

**KUKKO // Pull forward**



**FOR OVER 100 YEARS  
THE NUMBER 1 IN THE WORLD**



**THE SPECIALIST FOR NON-DESTRUCTIVE REMOVING**

# Table of Contents



## Guiding principles



|                                        |    |
|----------------------------------------|----|
| Activity index / Series overview ..... | 4  |
| Foreword .....                         | 18 |
| Modular system .....                   | 20 |
| KUKKO Original .....                   | 22 |
| Logistics .....                        | 24 |
| Sustainability .....                   | 26 |
| Industries .....                       | 28 |
| Omnipresence .....                     | 30 |
| Digital Support .....                  | 32 |
| KUKKO Live .....                       | 34 |
| KUKKO Live .....                       | 36 |
| KUKKEY .....                           | 38 |
| The Power of the Drive .....           | 40 |
| The KUKKO Numbering System .....       | 44 |

## Pulling



|                  |     |
|------------------|-----|
| External .....   | 48  |
| Internal .....   | 362 |
| Separation ..... | 448 |
| Removing .....   | 486 |

## Hydraulic oil



|                           |     |
|---------------------------|-----|
| Puller .....              | 557 |
| Cylinder .....            | 582 |
| Nut splitter .....        | 585 |
| Optional extensions ..... | 586 |

## Automotive



|                      |     |
|----------------------|-----|
| Chassis .....        | 600 |
| Glass .....          | 649 |
| Steering wheel ..... | 656 |
| Engine .....         | 663 |
| Electrical .....     | 690 |
| Clutch .....         | 692 |
| Axles .....          | 697 |
| Brakes .....         | 702 |

## Cutting & Loosening



|                            |     |
|----------------------------|-----|
| Nut splitter .....         | 708 |
| Gasket cutter .....        | 722 |
| Heating device .....       | 727 |
| Chain tools .....          | 731 |
| Thread repair .....        | 741 |
| Thread files .....         | 744 |
| Screw extractor .....      | 745 |
| Sheet Cutter .....         | 757 |
| Soft scraper .....         | 759 |
| Punching and Cutting ..... | 761 |

## Pressing & Insertion



|                                  |     |
|----------------------------------|-----|
| Bearing installation tools ..... | 789 |
| Pressing & Insertion .....       | 791 |
| Workshop press .....             | 793 |

## Gripping & Holding



|                     |     |
|---------------------|-----|
| Tension clamp ..... | 804 |
|---------------------|-----|



|                       |     |
|-----------------------|-----|
| Clamps .....          | 811 |
| Vise .....            | 849 |
| Flange Spreader ..... | 851 |
| Locking Pliers .....  | 855 |
| Tool Holder .....     | 862 |
| Special tools .....   | 864 |

## Screws & Drive



|                              |     |
|------------------------------|-----|
| Watchmaker Screwdriver ..... | 871 |
| Stift key .....              | 877 |
| European .....               | 899 |
| Impact Wrench .....          | 900 |
| Unlocking Key .....          | 903 |
| Hook spanner .....           | 904 |

## Signing & Marking



|                                |     |
|--------------------------------|-----|
| Letter and Number Stamps ..... | 911 |
| Stencil .....                  | 928 |
| Hand punch stamp .....         | 930 |
| Wheel impact stamping .....    | 938 |
| Seal tools .....               | 941 |

## Sets & Presentation



|                           |     |
|---------------------------|-----|
| Suitcase .....            | 955 |
| Tool cart .....           | 958 |
| Operating equipment ..... | 960 |
| Wall panel .....          | 965 |
| Sales walls .....         | 986 |
| Demo cube .....           | 991 |

## Hammers



|                                  |      |
|----------------------------------|------|
| Soft-face hammer SELECTHOR ..... | 998  |
| Soft-face hammer .....           | 1007 |

## Sparking-free



|                           |      |
|---------------------------|------|
| Non-Sparking Puller ..... | 1016 |
| Non-Sparking Sets .....   | 1018 |
| Non-Sparking Tools .....  | 1020 |

## Care & Safety



|                                 |      |
|---------------------------------|------|
| Special Grease .....            | 1037 |
| Bio-Multi-Oil .....             | 1039 |
| Fall protection .....           | 1040 |
| Accident protection plans ..... | 1041 |
| Tie Down Strap .....            | 1042 |

## Food & Drink



|                          |      |
|--------------------------|------|
| Knife .....              | 1049 |
| Lobster tongs .....      | 1053 |
| Cap and lid lifter ..... | 1054 |

## Merchandising



|                         |      |
|-------------------------|------|
| Clothing .....          | 1061 |
| Exhibition stands ..... | 1063 |
| Promotional item .....  | 1064 |

# Activity index / Series overview

(page included)

| SERIES                                                                                        | 20-Classic                                                                        | 30-Classic                                                                        | 20-ST                                                                             | 20-P                                                                              | 20-AV                                                                             | 30-P                                                                                | 20-Classic-B                                                                        | 30-Classic-B                                                                        | K-2030-20-B                                                                         |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                          | 60                                                                                | 65                                                                                | 71                                                                                | 72                                                                                | 73                                                                                | 75                                                                                  | 76                                                                                  | 78                                                                                  | 80                                                                                  |

| SERIES                                                                                        | 30-S-T                                                                            | K-2030-10-S-T                                                                     | 20-SP-T                                                                           | 30-SP-T                                                                           | 20+                                                                               | 30+                                                                                 | K-2030-10+                                                                          | K-2030-1+A                                                                          | 20-ST+                                                                              |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                          | 97                                                                                | 99                                                                                | 100                                                                               | 101                                                                               | 102                                                                               | 106                                                                                 | 109                                                                                 | 110                                                                                 | 111                                                                                 |

| SERIES                                                                                         | K-20-1+S-T                                                                         | 20-ST+S                                                                            | 20+SP                                                                              | 20+S-T                                                                             | 30+S-T                                                                             | K-2030-10+S-T                                                                        | 20+ST+S                                                                              | 20x                                                                                  | 20-STx                                                                               |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                           | 128                                                                                | 129                                                                                | 130                                                                                | 131                                                                                | 133                                                                                | 135                                                                                  | 136                                                                                  | 137                                                                                  | 140                                                                                  |

| SERIES                                                                                          | 11-B                                                                                | 11-BV                                                                               | Y28-11                                                                              | Y20-11                                                                              | David                                                                               | K-600                                                                                 | K-606                                                                                 | K-8-HP                                                                                | 120                                                                                   |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                            | 159                                                                                 | 160                                                                                 | 161                                                                                 | 162                                                                                 | 163                                                                                 | 173                                                                                   | 177                                                                                   | 181                                                                                   | 188                                                                                   |

| SERIES                                                                                          | 42-B                                                                                | 46                                                                                  | 46-B                                                                                | 47                                                                                  | 47-B                                                                                | 201                                                                                   | 202                                                                                   | 203                                                                                   | 201-F                                                                                 |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                            | 209                                                                                 | 214                                                                                 | 215                                                                                 | 216                                                                                 | 217                                                                                 | 222                                                                                   | 223                                                                                   | 225                                                                                   | 226                                                                                   |

| SERIES                                                                                          | Y-206                                                                               | Y0-206                                                                              | Y-208                                                                               | Y0-208                                                                              | YX8-X00                                                                             | YX8-X56                                                                               | Goliath                                                                               | 208                                                                                   | 209                                                                                   |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                            | 245                                                                                 | 246                                                                                 | 247                                                                                 | 248                                                                                 | 249                                                                                 | 251                                                                                   | 252                                                                                   | 265                                                                                   | 266                                                                                   |



| 20-H                                                                             | 20-S                                                                              | 30-S                                                                              | K-2030<br>-10-S                                                                   | K-2030<br>-20-S                                                                   | 20-ST-S                                                                           | 20-SP                                                                              | 30-SP                                                                               | 20-S-T                                                                              | SERIES                                                                                          |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>External |
| 81                                                                               | 82                                                                                | 86                                                                                | 90                                                                                | 91                                                                                | 92                                                                                | 93                                                                                 | 94                                                                                  | 95                                                                                  | PAGE                                                                                            |

| 20+B                                                                             | 30+B                                                                              | K-20-1-2+B                                                                        | K-20-15                                                                           | 20+S                                                                              | 30+S                                                                              | K-2030<br>-10+S                                                                    | K-2030<br>-20+S                                                                     | K-2030-<br>20+S+B                                                                   | SERIES                                                                                          |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>External |
| 112                                                                              | 113                                                                               | 114                                                                               | 115                                                                               | 116                                                                               | 120                                                                               | 124                                                                                | 125                                                                                 | 126                                                                                 | PAGE                                                                                            |

| 30x                                                                               | 20xS                                                                               | 30xS                                                                               | K-2030<br>-20xS                                                                    | 20-STxS                                                                            | 20xSP                                                                              | 30xSP                                                                               | 11-A                                                                                 | 11-AV                                                                                | SERIES                                                                                           |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>External |
| 142                                                                               | 146                                                                                | 150                                                                                | 152                                                                                | 153                                                                                | 154                                                                                | 155                                                                                 | 156                                                                                  | 158                                                                                  | PAGE                                                                                             |

| 130                                                                                | 120-ST                                                                              | 110                                                                                 | 200-1                                                                               | K-200                                                                               | 300-1                                                                               | 41                                                                                   | 41-B                                                                                  | 42                                                                                    | SERIES                                                                                            |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>External |
| 189                                                                                | 190                                                                                 | 194                                                                                 | 199                                                                                 | 200                                                                                 | 201                                                                                 | 206                                                                                  | 207                                                                                   | 208                                                                                   | PAGE                                                                                              |

| 202-F                                                                              | 205                                                                                 | 205-B                                                                               | 206                                                                                 | 206-B                                                                               | 207                                                                                 | 207-B                                                                                | Y-205                                                                                 | Y0-205                                                                                | SERIES                                                                                            |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>External |
| 227                                                                                | 234                                                                                 | 236                                                                                 | 237                                                                                 | 239                                                                                 | 240                                                                                 | 242                                                                                  | 243                                                                                   | 244                                                                                   | PAGE                                                                                              |

| 201-S                                                                              | 202-S                                                                               | 43                                                                                  | 43-10                                                                               | 43-0                                                                                | 44                                                                                  | 45                                                                                   | 114                                                                                   | 482                                                                                   | SERIES                                                                                            |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>External |
| 270                                                                                | 271                                                                                 | 277                                                                                 | 278                                                                                 | 279                                                                                 | 280                                                                                 | 282                                                                                  | 288                                                                                   | 292                                                                                   | PAGE                                                                                              |

# Activity index / Series overview

(page included)

| SERIES                                                                                        | 483                                                                               | 48                                                                                | K-482                                                                             | 844-B                                                                             | 845-B                                                                             | 845-150                                                                             | 845-250                                                                             | 845-851                                                                             | 845-855                                                                             |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                          | 293                                                                               | 294                                                                               | 295                                                                               | 299                                                                               | 301                                                                               | 303                                                                                 | 304                                                                                 | 305                                                                                 | 306                                                                                 |

| SERIES                                                                                        | 220                                                                               | 221                                                                               | 220/221                                                                           | K-220                                                                             | K-220-221                                                                         | 224-178                                                                             | 224-675                                                                             | WT-220                                                                              | Micro                                                                               |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>External |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                          | 331                                                                               | 332                                                                               | 333                                                                               | 334                                                                               | 335                                                                               | 336                                                                                 | 337                                                                                 | 338                                                                                 | 342                                                                                 |

| SERIES                                                                                         | 225-S                                                                              |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <br>External |  |
| PAGE                                                                                           | 360                                                                                |

| SERIES                                                                                          | 21                                                                                  | 21-E                                                                                | 22-0                                                                                | 22-0+                                                                               | K-26                                                                                | 28-A/B                                                                                | 27-A                                                                                  | 22                                                                                    | 25                                                                                    |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Internal |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                            | 371                                                                                 | 373                                                                                 | 384                                                                                 | 385                                                                                 | 386                                                                                 | 387                                                                                   | 389                                                                                   | 397                                                                                   | 398                                                                                   |

| SERIES                                                                                          | Y-21-E                                                                              | 818-0                                                                               | YX8-X18                                                                             | Y-180                                                                               | Y0-180                                                                              | YX8-X00                                                                               | GA                                                                                    | GE                                                                                    | 18-A                                                                                  |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Internal |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                            | 410                                                                                 | 411                                                                                 | 412                                                                                 | 414                                                                                 | 415                                                                                 | 416                                                                                   | 436                                                                                   | 438                                                                                   | 440                                                                                   |

| SERIES                                                                                           | 15                                                                                  | K-15                                                                                | K-20-15                                                                             | 17                                                                                  | K-17                                                                                | Y-15                                                                                  | 18                                                                                    | 18-B                                                                                  | 818-100                                                                               |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Separator |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                             | 455                                                                                 | 457                                                                                 | 458                                                                                 | 459                                                                                 | 460                                                                                 | 461                                                                                   | 462                                                                                   | 464                                                                                   | 465                                                                                   |





| 845-858 | 820 | 818-215 | 12  | 12-A | 14  | 14-S | 112 | 113 | SERIES           |
|---------|-----|---------|-----|------|-----|------|-----|-----|------------------|
|         |     |         |     |      |     |      |     |     |                  |
| 307     | 308 | 309     | 313 | 314  | 318 | 319  | 323 | 324 | External<br>PAGE |

| 140 | 140-S | 204-0 | 204 | 210 | 225-G | 225-0 | 225-SK-G | 225-SK | SERIES           |
|-----|-------|-------|-----|-----|-------|-------|----------|--------|------------------|
|     |       |       |     |     |       |       |          |        |                  |
| 343 | 344   | 349   | 350 | 351 | 356   | 357   | 358      | 359    | External<br>PAGE |

|  |  |  |  |  |  |  |  |  | SERIES           |
|--|--|--|--|--|--|--|--|--|------------------|
|  |  |  |  |  |  |  |  |  |                  |
|  |  |  |  |  |  |  |  |  | External<br>PAGE |

| 24  | K-22 | K-22-A-M | K-22-E | 28-C/D | 221-G | 224 | 223 | 818-021 | SERIES           |
|-----|------|----------|--------|--------|-------|-----|-----|---------|------------------|
|     |      |          |        |        |       |     |     |         |                  |
| 399 | 401  | 402      | 403    | 404    | 406   | 407 | 408 | 409     | Internal<br>PAGE |

| 18-AS | VM  | 22-1-AS | K-22-UNC | KS-22 | 223-K |  |  |  | SERIES           |
|-------|-----|---------|----------|-------|-------|--|--|--|------------------|
|       |     |         |          |       |       |  |  |  |                  |
| 441   | 442 | 443     | 444      | 445   | 447   |  |  |  | Internal<br>PAGE |

| 818-150 | YX8-X18 | YX8-X00 | Goliat h-218 | Goliat h-200 |  |  |  |  | SERIES            |
|---------|---------|---------|--------------|--------------|--|--|--|--|-------------------|
|         |         |         |              |              |  |  |  |  |                   |
| 466     | 467     | 469     | 471          | 472          |  |  |  |  | Separator<br>PAGE |

# Activity index / Series overview

(page included)

| SERIES                                                                                        | 69                                                                                | 70                                                                                | 70-K                                                                              | 70-0                                                                              | K-70                                                                              | KS-70-A-K                                                                           | 13                                                                                  | K-13                                                                                | 222                                                                                 |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Removing |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                          | 492                                                                               | 494                                                                               | 497                                                                               | 498                                                                               | 501                                                                               | 503                                                                                 | 507                                                                                 | 508                                                                                 | 509                                                                                 |

| SERIES                                                                                        | 177-0                                                                             | 177/10                                                                            | 177-A                                                                             | 728-A                                                                             | 728-A-1                                                                           | 729-J                                                                               | 729-J-1                                                                             | 728K-729                                                                            | 730                                                                                 |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Removing |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                          | 525                                                                               | 526                                                                               | 527                                                                               | 528                                                                               | 529                                                                               | 530                                                                                 | 531                                                                                 | 532                                                                                 | 533                                                                                 |

| SERIES                                                                                           | Chassis                                                                            | 127-0                                                                              | 127-A                                                                              | K-127-A                                                                            | 128                                                                                | 128-0                                                                                | 128-H                                                                                | 128-T-4                                                                              | 129                                                                                  |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <br>Automotive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                             |                                                                                    | 604                                                                                | 605                                                                                | 606                                                                                | 607                                                                                | 608                                                                                  | 609                                                                                  | 610                                                                                  | 611                                                                                  |

| SERIES                                                                                            | 129-5-H-0                                                                           | 129-6                                                                               | 129-7                                                                               | 129-7-H                                                                             | 129-H                                                                               | 145                                                                                   | K-363                                                                                 | 135                                                                                   | 10-M                                                                                  |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Automotive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                              | 621                                                                                 | 622                                                                                 | 623                                                                                 | 624                                                                                 | 625                                                                                 | 626                                                                                   | 627                                                                                   | 628                                                                                   | 634                                                                                   |

| SERIES                                                                                            | K-226                                                                               | Y-60-000                                                                            | Citaro                                                                              | Glass                                                                               | 128-F                                                                               | 128-F-60                                                                              | 142                                                                                   | K-142                                                                                 | 2200-ST                                                                               |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Automotive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                              | 644                                                                                 | 646                                                                                 | 645                                                                                 |                                                                                     | 652                                                                                 | 653                                                                                   | 654                                                                                   | 655                                                                                   |                                                                                       |

| SERIES                                                                                            | Uranos                                                                              | W-6066                                                                              | W-6067                                                                              | W-6050                                                                              | W-6050/9                                                                            | 124-K                                                                                 | 100                                                                                   | 101-1                                                                                 | 101-3                                                                                 |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Automotive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                              | 674                                                                                 | 675                                                                                 | 676                                                                                 | 679                                                                                 | 680                                                                                 | 681                                                                                   | 684                                                                                   | 682                                                                                   | 683                                                                                   |



| K-222 | 68  | K-68 | 29-A-69 | 23  | 223-0 | 139 | K-363 | 135 | SERIES |
|-------|-----|------|---------|-----|-------|-----|-------|-----|--------|
|       |     |      |         |     |       |     |       |     |        |
| 510   | 512 | 513  | 514     | 520 | 521   | 522 | 523   | 524 | PAGE   |

| 50  | 51  | 52  | 53  | 53-A | SERIES |  |  |  |
|-----|-----|-----|-----|------|--------|--|--|--|
|     |     |     |     |      |        |  |  |  |
| 534 | 535 | 536 | 537 | 539  | PAGE   |  |  |  |

| 129-1 | 129-2 | 129-25 | 129-3-4 | 129-3-A | 129-4-30 | 129-5 | 129-5-0 | 129-5-H | SERIES |
|-------|-------|--------|---------|---------|----------|-------|---------|---------|--------|
|       |       |        |         |         |          |       |         |         |        |
| 612   | 613   | 614    | 615     | 616     | 617      | 618   | 619     | 620     | PAGE   |

| 10-A | 38  | 40  | 229-1-1 | 229-1-2 | 229 | 229-1 | 230-I | 226 | SERIES |
|------|-----|-----|---------|---------|-----|-------|-------|-----|--------|
|      |     |     |         |         |     |       |       |     |        |
| 635  | 636 | 637 | 638     | 639     | 640 | 641   | 642   | 643 | PAGE   |

| Steering wheel | 31  | 32  | 33  | 34  | Engine | 118 | 16  | K-16 | SERIES |
|----------------|-----|-----|-----|-----|--------|-----|-----|------|--------|
|                |     |     |     |     |        |     |     |      |        |
|                | 659 | 660 | 661 | 662 |        | 666 | 672 | 673  | PAGE   |

| 103-1 | 104 | 104-32 | 105 | 108 | 451 | Electrical | 48  | 134 | SERIES |
|-------|-----|--------|-----|-----|-----|------------|-----|-----|--------|
|       |     |        |     |     |     |            |     |     |        |
| 685   | 686 | 687    | 687 | 688 | 689 |            | 690 | 691 | PAGE   |

# Activity index / Series overview

(page included)

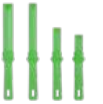
| SERIES                                                                                          | Clutch                                                                            | 20-V                                                                              | YHU                                                                               | Axles                                                                             | K-226                                                                             | 18-4SAF                                                                             | 102                                                                                 | 204-V                                                                               | 65                                                                                  |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Automotive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                            |                                                                                   | 695                                                                               | 696                                                                               |                                                                                   | 697                                                                               | 698                                                                                 | 699                                                                                 | 700                                                                                 | 647                                                                                 |

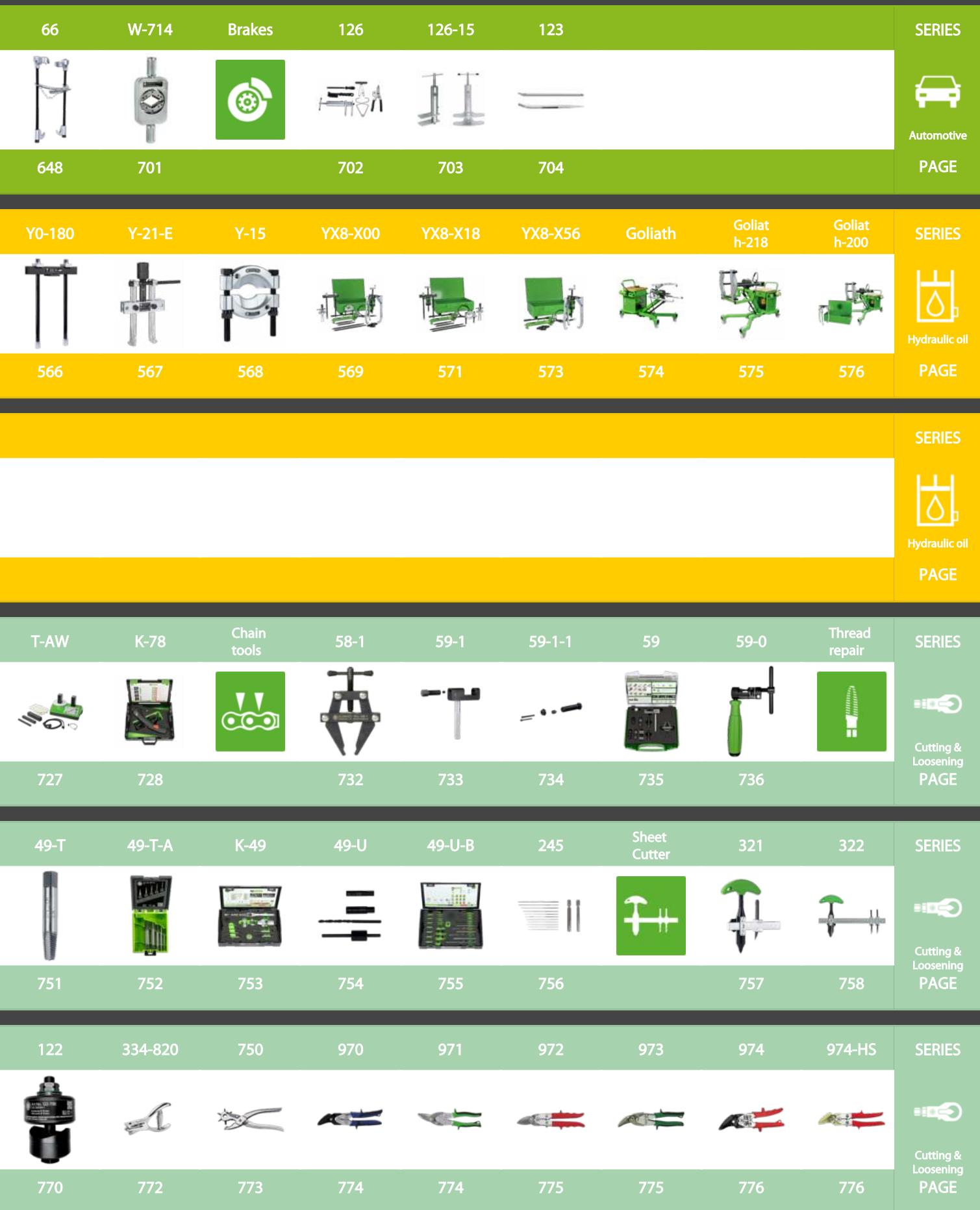
| SERIES                                                                                             | Y-205                                                                             | Y0-205                                                                            | Y-206                                                                             | Y0-206                                                                            | Y-208                                                                             | Y0-208                                                                              | Y28-11                                                                              | Y20-11                                                                              | Y-180                                                                               |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Hydraulic oil |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                               | 557                                                                               | 558                                                                               | 559                                                                               | 560                                                                               | 561                                                                               | 562                                                                                 | 563                                                                                 | 564                                                                                 | 565                                                                                 |

| SERIES                                                                                              | David                                                                               | Axle                                                                                | Citaro                                                                              | Y-60-000                                                                           | 129-5-H-0                                                                           | YRH                                                                                   | YRE                                                                                   | YSM                                                                                   | Y-57                                                                                 |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <br>Hydraulic oil |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                | 577                                                                                 | 578                                                                                 | 579                                                                                 | 580                                                                                | 581                                                                                 | 582                                                                                   | 583                                                                                   | 584                                                                                   | 585                                                                                  |

| SERIES                                                                                                        | Nut sp<br>litter                                                                    | 54                                                                                  | K-54-B                                                                              | 55                                                                                  | K-55-B                                                                              | 56                                                                                    | Y-57                                                                                  | 55-C                                                                                  | Heating<br>device                                                                     |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Cutting &<br>Loosening |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                          |                                                                                     | 716                                                                                 | 717                                                                                 | 718                                                                                 | 719                                                                                 | 720                                                                                   | 721                                                                                   | 722                                                                                   |                                                                                       |

| SERIES                                                                                                        | K-58                                                                                | K-98                                                                                | W-714                                                                               | 97                                                                                  | Screw ex<br>tractor                                                                 | 49                                                                                    | 49-S                                                                                  | 49-0                                                                                  | 49-0-S                                                                                |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Cutting &<br>Loosening |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                          | 741                                                                                 | 742                                                                                 | 743                                                                                 | 744                                                                                 |                                                                                     | 745                                                                                   | 747                                                                                   | 749                                                                                   | 750                                                                                   |

| SERIES                                                                                                        | Soft s<br>craper                                                                    | 2200                                                                                | 2200-ST                                                                             | Punching a<br>nd Cutting                                                            | 326                                                                                 | 326-KS                                                                                | 326-TS                                                                                | 326-300                                                                               | 121                                                                                   |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Cutting &<br>Loosening |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                          |                                                                                     | 759                                                                                 | 760                                                                                 |                                                                                     | 761                                                                                 | 764                                                                                   | 765                                                                                   | 766                                                                                   | 768                                                                                   |





# Activity index / Series overview

(page included)

| SERIES                                                                                                           | 980                                                                               | 981                                                                               | 982                                                                               | 983                                                                               | 986                                                                               | 987                                                                                 | 988                                                                                 | 993                                                                                 | 995                                                                                 |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Cutting & Loosening<br>PAGE |  |  |  |  |  |  |  |  |  |
|                                                                                                                  | 777                                                                               | 777                                                                               | 778                                                                               | 778                                                                               | 779                                                                               | 779                                                                                 | 780                                                                                 | 780                                                                                 | 781                                                                                 |

| SERIES                                                                                                            | 71                                                                                | K-71-L                                                                            | 880                                                                               | 890                                                                               | Axle                                                                              | YRE                                                                                 | YPP                                                                                 |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Pressing & Insertion<br>PAGE |  |  |  |  |  |  |  |
|                                                                                                                   | 789                                                                               | 790                                                                               | 791                                                                               | 792                                                                               | 793                                                                               | 796                                                                                 | 795                                                                                 |

| SERIES                                                                                                           | Tension clamp                                                                      | 101                                                                                | 102-120                                                                            | 103                                                                                | 106                                                                                | 107                                                                                  | 109                                                                                  | 112-100                                                                              | 113-1                                                                                |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <br>Gripping & Holding<br>PAGE |  |  |  |  |  |  |  |  |  |
|                                                                                                                  |                                                                                    | 804                                                                                | 805                                                                                | 806                                                                                | 807                                                                                | 808                                                                                  | 809                                                                                  | 810                                                                                  | 810                                                                                  |

| SERIES                                                                                                            | 472                                                                                 | 490                                                                                 | 490P                                                                                | 490K                                                                                | 493                                                                                 | 493P                                                                                  | 493K                                                                                  | 505/509                                                                               | 505P/507P                                                                             |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Gripping & Holding<br>PAGE |  |  |  |  |  |  |  |  |  |
|                                                                                                                   | 821                                                                                 | 822                                                                                 | 825                                                                                 | 828                                                                                 | 829                                                                                 | 830                                                                                   | 832                                                                                   | 833                                                                                   | 835                                                                                   |

| SERIES                                                                                                            | 516                                                                                 | 516-200                                                                             | 511                                                                                 | 517                                                                                 | Vise                                                                                | 520                                                                                   | 525                                                                                   | Flange S preader                                                                      | 160-1                                                                                 |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Gripping & Holding<br>PAGE |  |  |  |  |  |  |  |  |  |
|                                                                                                                   | 846                                                                                 | 846                                                                                 | 847                                                                                 | 848                                                                                 |                                                                                     | 849                                                                                   | 850                                                                                   |                                                                                       | 851                                                                                   |

| SERIES                                                                                                            | 691+                                                                                | 692                                                                                 | 693                                                                                 | 694                                                                                 | 695                                                                                 | 696                                                                                   | 697                                                                                   | 698                                                                                   | 699                                                                                   |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Gripping & Holding<br>PAGE |  |  |  |  |  |  |  |  |  |
|                                                                                                                   | 857                                                                                 | 858                                                                                 | 858                                                                                 | 859                                                                                 | 859                                                                                 | 860                                                                                   | 860                                                                                   | 861                                                                                   | 861                                                                                   |



997



781

SERIES

Cutting &  
Loosening  
PAGE

SERIES

Pressing &  
Insertion  
PAGE

Clamps

469

469P

469K

469PU

473K

475K

476K

480K

SERIES

Gripping &  
Holding  
PAGE

811

813

815

816

817

818

819

820

505K/509K

440

365

420

430

431

432

450

450-260

SERIES

Gripping &  
Holding  
PAGE

837

839

840

841

842

843

844

845

845

160-2

165

Y-165

K-Y-165

Locking  
Pliers

689

690

690+

691

SERIES

Gripping &  
Holding  
PAGE

852

853

854

855

855

856

856

857

Tool H  
older

280

315

Special  
tools

W-3132/K2

721

SERIES

Gripping &  
Holding  
PAGE

862

863

864

865

# Activity index / Series overview

(page included)

| SERIES                                                                                             | 250-000                                                                           | 250-100                                                                           | 250-PH                                                                            | 250-500                                                                           | 250-550                                                                           | 250-600                                                                             | 291                                                                                 | 291/9                                                                               | 292                                                                                 |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Screw & Drive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                               | 871                                                                               | 872                                                                               | 873                                                                               | 874                                                                               | 875                                                                               | 876                                                                                 | 877                                                                                 | 878                                                                                 | 879                                                                                 |

| SERIES                                                                                             | 297/7                                                                             | 301                                                                               | 301/9                                                                             | 302                                                                               | 302/13                                                                            | 303                                                                                 | 401-TX                                                                              | 401/8                                                                               | 402-TX                                                                              |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Screw & Drive |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                               | 889                                                                               | 890                                                                               | 891                                                                               | 892                                                                               | 893                                                                               | 894                                                                                 | 895                                                                                 | 896                                                                                 | 897                                                                                 |

| SERIES                                                                                                  | 328 to 331                                                                          | 327-B                                                                              | 327-Z                                                                              | 300H                                                                               | 300H-S5                                                                             | 300H-S6                                                                               | 300SZ                                                                                | 332                                                                                   | 332-110                                                                              |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <br>Signing & Marking |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                    |                                                                                     | 928                                                                                | 929                                                                                | 930                                                                                | 933                                                                                 | 934                                                                                   | 935                                                                                  | 938                                                                                   | 939                                                                                  |

| SERIES                                                                                                     | K-2030-KIT                                                                          | K-L-BOXX                                                                            | K-A-KT                                                                              | K-A-TL                                                                              | K-CubeBoxx                                                                          | X-MPK                                                                                 | X-MW                                                                                  | X-SW                                                                                  | X-LS                                                                                  |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Sets & Presentation |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                       | 954                                                                                 | 955                                                                                 | 956                                                                                 | 957                                                                                 | 958                                                                                 | 959                                                                                   | 960                                                                                   | 961                                                                                   | 962                                                                                   |

| SERIES                                                                                                     | WT-004                                                                              | WT-008                                                                              | WT-010                                                                              | WT-014                                                                              | WT-017                                                                              | WT-018                                                                                | WT-019                                                                                | WT-020                                                                                | WT-021                                                                                |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Sets & Presentation |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                                       | 972                                                                                 | 973                                                                                 | 974                                                                                 | 975                                                                                 | 976                                                                                 | 977                                                                                   | 978                                                                                   | 979                                                                                   | 980                                                                                   |

| SERIES                                                                                                     | WTH/5                                                                               | 999-H                                                                               |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Sets & Presentation |  |  |
| PAGE                                                                                                       | 990                                                                                 | 991                                                                                 |



| 292/9 | 293 | 293/9 | 294 | 294/9 | 295 | 295/9 | 236 | 297 | SERIES |
|-------|-----|-------|-----|-------|-----|-------|-----|-----|--------|
|       |     |       |     |       |     |       |     |     |        |
| 880   | 881 | 882   | 883 | 884   | 885 | 886   | 887 | 888 | PAGE   |

| 403-TR | 1900 | 133 | 406 | W-8800 | 76  | K-76 | SERIES |
|--------|------|-----|-----|--------|-----|------|--------|
|        |      |     |     |        |     |      |        |
| 898    | 899  | 900 | 902 | 903    | 904 | 905  | PAGE   |

| 332-120 | 332-100 | 334-900 | 334-910 | 334S | 334-928 | 334-929 | 334-933 | 334-030 | SERIES |
|---------|---------|---------|---------|------|---------|---------|---------|---------|--------|
|         |         |         |         |      |         |         |         |         |        |
| 940     | 941     | 941     | 942     | 943  | 944     | 945     | 946     | 946     | PAGE   |

| X-SB | X-SB-224 | WT-220 | 30-20-T | 30-20+T | WT-000 | WT-002 | WT-003 | WT-003+S | SERIES |
|------|----------|--------|---------|---------|--------|--------|--------|----------|--------|
|      |          |        |         |         |        |        |        |          |        |
| 963  | 964      | 966    | 967     | 968     | 965    | 969    | 970    | 971      | PAGE   |

| WT-030 | WT-031 | WT-50 | WT-1-INDUSTRIE | WT-43-44-45/12 | EVLW-INDUSTRIE-BASIC | EVLW-2-INDUSTRIE | EVLW-2-KFZ | EVLW-2-NFZ | SERIES |
|--------|--------|-------|----------------|----------------|----------------------|------------------|------------|------------|--------|
|        |        |       |                |                |                      |                  |            |            |        |
| 981    | 982    | 983   | 984            | 985            | 986                  | 987              | 988        | 989        | PAGE   |

| SERIES                      |
|-----------------------------|
|                             |
| Sets & Presentation<br>PAGE |

# Activity index / Series overview

(page included)

| SERIES                                                                                       | 3-KU-KU-1                                                                         | 3-GU-GU-1                                                                         | 3-NY-NY-1                                                                         | 3-NY-NY-0                                                                         | K-Sele<br>cthor                                                                   | 343                                                                                 |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Hammers |  |  |  |  |  |  |
| PAGE                                                                                         | 998                                                                               | 999                                                                               | 1001                                                                              | 1002                                                                              | 1003                                                                              | 1007                                                                                |

| SERIES                                                                                           | 201-F                                                                             | 202-F                                                                             | K-200-F                                                                           | K-201-F                                                                           | K-202-F                                                                           | 345F                                                                                | 721F                                                                                | 832F                                                                                | 836F                                                                                |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Non-Sparking |  |  |  |  |  |  |  |  |  |
| PAGE                                                                                             | 1016                                                                              | 1017                                                                              | 1018                                                                              | 1019                                                                              | 1020                                                                              | 1020                                                                                | 1021                                                                                | 1021                                                                                | 1022                                                                                |

| SERIES                                                                                              | KSF-69                                                                             | KSF-69-C                                                                           | 699990                                                                             | 660                                                                                 | UFP                                                                                | USB                                                                                   |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Care & Safety |  |  |  |  |  |  |
| PAGE                                                                                                | 1037                                                                               | 1038                                                                               | 1039                                                                               | 1040                                                                                | 1041                                                                               | 1042                                                                                  |

| SERIES                                                                                              | 90-100                                                                              | 90-200                                                                              | 90-190                                                                              | 90-900                                                                              | 91-160                                                                              | 404                                                                                   | 1919-900                                                                              |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <br>Food & Drink |  |  |  |  |  |  |  |
| PAGE                                                                                                | 1049                                                                                | 1050                                                                                | 1051                                                                                | 1052                                                                                | 1053                                                                                | 1053                                                                                  | 1054                                                                                  |

| SERIES                                                                                               | 1919-200                                                                            | 1919-200B                                                                           | 999-SH                                                                              | 125                                                                                 |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>Merchandising |  |  |  |  |
| PAGE                                                                                                 | 1061                                                                                | 1062                                                                                | 1063                                                                                | 1064                                                                                |





| SERIES                                                                                         |  |
|------------------------------------------------------------------------------------------------|--|
| <br>Hammers |  |
| PAGE                                                                                           |  |

| 1005F                                                                            | 1006F                                                                             | 1006F6                                                                            | 1006FD                                                                            | 1006FR                                                                            | 1006FS                                                                            | 1006FSD                                                                            | 1006FSP                                                                             | 1006FSR                                                                             | SERIES                                                                                              |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  | <br>Non-Sparking |
| 1023                                                                             | 1024                                                                              | 1025                                                                              | 1026                                                                              | 1026                                                                              | 1027                                                                              | 1028                                                                               | 1029                                                                                | 1030                                                                                | PAGE                                                                                                |

| SERIES |  | <br>Care & Safety | PAGE |
|--------|--|-------------------------------------------------------------------------------------------------------|------|
|        |  |                                                                                                       |      |

| SERIES                                                                                |  |
|---------------------------------------------------------------------------------------|--|
|  |  |
| Food & Drink                                                                          |  |
| PAGE                                                                                  |  |

| SERIES                                                                                |  |
|---------------------------------------------------------------------------------------|--|
|  |  |
| Merchandising                                                                         |  |



# Foreword

Dear business partners,

With great pride, we present you with this manual—a compendium of collected knowledge about Pulling. For over 1,000 original products, we have compiled their Applications, instructions, Advantages, and the most important product features. Additionally, the overarching functions for all product groups relating to the four Pulling principles External, Internal, Separation, and Removing, as well as all other activities, are explained.

The know-how thus compiled from over 100 years of successful entrepreneurship is unique in its breadth of knowledge. As the inventor of the Puller and a global solution developer, we are committed to progress and are always one step ahead, especially in challenging times. From this self-understanding, we grant a lifetime warranty on our tools—as an expression of our confidence in the outstanding quality of our products.

Embedded within the K+K Swiss corporate group, headquartered in Ranzo, Switzerland, the flagship brand KUKKO benefits from the legal, financial, and economic stability of the Swiss company. In this way, procurement and logistics chains can be ensured quickly and efficiently across the three logistics centres in Europe, Asia, and the USA. At the same time, this global group structure provides the best conditions to address our global customers locally and to serve them with a product range tailored to their individual needs.

We thank you for your trust in our premium tools and look forward to every suggestion to help us further develop our products and services.

Kindest regards,



Michael Kleinbongartz  
CEO K+K Swiss AG  
Business owner KUKKO oHG



Max Alfred Kleinbongartz  
Managing Director K+K Swiss AG  
Business partner KUKKO oHG



# KUKKO, the inventor of the modular system







## World's largest Range of products

As a specialist for pullers, KUKKO has made it its mission to design the right tool for every pulling situation.

Since no pulling process is the same, the KUKKO range includes a wide variety of pullers in numerous designs and sizes. Thanks to this diverse product selection, every component can be dismantled or assembled. Whether external extraction, internal extraction, separation or removing – KUKKO finds the perfect solution for every challenge. And if a specific puller is not immediately available for a special requirement, it can be assembled as an upgrade with just a few easy steps.

The modular system has been continuously further developed throughout the company's history and is thus an expression of a unique selling point.

Thanks to a limitless mix & match, 150 puller types can be combined in 500 variants. The heart of every puller is always the spindle, which provides the puller with power. Various hook types and extensions, 2-jaw and 3-jaw cross beams, and interchangeable pressure pieces make the composition of the puller perfect.

This offers the user almost endless possibilities to solve their individual application case with a special or universal puller.



# The originals from KUKKO - Unique in design, function and use







## Perfection in form and function

The entire range of KUKKO tools is characterised by unique product design. From the high-quality material selection and workmanship to the colour selection of the KUKKO company logo, the typical brand pioneering spirit and a great love of detail are to be found in every single product. For over a century, even laymen have recognised KUKKO originals at first glance. Green is the corporate colour, making all KUKKO products shine uniquely.

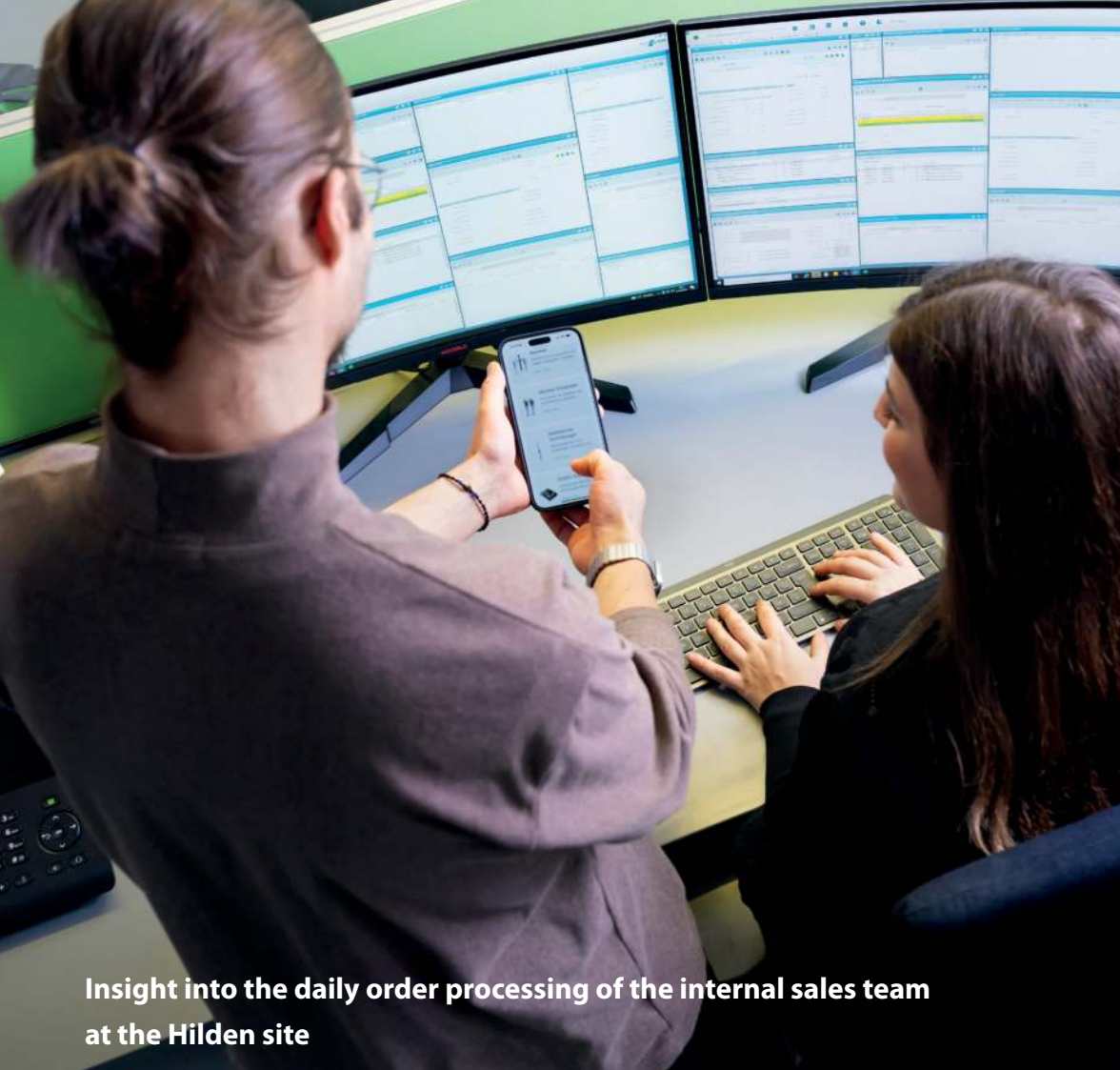
## Award-winning originals

All KUKKO originals have been certified to DIN EN ISO 9001 since 1995. This certification applies to the fields of development, manufacturing, and distribution of Pullers and special tools, as well as distribution of specialist tools. In addition, all products are labelled with their own type plate. This marking is an expression of KUKKO's high sustainability promise and guarantees a lifetime of several decades. At the same time, with this safety promise, the customer can be 100% sure that a quality product from the KUKKO company has been bought. Any form of forgery or product piracy is excluded. Furthermore, KUKKO grants a lifetime guarantee on all products – an expression of the highest quality and extraordinary performance of the tools. The individual component number guarantees fast and smooth processing of repeat orders or complaints.

## Ergonomics at the highest level

KUKKO quality tools are also convincing in terms of their haptics. First-class workmanship and compliance with the highest safety standards minimise the risk of injury. The products sit ergonomically well in the hand and are characterised by outstanding user-friendliness. The label contains the following information: article number, serial number, QR code, name and address of the manufacturer, product dimensions, and the most important technical attributes.





**Insight into the daily order processing of the internal sales team at the Hilden site**



**Fully automated packaging of up to 500 parcels per hour**



**Daily shipping directly from the KUKKO headquarters in Hilden**



**Daily overnight shipping via the worldwide UPS system, here at Cologne-Bonn airport**





# Logistics

## KUKKO takes procurement and delivery logistics to the next level

Our logistical connection to three own hubs in America, Asia, and Europe ensures complete procurement and distribution security.

The latest achievement for optimising the entire material, procurement, and logistics flow is a fully automatic packaging machine. Overall production-side control runs centrally via the ERP system. The interface between the packaging machine and ERP is organised via a socket server. With this setup, all data (shipping, order picking, safety instructions, dimensions) is processed in real time and sent to external logistics partners and customs authorities.

In doing so, all relevant data and information (image of the package contents, commercial invoice, export documents) are bundled by the machine and communicated to the shipping partners. At the same time, all data is also forwarded to customers and business partners.

By significantly minimising lead times and sources of error, the entire procurement and logistics process, including material flow, is reduced by 30% in terms of costs and time.



Video of the fully automatic packaging machine



# Sustainability is an integral part of KUKKO's DNA

Over 100,000 bees are hardworking honey producers at the headquarters in Hilden

An in-house combined heat and power plant supplies KUKKO with 30% of the required electricity and achieves 20% savings in total heating energy

Active resource conservation with a recycling rate of over 80%

Mission 2030:  
70% recycling  
quota





## 100,000 hardworking bees on the premises of the KUKKO factory and a certified SAQ bear witness to this

The multifunctional application possibilities, combined with an extraordinary range of spare parts and accessories, make KUKKO Pullers indispensable tools for every user.

By choosing an original KUKKO product, not only are current application cases covered, but Pullers have also been passed on to the next generation.

This form of sustainability, practiced for a century, explains why Pullers can still be found in workshops today that have been in use for over 50 years. It's no wonder that the industry credo is "Once KUKKO, always KUKKO".

Sustainable value creation begins with the careful selection of raw materials. The resource-efficient use of materials and products as well as the reduction of energy consumption are other important aspects.

A particular benefit as part of ecological business practices is the custom-made packaging boxes for each shipment. This prevents oversized packages and reduces shipping costs. Thanks to the complete elimination of plastics and the exclusive use of 100% recycled packing material, KUKKO reduces its CO2 footprint by more than five tonnes per year.

Another feature of consistent due diligence is demonstrated by the leading member organization of the automobile industry – AIAG – through SUPPLIER ASSURANCE. With SAQ 5.0, KUKKO meets the globally recognized sustainability standard of the automotive industry in the areas of human rights, working conditions, occupational safety, corporate ethics, environmental and supplier management.







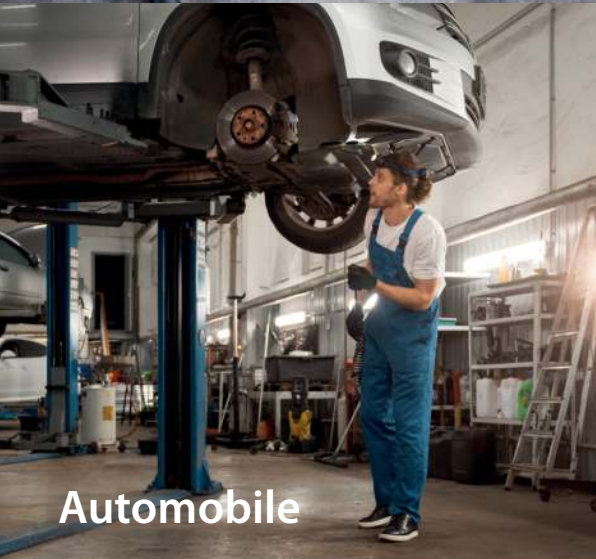
Drive technology



Industry



Motorcycle



Automobile



Energy



Shipbuilding



Railway



Electrical



Construction industry



Steel construction



Joinery

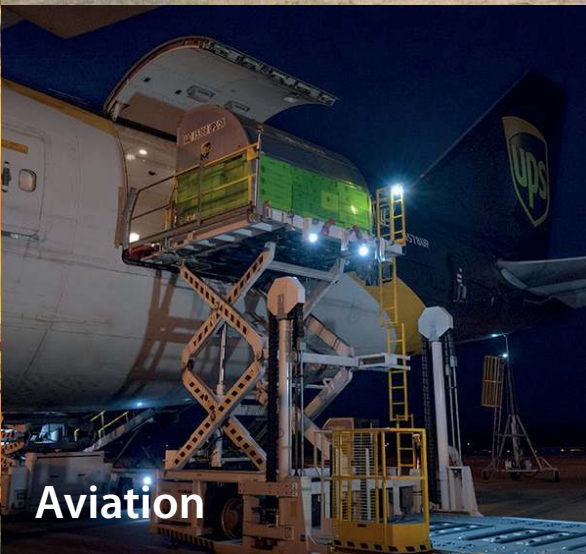


Agriculture

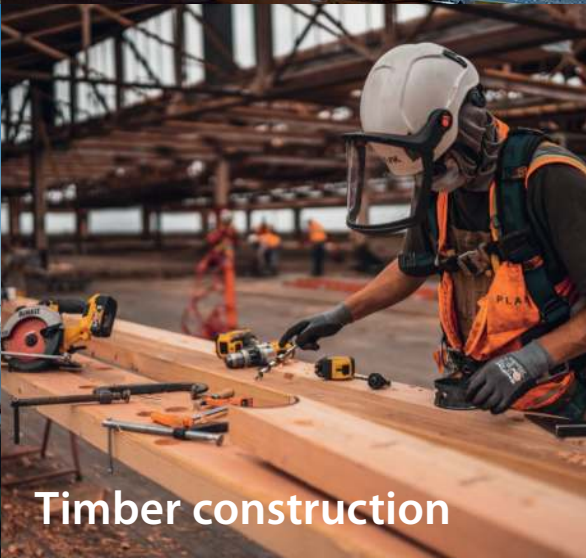




**Commercial Vehicles**



**Aviation**



**Timber construction**



**Military**

# INDUSTRIES

KUKKO offers solutions for all industries. Both global challenges and local requirements are met. KUKKO pullers are used in countless productions and workshops, ensuring that everything keeps moving. The range extends from large hydraulic solutions for the repair of industrial machines to precision tools for delicate work such as in watchmaking.





From top left to bottom right: Waldemar Just, Vanessa Annunziata, Timo Langenberg, Greg Genevro, Jan Bartos, Polly Kang-Paffrath, Ole Schmidt, Hans-Peter Broekhuis



Warenbestände  
auf Knopfdruck





# Omnipresence at KUKKO

Always up-to-date,  
transparent and personal!

At KUKKO, we are always there for you. With our country subsidiaries in the American, European and Asian regions, local contacts are available to you worldwide.

Regardless of office hours, we offer you various digital services. Via customer-specific shares you receive our up-to-date **price lists and product availability**:



In addition, we provide you with a detailed product data sheet for each of our over 3,000 articles. These data sheets contain all product information including technical features, technical drawings and photos.

Our complete **catalogue** with all products is available via the following QR code:



To always stay up-to-date on all product innovations, promotions or events, subscribe to our **newsletter** here:



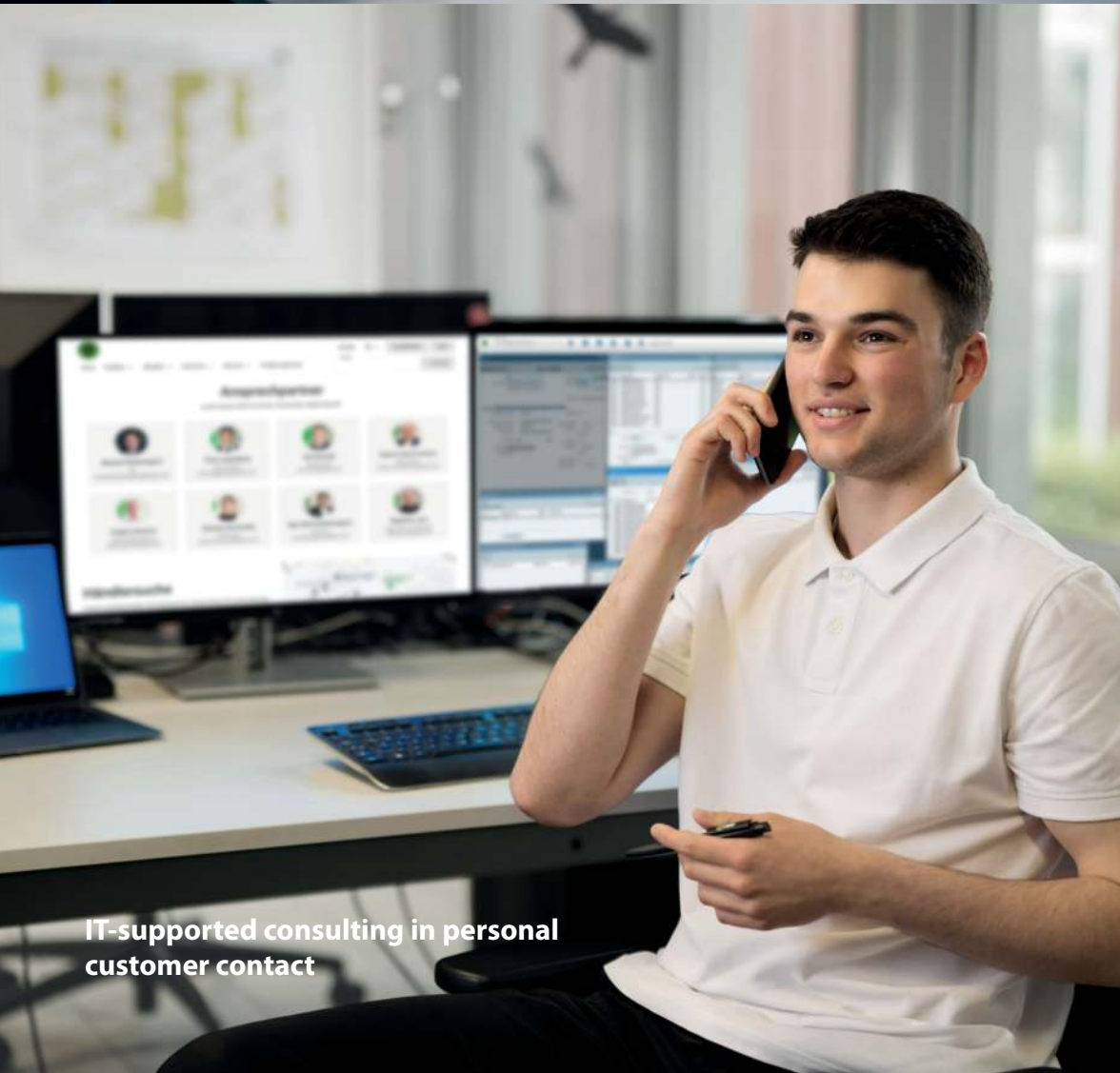




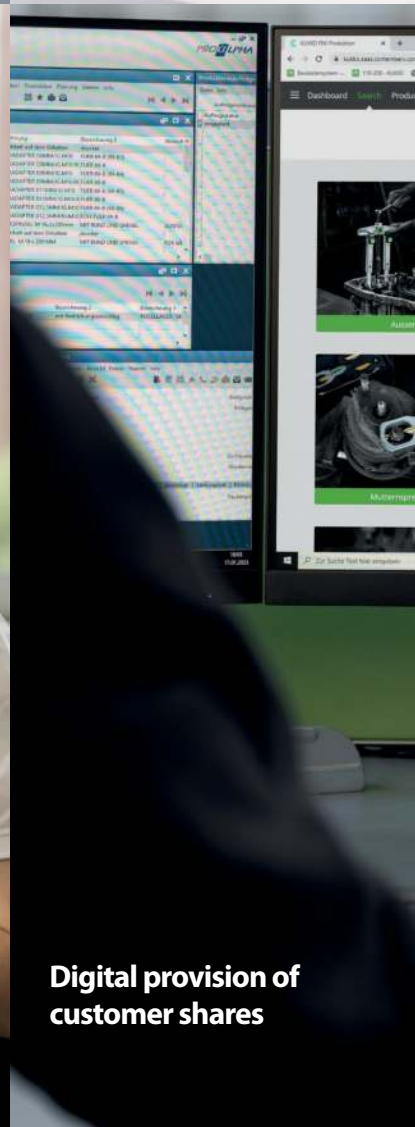
**Product development using a CAD program  
(here adapter for Puller)**



**IT trilogy between  
ERP, PIM and website**



**IT-supported consulting in personal  
customer contact**



**Digital provision of  
customer shares**

# Digital Support

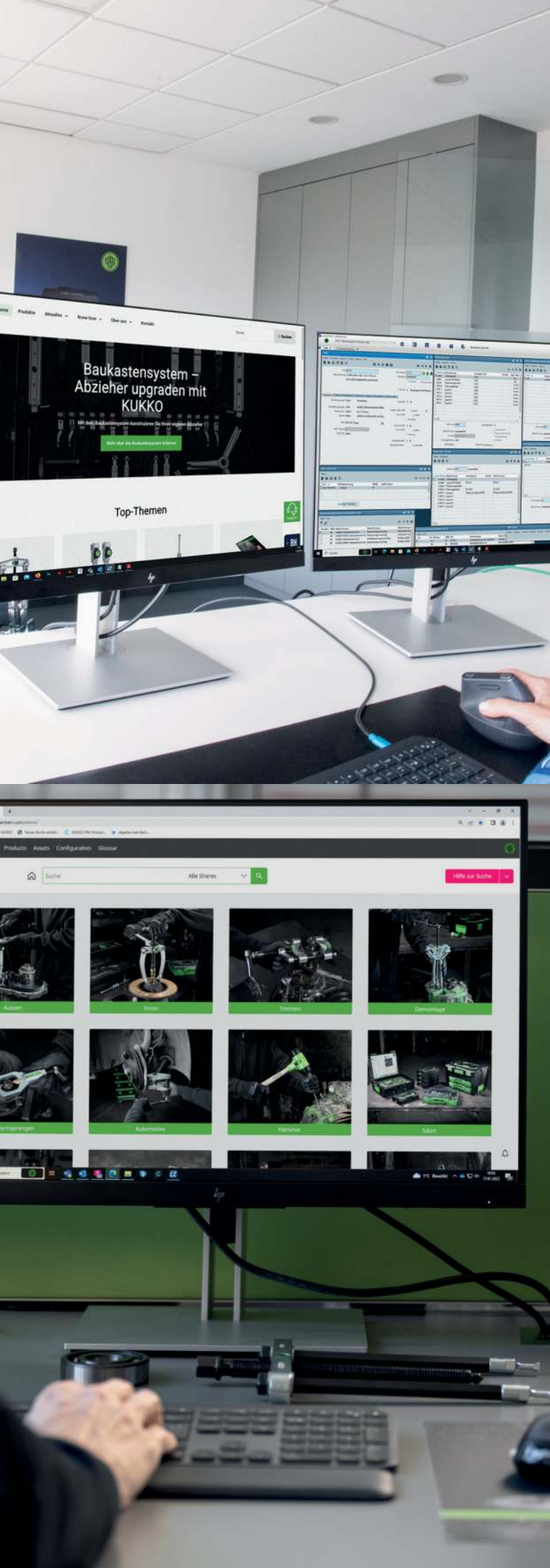
## A consistent focus on digital process control secures long-term business success

For all the passion for the production of analogue pulling tools, KUKKO lives with a digital spirit and relies on a multimedia-oriented communications strategy. This dovetails internal IT and its systems with the outward-facing media. The central control system is always the enterprise resource planning system (ERP). Directly connected to it is the product database (PIM) with over 3,000 articles. Both platforms feed all communications media and touchpoints such as website, newsletter, print media as well as AI-generated solution developers and thus ensure the continuous updating of all product features.

As a special service, we offer individual customer shares – personal download areas where our customers can access 24/7 all product images, data sheets as well as Excel lists with all technical attributes and features. This means all information is always central, up to date and easily accessible.

With this synchronisation, optimal support is provided to the sales team in the sales process. Furthermore, the central master data management also facilitates operational handling in global customer support in over 100 countries.

If you would like to benefit from our digital support, then contact our worldwide points of contact directly:







Consultation on board the demo vehicle



Order in the work-  
place in industry,  
workshop, or trade



Striking displays to boost sales



Company-owned  
fleet of demo  
vehicles deployed  
worldwide





# KUKKO Live

## There is no Business like Showbusiness

Driven by the spirit of solution development, KUKKO relies on a user-oriented and practice-proven staging of its products.

With a fully equipped showroom at the Hilden headquarters, an extensive space is available for the transfer of know-how, application consulting, and sales management. Here, both 3-D animations and demo tables are used to train existing and new trade partners and customers. Both individual and sequenced training sessions can be booked.

For mobile use at the customer's site, a company fleet of fully equipped demo vehicles is available. The mobile consultants on four wheels are deployed worldwide and, regardless of spatial restrictions, ensure comprehensive insights into KUKKO's extensive product portfolio. This way, customers and trade partners benefit from the exclusive know-how of the inventor of pullers in the smallest of spaces.

To shine directly at the point of sale, KUKKO offers a wide range of supporting POS media. These range from the smallest demo applications, pre-stocked or individually stocked displays, and sample cases, to demo vehicles and complete sales walls. This ensures there is a suitable sales presentation for every individual situation at the POS. And should the modularity of the POS programme not meet customer-specific requirements, KUKKO always finds a solution.

Any questions about POS activities will be gladly answered by our worldwide contacts:





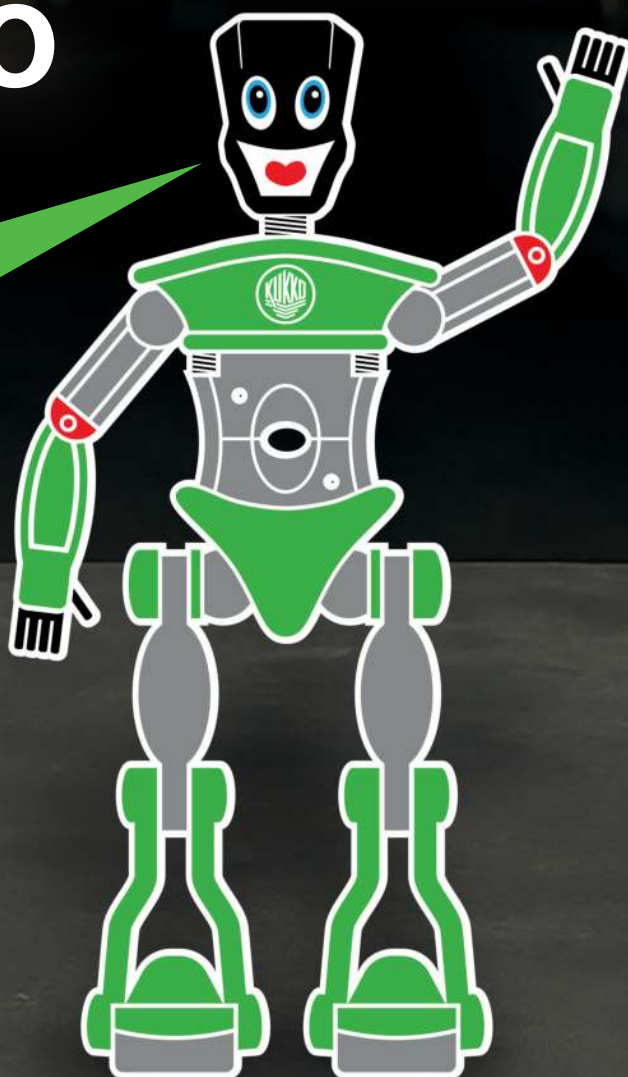
KUKKO // *Pull forward*



# KUKKEY - THE SOLUTION ADVISOR FROM KUKKO

**HELLO,  
I'M KUKKEY!**

Your 24/7 assistant with  
the ultimate knowledge  
all about Pulling. You've  
got a problem? Ask me, I  
have the solution!



# KUKKEY - ALL THIS IS INSIDE ME

My head is the hexagon of a **mechanical KUKKO spindle**



My arms are extensions for **universal pullers (series 20/30)**



My chest and shoulders are a **universal puller crossbar (series 20/30)**



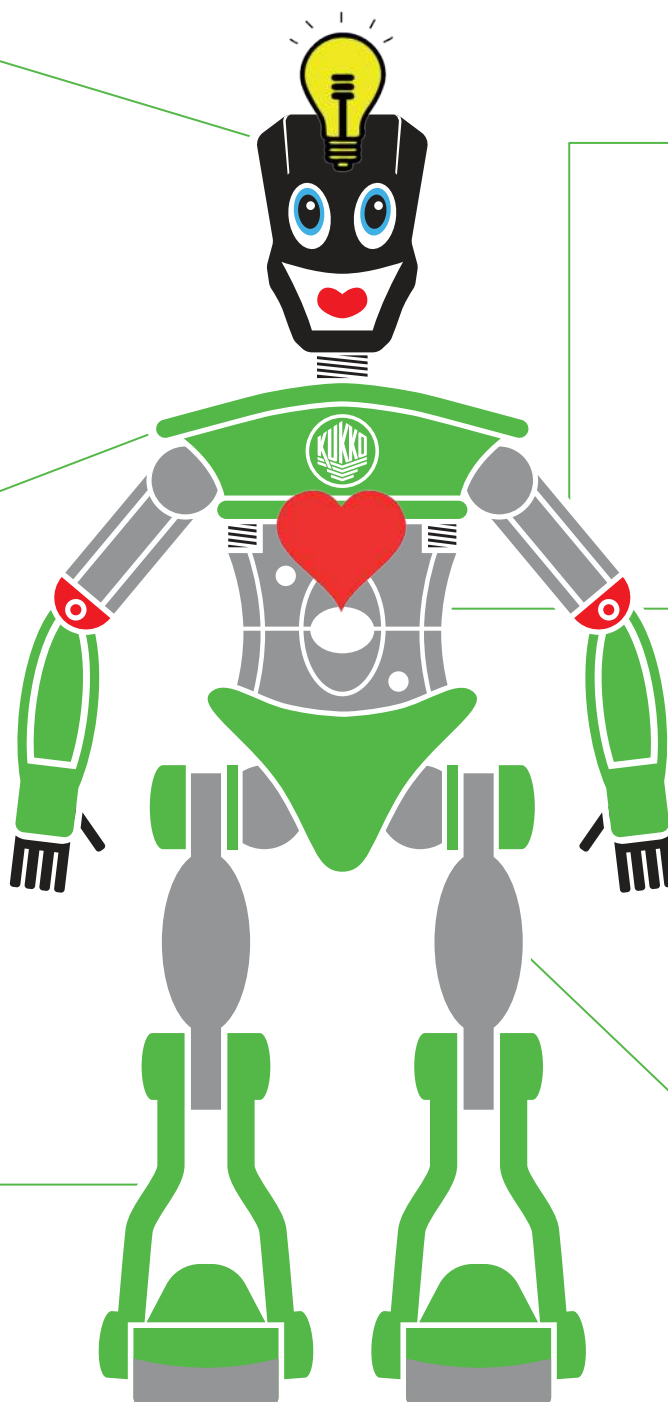
My belly is a **KUKKO bearing separator (series 15)**



My shins and feet are the jaws of a **hub puller (series 10-M & 38)**



My thighs are tabs of the **pullers from series 206**



"I was born with the DNA of the pioneers Alfred Kleinbongartz and Emil Kaiser. In the meantime, I've gathered over 100 years of know-how. As your loyal solutions advisor by your side, I always know the key to the right puller and deliver valuable tips to keep your world in motion."



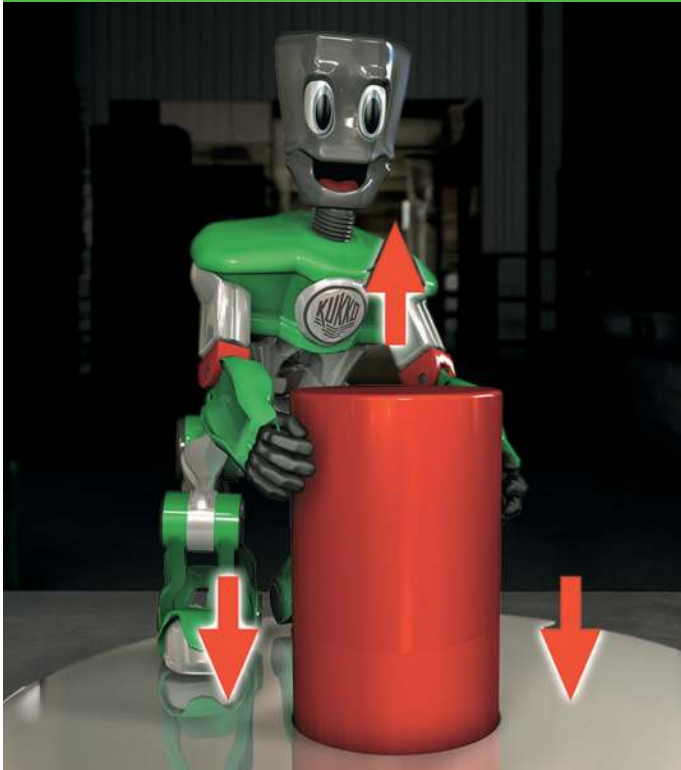
"I am your solutions advisor with bits and bytes on my mind. Driven by Generation Alpha and empowered with AI superpowers, I've become the digital superhero of today. I speak over 15 languages, feel at home all around the world, and am here for you 24/7."



## MY STORY

### I was born a millennial

Maybe you still know me from the 2000s? That's when I started sneaking into brochures or catalogs with tips and tricks.

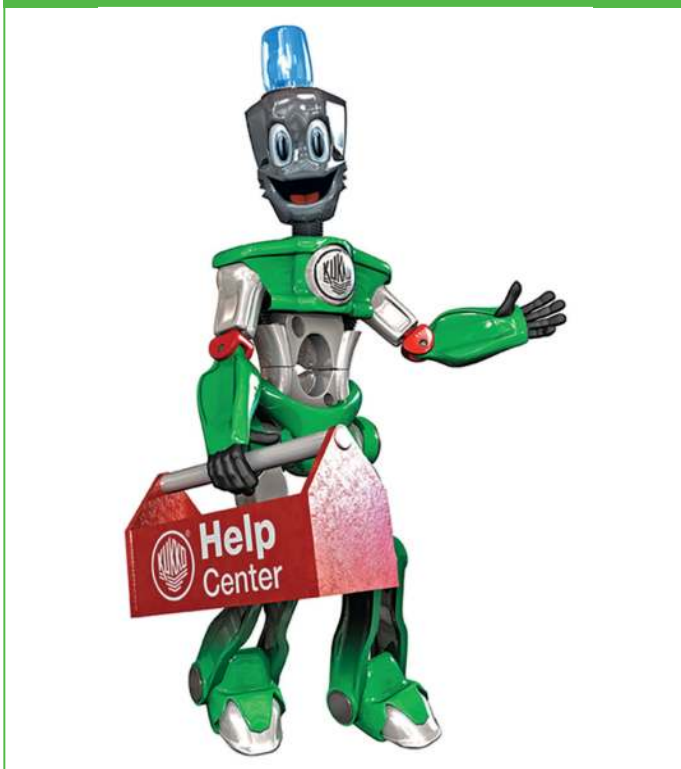


### I was an advisor from A to Z

I presented my ABC of Pulling to you in flyers and brochures.



### I was your savior when everything came to a standstill



### I even made it into a movie once



# KUKKEY - The bot with AI superpower

No matter where you are. Whether at the company, in the workshop, in the field, on the water, in the air, or relaxing with a hobby in your free time, I help you get everything running again.

Whether you have seized bearings, nasty sockets, or stubborn gears - I'll tell you in just a few clicks which is the right puller.

And if you get stuck, we'll just chat directly. Because my colleagues in sales and around the world are almost as omnipresent as I am.

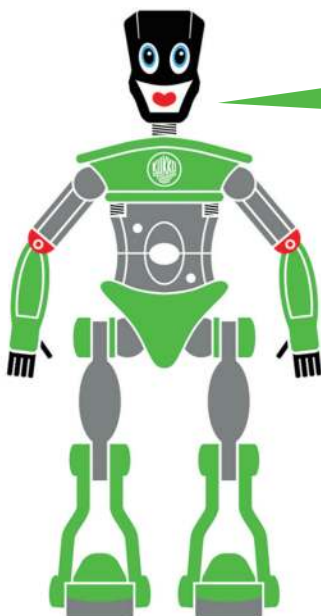
You can always reach them via:



## THE 24/7 CHAT ASSISTANT

### What I can do:

- I find the right KUKKO tool for your application in seconds
- I explain the proper use to you
- I have tips, tricks & pro know-how for every challenge
- And if it gets complicated: I'll get real people from KUKKO in Hilden and around the world involved for you



Here's direct access to the chat:



### Tips for quick results:

- **Give me as much context as possible** - the more precisely you describe your application, the better
- **The following details are important for me:**
  - In which field/industry do you need my help? (Machinery, automobile, mechanics, etc.)
  - What is the component you need to pull?



Ball Bearing



Gear



Pulley

- **How accessible is the component?**
  - Are there support surfaces
  - Is the component on a shaft and/or slightly recessed or in a deeper recess
  - Clearance (space next to/under the component)
- **What forces are required?**

If you can estimate whether superpowers are necessary for a hydraulic puller solution, that would be very important for me to know
- Are you looking for the **specific solution** for your application, or would you like a **universal puller solution** that will keep you happy in the future?



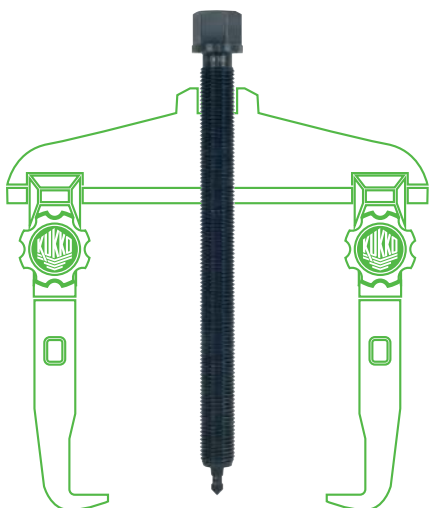
KUKKO // *Pull forward*



# THE POWER OF THE DRIVE



## MECHANICAL



The combination of spindle and thread guarantees particularly precise Pulling, with manual operation of the spindle ensuring sensitive control of the Pulling process.

### ADVANTAGE:

All KUKKO spindles are made from a single piece of steel. Another special feature is the dual spindle tip – round or pointed – for working on different surfaces.



Mechanical  
tension force up to

**10 t**

## GREASE HYDRAULIC



Series 8-0

Series 8

Series 800

Series 8-HP

Grease hydraulic spindles are suitable for Pulling particularly tight-fitting bearings, gears, and discs with a Pulling force of up to 20 t. Thanks to integrated grease hydraulics, there is no need for an external pump.

### ADVANTAGE:

Hydraulic spindles guarantee easy and controlled Pulling of particularly tight-fitting parts with minimal effort.



Medium  
tension force up to

**20 t**

## OIL HYDRAULIC



Series YRE

Series YRH

Series YRM

Hydraulic hollow piston cylinders are used with the KUKKO hydraulic programme. Used as a pressure or Pulling cylinder, they enable energy-saving, versatile work even in difficult Pulling situations.

### ADVANTAGE:

The infinitely adjustable force guarantees controlled and safe work while making full use of the entire performance potential.



Especially high tension and  
compression force up to

**100 t**



## TYPES OF OPERATION

### Spindles with T-handle

The spindle drive with T-handle guarantees particularly sensitive and controlled Pulling. Thanks to the fine-threaded spindle, the force can be dosed precisely. The T-handle allows for an even transmission of force, minimising point loads and avoiding damage to the workpiece. Ideally suited for applications where precision and sensitivity are required.



### Spindles with hexagon

The spindle drive with 6-hex allows a Puller to be operated with a ratchet, open-ended or ring spanner, providing maximum flexibility when Pulling. For tight-fitting or corroded components, the spindle drive with 6-hex allows the use of high torque and controlled tension force, ensuring components can be dismantled safely, precisely, and without damage.



### Spindles with hydraulic pump

The spindle drive with hydraulic pump guarantees powerful yet controlled Pulling of particularly tight-fitting components. Thanks to the hydraulic drive, even under heavy loads, components can be released with minimal effort. Ideally suited for demanding Pulling tasks where maximum performance and precision are required.



# THE KUKKO NUMBERING SYSTEM

The 2-jaw and 3-jaw universal Puller with sliding, always parallel pulling jaws of the 20 and 30 series can be combined with various jaw types – in different lengths. For easy allocation of Puller to the appropriate pulling jaw, KUKKO has introduced a user-friendly and self-explanatory numbering system.

## Which pulling jaws fit which Pullers?

All Pullers of size -1 and -10 fit the pulling jaws that start with 1-

All Pullers of size -2 and -20 fit the pulling jaws that start with 2-

All Pullers of size -3 and -30 fit the pulling jaws that start with 3-

All Pullers of size -4 and -40 also fit the pulling jaws that start with 3-

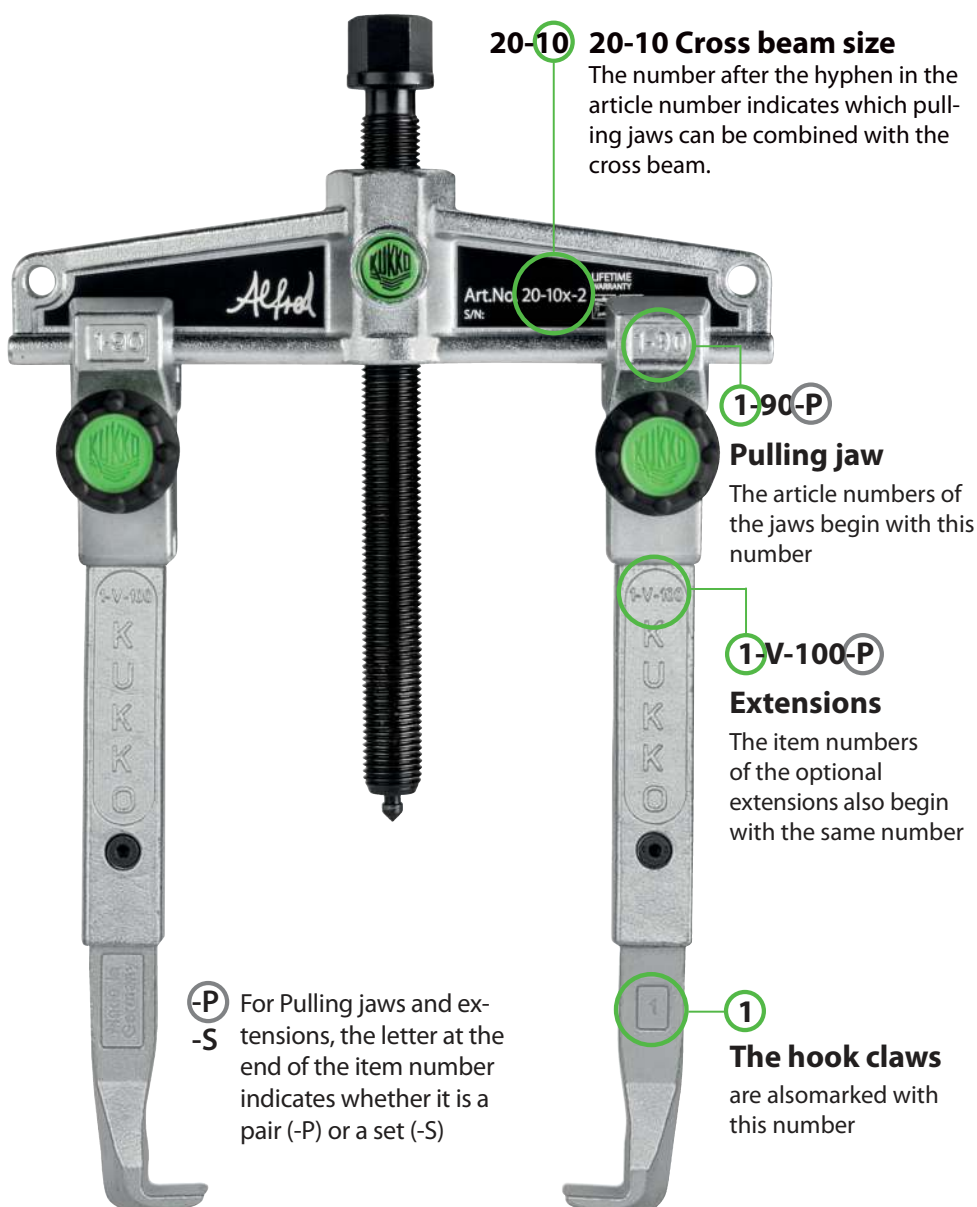
## Example:

**20-2** ➡ has the pulling jaws **2-150-P**

➡ also suitable: **2-151-P; 2-152-P; 2-153-P**

➡ also suitable are longer pulling jaws such as: **2-300-P; 2-301-P; 2-302-P; 2-303-P**

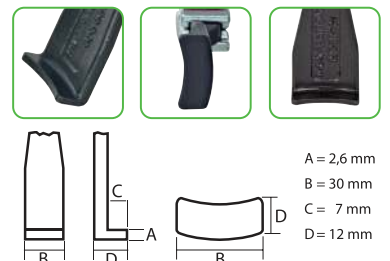
## EXPLANATION OF THE NUMBERING SYSTEM (EXAMPLE 20-10x-2)



## Jaw types:

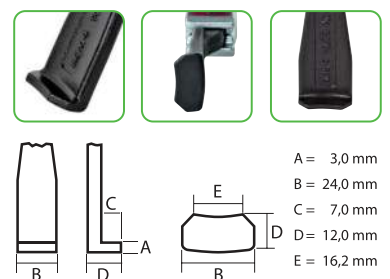
**S**

### Narrow jaws



**S-T**

### Extremely narrow jaws



S-T jaws

S jaws



## ARTICLE NUMBER SYSTEM

### COMPATIBILITY SPINDLE AND HYDRAULICS SERIES 8-HP

The hydraulic spindles of series 8-HP carry the diameter of the thread as the last two digits of the item number, thereby referencing the mechanical spindle.



| Art.No. Spindle | Pressure spindle | Ø a mm | b mm |
|-----------------|------------------|--------|------|
|                 | 6                | 21     | 170  |

| Item no. Hydraulic spindle | Hydraulic spindle with hand pump | Ø a mm |
|----------------------------|----------------------------------|--------|
|                            | 8-HP-6                           | 21     |



### COMPATIBILITY SPINDLE AND HYDRAULICS SERIES 8-0

The hydraulic spindles of series 8-0 carry the diameter of the thread as the last two digits of the item number, thereby referencing the mechanical spindle.



| Art.No. Spindle | Pressure spindle | Ø a mm | b mm |
|-----------------|------------------|--------|------|
|                 | 6                | 21     | 170  |

| Item no. Hydraulic spindle | Long hydraulic spindle | Ø a mm |
|----------------------------|------------------------|--------|
|                            | 8-0-6                  | 21     |



### COMPATIBILITY SPINDLE AND POWERNUT

All mechanical spindles as well as power nuts are equipped with descriptive item numbers. Both item numbers include the diameter of the thread, thus allowing quick assignment of the matching power nut to the respective spindle.



| Art.No. Spindle | Pressure spindle | Ø a mm | b mm |
|-----------------|------------------|--------|------|
|                 | 6                | 26     | 300  |

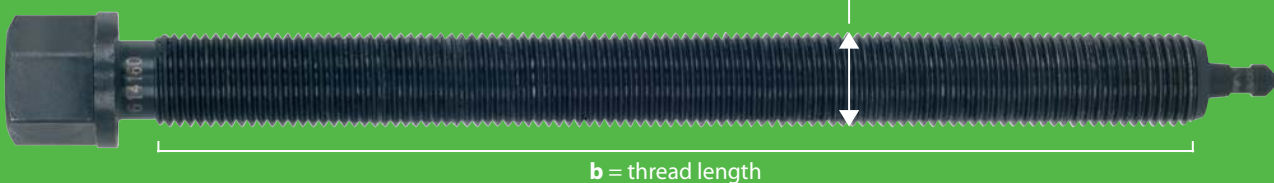
| Item no. Power nut | Power nut | Ø a mm | SW mm |
|--------------------|-----------|--------|-------|
|                    | 67        | 26     | 46    |



### ABBREVIATIONS:

Ø a = Diameter of the spindle  
b = Thread length

Ø a = Diameter of the spindle







External extraction



Internal extraction



Separation



Removing







# PULLER

Since 1919, KUKKO has specialized in the development, production, and optimization of pullers, which remain the core business to this day.

With 150 types of pullers and 500 application sizes, the pioneer of pulling offers a unique variety of assortment.

The activities of pulling include:

- External extraction
- Internal extractor
- Bearing separator
- Demounting











# EXTERNAL

During external extraction, the part to be removed, which is seated on a shaft and is accessible from the outside, is gripped from the outside with the jaws. By tightening the spindle, the component is secured. Subsequently, the hexagon on the spindle head is moved with an actuation tool until the component is released.





KUKKO // *Pull forward*



SERIES 20 | 30 | 11

# UNIVERSAL PULLER

*Alfred*





Left: Alfred Kleinbongartz in 1919, right: his great-great-grandson Max Alfred Kleinbongartz 2025

## KUKKO ORIGINAL PULLER – A PURE FAMILY AFFAIR FROM ITS INVENTION TO TODAY

The 20 and 30 series – developed in 1919 by Alfred Kleinbongartz and reengineered in 2025 by Max Alfred Kleinbongartz.

It is known that inventiveness and pioneering spirit are often passed down from generation to generation in some manufacturing and craft-based companies. However, for this DNA to persist for five generations and to be functionally perfected in such a fundamental way is unique within the German tool industry.

For over 100 years, the iconic shape and function of the 20 and 30 series have characterized KUKKO's original puller. The universal puller was invented by Alfred Kleinbongartz in 1919 and has since been the flagship of the world's largest range of pullers. As the number one in non-destructive disassembly, it offers the perfect solution for every special pulling situation and is highly valued internationally by industry, trades, and workshops.

Driven by the spirit of his great-great-grandfather, Max Alfred Kleinbongartz is committed to progress, even as the fifth generation. Through his international business relations and close personal contact with customers at home and abroad, the junior boss recognizes the need to take the series around the original puller to an even higher performance level. With a fundamental upgrade in technology and function, the 20, 30, and 11 series experience significant application improvements. The focus of his expanding and upgrading range optimizations was on operating comfort, user-friendliness, and greater flexibility during pulling. Thanks to these upgrades, Max Alfred Kleinbongartz once again achieves a milestone in the history of the puller dynasty. At the same time, he emphasizes with convincing insistence: "This is not the endpoint. In the future, too, I will dynamically evolve the KUKKO Original with my team, always keeping the user in mind throughout our ongoing transformation."



1919



2025



## FEATURES OF THE SERIES

### SERIES 20

**2-jaw  
universal puller**



**20-10**

The 2-jaw universal pullers of the 20 series are universally applicable, even in confined spaces.

### SERIES 30

**3-jaw  
universal puller**



**30-10**

With 3 jaws, the pullers of the 30 series ensure even force distribution and enable even greater pulling forces.

### SERIES 11

**Extra powerful 3-jaw  
universal puller with  
adjustable reach**



**11-1-AV**

The extra powerful pullers of the 11 series guarantee the extraction of particularly heavy parts due to their massive construction.

## NEW FEATURES



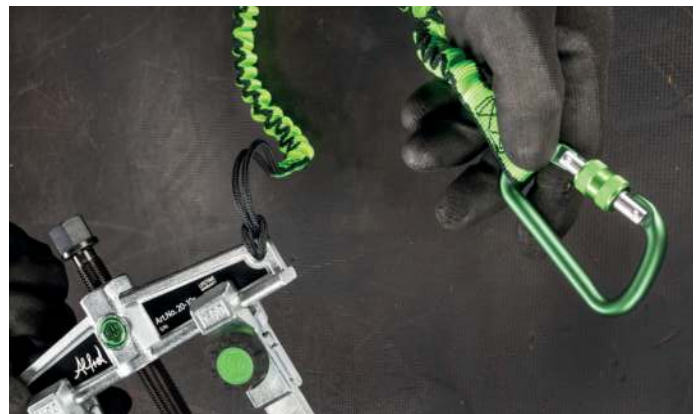
As an orientation aid, a scale is located above the cross-bar for uniform adjustment of the jaws, ensuring safe positioning of the jaws.



For even higher load capacity, the new crossbars of the pullers have reinforced shoulders. Thus, even under high tensile force, maximum stability is ensured.

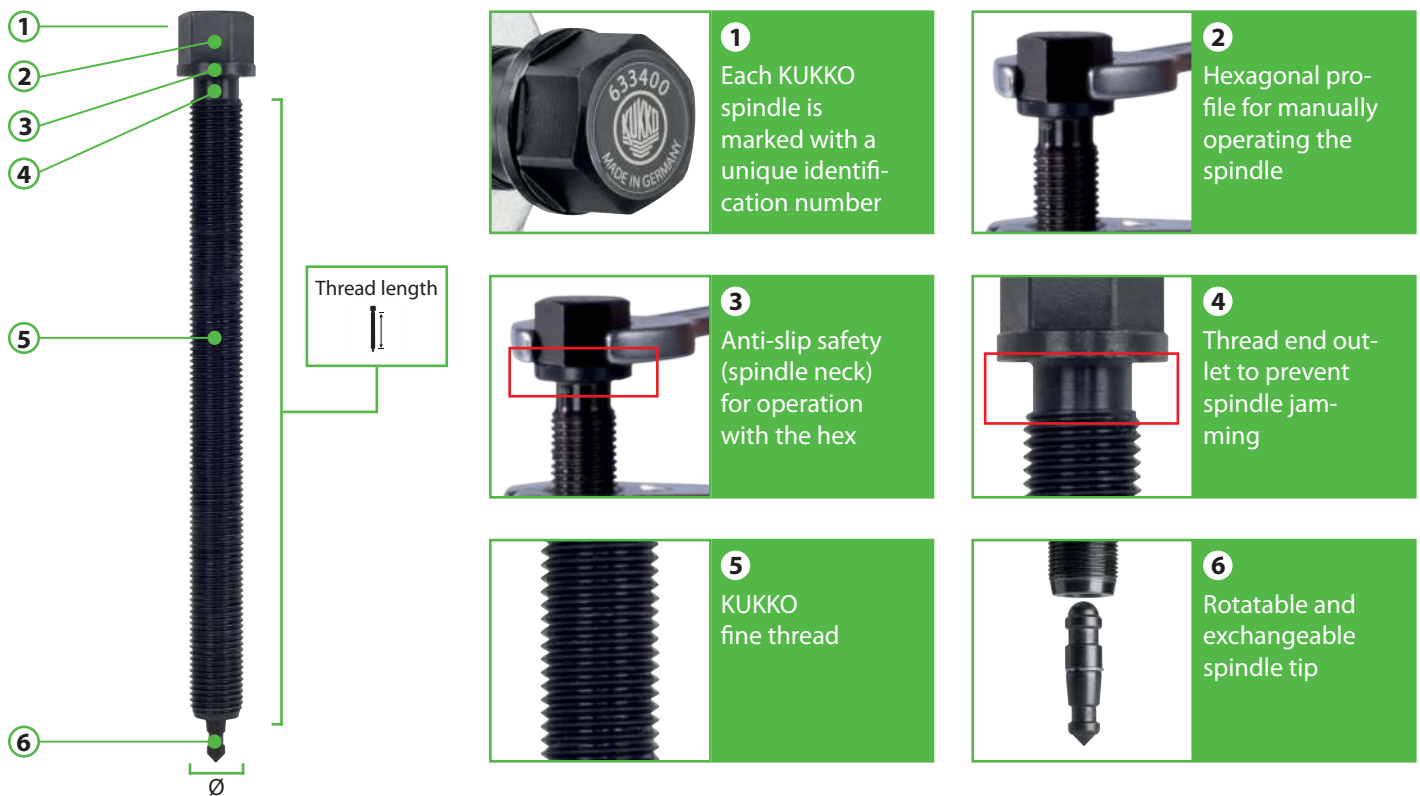


Below the crossbar, next to the spare part number for re-orders, there is a second number indicating which spindle is compatible with the crossbar.



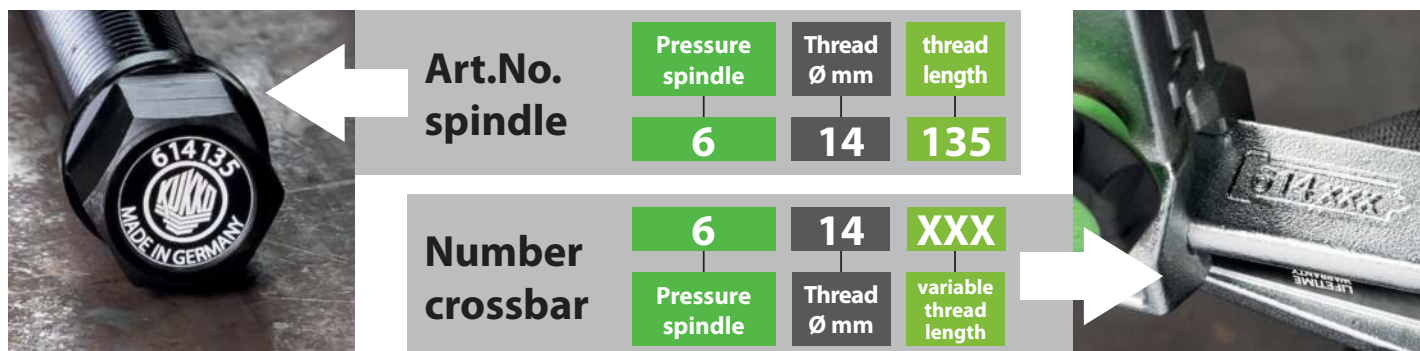
For additional puller safety as well as secure positioning during work or storage, two sidefall protection eyes have been installed on the crossbar, enabling the attachment of fall protection (series 660).

# MECHANICAL SPINDLES FROM KUKKO



## COMPATIBILITY OF SPINDLES AND PULLERS / CROSSBAR

| #      | Ø        | l      | W           | SW    | Fits to item number               |
|--------|----------|--------|-------------|-------|-----------------------------------|
| 612080 | 12 mm    | 85 mm  | M 12x1,5    | 13 mm | 20-0   20-00   30-0   30-00       |
| 612110 | 12 mm    | 110 mm | M 12x1,5    | 13 mm | 20-0   20-00   30-0   30-00       |
| 612130 | 12 mm    | 130 mm | M 12x1,5    | 13 mm | 20-0   20-00   30-0   30-00       |
| 612150 | 12 mm    | 150 mm | M 12x1,5    | 13 mm | 20-0   20-00   30-0   30-00       |
| 612200 | 12 mm    | 210 mm | M 12x1,75   | 13 mm | 20-0   20-00   30-0   30-00       |
| 614135 | 14 mm    | 135 mm | M 14x1,5    | 17 mm | 20-1   20-10   30-1   30-10       |
| 614160 | 14 mm    | 160 mm | M 14x1,5    | 17 mm | 20-1   20-10   30-1   30-10       |
| 614200 | 14 mm    | 200 mm | M 14x1,5    | 17 mm | 20-1   20-10   30-1   30-10       |
| 614242 | 14 mm    | 240 mm | M 14x1,5    | 17 mm | 20-1   20-10   30-1   30-10       |
| 614250 | 14 mm    | 250 mm | M 14x1,5    | 17 mm | 20-1   20-10   30-1   30-10       |
| 621220 | 20,96 mm | 220 mm | G 1/2" / 14 | 22 mm | 20-2   20-20   30-2   30-20       |
| 621300 | 20,96 mm | 300 mm | G 1/2" / 14 | 22 mm | 20-2   20-20   30-2   30-20       |
| 621355 | 20,96 mm | 355 mm | G 1/2" / 14 | 22 mm | 20-2   20-20   30-2   30-20       |
| 626300 | 26,44 mm | 300 mm | G 3/4" / 14 | 27 mm | 20-3   20-30   30-3   30-30       |
| 626400 | 26,44 mm | 400 mm | G 3/4" / 14 | 27 mm | 20-3   20-30   30-3   30-30       |
| 626500 | 26,44 mm | 500 mm | G 3/4" / 14 | 27 mm | 20-3   20-30   30-3   30-30       |
| 633400 | 33,25 mm | 400 mm | G 1" / 11   | 36 mm | 20-4   20-40   30-4   11-0        |
| 633500 | 33,25 mm | 500 mm | G 1" / 11   | 36 mm | 20-4   20-40   30-4   11-0        |
| 633600 | 33,25 mm | 600 mm | G 1" / 11   | 36 mm | 20-4   20-40   30-4   11-0        |
| 637350 | 37,90 mm | 350 mm | G1 1/8"     | 41 mm | 20-5   30-40   30-5   11-1   11-2 |
| 637500 | 37,90 mm | 500 mm | G1 1/8"     | 41 mm | 20-5   30-40   30-5   11-1   11-2 |
| 637600 | 37,90 mm | 600 mm | G1 1/8"     | 41 mm | 20-5   30-40   30-5   11-1   11-2 |





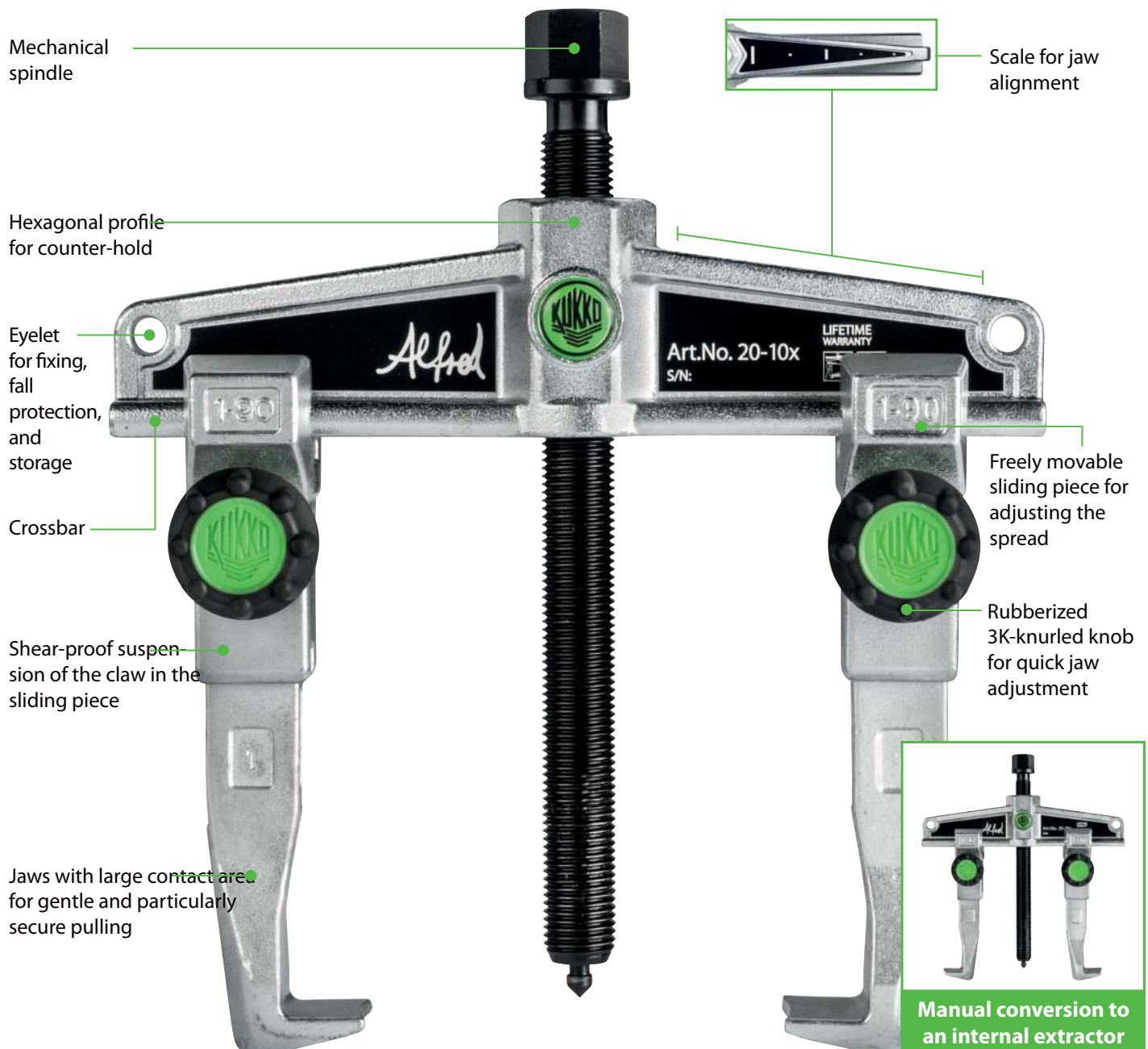
# APPLICATION

Based on the inventiveness and pioneering spirit of Alfred Kleinbongartz, the universal pullers with sliding, always parallel jaws of the 20, 30, and 11 series receive a functional upgrade. The focus here is on increased operational comfort and improved user-friendliness. For even more flexibility in pulling, the product line has been expanded by two additional sizes (20-0 and 20-00 as well as 30-0 and 30-00). This results in a significantly increased external extraction spread range from 0 to 750 mm.

## Benefits

- Suitable for use with eccentric components thanks to freely sliding jaws on the crossbar
- Optionally convertible from an external puller to an internal extractor by reversing the jaws
- Variable adjustment to different spreads (depending on model)
- Secure positioning of the spindle thanks to the rotatable spindle tip on smooth surfaces and during centering (Switch Technology)
- 3-jaw design ensures even force distribution and enables greater extraction forces (series 11 & 30)
- Shear-proof suspension of the claw in the sliding piece (jaw lock technology)
- Anti-slip safety (spindle neck) for safe work with a wrench
- Thread end outlet to protect the thread
- For different installation situations, there are 3 different types of jaws (standard, narrow and extra narrow)
- All pullers are inscribed with technical attributes and manufacturer information
- Jaws, spindle, and crossbar have a spare part number for easy reordering

## CONSTRUCTION OF A UNIVERSAL PULLER (EXAMPLE 20-10x)



# SERIES MODULARITY *Alfred*

The modular kit system is the unique selling point of KUKKO. Thanks to the limitless mix & match, 150 types of pullers can be combined in 500 variants. The heart is always the spindle, which gives the puller its power. Various jaw types and their extensions, 2- and 3-jaw crossbars, and reversible spindle tips make the puller's composition perfect. This provides users with nearly endless options to master their individual application case.



## SCREW CONNECTION / KNURLED KNOB



**SERIES 20 CLASSIC:** Screw connection allows for easy release and particularly tight fastening of the jaws with a hex key.

**SERIES 20+:** The red hand knobs enable easy, tool-free loosening and fixing of the jaws.

**SERIES 20x:** The optimized shape of the green soft-touch knob guarantees exceptionally good haptics (even with wet or oily hands).

## JAWS



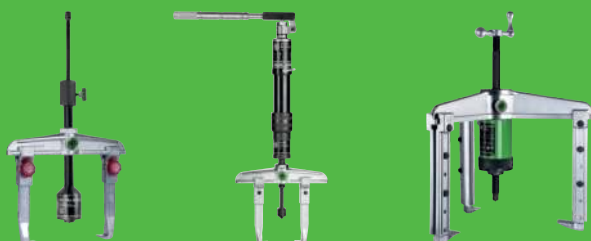
**STANDARD:** robust, large contact area, particularly safe disassembly

**NARROW:** for tight and hard-to-reach spaces

**EXTREMELY NARROW:** for very tight and poorly accessible spaces

**HEIGHT ADJUSTABLE:** particularly massive, adjustable reach

## HYDRAULICS



**HYDRAULIC SPINDLES:** maximum pulling force up to 20 t, operation with hex key or ratchet

**HYDRAULIC SPINDLES WITH HAND LEVER OPERATION:** maximum pulling force up to 20 t, operation via hand lever

**HYDRAULIC HOLLOW PISTON CYLINDERS:** maximum pulling force up to 30 t, operation via hydraulic pump

## EXTENSIONS



**PULLING JAWS EXTENSIONS:** The extensions are used for increasing the reach. This allows parts to be gripped that are seated particularly deep on a shaft. The extensions can be combined as needed and therefore adapted to the required reach. The extensions are available in lengths of 10 cm and 15 cm.

## SPINDLE TIPS



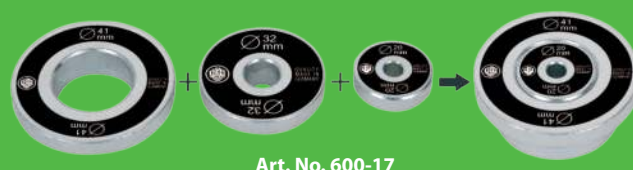
**BALL / TIP:** dual spindle tip for smooth surfaces and centering

**FLAT:** for large and flat bearing surfaces

**CONCAVE:** for rounded bearing surfaces

**LARGE TIP:** for bearing surfaces with large centering holes

## PRESSURE PIECES



Art. No. 600-17

The pressure piece kit 600-17 is used to support the pressure spindle on a hollow shaft. The kit includes three pressure pieces of different diameters that can be combined. Thanks to their stepped silhouette, the pressure pieces sit perfectly on the hollow shaft. Depending on size, the different pressure pieces can also be nested to achieve the exact diameter of the shaft.



# SPREADS, REACHES, AND TENSION FORCE



| 20-0   30-0                               | 20-00   30-00                             | 20-1   30-1                                  | 20-10   30-10                               | 20-2   30-2                                  | 20-20   30-20                                | 20-3   30-3                                  |
|-------------------------------------------|-------------------------------------------|----------------------------------------------|---------------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|
| External extraction spread<br><br>0-70 mm | External extraction spread<br><br>0-70 mm | External extraction spread<br><br>0-90 mm    | External extraction spread<br><br>0-130 mm  | External extraction spread<br><br>0-160 mm   | External extraction spread<br><br>0-200 mm   | External extraction spread<br><br>0-250 mm   |
| External extraction reach<br><br>0-70 mm  | External extraction reach<br><br>0-70 mm  | External extraction reach<br><br>0-100 mm    | External extraction reach<br><br>0-70 mm    | External extraction reach<br><br>162 mm      | External extraction reach<br><br>162 mm      | External extraction reach<br><br>210 mm      |
| Internal extraction spread<br><br>0-70 mm | Internal extraction spread<br><br>0-70 mm | Internal extraction spread<br><br>100-120 mm | Internal extraction spread<br><br>95-160 mm | Internal extraction spread<br><br>100-220 mm | Internal extraction spread<br><br>100-260 mm | Internal extraction spread<br><br>180-340 mm |
| max. tension force<br>0-70 mm             | max. tension force<br>0-70 mm             | max. tension force<br>4,5 t                  | max. tension force<br>4,5 t                 | max. tension force<br>6 t                    | max. tension force<br>6 t                    | max. tension force<br>8,5 t                  |



| 20-30   30-30                                       | 20-4   30-4                                         | 20-40   30-40                                       | 20-5   30-5                                          | 11-0                                             | 11-1                                             | 11-2                                             |
|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| <b>External extraction spread</b><br><br>0-350 mm   | <b>External extraction spread</b><br><br>15-520 mm  | <b>External extraction spread</b><br><br>15-650 mm  | <b>External extraction spread</b><br><br>0-750 mm    | <b>External extraction spread</b><br><br>0-70 mm | <b>External extraction spread</b><br><br>0-70 mm | <b>External extraction spread</b><br><br>0-70 mm |
| <b>External extraction reach</b><br><br>200 mm      | <b>External extraction reach</b><br><br>209 mm      | <b>External extraction reach</b><br><br>300 mm      | <b>External extraction reach</b><br><br>400 mm       | <b>External extraction reach</b><br><br>0-70 mm  | <b>External extraction reach</b><br><br>0-70 mm  | <b>External extraction reach</b><br><br>0-70 mm  |
| <b>Internal extraction spread</b><br><br>180-440 mm | <b>Internal extraction spread</b><br><br>200-590 mm | <b>Internal extraction spread</b><br><br>200-710 mm | <b>Internal extraction spread</b><br><br>340-1000 mm | <b>Internal extraction spread</b><br><br>0-70 mm | <b>Internal extraction spread</b><br><br>0-70 mm | <b>Internal extraction spread</b><br><br>0-70 mm |
| <b>max. tension force</b><br>8,5 t                  | <b>max. tension force</b><br>12 t                   | <b>max. tension force</b><br>12 t                   | <b>max. tension force</b><br>15 t                    | <b>max. tension force</b><br>0-70 mm             | <b>max. tension force</b><br>0-70 mm             | <b>max. tension force</b><br>0-70 mm             |



## SETS

The sets of the K-2030 series are equipped with universally applicable 2- and 3-jaw pullers. Thanks to numerous combination options with jaws, crossbars, and extensions, the sets are used across various industries.



K-2030-20-S



K-2030-10+S



K-2030-20XS

## APPLICATION EXAMPLE



Pulling a transmission gear using the 20-10+

# MOBILE HYDRAULIC PULLER “DAVID”

The hydraulic, mobile 3-jaw puller with adjustable reach “DAVID” is used to extract large bearings, gears, and similar parts in heavy industry, crafts, and workshops. With a maximum load of 20 t, the puller provides a powerful hydraulic solution for otherwise difficult pulling tasks with large parts.

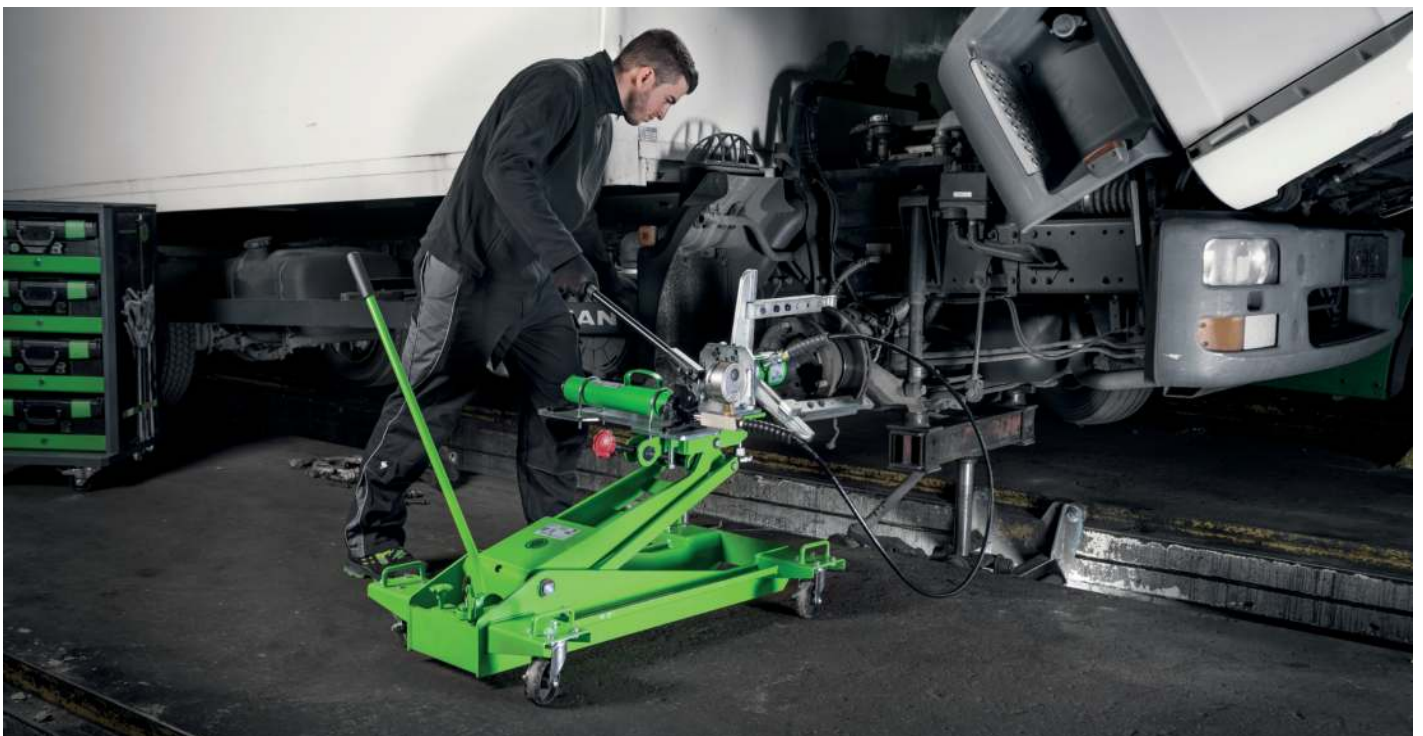
## Benefits

- Even under full load, DAVID ensures parallel pulling
- The lever operation swivels 360° for ergonomic handling from the working area
- The lowering function for controlled load reduction minimizes accident risk thanks to the easily accessible valve
- With four swivel casters, mobile use at various worksites
- The three-jaw design ensures even load distribution and thus particularly secure retention on the part to be pulled

## CONSTRUCTION



## APPLICATION EXAMPLE



The mobile hydraulic puller “DAVID” in use



## SERIES 20-CLASSIC 2-JAW UNIVERSAL PULLER



The 2-jaw universal pullers with adjustable and robust standard jaws are used for particularly safe pulling of bearings, gears, and disks in all common sizes for crafts, workshops, and industries. This allows any component seated on a shaft and externally accessible to be released. By simply reversing the jaws, the pullers can also be used as internal extractors.

### BENEFITS

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding
- Variable adjustment to any spread between 0 mm – 750 mm
- Shear-safe suspension of the claw in the sliding piece (ARMLOCK Technology)



### TECHNICAL ATTRIBUTES

| #                |  GTIN |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in<br>the set            |  |
|------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|
| <b>20-0 New</b>  | -339936                                                                                  | 0 - 70<br>0 - 2 3/4                                                                             | 75<br>2 15/16                                                                               | 70 - 105<br>2 3/4 - 4 1/8                                                                   | 13<br>1 1/2                                                                                 | 40<br>29.50                                                                                  | 25                             | 2.5<br>2.76                                | 0,52<br>2.205                                                                               | -                                 | ✓                                                                                     |
| <b>20-00 New</b> | -042317                                                                                  | 0 - 95<br>0 - 3 3/4                                                                             | 75<br>2 15/16                                                                               | 70 - 130<br>2 3/4 - 5 1/8                                                                   | 13<br>1 1/2                                                                                 | 40<br>29.50                                                                                  | 25                             | 2.5<br>2.76                                | 0,56<br>2.205                                                                               | -                                 | ✓                                                                                     |
| <b>20-1 New</b>  | -009433                                                                                  | 0 - 90<br>0 - 3 5/8                                                                             | 100<br>4                                                                                    | 100 - 120<br>3 15/16 - 4 3/4                                                                | 17<br>1 1/16                                                                                | 80<br>59.01                                                                                  | 45                             | 4.5<br>4.96                                | 1,305<br>2.977                                                                              | 20-TK-13, 24-A, 24-B, 20-ST, 24-C | ✓                                                                                     |
| <b>20-10 New</b> | -009921                                                                                  | 0 - 130<br>0 - 5                                                                                | 100<br>4                                                                                    | 95 - 160<br>3 3/4 - 6 5/16                                                                  | 17<br>1 1/16                                                                                | 80<br>59.01                                                                                  | 45                             | 4.5<br>4.96                                | 1,42<br>3.131                                                                               | 20-TK-13, K-2030-10, 20-ST        | ✓                                                                                     |
| <b>20-2 New</b>  | -009501                                                                                  | 0 - 160<br>0 - 6                                                                                | 150<br>6                                                                                    | 100 - 220<br>3 15/16 - 8 11/16                                                              | 22<br>7/8                                                                                   | 150<br>110.64                                                                                | 60                             | 6<br>6.61                                  | 3,01<br>6.836                                                                               | 20-TK-13, 24-B, 20-ST, 24-C       | ✓                                                                                     |

## PRODUCT DETAILS

| #                             |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set                           |  |
|-------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|
|                               | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                  |                                                                                     |
| <b>20-20</b><br><b>New</b>    | -010088                                                                           | 0 - 200<br>0 - 8                                                                  | 162<br>6                                                                          | 100 - 260<br>3 15/16 -<br>10 1/4                                                  | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 60                       | 6<br>6.61                | 3,22<br>7.100                                                                       | 20-TK-13,<br>K-2030-20,<br>K-2030-20-B,<br>20-ST | ✓                                                                                   |
| <b>20-3</b> <b>New</b>        | -009686                                                                           | 0 - 250<br>0 - 10                                                                 | 210<br>8                                                                          | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 85                       | 8.5<br>9.37              | 7,185<br>15.843                                                                     | 20-TK-13, 20-<br>ST                              | ✓                                                                                   |
| <b>20-30</b><br><b>New</b>    | -010163                                                                           | 0 - 350<br>0 - 14                                                                 | 200<br>8                                                                          | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 85                       | 8.5<br>9.37              | 7,525<br>16.593                                                                     | -                                                | ✓                                                                                   |
| <b>20-4</b> <b>New</b>        | -009761                                                                           | 15 - 520<br>9/16 -<br>21                                                          | 209<br>8                                                                          | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 14<br>30.870                                                                        | -                                                | ✓                                                                                   |
| <b>20-40</b><br><b>New</b>    | -411861                                                                           | 15 - 650<br>9/16 -<br>26                                                          | 300<br>12                                                                         | 200 - 710<br>7 7/8 - 27<br>15/16                                                  | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 16,36<br>36.074                                                                     | -                                                | ✓                                                                                   |
| <b>20-1-2</b><br><b>New</b>   | -466311                                                                           | 0 - 90<br>0 - 3 5/8                                                               | 200<br>8                                                                          | 70 - 140<br>2 3/4 - 5<br>1/2                                                      | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 1,985<br>4.377                                                                      | -                                                | ✓                                                                                   |
| <b>20-1-25</b><br><b>New</b>  | -914362                                                                           | 0 - 90<br>0 - 3 5/8                                                               | 250<br>10                                                                         | 70 - 140<br>2 3/4 - 5<br>1/2                                                      | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 8,5<br>18.743                                                                       | -                                                | ✓                                                                                   |
| <b>20-1-4</b><br><b>New</b>   | -989643                                                                           | 0 - 90<br>0 - 3 5/8                                                               | 400<br>16.                                                                        | 70 - 140<br>2 3/4 - 5<br>1/2                                                      | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 3,13<br>6.902                                                                       | -                                                | ✓                                                                                   |
| <b>20-10-2</b><br><b>New</b>  | -466496                                                                           | 0 - 120<br>0 - 5                                                                  | 200<br>8                                                                          | 70 - 180<br>2 3/4 - 7<br>1/16                                                     | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 2,13<br>4.697                                                                       | K-2030-10                                        | ✓                                                                                   |
| <b>20-10-25</b><br><b>New</b> | -908682                                                                           | 0 - 120<br>0 - 5                                                                  | 250<br>10                                                                         | 70 - 180<br>2 3/4 - 7<br>1/16                                                     | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 2,405<br>5.402                                                                      | K-2030-10                                        | ✓                                                                                   |
| <b>20-10-4</b><br><b>New</b>  | -989650                                                                           | 0 - 120<br>0 - 5                                                                  | 400<br>16                                                                         | 70 - 180<br>2 3/4 - 7<br>1/16                                                     | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 3,435<br>7.574                                                                      | -                                                | ✓                                                                                   |
| <b>20-2-3</b><br><b>New</b>   | -466564                                                                           | 3,2 - 160<br>1/8 - 6                                                              | 300<br>12                                                                         | 100 - 220<br>3 15/16 - 8<br>11/16                                                 | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 70                       | 7<br>7.72                | 4,38<br>9.658                                                                       | -                                                | ✓                                                                                   |
| <b>20-20-3</b><br><b>New</b>  | -466649                                                                           | 3,2 - 200<br>1/8 - 8                                                              | 300<br>12                                                                         | 100 - 260<br>3 15/16 -<br>10 1/4                                                  | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 70                       | 7<br>7.72                | 4,655<br>10.264                                                                     | K-2030-20,<br>K-2030-20-B                        | ✓                                                                                   |
| <b>20-3-25</b><br><b>New</b>  | -901188                                                                           | 0 - 250<br>0 - 10                                                                 | 250<br>10                                                                         | 80 - 340<br>3 1/8 - 13<br>3/8                                                     | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 85                       | 8.5<br>9.37              | 7,52<br>16.582                                                                      | -                                                | ✓                                                                                   |
| <b>20-3-3</b><br><b>New</b>   | -466724                                                                           | 0 - 250<br>0 - 10                                                                 | 300<br>12                                                                         | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 100                      | 10<br>11.02              | 8,1<br>17.861                                                                       | -                                                | ✓                                                                                   |
| <b>20-3-4</b><br><b>New</b>   | -467066                                                                           | 0 - 250<br>0 - 10                                                                 | 400<br>16                                                                         | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 100                      | 10<br>11.02              | 9,075<br>21.499                                                                     | -                                                | ✓                                                                                   |
| <b>20-3-5</b><br><b>New</b>   | -467301                                                                           | 0 - 250<br>0 - 10                                                                 | 500<br>20                                                                         | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 100                      | 10<br>11.02              | 10,57<br>3.462                                                                      | -                                                | ✓                                                                                   |
| <b>20-30-3</b><br><b>New</b>  | -466809                                                                           | 0 - 350<br>0 - 14                                                                 | 300<br>12                                                                         | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 100                      | 10<br>11.02              | 5,52<br>12.172                                                                      | -                                                | ✓                                                                                   |
| <b>20-30-4</b><br><b>New</b>  | -467141                                                                           | 0 - 350<br>0 - 14                                                                 | 400<br>16                                                                         | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 100                      | 10<br>11.02              | 9,62<br>21.212                                                                      | -                                                | ✓                                                                                   |





## PRODUCT DETAILS



| #                            |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|                              | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| <b>20-30-5</b><br><b>New</b> | -467486                                                                           | 0 - 350<br>0 - 14                                                                 | 500<br>20                                                                         | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 100                      | 10<br>11.02              | 10,875<br>23.979                                                                    | -                      | ✓                                                                                   |
| <b>20-4-3</b><br><b>New</b>  | -466984                                                                           | 15 - 520<br>9/16 -<br>21                                                          | 300<br>12                                                                         | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 150                      | 15<br>16.53              | 15,28<br>33.692                                                                     | -                      | ✓                                                                                   |
| <b>20-4-4</b><br><b>New</b>  | -467226                                                                           | 15 - 520<br>9/16 -<br>21                                                          | 400<br>16                                                                         | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 150                      | 15<br>16.53              | 16,79<br>37.022                                                                     | -                      | ✓                                                                                   |
| <b>20-4-5</b><br><b>New</b>  | -467554                                                                           | 15 - 520<br>9/16 -<br>21                                                          | 500<br>20                                                                         | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 150                      | 15<br>16.53              | 16,6<br>36.603                                                                      | -                      | ✓                                                                                   |
| <b>20-40-4</b><br><b>New</b> | -730641                                                                           | 15 - 650<br>9/16 -<br>26                                                          | 400<br>16                                                                         | 200 - 710<br>7 7/8 - 27<br>15/16                                                  | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 150                      | 15<br>16.53              | 17,67<br>38.962                                                                     | -                      | ✓                                                                                   |
| <b>20-40-5</b><br><b>New</b> | -731976                                                                           | 15 - 650<br>9/16 -<br>26                                                          | 500<br>19 4/8                                                                     | 200 - 710<br>7 7/8 - 27<br>15/16                                                  | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 150                      | 15<br>16.53              | 15,8<br>34.839                                                                      | -                      | ✓                                                                                   |
| <b>20-5</b> <b>New</b>       | -009846                                                                           | 0 - 750<br>0 - 30                                                                 | 400<br>16-27                                                                      | 340 -<br>1.000<br>13 3/8 - 39<br>3/8                                              | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 150                      | 15<br>16.53              | 47<br>103.635                                                                       | -                      | ✓                                                                                   |

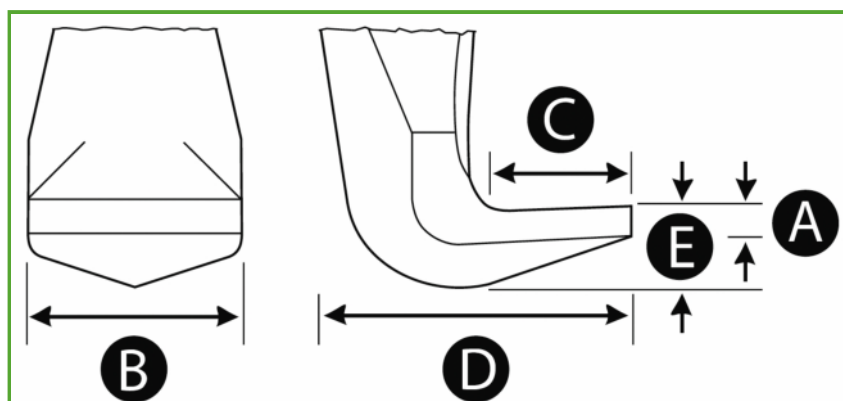
## SERIES 0-P STANDARD JAWS (PAIR)



The pair of two standard jaws is suitable for 2-jaw universal pullers. The robust jaws guarantee a particularly secure removal of bearings, gears, and discs.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 0-75-P  | -024153                                                                             | 75<br>2 15/16                                                                       | 76<br>2 1                                                                           | 5<br>3/16                                                                           | 16<br>5/8                                                                           | 15<br>9/16                                                                          | 13<br>1/2                                                                            | 1,5<br>1/16                                                                           | 0,555<br>0.662                                                                        | ✓                                                                                     |
| 1-90-P  | -001338                                                                             | 100<br>4                                                                            | 132<br>5 3/16                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 0,555<br>1.224                                                                        | ✓                                                                                     |
| 1-190-P | -001666                                                                             | 200<br>8                                                                            | 232<br>9 1/8                                                                        | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,12<br>2.470                                                                         | ✓                                                                                     |
| 1-250-P | -001901                                                                             | 250<br>10                                                                           | 282<br>11 1/8                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,36<br>2.999                                                                         | ✓                                                                                     |
| 1-400-P | -975660                                                                             | 400<br>15 3/4                                                                       | 432<br>17 1/64                                                                      | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 2,12<br>4.675                                                                         | ✓                                                                                     |
| 2-150-P | -002403                                                                             | 150<br>6                                                                            | 193<br>7 5/8                                                                        | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 1,24<br>2.734                                                                         | ✓                                                                                     |
| 2-300-P | -002731                                                                             | 300<br>12                                                                           | 343<br>13 1/2                                                                       | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 2,4<br>5.292                                                                          | ✓                                                                                     |



## PRODUCT DETAILS



| #              |  |  |  |  |  |  |  |  |  |  |
|----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                        | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| <b>3-200-P</b> | -003233                                                                           | 200<br>8                                                                          | 255<br>10 1/32                                                                    | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 3,27<br>7.210                                                                       | ✓                                                                                   |
| <b>3-250-P</b> | -901232                                                                           | 250<br>9 13/16                                                                    | 300<br>11 13/16                                                                   | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 3,725<br>8.214                                                                      | ✓                                                                                   |
| <b>3-300-P</b> | -003561                                                                           | 300<br>12                                                                         | 350<br>13 3/4                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 4,5<br>9.923                                                                        | ✓                                                                                   |
| <b>3-400-P</b> | -003806                                                                           | 400<br>16                                                                         | 450<br>17 11/16                                                                   | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 5,33<br>11.753                                                                      | ✓                                                                                   |
| <b>3-500-P</b> | -004148                                                                           | 500<br>20                                                                         | 550<br>21 5/8                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 6,7<br>14.774                                                                       | ✓                                                                                   |

## SERIES 30-CLASSIC 3-JAW UNIVERSAL PULLER



The 3-jaw universal puller is used for pulling off bearings, gears and discs in all common sizes for trades, workshops and industry. This makes it possible to loosen any component that sits on a shaft and is freely accessible from the outside. Equipped with robust and adjustable standard jaws, the puller all-rounder ensures particularly safe, non-destructive disassembly for both external extraction and internal extraction. The 3-jaw design guarantees even load distribution and therefore a particularly secure hold on the part to be pulled off.



### BENEFITS

- The screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment to any span between 0 mm – 650 mm

### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set    |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                           |                                                                                       |
| 30-0  | -497674                                                                             | 0 - 70<br>0 - 2 3/4                                                                 | 75<br>2 15/16                                                                       | 70<br>2 3/4                                                                         | 13<br>1/2                                                                           | 40<br>29.50                                                                         | 25                       | 2.5<br>2.76              | 0,68<br>1.499                                                                         | -                         | ✓                                                                                     |
| 30-00 | -061608                                                                             | 0 - 95<br>0 - 3 3/4                                                                 | 75<br>2 15/16                                                                       | 70<br>2 3/4                                                                         | 13<br>1/2                                                                           | 40<br>29.50                                                                         | 25                       | 2.5<br>2.76              | 0,74<br>1.632                                                                         | -                         | ✓                                                                                     |
| 30-1  | -013393                                                                             | 0 - 90<br>0 - 3 5/8                                                                 | 100<br>4                                                                            | 70 - 140<br>2 3/4 - 5 1/2                                                           | 17<br>11/16                                                                         | 80<br>59.01                                                                         | 60                       | 6<br>6.61                | 1,53<br>3.374                                                                         | -                         | ✓                                                                                     |
| 30-10 | -013621                                                                             | 0 - 130<br>0 - 5                                                                    | 100<br>4                                                                            | 70 - 180<br>2 3/4 - 7 1/16                                                          | 17<br>11/16                                                                         | 80<br>59.01                                                                         | 60                       | 6<br>6.61                | 1,59<br>3.506                                                                         | K-2030-10                 | ✓                                                                                     |
| 30-2  | -013478                                                                             | 0 - 160<br>0 - 6                                                                    | 150<br>6                                                                            | 100 - 220<br>3 15/16 - 8 11/16                                                      | 22<br>7/8                                                                           | 150<br>110.64                                                                       | 70                       | 7<br>7.72                | 3,815<br>8.412                                                                        | -                         | ✓                                                                                     |
| 30-20 | -013706                                                                             | 0 - 200<br>0 - 8                                                                    | 150<br>6                                                                            | 100 - 260<br>3 15/16 - 10 1/4                                                       | 22<br>7/8                                                                           | 150<br>110.64                                                                       | 70                       | 7<br>7.72                | 4,14<br>9.129                                                                         | K-2030-20,<br>K-2030-20-B | ✓                                                                                     |
| 30-3  | -013546                                                                             | 0 - 250<br>0 - 10                                                                   | 200<br>8                                                                            | 180 - 340<br>7 1/16 - 13 3/8                                                        | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | 100                      | 10<br>11.02              | 9,615<br>21.201                                                                       | -                         | ✓                                                                                     |
| 30-30 | -303005                                                                             | 105 - 375<br>4 1/8 - 14                                                             | 200<br>8                                                                            | 180 - 440<br>7 1/16 - 17 5/16                                                       | 36<br>1 7/16                                                                        | 250<br>184.40                                                                       | 150                      | 15<br>16.53              | 17,43<br>38.433                                                                       | -                         | ✓                                                                                     |
| 30-4  | -303302                                                                             | 105 - 375<br>4 1/8 - 15                                                             | 200<br>8                                                                            | 200 - 590<br>7 7/8 - 23 1/4                                                         | 36<br>1 7/16                                                                        | 500<br>368.80                                                                       | 150                      | 15<br>16.53              | 17,88<br>39.425                                                                       | -                         | ✓                                                                                     |



## PRODUCT DETAILS



| #              |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set    |  |
|----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|
|                | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                           |                                                                                     |
| <b>30-40</b>   | -303319                                                                           | 125 - 520<br>4 15/16 - 21                                                         | 200<br>8                                                                          | 200 - 710<br>7 7/8 - 27 15/16                                                     | 41<br>1 5/8                                                                       | 500<br>368.80                                                                     | 150                      | 15<br>16.53              | 22,64<br>49.921                                                                     | -                         | ✓                                                                                   |
| <b>30-5</b>    | -303326                                                                           | 87 - 650<br>3 7/16 - 26                                                           | 300<br>8                                                                          | 290 - 740<br>11 7/16 - 29 1/8                                                     | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 31,71<br>69.921                                                                     | -                         | ✓                                                                                   |
| <b>30-1-2</b>  | -730726                                                                           | 0 - 90<br>0 - 3 5/8                                                               | 200<br>8                                                                          | 70 - 140<br>2 3/4 - 5 1/2                                                         | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 60                       | 6<br>6.61                | 2,445<br>5.391                                                                      | -                         | ✓                                                                                   |
| <b>30-10-2</b> | -730801                                                                           | 0 - 130<br>0 - 5                                                                  | 200<br>8                                                                          | 70 - 180<br>2 3/4 - 7 1/16                                                        | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 60                       | 6<br>6.61                | 2,63<br>5.799                                                                       | K-2030-10                 | ✓                                                                                   |
| <b>30-2-3</b>  | -730986                                                                           | 5 - 160<br>3/16 - 6                                                               | 300<br>12                                                                         | 100 - 220<br>3 15/16 - 8 11/16                                                    | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 70                       | 7<br>7.72                | 5,565<br>12.271                                                                     | -                         | ✓                                                                                   |
| <b>30-20-3</b> | -731068                                                                           | 5 - 200<br>3/16 - 8                                                               | 300<br>12                                                                         | 100 - 260<br>3 15/16 - 10 1/4                                                     | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 70                       | 7<br>7.72                | 5,98<br>13.186                                                                      | K-2030-20,<br>K-2030-20-B | ✓                                                                                   |
| <b>30-3-25</b> | -901256                                                                           | 0 - 250<br>0 - 10                                                                 | 250<br>10                                                                         | 180 - 340<br>7 1/16 - 13 3/8                                                      | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 100                      | 10<br>11.02              | 10,195<br>2.635                                                                     | -                         | ✓                                                                                   |
| <b>30-3-3</b>  | -731143                                                                           | 0 - 250<br>0 - 10                                                                 | 300<br>12                                                                         | 180 - 340<br>7 1/16 - 13 3/8                                                      | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 100                      | 10<br>11.02              | 11,305<br>25.027                                                                    | -                         | ✓                                                                                   |
| <b>30-3-4</b>  | -731228                                                                           | 0 - 250<br>0 - 10                                                                 | 400<br>16                                                                         | 180 - 340<br>7 1/16 - 13 3/8                                                      | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 100                      | 10<br>11.02              | 12,86<br>28.356                                                                     | -                         | ✓                                                                                   |
| <b>30-3-5</b>  | -731303                                                                           | 0 - 250<br>0 - 10                                                                 | 500<br>20                                                                         | 180 - 340<br>7 1/16 - 13 3/8                                                      | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 100                      | 10<br>11.02              | 14,385<br>31.719                                                                    | -                         | ✓                                                                                   |

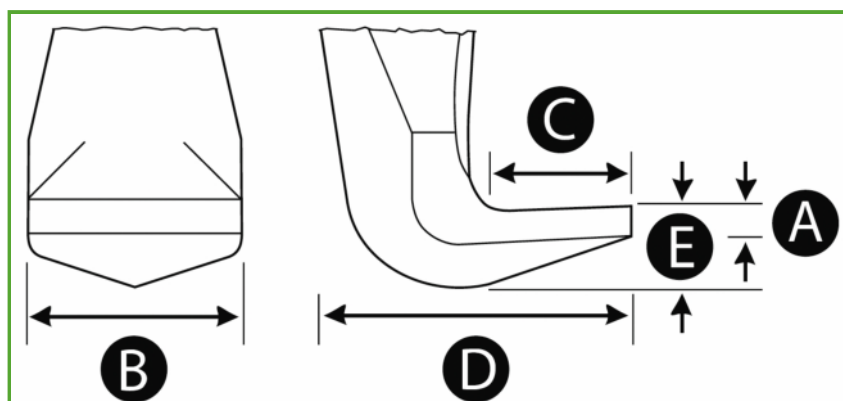
## SERIES 0-S STANDARD JAWS (SET)



The set of three standard jaws is suitable for 3-jaw universal pullers. The robust jaws guarantee particularly safe removal of bearings, gears, and discs.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 0-75-S  | -024160                                                                             | 75<br>2 15/16                                                                       | 76<br>2 1                                                                           | 5<br>3/16                                                                           | 16<br>5/8                                                                           | 15<br>9/16                                                                          | 13<br>1/2                                                                            | 1,5<br>1/16                                                                           | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 1-90-S  | -001413                                                                             | 100<br>4                                                                            | 132<br>5 3/16                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 0,835<br>1.841                                                                        | ✓                                                                                     |
| 1-190-S | -001741                                                                             | 200<br>8                                                                            | 232<br>9 1/8                                                                        | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,685<br>3.715                                                                        | ✓                                                                                     |
| 1-250-S | -002083                                                                             | 250<br>10                                                                           | 282<br>11 1/8                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 2,04<br>4.498                                                                         | ✓                                                                                     |
| 1-400-S | -975684                                                                             | 400<br>15 3/4                                                                       | 432<br>17 1/64                                                                      | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 3,48<br>7.673                                                                         | ✓                                                                                     |
| 2-150-S | -002571                                                                             | 150<br>6                                                                            | 193<br>7 5/8                                                                        | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 1,84<br>4.057                                                                         | ✓                                                                                     |
| 2-300-S | -002816                                                                             | 300<br>12                                                                           | 343<br>13 1/2                                                                       | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 3,78<br>8.335                                                                         | ✓                                                                                     |

## PRODUCT DETAILS



| #              |  |  |  |  |  |  |  |  |  |  |
|----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                        | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| <b>3-200-S</b> | -003318                                                                           | 200<br>8                                                                          | 255<br>10 1/32                                                                    | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 3,28<br>7.232                                                                       | ✓                                                                                   |
| <b>3-250-S</b> | -901249                                                                           | 250<br>9 13/16                                                                    | 300<br>11 13/16                                                                   | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 5,695<br>12.557                                                                     | ✓                                                                                   |
| <b>3-300-S</b> | -003646                                                                           | 300<br>12                                                                         | 350<br>13 3/4                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 6,46<br>14.244                                                                      | ✓                                                                                   |
| <b>3-400-S</b> | -003981                                                                           | 400<br>16                                                                         | 450<br>17 11/16                                                                   | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 8,05<br>18.743                                                                      | ✓                                                                                   |
| <b>3-500-S</b> | -004223                                                                           | 500<br>20                                                                         | 550<br>21 5/8                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 9,89<br>21.807                                                                      | ✓                                                                                   |



SERIES K-2030-10  
2- AND 3-JAW UNIVERSAL PULLER SET



The 13-piece Universal Puller Set from the 2030 series is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in craftsmanship, industry, and workshops. The 2030 series impresses with its diverse combination options. The kit allows for the assembly of 8 different variants through the combination of puller jaws and extensions.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                          |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-10 | -974748                                                                                     | 0 - 130<br>0 - 5 1/8                                                                           | 350<br>13 3/4                                                                                  | 70 - 180<br>2 3/4 - 7 1/16                                                                     | 17<br>11/16                                                                                    | 60                             | 6<br>6.61                               | 9,19<br>20.264                                                                                 | 20-10,<br>30-10-T,<br>614250,<br>1-190-S,<br>1-250-S | ✓                                                                                     |

SERIES K-2030-20  
2- AND 3-JAW UNIVERSAL PULLER SET



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                                                                                      |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-20 | -123252                                                                                     | 10 - 200<br>3/8 - 7<br>7/8                                                                     | 600<br>23 5/8                                                                                  | 100 - 260<br>3 15/16 - 10<br>1/4                                                               | 22<br>7/8                                                                                      | 70                             | 7<br>7.72                               | 14,575<br>32.138                                                                               | 621220,<br>621355,<br>600-17,<br>2-150-S,<br>2-300-S, 2-<br>V-150-P,<br>30-20-T,<br>2-150-E,<br>2-300-E,<br>20-20-T,<br>30-20-T3 | ✓                                                                                     |

The 15-piece Universal Puller Set of the Series 2030 is used for 2-jaw and 3-jaw pulling of large bearings, gears, discs, etc. in craft, industry, and workshop. The Series 2030 impresses with its diverse combination possibilities. The kit allows the assembly of 7 different variants through the combination of puller jaws and extensions. The robust design is particularly suitable for large and heavy applications in industry and commercial vehicles.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.

## PRODUCT DETAILS

### SERIES 20-ST SALES DISPLAY FOR 2-JAW UNIVERSAL PULLERS



The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers are used for removing bearings, gears, and discs in all common sizes.

#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components via freely movable pulling jaws gliding on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Safety of the claw suspension in the sliding piece (Armlock Technology)



#### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                         |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                        |                                                                                       |
| 20-ST | -010248                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 330<br>12 1                                                                         | 0 - 250<br>0 - 9<br>13/16                                                           | 210<br>8 1/4                                                                        | 100 -<br>340<br>3 15/16 -<br>13 3/8                                                 | 300<br>221.28                                                                       | 85                       | 8.5<br>9.37              | 20,16<br>4.763                                                                        | 20-1,<br>20-10,<br>20-2,<br>20-20,<br>20-3, 20-<br>STL | ✓                                                                                     |



## SERIES 20-P 2-JAW UNIVERSAL PULLER WITH ADJUSTABLE JAWS IN THE SET



The 2-jaw universal puller with adjustable jaws is used for particularly safe pulling of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. With the equipment of 2 pairs of jaws in various lengths, pulling processes with diverse combinations and depths are made possible. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside.

### BENEFITS

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment for any spread between 0 mm – 350 mm
- Safety of the claw suspension in the sliding piece (Armlock Technology)



### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max. tensile force | Max. tension force |  | Included in the set       |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                 | t/US t.<br>sh.     | kg/lb                                                                                 |                           |                                                                                       |
| 20-10-P3 | -267611                                                                             | 9 - 130<br>3/8 - 5<br>1/8                                                           | 350<br>13 3/4                                                                       | 95 - 160<br>3 3/4 - 6<br>5/16                                                       | 17<br>11/16                                                                         | 80<br>59.01                                                                         | 45                 | 4.5<br>4.96        | 3,97<br>8.754                                                                         | K-2030-10                 | ✓                                                                                     |
| 20-20-P2 | -003004                                                                             | 10 - 200<br>3/8 - 7<br>7/8                                                          | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 150<br>110.64                                                                       | 60                 | 6<br>6.61          | 5,905<br>13.120                                                                       | K-2030-20,<br>K-2030-20-B | ✓                                                                                     |
| 20-30-P3 | -003011                                                                             | 0 - 350<br>0 - 13<br>3/4                                                            | 400<br>15 3/4                                                                       | 180 - 440<br>7 1/16 - 17<br>5/16                                                    | 27<br>1 1/16                                                                        | 300<br>221.28                                                                       | 85                 | 8.5<br>9.37        | 17,1<br>37.706                                                                        | -                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 20-AV 2-JAW UNIVERSAL PULLER WITH ADJUSTABLE REACH



The 2-jaw universal puller with adjustable reach is used to pull bearings, gears, and discs in all common sizes. The 20-5 is the most powerful puller in the 20 series. It can be used to loosen parts that sit on shafts and are freely accessible from the outside.

#### BENEFITS

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable jaws gliding on the crossbar
- Variable adjustment for any span between 0 mm – 750 mm as well as reach depth between 500 mm – 750 mm
- Secure attachment of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- Optional convertible from an external puller to an internal extractor by reversing the extractor jaws.



#### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 20-4-AV  | -706233                                                                                     | 0 - 520<br>0 - 21                                                                              | 500<br>19 11/16                                                                                | 200 - 590<br>7 7/8 - 23 1/4                                                                    | 36<br>1 7/16                                                                                   | 400<br>295.04                                                                                   | 120                            | 12<br>13.23                             | 20,74<br>6.042                                                                                 | ✓                                                                                     |
| 20-40-AV | -973222                                                                                     | 0 - 650<br>0 - 26                                                                              | 500<br>19 11/16                                                                                | 200 - 710<br>7 7/8 - 27 15/16                                                                  | 36<br>1 7/16                                                                                   | 400<br>295.04                                                                                   | 120                            | 12<br>13.23                             | 20,3<br>4.410                                                                                  | ✓                                                                                     |
| 20-5-AV  | -545313                                                                                     | 0 - 750<br>0 - 29 1/2                                                                          | 750<br>29 1/2                                                                                  | 340 - 1.000<br>13 3/8 - 39 3/8                                                                 | 41<br>1 5/8                                                                                    | 650<br>479.44                                                                                   | 150                            | 15<br>16.53                             | 45<br>99.225                                                                                   | ✓                                                                                     |

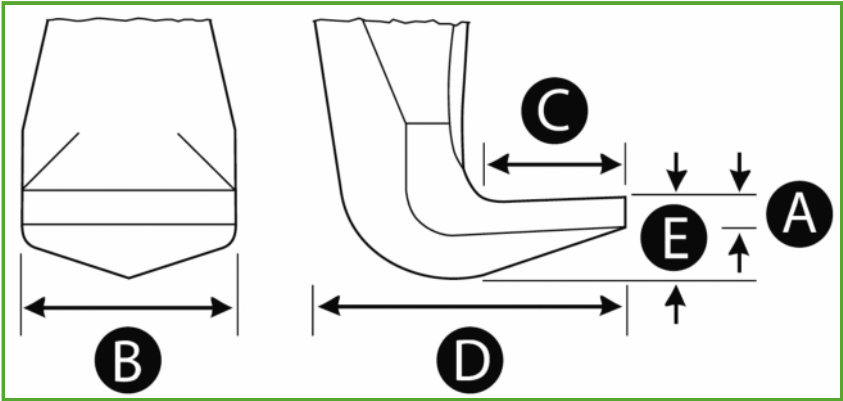
SERIES SP-P  
ADJUSTABLE LENGTH PULLING HOOKS (PAIR)



The pair of two height-adjustable puller jaws is suitable for 2-jaw pullers. The robust puller jaws guarantee a particularly safe removal of bearings, gears, and discs.

BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/inch | <br>mm/<br>inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 4-SP-P | -004636                                                                                     | 500<br>19 11/16                                                                                | 565<br>22 1/4                                                                                  | 25<br>1                                                                                            | 85<br>3 3/8                                                                                        | 45<br>1 3/4                                                                                        | 50<br>1 15/16                                                                                   | 7<br>1/4                                                                                             | 8,965<br>19.768                                                                                | ✓                                                                                     |
| 5-SP-P | -004971                                                                                     | 700<br>27 9/16                                                                                 | 770<br>30 5/16                                                                                 | 37<br>1 7/16                                                                                       | 105<br>4 1/8                                                                                       | 61<br>2 3/8                                                                                        | 60<br>2 3/8                                                                                     | 7<br>1/4                                                                                             | 22,21<br>48.973                                                                                | ✓                                                                                     |



## SERIES 30-P 3-JAW UNIVERSAL PULLER SET



The 3-jaw universal puller with adjustable jaws is used for safely removing bearings, gears, and discs in all common sizes for crafts, workshops, and industry. With its three pairs of jaws in different lengths, various combinations and depths of pull-out processes are possible. This allows any component seated on a shaft and accessible from the outside to be removed. The 3-jaw design guarantees even load distribution and thus a particularly secure grip on the part being removed.

### BENEFITS

- The screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment to any span between 0 mm – 250 mm



### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set    |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                           |                                                                                       |
| 30-10-P3 | -111136                                                                             | 0 - 130<br>0 - 5 1/8                                                                | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7 1/16                                                          | 17<br>11/16                                                                         | 80<br>59.01                                                                         | 60                       | 6<br>6.61                | 5,335<br>11.764                                                                       | K-2030-10                 | ✓                                                                                     |
| 30-20-P2 | -111150                                                                             | 5 - 200<br>3/16 - 7 7/8                                                             | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 - 10 1/4                                                       | 22<br>7/8                                                                           | 150<br>110.64                                                                       | 70                       | 7<br>7.72                | 7,635<br>16.835                                                                       | K-2030-20,<br>K-2030-20-B | ✓                                                                                     |
| 30-3-P3  | -111174                                                                             | 0 - 250<br>0 - 9 13/16                                                              | 400<br>15 3/4                                                                       | 180 - 340<br>7 1/16 - 13 3/8                                                        | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | 100                      | 10<br>11.02              | 23,86<br>52.611                                                                       | -                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 20-CLASSIC-B 2-JAW UNIVERSAL PULLER WITH ADJUSTABLE EXTRACTOR JAWS AND HYDRAULIC SPINDLE



The 2-jaw universal puller with adjustable jaws and hydraulic spindle is used for the particularly safe removal of extremely tight bearings, gears, and discs in all common sizes for trades, workshops, and industry. The hydraulic spindle achieves an average pulling force of up to 15 t. This allows you to loosen any component that is seated on a shaft and is freely accessible from the outside. For pulling operations with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used.

#### BENEFITS

- Screwed connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle has a rotating spindle tip for secure placement on smooth surfaces and during centering.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### TECHNICAL ATTRIBUTES

| #         | GTIN    |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. |  kg/lb | Included in<br>the set |  |
|-----------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 20-2-B    | -885815 | 11 - 160<br>7/16 - 6<br>5/16                                                                | 150<br>5 7/8                                                                                | 100 - 220<br>3 15/16 - 8<br>11/16                                                           | 15<br>11.06                                                                                  | 100                            | 10<br>11.02                             | 4,52<br>9.967                                                                               | -                      | ✓                                                                                     |
| 20-20-B   | -885846 | 11 - 200<br>7/16 - 7<br>7/8                                                                 | 160<br>6 5/16                                                                               | 100 - 260<br>3 15/16 - 10<br>1/4                                                            | 15<br>11.06                                                                                  | 100                            | 10<br>11.02                             | 4,9<br>10.805                                                                               | K-2030-20-B            | ✓                                                                                     |
| 20-3-B    | -885891 | 0 - 250<br>0 - 9<br>13/16                                                                   | 200<br>7 7/8                                                                                | 180 - 340<br>7 1/16 - 13<br>3/8                                                             | 20<br>14.75                                                                                  | 120                            | 12<br>13.23                             | 9,525<br>21.003                                                                             | -                      | ✓                                                                                     |
| 20-30-B   | -885945 | 0 - 350<br>0 - 13 3/4                                                                       | 200<br>7 7/8                                                                                | 180 - 440<br>7 1/16 - 17<br>5/16                                                            | 20<br>14.75                                                                                  | 120                            | 12<br>13.23                             | 9,665<br>21.311                                                                             | -                      | ✓                                                                                     |
| 20-4-B    | -885983 | 5,4 - 520<br>3/16 - 20<br>1/2                                                               | 200<br>7 7/8                                                                                | 200 - 590<br>7 7/8 - 23<br>1/4                                                              | 45<br>33.19                                                                                  | 150                            | 15<br>16.53                             | 2<br>4.410                                                                                  | -                      | ✓                                                                                     |
| 20-40-B   | -886010 | 5,4 - 650<br>3/16 - 25<br>9/16                                                              | 300<br>11 13/16                                                                             | 200 - 710<br>7 7/8 - 27<br>15/16                                                            | 45<br>33.19                                                                                  | 150                            | 15<br>16.53                             | 24,12<br>53.185                                                                             | -                      | ✓                                                                                     |
| 20-2-3-B  | -885808 | 3,2 - 160<br>1/8 - 6<br>5/16                                                                | 300<br>11 13/16                                                                             | 100 - 220<br>3 15/16 - 8<br>11/16                                                           | 15<br>11.06                                                                                  | 100                            | 10<br>11.02                             | 5,6<br>12.348                                                                               | -                      | ✓                                                                                     |
| 20-20-3-B | -885839 | 3,2 - 200<br>1/8 - 7<br>7/8                                                                 | 300<br>11 13/16                                                                             | 100 - 260<br>3 15/16 - 10<br>1/4                                                            | 15<br>11.06                                                                                  | 100                            | 10<br>11.02                             | 5,835<br>12.866                                                                             | K-2030-20-B            | ✓                                                                                     |

## PRODUCT DETAILS

| #                |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|                  | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                        |                                                                                     |
| <b>20-3-3-B</b>  | -885860                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 300<br>11 13/16                                                                   | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 20<br>14.75                                                                       | 120                      | 12<br>13.23              | 1,24<br>2.734                                                                       | -                      | ✓                                                                                   |
| <b>20-3-4-B</b>  | -885877                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 400<br>15 3/4                                                                     | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 20<br>14.75                                                                       | 120                      | 12<br>13.23              | 11,34<br>25.005                                                                     | -                      | ✓                                                                                   |
| <b>20-3-5-B</b>  | -885884                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 500<br>19 11/16                                                                   | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 20<br>14.75                                                                       | 120                      | 12<br>13.23              | 12,285<br>27.088                                                                    | -                      | ✓                                                                                   |
| <b>20-30-3-B</b> | -885914                                                                           | 0 - 350<br>0 - 13 3/4                                                             | 300<br>11 13/16                                                                   | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 20<br>14.75                                                                       | 120                      | 12<br>13.23              | 10,7<br>3.749                                                                       | -                      | ✓                                                                                   |
| <b>20-30-4-B</b> | -885921                                                                           | 0 - 350<br>0 - 13 3/4                                                             | 400<br>15 3/4                                                                     | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 20<br>14.75                                                                       | 120                      | 12<br>13.23              | 11,765<br>25.942                                                                    | -                      | ✓                                                                                   |
| <b>20-30-5-B</b> | -885938                                                                           | 0 - 350<br>0 - 13 3/4                                                             | 500<br>19 11/16                                                                   | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 20<br>14.75                                                                       | 120                      | 12<br>13.23              | 12,815<br>28.257                                                                    | -                      | ✓                                                                                   |
| <b>20-4-3-B</b>  | -885952                                                                           | 15 - 520<br>9/16 - 20<br>1/2                                                      | 300<br>11 13/16                                                                   | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 45<br>33.19                                                                       | 150                      | 15<br>16.53              | 17,8<br>39.249                                                                      | -                      | ✓                                                                                   |
| <b>20-4-4-B</b>  | -885969                                                                           | 15 - 520<br>9/16 - 20<br>1/2                                                      | 400<br>15 3/4                                                                     | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 45<br>33.19                                                                       | 150                      | 15<br>16.53              | 18,9<br>41.675                                                                      | -                      | ✓                                                                                   |
| <b>20-4-5-B</b>  | -885976                                                                           | 15 - 520<br>9/16 - 20<br>1/2                                                      | 500<br>19 11/16                                                                   | 200 - 590<br>7 7/8 - 23<br>1/4                                                    | 45<br>33.19                                                                       | 150                      | 15<br>16.53              | 23,89<br>52.677                                                                     | -                      | ✓                                                                                   |
| <b>20-40-4-B</b> | -885990                                                                           | 15 - 650<br>9/16 - 25<br>9/16                                                     | 400<br>15 3/4                                                                     | 200 - 710<br>7 7/8 - 27<br>15/16                                                  | 45<br>33.19                                                                       | 150                      | 15<br>16.53              | 2,3<br>5.072                                                                        | -                      | ✓                                                                                   |
| <b>20-40-5-B</b> | -886003                                                                           | 15 - 650<br>9/16 - 25<br>9/16                                                     | 500<br>19 11/16                                                                   | 200 - 710<br>7 7/8 - 27<br>15/16                                                  | 45<br>33.19                                                                       | 150                      | 15<br>16.53              | 25,69<br>56.646                                                                     | -                      | ✓                                                                                   |





## PRODUCT DETAILS

### SERIES 30-CLASSIC-B 3-JAW UNIVERSAL PULLER WITH ADJUSTABLE EXTRACTOR JAWS AND HYDRAULIC SPINDLE



The 3-jaw universal puller with adjustable jaws and grease hydraulic spindle is used for particularly safe pulling of extremely stuck bearings, gears, and discs. The grease hydraulic spindle achieves a medium tension force of a maximum of 12 t. For pulling operations with a tension force up to 10 t and/or in confined spaces, the mechanical spindle can be used.

#### BENEFITS

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw ensures an even distribution of force and allows for greater pulling forces
- Hydraulic spindle ensures easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited space conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle has a rotatable spindle tip for secure placement on smooth surfaces and centering.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | Nm                                                                                  | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                        |                                                                                       |
| 30-2-B  | -886317                                                                             | 0 - 160<br>0 - 6<br>5/16                                                            | 150<br>5 7/8                                                                        | 100 - 220<br>3 15/16 - 8<br>11/16                                                   | 15<br>11.06                                                                         | 12                                                                                  | 100                      | 10<br>11.02              | 5,48<br>12.083                                                                        | -                      | ✓                                                                                     |
| 30-20-B | -886348                                                                             | 0 - 200<br>0 - 7 7/8                                                                | 150<br>5 7/8                                                                        | 100 - 260<br>3 15/16 - 10<br>1/4                                                    | 15<br>11.06                                                                         | 12                                                                                  | 100                      | 10<br>11.02              | 5,695<br>12.557                                                                       | K-2030-20-B            | ✓                                                                                     |
| 30-3-B  | -886393                                                                             | 0 - 250<br>0 - 9<br>13/16                                                           | 200<br>7 7/8                                                                        | 180 - 340<br>7 1/16 - 13<br>3/8                                                     | 20<br>14.75                                                                         | 15                                                                                  | 120                      | 12<br>13.23              | 11,45<br>25.247                                                                       | -                      | ✓                                                                                     |
| 30-30-B | -303104                                                                             | 0 - 375<br>0 - 14<br>3/4                                                            | 200<br>7 7/8                                                                        | 180 - 440<br>7 1/16 - 17<br>5/16                                                    | 45<br>33.19                                                                         | 45                                                                                  | 150                      | 15<br>16.53              | 11,1<br>24.476                                                                        | -                      | ✓                                                                                     |

## PRODUCT DETAILS

| #                |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|                  | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | Nm                                                                                | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| <b>30-2-3-B</b>  | -886300                                                                           | 5 - 160<br>3/16 - 6<br>5/16                                                       | 300<br>11 13/16                                                                   | 100 - 220<br>3 15/16 - 8<br>11/16                                                 | 15<br>11.06                                                                       | 12                                                                                | 100                      | 10<br>11.02              | 5,6<br>12.348                                                                       | -                      | ✓                                                                                   |
| <b>30-20-3-B</b> | -886331                                                                           | 5 - 200<br>3/16 - 7<br>7/8                                                        | 300<br>11 13/16                                                                   | 100 - 260<br>3 15/16 -<br>10 1/4                                                  | 15<br>11.06                                                                       | 12                                                                                | 100                      | 10<br>11.02              | 7,38<br>16.273                                                                      | K-2030-20-B            | ✓                                                                                   |
| <b>30-3-3-B</b>  | -886362                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 300<br>11 13/16                                                                   | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 20<br>14.75                                                                       | 15                                                                                | 120                      | 12<br>13.23              | 1,8<br>3.969                                                                        | -                      | ✓                                                                                   |
| <b>30-3-4-B</b>  | -886379                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 400<br>15 3/4                                                                     | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 20<br>14.75                                                                       | 15                                                                                | 120                      | 12<br>13.23              | 14,73<br>32.480                                                                     | -                      | ✓                                                                                   |
| <b>30-3-5-B</b>  | -886386                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 500<br>19 11/16                                                                   | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 20<br>14.75                                                                       | 15                                                                                | 120                      | 12<br>13.23              | 16,41<br>36.184                                                                     | -                      | ✓                                                                                   |



PRODUCT DETAILS

SERIES K-2030-20-B  
HYDRAULIC 2-JAW AND 3-JAW UNIVERSAL  
PULLER SET



TECHNICAL ATTRIBUTES

| #           | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                                                                                                   |  |
|-------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-20-B | -123269                                                                                     | 10 - 200<br>3/8 - 7 7/8                                                                        | 600<br>23 5/8                                                                                  | 100 - 260<br>3 15/16 - 10 1/4                                                                  | 100                            | 10<br>11.02                             | 15,94<br>35.148                                                                                | 621220,<br>621355,<br>600-17,<br>8-0-621,<br>2-150-S,<br>2-300-S, 2-<br>V-150-S,<br>30-20-T3,<br>2-150-E,<br>2-300-E,<br>20-20-T,<br>30-20-T3 | ✓                                                                                     |

The 16-piece universal puller set from series 2030 is used for hydraulic, 2-jaw and 3-jaw pulling of large bearings, gears, disks, etc. in craft, industry, and workshop. The series 2030 impresses with its diverse combination options. The assembly set allows the combination of hydraulics, puller jaws, and extensions to create 14 different variants. The powerful design is particularly suitable for large and heavy applications in industry and commercial vehicles.

BENEFITS

- Application-oriented assembly for universal use
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.



## SERIES 20-H 2-JAW PULLER WITH HYDRAULIC SPINDLE



The 2-jaw universal puller with hydraulic spindle is used for pulling bearings, gears, and discs with a pulling force of up to 20 tons. Thanks to the integrated grease hydraulics, no external pump is required. The flexible connection thread on the spindle allows for the mounting of various pulling tools from the KUKKO range, depending on the thread size.

### BENEFITS

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable jaws gliding on the crossbar
- Spindle outlet to protect the thread
- Fat hydraulic spindle ensures easy and controlled removal of tightly seated parts with minimal effort.
- Optional convertible from an external puller to an internal extractor by reversing the extractor jaws.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 20-3-H  | -786839                                                                                     | 0 - 250<br>0 - 9 13/16                                                                         | 210<br>8 1/4                                                                                   | 180 - 340<br>7 1/16 - 13 3/8                                                                   | 0.00                                                                                            | 120                            | 12<br>13.23                             | 7,53<br>16.604                                                                                 | ✓                                                                                     |
| 20-30-H | -786914                                                                                     | 0 - 350<br>0 - 13 3/4                                                                          | 210<br>8 1/4                                                                                   | 180 - 440<br>7 1/16 - 17 5/16                                                                  | 0.00                                                                                            | 120                            | 12<br>13.23                             | 8,375<br>18.467                                                                                | ✓                                                                                     |
| 20-4-H  | -227981                                                                                     | 15 - 520<br>9/16 - 20 1/2                                                                      | 209<br>8 1/4                                                                                   | 200 - 590<br>7 7/8 - 23 1/4                                                                    | 0.00                                                                                            | 120                            | 12<br>13.23                             | 24,21<br>53.383                                                                                | ✓                                                                                     |
| 20-40-H | -732218                                                                                     | 15 - 650<br>9/16 - 25 9/16                                                                     | 300<br>11 13/16                                                                                | 200 - 710<br>7 7/8 - 27 15/16                                                                  | 0.00                                                                                            | 120                            | 12<br>13.23                             | 28,29<br>62.379                                                                                | ✓                                                                                     |
| 20-5-H  | -228063                                                                                     | 105 - 750<br>4 1/8 - 29 1/2                                                                    | 750<br>29 1/2                                                                                  | 340 - 1.000<br>13 3/8 - 39 3/8                                                                 | 0.00                                                                                            | 120                            | 20<br>22.05                             | 54<br>119.070                                                                                  | ✓                                                                                     |

## SERIES 20-S 2-JAW UNIVERSAL PULLER WITH SLIDING, ALWAYS PARALLEL JAWS



The 2-jaw universal pullers of the 20-S series with adjustable and narrow jaws are used for safely pulling bearings, gears and washers. This makes it possible to loosen any component that sits on a shaft and is freely accessible from the outside. The narrow jaws make it possible to reach tight spaces. By simply reversing the jaws, the pullers can also be used as internal extractors.

### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components via freely movable pulling jaws gliding on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment for any span between 4 mm – 350 mm



### TECHNICAL ATTRIBUTES

| #       | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in<br>the set                 |  |
|---------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------|
| 20-1-S  | -757396 | 20 - 90<br>7/16 - 3<br>5/8                                                                      | 100<br>4                                                                                    | 70 - 140<br>2 3/4 - 5<br>1/2                                                                | 17<br>11/16                                                                                 | 35<br>25.82                                                                                  | 25                             | 2.5<br>2.76                                | 1,245<br>2.745                                                                              | 20-S-TK-13,<br>20-ST-S                 | ✓                                                                                     |
| 20-10-S | -757471 | 20 - 120<br>3/16 - 5                                                                            | 100<br>4                                                                                    | 70 - 180<br>2 3/4 - 7<br>1/16                                                               | 17<br>11/16                                                                                 | 35<br>25.82                                                                                  | 25                             | 2.5<br>2.76                                | 1,365<br>3.010                                                                              | 20-S-TK-13,<br>K-2030-10-S,<br>20-ST-S | ✓                                                                                     |
| 20-2-S  | -727368 | 16 - 160<br>5/8 - 6                                                                             | 150<br>6                                                                                    | 100 - 220<br>3 15/16 - 8<br>11/16                                                           | 22<br>7/8                                                                                   | 120<br>88.51                                                                                 | 50                             | 5<br>5.51                                  | 3,005<br>7.718                                                                              | 20-S-TK-13,<br>20-ST-S                 | ✓                                                                                     |
| 20-20-S | -727443 | 16 - 200<br>5/8 - 8                                                                             | 150<br>6                                                                                    | 100 - 260<br>3 15/16 -<br>10 1/4                                                            | 22<br>7/8                                                                                   | 120<br>88.51                                                                                 | 50                             | 5<br>5.51                                  | 3,285<br>7.243                                                                              | 20-S-TK-13,<br>K-2030-20-S,<br>20-ST-S | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| 20-3-S  | -727511                                                                           | 21 - 250<br>13/16 -<br>10                                                         | 200<br>8                                                                          | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 90                       | 9<br>9.92                | 6,81<br>15.016                                                                      | 20-S-TK-13,<br>20-ST-S | ✓                                                                                   |
| 20-30-S | -727696                                                                           | 21 - 350<br>13/16 -<br>14                                                         | 200<br>8                                                                          | 180 - 440<br>7 1/16 - 17<br>5/16                                                  | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 90                       | 9<br>9.92                | 7,38<br>16.273                                                                      | -                      | ✓                                                                                   |





## PRODUCT DETAILS

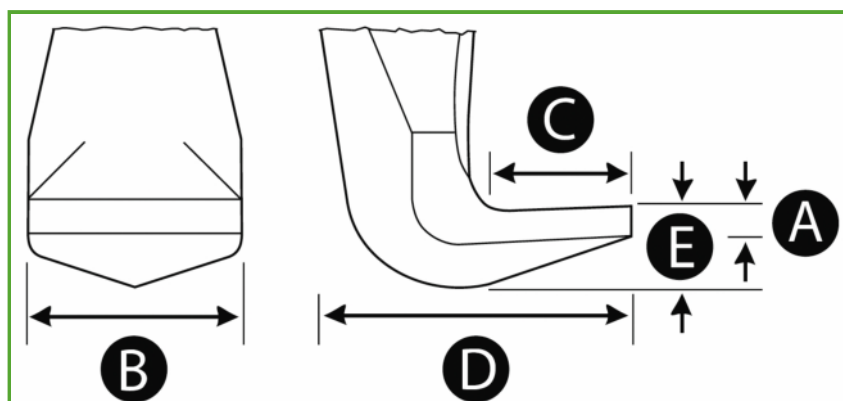
### SERIES 1-P NARROW JAWS (PAIR)



The pair of two narrow jaws is suitable for 2-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.

#### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                              | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-91-P  | -434716                                                                             | 100<br>4                                                                            | 127<br>5                                                                            | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,515<br>1.136                                                                        | ✓                                                                                     |
| 1-191-P | -461286                                                                             | 200<br>8                                                                            | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,075<br>2.370                                                                        | ✓                                                                                     |
| 1-251-P | -461446                                                                             | 250<br>10                                                                           | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,305<br>2.878                                                                        | ✓                                                                                     |
| 1-401-P | -985010                                                                             | 400<br>16                                                                           | 427<br>16 13/16                                                                     | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 2,075<br>4.575                                                                        | ✓                                                                                     |
| 2-151-P | -702921                                                                             | 150<br>6                                                                            | 186<br>7 5/16                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 1,205<br>2.756                                                                        | ✓                                                                                     |
| 2-301-P | -703188                                                                             | 300<br>12                                                                           | 336<br>13 1/4                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 2,535<br>5.590                                                                        | ✓                                                                                     |
| 3-201-P | -726521                                                                             | 200<br>8                                                                            | 244<br>9 5/8                                                                        | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 3,175<br>7.001                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/inch                                                                           | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-301-P | -726781                                                                           | 300<br>12                                                                         | 340<br>13 3/8                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 4,28<br>9.437                                                                       | ✓                                                                                   |
| 3-401-P | -726941                                                                           | 400<br>16                                                                         | 440<br>17 5/16                                                                    | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 5,89<br>12.987                                                                      | ✓                                                                                   |
| 3-501-P | -727108                                                                           | 500<br>20                                                                         | 540<br>21 1/4                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 6,555<br>14.454                                                                     | ✓                                                                                   |



## SERIES 30-S 3-JAW UNIVERSAL PULLER WITH NARROW JAWS



The 3-jaw universal puller with narrow jaws is used for safely removing bearings, gears, and discs in all common sizes for craft, workshop, and industry. It allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and poorly accessible spaces can be reached. The 3-jaw design guarantees an even load distribution and thus a particularly secure hold on the part being pulled.

### BENEFITS

- Narrow puller jaws grip optimally in tight and hard-to-reach areas.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- The screw connection allows for easy loosening and especially tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding



### TECHNICAL ATTRIBUTES

| #       | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in<br>the set |  |
|---------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 30-1-S  | -727771 | 8 - 90<br>5/16 - 3<br>5/8                                                                       | 100<br>4                                                                                    | 70 - 140<br>2 3/4 - 5<br>1/2                                                                | 17<br>11/16                                                                                 | 40<br>29.50                                                                                  | 30                             | 3<br>3.31                                  | 1,335<br>2.944                                                                              | -                      | ✓                                                                                     |
| 30-10-S | -728198 | 8 - 130<br>5/16 - 5                                                                             | 100<br>4                                                                                    | 70 - 180<br>2 3/4 - 7<br>1/16                                                               | 17<br>11/16                                                                                 | 40<br>29.50                                                                                  | 30                             | 3<br>3.31                                  | 1,52<br>3.352                                                                               | K-2030-10-S            | ✓                                                                                     |
| 30-2-S  | -727856 | 16 - 160<br>5/8 - 6                                                                             | 150<br>6                                                                                    | 100 - 220<br>3 15/16 - 8<br>11/16                                                           | 22<br>7/8                                                                                   | 120<br>88.51                                                                                 | 50                             | 5<br>5.51                                  | 3,78<br>8.335                                                                               | -                      | ✓                                                                                     |
| 30-20-S | -727931 | 16 - 200<br>5/8 - 8                                                                             | 150<br>6                                                                                    | 100 - 260<br>3 15/16 -<br>10 1/4                                                            | 22<br>7/8                                                                                   | 120<br>88.51                                                                                 | 50                             | 5<br>5.51                                  | 4,08<br>10.584                                                                              | K-2030-20-S            | ✓                                                                                     |



PRODUCT DETAILS

| #      |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| 30-3-S | -728013                                                                           | 2 - 250<br>1/16 -<br>10                                                           | 200<br>8                                                                          | 180 - 340<br>7 1/16 - 13<br>3/8                                                   | 27<br>1 1/16                                                                      | 390<br>287.66                                                                     | 135                      | 13.5<br>14.88            | 9,365<br>20.650                                                                     | -                      | ✓                                                                                   |



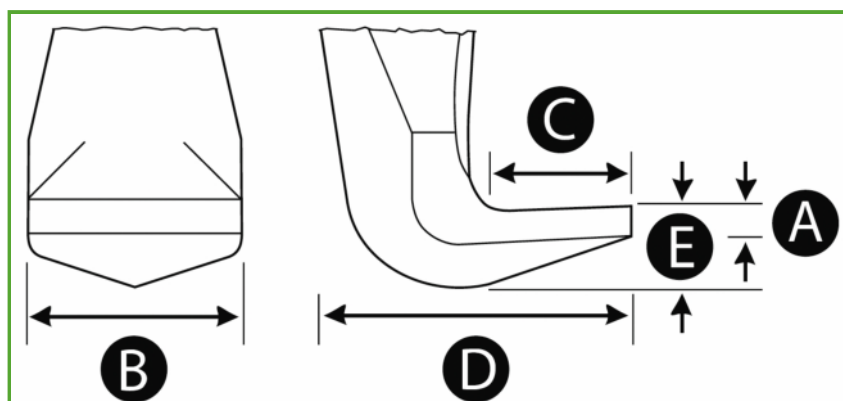
## SERIES 1-S NARROW PULLER JAWS (SET)



The set of three narrow jaws is suitable for 3-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach spaces are accessible.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                              | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-91-S  | -497834                                                                             | 100<br>4                                                                            | 127<br>5                                                                            | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,755<br>1.665                                                                        | ✓                                                                                     |
| 1-191-S | -497919                                                                             | 200<br>8                                                                            | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,605<br>3.539                                                                        | ✓                                                                                     |
| 1-251-S | -498091                                                                             | 250<br>10                                                                           | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 2,08<br>4.586                                                                         | ✓                                                                                     |
| 1-401-S | -985034                                                                             | 400<br>16                                                                           | 427<br>16 13/16                                                                     | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 3,24<br>7.144                                                                         | ✓                                                                                     |
| 2-151-S | -728686                                                                             | 150<br>6                                                                            | 186<br>7 5/16                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 1,78<br>3.925                                                                         | ✓                                                                                     |
| 2-301-S | -728761                                                                             | 300<br>12                                                                           | 336<br>13 1/4                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 3,645<br>8.037                                                                        | ✓                                                                                     |
| 3-201-S | -728846                                                                             | 200<br>8                                                                            | 244<br>9 5/8                                                                        | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 5,485<br>12.094                                                                       | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/inch                                                                            | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-301-S | -728921                                                                           | 300<br>12                                                                         | 340<br>13 3/8                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 6,39<br>14.090                                                                      | ✓                                                                                   |
| 3-401-S | -729003                                                                           | 400<br>16                                                                         | 440<br>17 5/16                                                                    | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 7,86<br>17.331                                                                      | ✓                                                                                   |
| 3-501-S | -729188                                                                           | 500<br>20                                                                         | 540<br>21 1/4                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 1,1<br>2.426                                                                        | ✓                                                                                   |





PRODUCT DETAILS

SERIES K-2030-10-S  
2- AND 3-JAW UNIVERSAL PULLER SET WITH  
NARROW JAWS



TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                            |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                        |                                                                                       |
| K-2030-10-S | -306181                                                                             | 0 - 130<br>0 - 5 1/8                                                                | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7 1/16                                                          | 17<br>11/16                                                                         | 30                       | 3<br>3.31                | 8,92<br>19.669                                                                        | 20-10-S,<br>614250,<br>30-10-T,<br>1-191-S,<br>1-251-S | ✓                                                                                     |

The 13-piece universal puller set with narrow puller jaws from series 2030 is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in tight and hard-to-reach spaces in craft, industry, and workshop. The series 2030 convinces with its numerous combination options. The kit enables the assembly of 8 different variants through the combination of puller jaws and extensions.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.

## PRODUCT DETAILS

### SERIES K-2030-20-S 2- AND 3-JAW UNIVERSAL PULLER SET WITH NARROW PULLER JAWS



The 15-piece universal puller set with narrow jaws from series 2030 is used for 2-jaw and 3-jaw pulling of large bearings, gears, disks, etc. for tight and difficult-to-access spaces in crafts, industry, and workshops. The series 2030 impresses with its versatile combination options. The kit allows for the assembly of 14 different variants through the combination of puller jaws and extensions. The robust design is particularly suitable for large and heavy applications in industry and commercial vehicles.



#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.



#### TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                                                                                      |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                                                                  |                                                                                       |
| K-2030-20-S | -123276                                                                             | 10 - 200<br>3/8 - 7<br>7/8                                                          | 600<br>23 5/8                                                                       | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 50                       | 5<br>5.51                | 14,5<br>31.973                                                                        | 621220,<br>621355,<br>600-17,<br>2-151-S,<br>2-301-S, 2-<br>V-150-P,<br>30-20-T,<br>2-151-E,<br>20-20-T,<br>30-20-T3,<br>2-301-E | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 20-ST-S SALES DISPLAY FOR 2-JAW UNIVERSAL PULLERS WITH NARROW JAWS



The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow puller jaws are used for the safe removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The narrow puller jaws ensure that even tight and difficult-to-access spaces can be reached.

#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow jaws grip optimally in tight and hard-to-reach spots.
- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                 |                                                                                       |
| 20-ST-S | -906282                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 330<br>12 1                                                                         | 4 - 250<br>3/16 -<br>9<br>13/16                                                     | 200<br>7 7/8                                                                        | 70 - 340<br>2 3/4 -<br>13 3/8                                                       | 250<br>184.40                                                                       | 70                       | 7<br>7.72                | 19,67<br>43.372                                                                       | 20-1-S,<br>20-10-S,<br>20-2-S,<br>20-20-S,<br>20-3-S,<br>20-STL | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 20-SP 2-JAW UNIVERSAL PULLER WITH NARROW JAWS IN SET



The 2-jaw universal puller with narrow, adjustable jaws is used for safely removing bearings, gears, and discs in all common sizes for craftsmanship, workshops, and industry. The equipment with three pairs of jaws in various lengths allows for extraction processes with diverse combinations and depths. This enables the loosening of any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure access to even tight and poorly accessible spaces.

#### BENEFITS

- Narrow puller jaws grip optimally in tight and hard-to-reach areas.
- Screw connection allows easy loosening and particularly tight fastening of the jaws with an Allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 11 mm – 350 mm



#### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                        |                                                                                       |
| 20-10-SP | -461514                                                                             | 11 - 120<br>7/16 - 4<br>3/4                                                         | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 3,69<br>8.136                                                                         | K-2030-10-S            | ✓                                                                                     |
| 20-20-SP | -701856                                                                             | 26 - 200<br>1 1/32 -<br>7 7/8                                                       | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 5,83<br>12.855                                                                        | K-2030-20-S            | ✓                                                                                     |
| 20-30-SP | -701931                                                                             | 21 - 350<br>13/16 -<br>13 3/4                                                       | 400<br>15 3/4                                                                       | 180 - 440<br>7 1/16 - 17<br>5/16                                                    | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | 70                       | 7<br>7.72                | 16,68<br>36.779                                                                       | -                      | ✓                                                                                     |

### SERIES 30-SP 3-JAW UNIVERSAL PULLER WITH NARROW JAWS IN THE SET



The 3-jaw universal puller with narrow, adjustable jaws is used for safely pulling bearings, gears, and discs. The inclusion of three pairs of jaws in various lengths allows for pulling operations with different combinations and depths. This makes it possible to release any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and hard-to-reach spaces are accessible. The 3-jaw design guarantees an even load distribution and thus a particularly secure grip on the part being pulled.

#### BENEFITS

- The extremely slim design of the jaws optimally engages in extremely tight and hard-to-reach spots.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- The screw connection allows for easy loosening and especially tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding

#### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                        |                                                                                       |
| 30-10-SP | -463839                                                                             | 8 - 130<br>5/16 - 5<br>1/8                                                          | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 40<br>29.50                                                                         | 30                       | 3<br>3.31                | 5,11<br>11.268                                                                        | K-2030-10-S            | ✓                                                                                     |
| 30-20-SP | -728273                                                                             | 11 - 200<br>7/16 - 7<br>7/8                                                         | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 7,66<br>16.890                                                                        | K-2030-20-S            | ✓                                                                                     |
| 30-3-SP  | -728358                                                                             | 2 - 250<br>1/16 - 9<br>13/16                                                        | 400<br>15 3/4                                                                       | 180 - 340<br>7 1/16 - 13<br>3/8                                                     | 27<br>1 1/16                                                                        | 220<br>162.27                                                                       | 70                       | 7<br>7.72                | 23,67<br>52.192                                                                       | -                      | ✓                                                                                     |

## SERIES 20-S-T 2-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS



The 2-jaw universal puller with extremely narrow jaws and trapezoidal support surface on the claw is used for the safe removal of transmission gears, bearings, sprockets, synchronizer bodies, and similar components. This allows for the loosening of any component that is seated on a shaft and is accessible from the outside. The special design of the jaws ensures that even very tight and poorly accessible gaps can be reached.

### BENEFITS

- The extremely slim design of the jaws is optimal for tight and hard-to-reach places.
- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components via freely movable pulling jaws gliding on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment to any span between 16 mm – 120 mm



### TECHNICAL ATTRIBUTES

| #         | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in<br>the set |  |
|-----------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 20-1-S-T  | -321641 | 16 - 90<br>5/8 - 3<br>9/16                                                                      | 100<br>3 15/16                                                                              | 70 - 140<br>2 3/4 - 5<br>1/2                                                                | 17<br>11/16                                                                                 | 35<br>25.82                                                                                  | 25                             | 2.5<br>2.76                                | 1,18<br>2.602                                                                               | -                      | ✓                                                                                     |
| 20-10-S-T | -201097 | 16 - 120<br>5/8 - 4<br>3/4                                                                      | 100<br>3 15/16                                                                              | 70 - 180<br>2 3/4 - 7<br>1/16                                                               | 17<br>11/16                                                                                 | 35<br>25.82                                                                                  | 25                             | 2.5<br>2.76                                | 1,32<br>2.911                                                                               | K-2030-10-S-T          | ✓                                                                                     |



## PRODUCT DETAILS

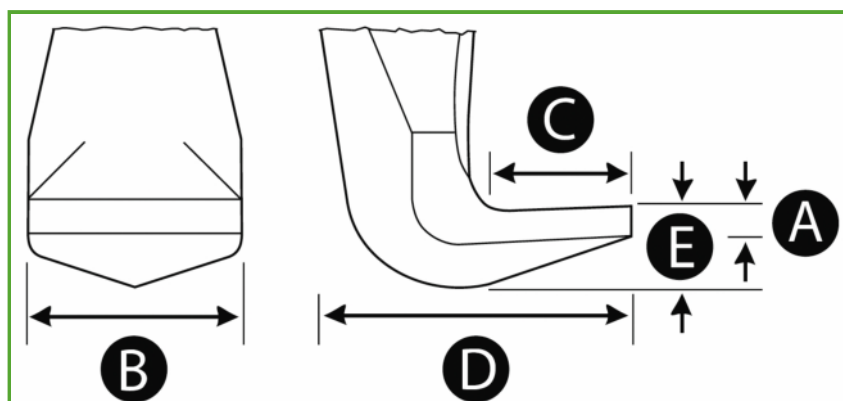
### SERIES 4-P EXTREMELY NARROW PULLER JAWS (PAIR)



The pair of two extremely narrow jaws is suitable for 2-jaw universal pullers. The trapezoidal support surface of the claw ensures that even very tight and hard-to-reach gaps can be accessed.

#### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-94-P  | -852039                                                                             | 100<br>3 15/16                                                                      | 127<br>5                                                                            | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,49<br>1.080                                                                         | ✓                                                                                     |
| 1-194-P | -321399                                                                             | 200<br>7 7/8                                                                        | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,06<br>2.337                                                                         | ✓                                                                                     |
| 1-254-P | -321498                                                                             | 250<br>9 13/16                                                                      | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,26<br>2.778                                                                         | ✓                                                                                     |

## SERIES 30-S-T 3-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS



The 3-jaw universal puller with extremely narrow jaws and trapezoidal support surface at the claw is used for securely pulling gear wheels, bearings, sprockets, synchronizers, and similar components. This allows for the loosening of any component mounted on a shaft that is freely accessible from the outside. The special design of the jaws ensures that even very tight and hard-to-reach spaces can be accessed. The 3-jaw design guarantees a uniform load distribution and thus a particularly secure grip on the part being pulled.



### BENEFITS

- The extremely slim design of the jaws is optimal for tight and hard-to-reach places.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- The screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding



### TECHNICAL ATTRIBUTES

| #         | GTIN    |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  SW<br>mm/<br>inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in<br>the set |  MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|-----------|---------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 30-1-S-T  | -321689 | 13 - 90<br>1/2 - 3<br>9/16                                                                      | 100<br>3 15/16                                                                                  | 70 - 140<br>2 3/4 - 5<br>1/2                                                                    | 17<br>11/16                                                                                           | 40<br>29.50                                                                                  | 30                             | 3<br>3.31                                  | 1,335<br>2.944                                                                              | -                      | ✓                                                                                                                                     |
| 30-10-S-T | -321696 | 13 - 130<br>1/2 - 5<br>1/8                                                                      | 100<br>3 15/16                                                                                  | 70 - 180<br>2 3/4 - 7<br>1/16                                                                   | 17<br>11/16                                                                                           | 40<br>29.50                                                                                  | 30                             | 3<br>3.31                                  | 1,475<br>3.252                                                                              | K-2030-10-S-T          | ✓                                                                                                                                     |

## PRODUCT DETAILS

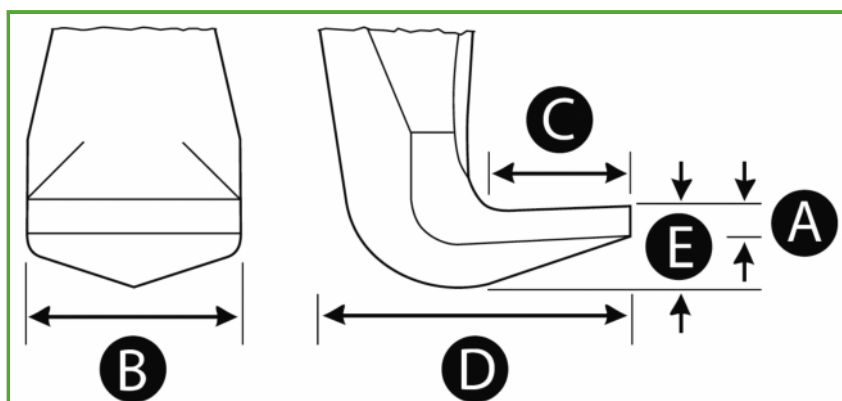
### SERIES 4-S EXTREMELY NARROW JAWS (SET)



The set of three extremely narrow jaws is suitable for 3-jaw universal pullers. The trapezoidal contact surface of the claw ensures that even very tight and hard-to-reach gaps are accessed.

#### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-94-S  | -321580                                                                             | 100<br>3 15/16                                                                      | 127<br>5                                                                            | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,72<br>1.588                                                                         | ✓                                                                                     |
| 1-194-S | -321412                                                                             | 200<br>7 7/8                                                                        | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,56<br>3.440                                                                         | ✓                                                                                     |
| 1-254-S | -484520                                                                             | 250<br>9 13/16                                                                      | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,89<br>4.167                                                                         | ✓                                                                                     |



PRODUCT DETAILS

SERIES K-2030-10-S-T  
2- AND 3-JAW UNIVERSAL PULLER SET WITH  
EXTREMELY NARROW PULLER JAWS



TECHNICAL ATTRIBUTES

| #             | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                              |  |
|---------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-10-S-T | -852022                                                                                     | 0 - 130<br>0 - 5 1/8                                                                           | 350<br>13 3/4                                                                                  | 70 - 180<br>2 3/4 - 7 1/16                                                                     | 17<br>11/16                                                                                    | 30                             | 3<br>3.31                               | 8,805<br>19.514                                                                                | 20-10-S-T,<br>30-10-T,<br>614250,<br>1-194-E,<br>1-254-E | ✓                                                                                     |

The 13-piece universal puller set with extremely narrow jaws of series 2030 is used for 2-jaw and 3-jaw pulling of gearbox gears, bearings, pinions, synchronizers, etc., for extremely tight and poorly accessible intermediate spaces in crafts, industry, and workshops. The series 2030 impresses with its diverse combination options. The kit allows for the assembly of 8 different variants by combining jaws and extensions.

BENEFITS

- Application-oriented assembly for universal use
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.



PRODUCT DETAILS

SERIES 20-SP-T  
2-JAW UNIVERSAL PULLER WITH EXTREMELY  
NARROW JAWS IN THE SET



The 2-jaw universal puller with extremely narrow, adjustable jaws and trapezoidal contact surface at the claw is used for the safe removal of gear wheels, bearings, sprockets, synchronizers, and similar components. It allows for the loosening of parts that are freely accessible from the outside.

BENEFITS

- The extremely slim design of the jaws is optimal for tight and hard-to-reach places.
- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key.
- Application also for eccentric components via freely movable pulling jaws gliding on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Variable adjustment for any span between 16 mm – 120 mm

TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|            | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                        |                                                                                       |
| 20-10-SP-T | -321658                                                                             | 16 - 120<br>5/8 - 4<br>3/4                                                          | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 3,74<br>8.247                                                                         | K-2030-10-S-T          | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 30-SP-T 3-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW JAWS IN THE SET



The 3-jaw universal puller with extremely narrow, adjustable jaws and trapezoidal support surface on the claw is used for safely pulling gear wheels, bearings, pinions, synchronizers, and similar components. It allows for loosening externally accessible parts.

#### BENEFITS

- The extremely slim design of the jaws is optimal for tight and hard-to-reach places.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- The screw connection allows for easy loosening and especially tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding



## TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  |  | Max. tensile force | Max. tension force |  | Included in the set |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|            | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                 | t/US t.<br>sh.     | kg/lb                                                                                 |                     |                                                                                       |
| 30-10-SP-T | -770272                                                                             | 13 - 130<br>1/2 - 5<br>1/8                                                          | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 40<br>29.50                                                                         | 30                 | 3<br>3.31          | 5,55<br>12.238                                                                        | K-2030-10-S-T       | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 20+ 2-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE JAWS



The 2-jaw universal pullers with quick adjustment and robust standard jaws are used for particularly safe pulling of bearings, gears, and discs in all common sizes for craft, workshop, and industrial applications. This allows any component that sits on a shaft and is freely accessible from the outside to be detached. By simply reversing the jaws, the pullers can also be used as internal extractors.

#### BENEFITS

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding
- Variable adjustment for any spread between 0 mm – 350 mm
- Safe shear suspension of the claw in the sliding piece (Armlock Technology)



#### TECHNICAL ATTRIBUTES

| #                    | GTIN    |  |  |  |  |  | Max. tensile force | Max. tension force |  | Included in the set                                                                    |  |
|----------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                      |         | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                 | t/US t.<br>sh.     | kg/lb                                                                                 |                                                                                        |                                                                                       |
| <b>20-0+</b><br>New  | -488078 | 0 - 70<br>0 - 2 3/4                                                                 | 75<br>2 15/16                                                                       | 70 - 105<br>2 3/4 - 4 1/8                                                           | 13<br>1 1/2                                                                         | 40<br>29.50                                                                         | 25                 | 2.5<br>2.76        | 0,52<br>1.147                                                                         | -                                                                                      | ✓                                                                                     |
| <b>20-00+</b><br>New | -104275 | 0 - 95<br>0 - 2 3/4                                                                 | 75<br>2 15/16                                                                       | 70 - 130<br>2 3/4 - 4 1/8                                                           | 13<br>1 1/2                                                                         | 40<br>29.50                                                                         | 25                 | 2.5<br>2.76        | 0,56<br>1.147                                                                         | -                                                                                      | ✓                                                                                     |
| <b>20-1+</b><br>New  | -644771 | 9 - 90<br>3/8 - 3 5/8                                                               | 100<br>4                                                                            | 100 - 120<br>3 15/16 - 4 3/4                                                        | 17<br>1 1/16                                                                        | 80<br>59.01                                                                         | 45                 | 4.5<br>4.96        | 1,27<br>2.800                                                                         | 20+TK-13,<br>K-2030-1+A,<br>K-20-1+S-T,<br>K-20-1-2+B, 20-<br>ST+, 20+ST+S,<br>K-20-15 | ✓                                                                                     |
| <b>20-10+</b><br>New | -644856 | 10 - 130<br>3/8 - 5                                                                 | 100<br>4                                                                            | 95 - 160<br>3 3/4 - 6 5/16                                                          | 17<br>1 1/16                                                                        | 80<br>59.01                                                                         | 45                 | 4.5<br>4.96        | 1,44<br>3.175                                                                         | 20+TK-13,<br>K-2030-10+, 20-<br>ST+                                                    | ✓                                                                                     |

## PRODUCT DETAILS

| #                            |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the<br>set                                |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------|
|                              | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                       |                                                                                     |
| <b>20-10+2</b><br><b>New</b> | -773310                                                                           | 10 - 130<br>3/8 - 5<br>1/8                                                        | 200<br>7 7/8                                                                      | 95 - 160<br>3 3/4 - 6<br>5/16                                                     | 17<br>11/16                                                                       | 80<br>59.01                                                                       | 45                       | 4.5<br>4.96              | 2,145<br>4.730                                                                      | K-2030-10+,<br>20+ST+S                                | ✓                                                                                   |
| <b>20-2+</b><br><b>New</b>   | -644931                                                                           | 10 - 160<br>3/8 - 6                                                               | 162<br>6                                                                          | 100 - 220<br>3 15/16 -<br>8 11/16                                                 | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 60                       | 6<br>6.61                | 3,045<br>7.607                                                                      | 20+TK-13,<br>K-20-1-2+B, 20-<br>ST+, K-20-15          | ✓                                                                                   |
| <b>20-2+3</b><br><b>New</b>  | -773327                                                                           | 10 - 160<br>3/8 - 6<br>5/16                                                       | 300<br>11 13/16                                                                   | 100 - 220<br>3 15/16 -<br>8 11/16                                                 | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 60                       | 6<br>6.61                | 4,615<br>10.176                                                                     | 20+ST+S                                               | ✓                                                                                   |
| <b>20-20+</b><br><b>New</b>  | -645013                                                                           | 10 - 200<br>3/8 - 8                                                               | 162<br>6                                                                          | 100 - 260<br>3 15/16 -<br>10 1/4                                                  | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 60                       | 6<br>6.61                | 3,315<br>7.310                                                                      | 20+TK-13,<br>K-2030-20+S,<br>K-2030-20+S+B,<br>20-ST+ | ✓                                                                                   |
| <b>20-3+</b><br><b>New</b>   | -645198                                                                           | 0 - 250<br>0 - 10                                                                 | 210<br>8                                                                          | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 85                       | 8.5<br>9.37              | 7,05<br>16.538                                                                      | 20+TK-13, 20-ST+                                      | ✓                                                                                   |
| <b>20-30+</b><br><b>New</b>  | -645273                                                                           | 0 - 350<br>0 - 14                                                                 | 200<br>8                                                                          | 180 - 440<br>7 1/16 -<br>17 5/16                                                  | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 85                       | 8.5<br>9.37              | 7,51<br>16.560                                                                      | -                                                     | ✓                                                                                   |



## PRODUCT DETAILS

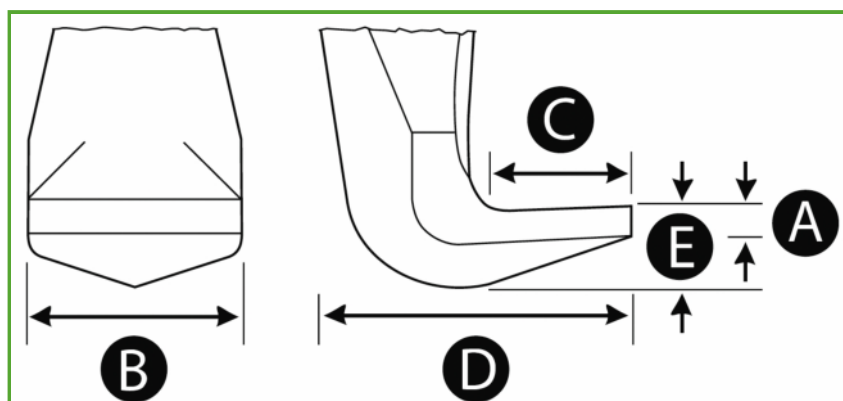
### SERIES 2-P QUICK-ADJUSTABLE STANDARD JAWS (PAIR)



The pair of two quick-adjustable standard jaws is suitable for 2-jaw universal pullers. The robust jaws guarantee particularly safe and user-friendly removal of bearings, gears, and disks.

#### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Through the knurl, a tool-free, quick solution or movement of the jaws is made possible.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-92-P  | -732393                                                                             | 100<br>4                                                                            | 132<br>5 3/16                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 0,58<br>1.279                                                                         | ✓                                                                                     |
| 1-192-P | -973611                                                                             | 200<br>8                                                                            | 232<br>9 1/8                                                                        | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,17<br>2.580                                                                         | ✓                                                                                     |
| 1-252-P | -973673                                                                             | 250<br>10                                                                           | 282<br>11 1/8                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,41<br>3.109                                                                         | ✓                                                                                     |
| 2-152-P | -973765                                                                             | 150<br>6                                                                            | 193<br>7 5/8                                                                        | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 1,26<br>2.778                                                                         | ✓                                                                                     |
| 2-302-P | -973819                                                                             | 300<br>12                                                                           | 343<br>13 1/2                                                                       | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 2,59<br>5.711                                                                         | ✓                                                                                     |
| 3-202-P | -732706                                                                             | 200<br>8                                                                            | 255<br>10 1/32                                                                      | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 3,33<br>7.343                                                                         | ✓                                                                                     |
| 3-302-P | -973932                                                                             | 300<br>12                                                                           | 350<br>13 3/4                                                                       | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 4,505<br>10.033                                                                       | ✓                                                                                     |



PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                        | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-402-P | -974014                                                                           | 400<br>16                                                                         | 450<br>17 11/16                                                                   | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 5,505<br>12.238                                                                     | ✓                                                                                   |
| 3-502-P | -974137                                                                           | 500<br>20                                                                         | 550<br>21 5/8                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 6,35<br>14.002                                                                      | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 30+ 3-JAW UNIVERSAL PULLER WITH QUICK-ADJUSTABLE JAWS



The 3-jaw universal puller with quickly adjustable jaws is used for removing bearings, gears, and discs in all common sizes. This allows for loosening any component that is mounted on a shaft and freely accessible from the outside.

#### BENEFITS

- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 0 mm – 375 mm

#### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Included in the<br>set        |  |
|--------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------|
| 30-1+  | -731488                                                                                     | 0 - 90<br>0 - 3 5/8                                                                                | 100<br>4                                                                                       | 70 - 140<br>2 3/4 - 5<br>1/2                                                                   | 17<br>11/16                                                                                    | 80<br>59.01                                                                                     | 60                             | 6<br>6.61                                  | 1,46<br>3.219                                                                                  | K-2030-1+A                    | ✓                                                                                     |
| 30-10+ | -731556                                                                                     | 0 - 130<br>0 - 5                                                                                   | 100<br>4                                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                                  | 17<br>11/16                                                                                    | 80<br>59.01                                                                                     | 60                             | 6<br>6.61                                  | 1,6<br>3.528                                                                                   | K-2030-10+                    | ✓                                                                                     |
| 30-2+  | -731631                                                                                     | 0 - 160<br>0 - 6                                                                                   | 150<br>6                                                                                       | 100 - 220<br>3 15/16 -<br>8 11/16                                                              | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                             | 7<br>7.72                                  | 3,8<br>8.379                                                                                   | -                             | ✓                                                                                     |
| 30-20+ | -731716                                                                                     | 0 - 200<br>0 - 8                                                                                   | 150<br>6                                                                                       | 100 - 260<br>3 15/16 -<br>10 1/4                                                               | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                             | 7<br>7.72                                  | 4,08<br>10.584                                                                                 | K-2030-20+S,<br>K-2030-20+S+B | ✓                                                                                     |

PRODUCT DETAILS

| #      |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the<br>set |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| 30-3+  | -731891                                                                           | 0 - 250<br>0 - 10                                                                 | 200<br>8                                                                          | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 100                      | 10<br>11.02              | 8,8<br>19.404                                                                       | -                      | ✓                                                                                   |
| 30-30+ | -303333                                                                           | 105 -<br>375<br>4 1/8 -<br>14 3/4                                                 | 200<br>7 7/8                                                                      | 180 - 440<br>7 1/16 -<br>17 5/16                                                  | 36<br>1 7/16                                                                      | 250<br>184.40                                                                     | 150                      | 15<br>16.53              | 10,635<br>3.605                                                                     | -                      | ✓                                                                                   |





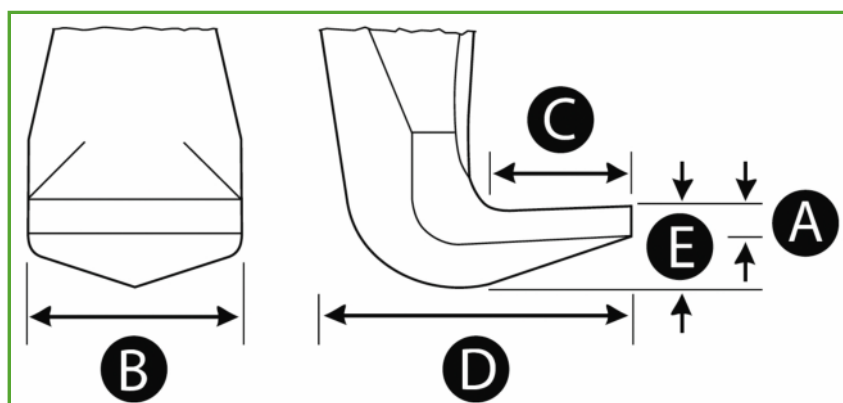
## SERIES 2-S QUICK ADJUSTMENT STANDARD JAWS (SET)



The set of three quickly adjustable standard jaws is suitable for 3-jaw universal pullers. The robust jaws guarantee particularly safe and user-friendly removal of bearings, gears, and discs.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurling, it enables tool-free, quick loosening or moving of the jaws.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-92-S  | -973741                                                                             | 100<br>4                                                                            | 132<br>5 3/16                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 0,92<br>2.029                                                                         | ✓                                                                                     |
| 1-192-S | -973635                                                                             | 200<br>8                                                                            | 232<br>9 1/8                                                                        | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,86<br>4.101                                                                         | ✓                                                                                     |
| 1-252-S | -973697                                                                             | 250<br>10                                                                           | 282<br>11 1/8                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 2,305<br>5.083                                                                        | ✓                                                                                     |
| 2-152-S | -973772                                                                             | 150<br>6                                                                            | 193<br>7 5/8                                                                        | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 2,075<br>6.064                                                                        | ✓                                                                                     |
| 2-302-S | -973833                                                                             | 300<br>12                                                                           | 343<br>13 1/2                                                                       | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 3,775<br>8.324                                                                        | ✓                                                                                     |
| 3-202-S | -973895                                                                             | 200<br>8                                                                            | 255<br>10 1/32                                                                      | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 4,94<br>10.893                                                                        | ✓                                                                                     |
| 3-302-S | -973956                                                                             | 300<br>12                                                                           | 350<br>13 3/4                                                                       | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 6,64<br>14.641                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                               |                                                                                     |
| 3-402-S | -974038                                                                           | 400<br>16                                                                         | 450<br>17 11/16                                                                   | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 8,14<br>17.949                                                                      | ✓                                                                                   |
| 3-502-S | -974151                                                                           | 500<br>20                                                                         | 550<br>21 5/8                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 9,89<br>21.807                                                                      | ✓                                                                                   |

### SERIES K-2030-10+ 2- AND 3-JAW UNIVERSAL PULLER SET WITH QUICK-ADJUSTABLE JAWS

The 13-piece universal puller set with quickly adjustable jaws of the 2030 series is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in crafts, industry, and workshops. The 2030 series impresses with its versatile combination options. The set allows for the assembly of 8 different variants through the combination of jaws and extensions.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the given pull-off situation, easily adjustable and configurable for a variety of applications.
- With 2-jaw or 3-jaw, you are always flexible in use.
- Extensions allow the removal of deeply seated components.



#### TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                           |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
|            | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                       |                                                                                       |
| K-2030-10+ | -001697                                                                             | 0 - 130<br>0 - 5 1/8                                                                | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7 1/16                                                          | 17<br>11/16                                                                         | 60                       | 6<br>6.61                | 9,26<br>20.418                                                                        | 30-10-T,<br>614250,<br>1-192-S,<br>1-252-S,<br>20-10+ | ✓                                                                                     |

SERIES K-2030-1+A  
2- AND 3-JAW UNIVERSAL PULLER SET WITH  
NARROW, QUICK-ADJUSTABLE JAWS



TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                                  |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-1+A | -242311                                                                                     | 9 - 90<br>3/8 - 3<br>9/16                                                                      | 200<br>7 7/8                                                                                   | 100 - 120<br>3 15/16 - 4<br>3/4                                                                | 17<br>11/16                                                                                    | 45                             | 4.5<br>4.96                             | 4,755<br>10.485                                                                                | 600-17,<br>20-1-T,<br>30-1-T,<br>614160, 1-<br>V-100-S,<br>1-92-S,<br>1-93-S | ✓                                                                                     |

The 13-piece universal puller set (2-jaw and 3-jaw) with narrow, quickly adjustable puller jaws from series 2030 is used for pulling bearings, gears, discs, etc. in tight and hard-to-reach spaces in crafts, industry, and workshops. The series 2030 impresses with its versatile combinations. The kit allows for the assembly of 8 different variants by combining puller jaws and extensions.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.

SERIES 20-ST+  
SALES DISPLAY FOR 2-JAW UNIVERSAL  
PULLERS WITH QUICKLY ADJUSTABLE JAWS



The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers are used for removing bearings, gears, and discs in all common sizes.

BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.



TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                             |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                            |                                                                                       |
| 20-ST+ | -668944                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 330<br>12 1                                                                         | 0 - 250<br>0 - 9<br>13/16                                                           | 210<br>8 1/4                                                                        | 100 -<br>340<br>3 15/16 -<br>13 3/8                                                 | 300<br>221.28                                                                       | 85                       | 8.5<br>9.37              | 20,2<br>4.851                                                                         | 20-STL,<br>20-1+,<br>20-10+,<br>20-2+,<br>20-20+,<br>20-3+ | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 20+B 2-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE JAWS AND HYDRAULIC SPINDLE



The 2-jaw universal puller with quickly adjustable jaws and hydraulic spindle is used for particularly safe and user-friendly extraction of extremely tight bearings, gears, and discs in all common sizes for craft, workshop, and industry. The hydraulic spindle achieves an average pulling force of a maximum of 12 t. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. For extraction processes with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used.

#### BENEFITS

- Simple manual release of the puller jaws via hand knob (Quick Adjust Technology)
- The hydraulic spindle guarantees easy and controlled removal of particularly stubborn parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle has a rotating spindle tip for secure placement on smooth surfaces and during centering.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set    |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                        |                                                                                       |
| 20-2+B  | -885792                                                                             | 11 - 160<br>7/16 - 6<br>5/16                                                        | 150<br>5 7/8                                                                        | 100 - 220<br>3 15/16 - 8<br>11/16                                                   | 15<br>11.06                                                                         | 100                      | 10<br>11.02              | 4,665<br>10.286                                                                       | K-20-1-2+B,<br>K-20-15 | ✓                                                                                     |
| 20-20+B | -885822                                                                             | 11 - 200<br>7/16 - 7<br>7/8                                                         | 160<br>6 5/16                                                                       | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 15<br>11.06                                                                         | 100                      | 10<br>11.02              | 4,26<br>9.393                                                                         | K-2030-20+S+B          | ✓                                                                                     |
| 20-3+B  | -885853                                                                             | 0 - 250<br>0 - 9<br>13/16                                                           | 200<br>7 7/8                                                                        | 180 - 340<br>7 1/16 - 13<br>3/8                                                     | 20<br>14.75                                                                         | 120                      | 12<br>13.23              | 8,9<br>19.625                                                                         | -                      | ✓                                                                                     |
| 20-30+B | -885907                                                                             | 0 - 350<br>0 - 13<br>3/4                                                            | 200<br>7 7/8                                                                        | 180 - 440<br>7 1/16 - 17<br>5/16                                                    | 20<br>14.75                                                                         | 120                      | 12<br>13.23              | 9,625<br>21.223                                                                       | -                      | ✓                                                                                     |

## SERIES 30+B 3-JAW UNIVERSAL PULLER WITH QUICKLY ADJUSTABLE JAWS AND HYDRAULIC SPINDLE



The 3-jaw universal puller with quickly adjustable jaws and hydraulic spindle is used for particularly safe and user-friendly extraction of extremely tight components. The hydraulic spindle achieves an average pulling force of up to 15 t. For pulling operations with a pulling force of up to 10 t and/or in confined spaces, the mechanical spindle can be used.

### BENEFITS

- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- 3-jaw provides an even distribution of forces and enables greater pulling forces.
- Fat hydraulic spindle guarantees an easy and controlled removal of particularly stubborn parts with little effort.
- In limited space conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle has a rotating spindle tip for secure placement on smooth surfaces and during centering.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                     |                                                                                       |
| 30-2+B  | -886294                                                                             | 0 - 160<br>0 - 6<br>5/16                                                            | 150<br>5 7/8                                                                        | 100 - 220<br>3 15/16 - 8<br>11/16                                                   | 15<br>11.06                                                                         | 100                      | 10<br>11.02              | 5,345<br>11.786                                                                       | -                   | ✓                                                                                     |
| 30-20+B | -886324                                                                             | 0 - 200<br>0 - 7 7/8                                                                | 150<br>5 7/8                                                                        | 100 - 260<br>3 15/16 - 10 1/4                                                       | 15<br>11.06                                                                         | 100                      | 10<br>11.02              | 5,64<br>12.436                                                                        | K-2030-20+S+B       | ✓                                                                                     |
| 30-3+B  | -886355                                                                             | 0 - 250<br>0 - 9<br>13/16                                                           | 200<br>7 7/8                                                                        | 180 - 340<br>7 1/16 - 13<br>3/8                                                     | 20<br>14.75                                                                         | 120                      | 12<br>13.23              | 11,43<br>25.203                                                                       | -                   | ✓                                                                                     |
| 30-30+B | -303067                                                                             | 0 - 375<br>0 - 14<br>3/4                                                            | 200<br>7 7/8                                                                        | 180 - 440<br>7 1/16 - 17<br>5/16                                                    | 45<br>33.19                                                                         | 150                      | 15<br>16.53              | 19<br>41.895                                                                          | -                   | ✓                                                                                     |

SERIES K-20-1-2+B  
2-JAW UNIVERSAL PULLER SET WITH QUICK  
ADJUSTMENT, HYDRAULIC SPINDLE AND  
EXTENSIONS



TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                    |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-20-1-2+B | -935923                                                                                     | 0 - 160<br>0 - 6 5/16                                                                          | 0 - 300<br>0 - 11 13/16                                                                        | 100 - 220<br>3 15/16 - 8 11/16                                                                 | 100                            | 10<br>11.02                             | 0,3<br>0.662                                                                                   | 20-1+,<br>20-2+,<br>8-0-621,<br>600-17,<br>1-192-P,<br>2-302-P | ✓                                                                                     |

The 14-piece universal puller set with quick adjustment, hydraulic spindle and extensions of the K-20-1-2+B series is used for 2-jaw pulling of normal and especially tight-fitting bearings, gears, disks, etc. in crafts, industry, and workshops. The series impresses with its versatile construction possibilities. The "6 in 1" kit allows the assembly of 6 different puller models by combining hydraulics, jaws, and extensions.

BENEFITS

- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through the hooks for different spans, you are always flexible in use.
- Extensions enable the removal of deeply seated components.

## PRODUCT DETAILS

### SERIES K-20-15 UNIVERSAL PULLER AND PULLING DEVICE SET



The 12-piece universal puller and pulling device set of series K-20-15 is used for hydraulic Pulling and Separation of ball bearings, roller bearings, inner rings, and other flush-seated parts in trade, industry, and workshop. The kit enables the assembly of 7 different Puller models by combining jaws and extensions. Together with the pulling devices of series 15 and the hydraulic spindle, this results in numerous combination options for optimal use in changing Pulling situations.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- The hydraulic spindle enables gentle and safe extraction.
- The sharp edges of the series 15 enable a pulling action where other pulling methods are inapplicable.



#### TECHNICAL ATTRIBUTES

| #       | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Consists<br>of                                                                   |  |
|---------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-20-15 | -367311 | 9 - 160<br>3/8 - 6<br>5/16                                                                      | 0 - 312<br>0 - 12<br>5/16                                                                   | 100 - 220<br>3 15/16 -<br>8 11/16                                                           | 68 - 244<br>2 11/16 -<br>9 5/8                                                              | 260<br>10 1/4                                                                               | 22 - 115<br>7/8 - 4<br>1/2                                                                  | 100                            | 10<br>11.02                                | 21,61<br>47.650                                                                             | 600-17,<br>8-0-621,<br>15-2,<br>18-2,<br>20-1+,<br>20-2+,<br>1-192-P,<br>2-302-P | ✓                                                                                     |



## SERIES 20+S 2-JAW UNIVERSAL PULLER WITH NARROW, QUICKLY ADJUSTABLE EXTRACTOR JAWS



The 2-jaw universal puller with narrow, quickly adjustable jaws is used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for the loosening of any component seated on a shaft and freely accessible from the outside. The narrow jaws ensure that even tight and hard-to-reach gaps can be accessed.

### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- Simple manual release of the jaws with hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 4 mm – 350 mm



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set                                            |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                |                                                                                       |
| 20-1+S  | -756221                                                                             | 20 - 90<br>3/16 - 3<br>5/8                                                          | 100<br>4                                                                            | 70 - 140<br>2 3/4 - 5<br>1/2                                                        | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 1,27<br>2.800                                                                         | KS-2030-1-193xS,<br>K-2030-1+A,<br>KS-2030-1-193+S,<br>20-ST+S | ✓                                                                                     |
| 20-10+S | -756306                                                                             | 20 - 120<br>3/16 - 5                                                                | 100<br>4                                                                            | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 1,42<br>3.131                                                                         | K-2030-10+S, 20-<br>ST+S, 20+ST+S                              | ✓                                                                                     |
| 20-2+S  | -756481                                                                             | 16 - 160<br>5/8 - 6                                                                 | 150<br>6                                                                            | 100 - 220<br>3 15/16 -<br>8 11/16                                                   | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 3,04<br>7.497                                                                         | 20-ST+S, 20+ST+S                                               | ✓                                                                                     |
| 20-20+S | -756559                                                                             | 16 - 200<br>5/8 - 8                                                                 | 150<br>6                                                                            | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 3,3<br>7.277                                                                          | K-2030-20+S,<br>K-2030-20+S+B, 20-<br>ST+S                     | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                     |                                                                                     |
| 20-3+S  | -756634                                                                           | 21 - 250<br>13/16 -<br>10                                                         | 200<br>8                                                                          | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 90                       | 9<br>9.92                | 6,885<br>15.181                                                                     | 20-ST+S             | ✓                                                                                   |
| 20-30+S | -756719                                                                           | 21 - 350<br>13/16 -<br>14                                                         | 200<br>8                                                                          | 180 - 440<br>7 1/16 -<br>17 5/16                                                  | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 90                       | 9<br>9.92                | 7,37<br>16.251                                                                      | -                   | ✓                                                                                   |



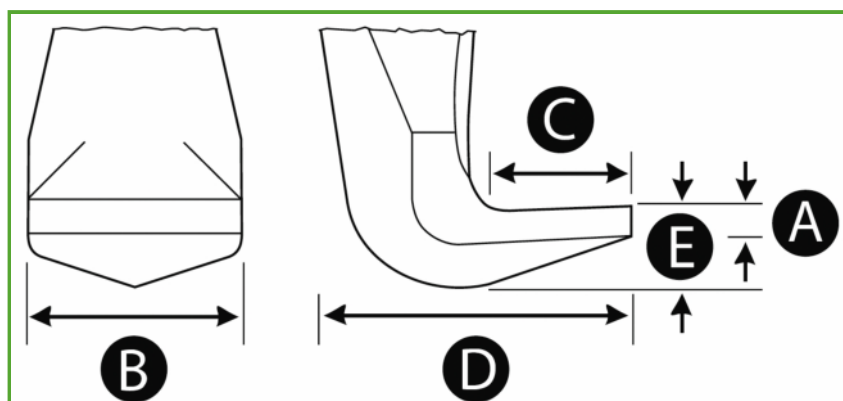
## SERIES 3-P NARROW, QUICKLY ADJUSTABLE JAWS (PAIR)



The pair of two narrow, quickly adjustable pulling jaws is suitable for 2-jaw universal pullers. The narrow pulling jaws ensure that even tight and hard-to-reach spaces can be accessed.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurling, tool-free, quick loosening or moving of the jaws is made possible.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                              | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |                                                                                       |
| 1-93-P  | -973352                                                                             | 100<br>4                                                                            | 127<br>5                                                                            | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,53<br>1.169                                                                         | ✓                                                                                     |                                                                                       |
| 1-193-P | -324208                                                                             | 200<br>8                                                                            | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,095<br>2.414                                                                        | ✓                                                                                     |                                                                                       |
| 1-253-P | -973710                                                                             | 250<br>10                                                                           | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,34<br>2.955                                                                         | ✓                                                                                     |                                                                                       |
| 2-153-P | -973789                                                                             | 150<br>6                                                                            | 186<br>7 5/16                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 1,37<br>3.021                                                                         | ✓                                                                                     |                                                                                       |
| 2-303-P | -973857                                                                             | 300<br>12                                                                           | 336<br>13 1/4                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 2,58<br>5.689                                                                         | ✓                                                                                     |                                                                                       |
| 3-203-P | -973901                                                                             | 200<br>8                                                                            | 244<br>9 5/8                                                                        | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 3,16<br>6.968                                                                         | ✓                                                                                     |                                                                                       |
| 3-303-P | -973970                                                                             | 300<br>12                                                                           | 340<br>13 3/8                                                                       | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 4,265<br>9.404                                                                        | ✓                                                                                     |                                                                                       |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/inch                                                                           | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-403-P | -974052                                                                           | 400<br>16                                                                         | 440<br>17 5/16                                                                    | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 6,155<br>13.572                                                                     | ✓                                                                                   |
| 3-503-P | -974175                                                                           | 500<br>20                                                                         | 540<br>21 1/4                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 6,51<br>14.355                                                                      | ✓                                                                                   |





## PRODUCT DETAILS

### SERIES 30+S 3-JAW UNIVERSAL PULLER WITH NARROW, QUICKLY ADJUSTABLE JAWS



The 3-jaw universal puller with narrow, quick adjustment jaws is used for the safe and user-friendly pulling of bearings, gears and discs in all common sizes for trades, workshops and industry. This makes it possible to loosen any component that sits on a shaft and is freely accessible from the outside. The narrow jaws ensure that even tight and hard-to-access gaps can be reached. The 3-jaw design guarantees uniform load distribution and thus a particularly secure hold on the part to be pulled.

#### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | <br>Max.<br>tensile<br>force<br>kN | <br>Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Included in the set                                |  |
|---------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------|
| 30-1+S  | -756894                                                                                     | 8 - 90<br>5/16 - 3<br>5/8                                                                          | 100<br>4                                                                                       | 70 - 140<br>2 3/4 - 5<br>1/2                                                                   | 17<br>11/16                                                                                    | 40<br>29.50                                                                                     | 30                                                                                                                    | 3<br>3.31                                                                                                                          | 1,46<br>3.219                                                                                  | KS-2030-1-193xS,<br>K-2030-1+A,<br>KS-2030-1-193+S | ✓                                                                                     |
| 30-10+S | -756979                                                                                     | 8 - 130<br>5/16 - 5                                                                                | 100<br>4                                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                                  | 17<br>11/16                                                                                    | 40<br>29.50                                                                                     | 30                                                                                                                    | 3<br>3.31                                                                                                                          | 1,54<br>3.396                                                                                  | K-2030-10+S                                        | ✓                                                                                     |
| 30-2+S  | -757051                                                                                     | 16 - 160<br>5/8 - 6                                                                                | 150<br>6                                                                                       | 100 - 220<br>3 15/16 -<br>8 11/16                                                              | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 50                                                                                                                    | 5<br>5.51                                                                                                                          | 3,785<br>8.346                                                                                 | -                                                  | ✓                                                                                     |
| 30-20+S | -757136                                                                                     | 16 - 200<br>5/8 - 8                                                                                | 150<br>6                                                                                       | 100 - 260<br>3 15/16 -<br>10 1/4                                                               | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 50                                                                                                                    | 5<br>5.51                                                                                                                          | 4,12<br>9.085                                                                                  | K-2030-20+S,<br>K-2030-20+S+B                      | ✓                                                                                     |

PRODUCT DETAILS

| #      |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                     |                                                                                     |
| 30-3+S | -757211                                                                           | 2 - 250<br>1/16 -<br>10                                                           | 200<br>8                                                                          | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 390<br>287.66                                                                     | 135                      | 13.5<br>14.88            | 9,3<br>20.507                                                                       | -                   | ✓                                                                                   |



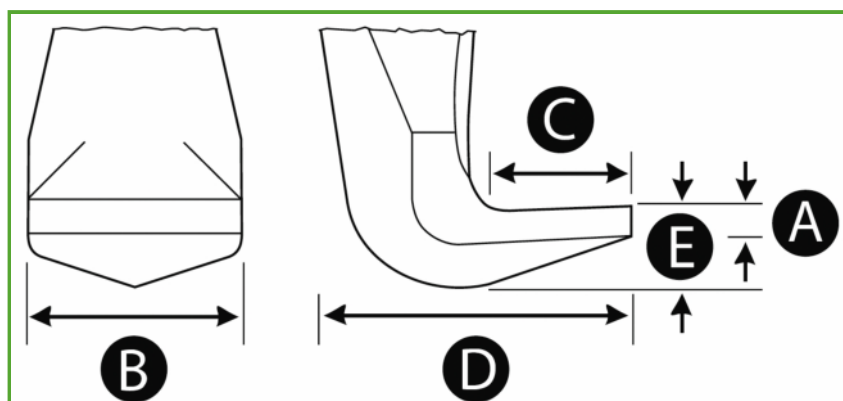
## SERIES 3-S NARROW, QUICK ADJUSTMENT JAWS (SET)



The set of three narrow, quickly adjustable jaws is suitable for 3-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurling, a tool-free, quick release or movement of the trigger jaws is possible.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                              | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-93-S  | -973758                                                                             | 100<br>4                                                                            | 127<br>5                                                                            | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,85<br>1.874                                                                         | ✓                                                                                     |
| 1-193-S | -973659                                                                             | 200<br>8                                                                            | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,62<br>3.572                                                                         | ✓                                                                                     |
| 1-253-S | -973734                                                                             | 250<br>10                                                                           | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 2,18<br>4.807                                                                         | ✓                                                                                     |
| 2-153-S | -973796                                                                             | 150<br>6                                                                            | 186<br>7 5/16                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 2,03<br>5.072                                                                         | ✓                                                                                     |
| 2-303-S | -973871                                                                             | 300<br>12                                                                           | 336<br>13 1/4                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 3,745<br>8.258                                                                        | ✓                                                                                     |
| 3-203-S | -973918                                                                             | 200<br>8                                                                            | 244<br>9 5/8                                                                        | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 5,435<br>11.984                                                                       | ✓                                                                                     |
| 3-303-S | -973994                                                                             | 300<br>12                                                                           | 340<br>13 3/8                                                                       | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 4,265<br>9.404                                                                        | ✓                                                                                     |

PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/inch                                                                           | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-403-S | -974076                                                                           | 400<br>16                                                                         | 440<br>17 5/16                                                                    | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 7,85<br>17.309                                                                      | ✓                                                                                   |
| 3-503-S | -974199                                                                           | 500<br>20                                                                         | 540<br>21 1/4                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                       | 6,5<br>1/4                                                                          | 1,35<br>2.977                                                                       | ✓                                                                                   |





SERIES K-2030-10+S  
2- AND 3-JAW UNIVERSAL PULLER SET WITH  
NARROW, QUICK-ADJUSTING JAWS



TECHNICAL ATTRIBUTES

| #           | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                            |  |
|-------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-10+S | -120060                                                                                     | 0 - 130<br>0 - 5 1/8                                                                           | 350<br>13 3/4                                                                                  | 70 - 180<br>2 3/4 - 7<br>1/16                                                                  | 17<br>11/16                                                                                    | 30                             | 3<br>3.31                               | 8,5<br>18.743                                                                                  | 20-10+S,<br>30-10-T,<br>614250,<br>1-193-S,<br>1-253-S | ✓                                                                                     |

The 13-piece universal puller set with narrow, quick-adjustable jaws from series 2030 is used for 2-jaw and 3-jaw pulling of bearings, gears, discs, etc. in tight and hard-to-reach spaces in craftsmanship, industry, and workshops. The series 2030 impresses with its versatile combination options. The kit allows for the assembly of 8 different variants by combining the jaws and extensions.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Extensions allow the removal of deeply seated components.

## PRODUCT DETAILS

### SERIES K-2030-20+S 2- AND 3-JAW UNIVERSAL PULLER SET WITH TWO DIFFERENT JAW TYPES



The 15-piece universal puller set with two different types of puller jaws is used for universal applications in the 2-jaw and 3-jaw extraction of gearbox gears, bearings, sprockets, and synchronizers. This set includes the basic equipment of pullers needed for universal work.

#### BENEFITS

- Application-oriented assembly for universal use
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.



#### TECHNICAL ATTRIBUTES

| #           | GTIN           | mm/inch                    | mm/inch       | mm/inch                        | mm/inch   | Max. tensile force<br>kN | Max. tension force<br>t/US t. sh. | kg/lb           | Consists of                                                                                                                       |   |
|-------------|----------------|----------------------------|---------------|--------------------------------|-----------|--------------------------|-----------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------|---|
| K-2030-20+S | 4021176-058677 | 10 - 200<br>3/8 - 7<br>7/8 | 600<br>23 5/8 | 150 - 600<br>5 7/8 - 23<br>5/8 | 22<br>7/8 | 50                       | 5<br>5.51                         | 14,76<br>32.546 | 621220,<br>621355,<br>2-152-P,<br>2-153-P,<br>2-302-P, 2-<br>V-150-P,<br>20-20-T,<br>30-20-T3,<br>30-20-T3,<br>600-17,<br>20-30-T | ✓ |

PRODUCT DETAILS

SERIES K-2030-20+S+B  
PULLERS AND SETS FOR EXTERNAL  
EXTRACTION



The 16-piece universal puller set with two different types of puller jaws and hydraulic spindle from series 2030 is used for universal applications in 2-jaw and 3-jaw pulling of gear wheels, bearings, sprockets, and synchronizers. This set includes the basic equipment of pullers.

BENEFITS

- Application-oriented assembly for universal use
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through 2-jaw or 3-jaw design, one is always flexible in use.
- Through the included extensions, the pullers can be combined for a reach of up to 300 mm.

TECHNICAL ATTRIBUTES

| #             | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                                                                          |  |
|---------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-2030-20+S+B | -487422                                                                                     | 10 - 200<br>3/8 - 7<br>7/8                                                                     | 600<br>23 5/8                                                                                  | 150 - 600<br>5 7/8 - 23<br>5/8                                                                 | 100                            | 10<br>11.02                             | 14,22<br>31.355                                                                                | 621220,<br>621355,<br>2-152-P,<br>2-153-P,<br>2-302-P, 2-<br>V-150-P,<br>8-0-621,<br>20-20-T,<br>30-20-T3,<br>600-17 | ✓                                                                                     |

PRODUCT DETAILS

SERIES KS-2030-1-193+S  
2- AND 3-JAW UNIVERSAL PULLER SET WITH  
NARROW PULLER JAWS



TECHNICAL ATTRIBUTES

| #               |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                           |  |
|-----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------|
|                 | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                          |                                                                                       |
| KS-2030-1-193+S | -967399                                                                             | 0 - 90<br>0 - 3<br>9/16                                                             | 0 - 200<br>0 - 7 7/8                                                                | 70 - 140<br>2 3/4 - 5<br>1/2                                                        | 17<br>11/16                                                                         | 45                       | 4.5<br>4.96              | 4,22<br>9.305                                                                         | 20-1+S,<br>1-193-S,<br>1-93-E,<br>30-1-T | ✓                                                                                     |

The 9-piece Universal Puller Set with narrow puller jaws from the series KS-2030-1-193+S is used for pulling bearings, gears, discs, etc. in tight and hard-to-reach spaces in crafts, industry, and workshops. The kit allows switching between 2-jaw and 3-jaw pullers and different jaws, resulting in 4 different variations.

BENEFITS

- Narrow puller jaws optimally grip in tight and hard-to-reach places.
- Simple manual release of jaws using hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.





PRODUCT DETAILS

SERIES K-20-1+S-T  
2-JAW UNIVERSAL PULLER SET WITH  
EXTENSIONS



TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                 |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|
|            | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                             |                                                                                       |
| K-20-1+S-T | -102608                                                                             | 0 - 90<br>0 - 3 9/16                                                                | 0 - 200<br>0 - 7 7/8                                                                | 70 - 140<br>2 3/4 - 5 1/2                                                           | 17<br>11/16                                                                         | 45                       | 4.5<br>4.96              | 2,64<br>5.821                                                                         | 20-1+S,<br>1-95-P, 1-<br>V-100-P,<br>1-92-P | ✓                                                                                     |

During external extraction, the part to be removed, which is seated on a shaft and is accessible from the outside, is gripped from the outside with the jaws. By tightening the spindle, the component is secured. Subsequently, the hexagon on the spindle head is moved with an actuation tool until the component is released.

BENEFITS

- Application-oriented assembly for universal use
- The storage in the box allows for a good overview of the completeness of the set. The screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key.
- Variable adjustment for any span between -

## PRODUCT DETAILS

### SERIES 20-ST+S DISPLAY FOR 2-JAW UNIVERSAL PULLERS WITH NARROW, QUICKLY ADJUSTABLE JAWS



The display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow, quick-adjusting jaws are used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows any component that is on a shaft and freely accessible from the outside to be loosened. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed.



#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow jaws grip optimally in tight and hard-to-reach spots.
- Simple manual release of the jaws via hand knob (Quick Adjust Technology)

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                 |                                                                                       |
| 20-ST+S | -998812                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 330<br>12 1                                                                         | 4 - 250<br>3/16 -<br>9<br>13/16                                                     | 200<br>7 7/8                                                                        | 70 - 340<br>2 3/4 -<br>13 3/8                                                       | 250<br>184.40                                                                       | 70                       | 7<br>7.72                | 19,87<br>43.813                                                                       | 20-1+S,<br>20-10+S,<br>20-2+S,<br>20-20+S,<br>20-3+S,<br>20-STL | ✓                                                                                     |

## SERIES 20+SP 2-JAW UNIVERSAL PULLER WITH NARROW, QUICKLY ADJUSTABLE JAWS IN SET



The 2-jaw universal puller with narrow, quick-adjustable jaws is used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes. It can be used to loosen components that sit on shafts and are freely accessible from the outside.

### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- Simple manual adjustment of the jaws using hand knobs (Quick Adjust Technology)
- Application also for eccentric components via freely movable pulling jaws gliding on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 16 mm – 350 mm

### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                        |                                                                                       |
| 20-10+SP | -181061                                                                             | 16 - 120<br>5/8 - 4<br>3/4                                                          | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 3,875<br>8.544                                                                        | K-2030-10+S            | ✓                                                                                     |
| 20-20+SP | -181078                                                                             | 16 - 200<br>5/8 - 7<br>7/8                                                          | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 5,96<br>13.142                                                                        | -                      | ✓                                                                                     |
| 20-30+SP | -181085                                                                             | 21 - 350<br>13/16 -<br>13 3/4                                                       | 400<br>15 3/4                                                                       | 180 - 440<br>7 1/16 -<br>17 5/16                                                    | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | 70                       | 7<br>7.72                | 18,12<br>39.955                                                                       | -                      | ✓                                                                                     |

## SERIES 20+S-T 2-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW, QUICKLY ADJUSTABLE JAWS



The 2-jaw universal puller with extremely narrow, quickly adjustable jaws and trapezoidal support surfaces on the claw is used for safely and user-friendly pulling of transmission gears, bearings, sprockets, synchronizer bodies, and similar components. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The trapezoidal support surfaces of the claw ensure that even very tight and hard-to-reach spaces are accessible.

### BENEFITS

- The extremely slim design of the jaws optimally engages in extremely tight and hard-to-reach spots.
- Simple manual adjustment of the jaws using hand knobs (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 16 mm – 120 mm



### TECHNICAL ATTRIBUTES

| #         | GTIN    | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | <br>Max.<br>tensile<br>force<br>kN | <br>Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Included in the<br>set | <br>MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|-----------|---------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 20-1+S-T  | -321344 | 16 - 90<br>5/8 - 3<br>9/16                                                                         | 100<br>3 15/16                                                                                 | 70 - 140<br>2 3/4 - 5<br>1/2                                                                   | 17<br>11/16                                                                                    | 35<br>25.82                                                                                     | 25                                                                                                                    | 2.5<br>2.76                                                                                                                        | 1,215<br>2.679                                                                                 | K-20-1+S-T             | ✓                                                                                                                                        |
| 20-10+S-T | -321368 | 16 - 120<br>5/8 - 4<br>3/4                                                                         | 100<br>3 15/16                                                                                 | 70 - 180<br>2 3/4 - 7<br>1/16                                                                  | 17<br>11/16                                                                                    | 35<br>25.82                                                                                     | 25                                                                                                                    | 2.5<br>2.76                                                                                                                        | 1,35<br>2.977                                                                                  | K-2030-10+S-T          | ✓                                                                                                                                        |



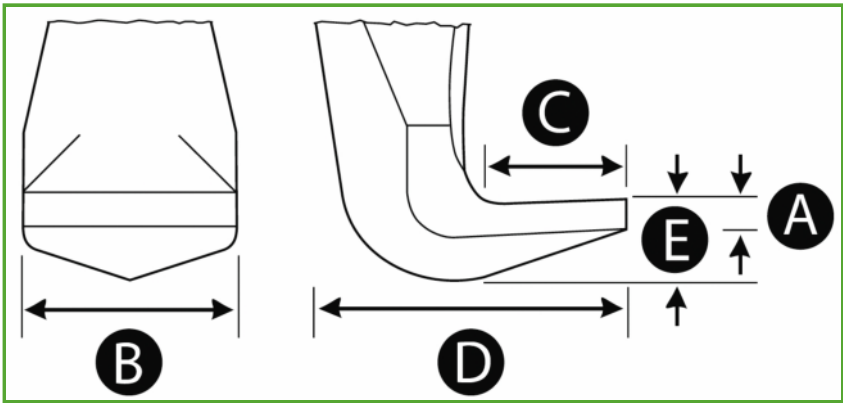
SERIES 5-P  
EXTREMELY NARROW, QUICK-ADJUSTABLE  
JAWS (PAIR)



The pair of two extremely narrow, quickly adjustable extractor jaws is suitable for 2-jaw universal pullers. The trapezoidal support surfaces of the claw ensure that even very tight and hard-to-reach gaps are accessible.

BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurl, a tool-free, quick release or movement of the trigger hooks is made possible.



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-95-P  | -321610                                                                             | 100<br>3 15/16                                                                      | 127<br>5                                                                            | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,505<br>1.114                                                                        | ✓                                                                                     |
| 1-195-P | -321443                                                                             | 200<br>7 7/8                                                                        | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,08<br>2.381                                                                         | ✓                                                                                     |
| 1-255-P | -321542                                                                             | 250<br>9 13/16                                                                      | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,32<br>2.911                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 30+S-T 3-JAW UNIVERSAL PULLER WITH EXTREMELY NARROW, QUICK-ADJUSTABLE JAWS



The 3-jaw universal puller with extremely narrow, quick-adjustable jaws and trapezoidal support surface on the claw is used for the safe and user-friendly removal of gear wheels, bearings, sprockets, synchronizers, and similar components.

#### BENEFITS

- The extremely slim design of the jaws optimally engages in extremely tight and hard-to-reach spots
- 3-jaw provides an even distribution of forces and enables greater pulling forces.
- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding



#### TECHNICAL ATTRIBUTES

| #         | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in the<br>set |  MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|-----------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 30-1+S-T  | -321320 | 13 - 90<br>1/2 - 3<br>9/16                                                                      | 100<br>3 15/16                                                                              | 70 - 140<br>2 3/4 - 5<br>1/2                                                                | 17<br>11/16                                                                                 | 40<br>29.50                                                                                  | 30                             | 3<br>3.31                                  | 1,345<br>2.966                                                                              | -                      | ✓                                                                                                                                     |
| 30-10+S-T | -321337 | 13 - 130<br>1/2 - 5<br>1/8                                                                      | 100<br>3 15/16                                                                              | 70 - 180<br>2 3/4 - 7<br>1/16                                                               | 17<br>11/16                                                                                 | 40<br>29.50                                                                                  | 30                             | 3<br>3.31                                  | 1,535<br>3.385                                                                              | K-2030-10+S-T          | ✓                                                                                                                                     |

## PRODUCT DETAILS

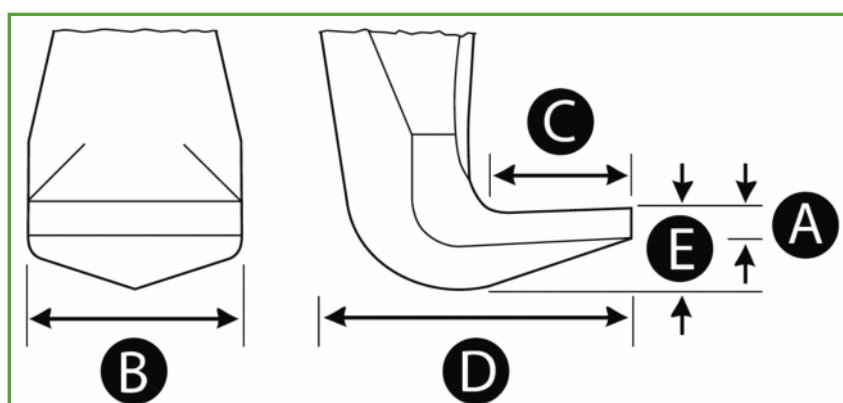
### SERIES 5-S EXTREMELY NARROW, QUICK ADJUSTMENT JAWS (SET)



The set of three extremely narrow, quick-adjustable jaws is suitable for 3-jaw universal pullers. The trapezoidal contact surface of the claw ensures that even very tight and poorly accessible gaps can be reached.

#### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurl, a tool-free, quick release or movement of the jaws is made possible.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-95-S  | -321634                                                                             | 100<br>3 15/16                                                                      | 127<br>5                                                                            | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,81<br>1.786                                                                         | ✓                                                                                     |
| 1-195-S | -321467                                                                             | 200<br>7 7/8                                                                        | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,95<br>4.300                                                                         | ✓                                                                                     |
| 1-255-S | -321566                                                                             | 250<br>9 13/16                                                                      | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 12<br>1/2                                                                           | 24<br>15/16                                                                         | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 2,095<br>4.619                                                                        | ✓                                                                                     |

SERIES K-2030-10+S-T  
2- AND 3-JAW UNIVERSAL PULLER SET WITH  
EXTREMELY NARROW, QUICK-ADJUSTABLE  
JAWS



TECHNICAL ATTRIBUTES

| #             |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                              |  |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------|
|               | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                          |                                                                                       |
| K-2030-10+S-T | -001710                                                                             | 0 - 130<br>0 - 5 1/8                                                                | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7 1/16                                                          | 17<br>11/16                                                                         | 30                       | 3<br>3.31                | 8,91<br>19.647                                                                        | 20-10+S-T,<br>30-10-T,<br>614250,<br>1-195-S,<br>1-255-S | ✓                                                                                     |

The 13-piece universal puller set with extremely narrow, quickly adjustable jaws of series 2030 is used for the 2-jaw and 3-jaw pulling of gear wheels, bearings, sprockets, synchronizers, etc. for extremely tight and hard-to-reach spaces in craft, industry, and workshop. The series 2030 impresses with its diverse combination possibilities. The kit enables the assembly of 8 different variants by combining jaws and extensions.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- Through two- or three-jaw design, you are always flexible in use.
- Extensions allow the removal of deeply seated components.





### SERIES 20+ST+S SALES DISPLAY FOR 2-JAW UNIVERSAL PULLERS WITH NARROW, QUICKLY ADJUSTABLE JAWS



The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow, quick-adjustable jaws are used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for the loosening of any component that sits on a shaft and is accessible from the outside. The narrow jaws ensure that tight and hard-to-reach spaces can also be accessed.

#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow jaws grip optimally in tight and hard-to-reach spots.
- Simple manual release of the jaws via hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                 |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                |                                                                                       |
| 20+ST+S | -773303                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 216<br>8 1/2                                                                        | 9 - 160<br>3/8 - 6<br>5/16                                                          | 300<br>11 13/16                                                                     | 100 -<br>220<br>3 15/16 -<br>8 11/16                                                | 150<br>110.64                                                                       | 60                       | 6<br>6.61                | 16,27<br>35.875                                                                       | 20-1+,<br>20-10+S,<br>20-2+S,<br>20-10+2,<br>20-2+3,<br>20-STL | ✓                                                                                     |

## SERIES 20X 2-JAW UNIVERSAL PULLER WITH QUICK ADJUSTMENT JAWS AND SOFT-TOUCH KNURLED SURFACE

The 2-jaw universal pullers with quick adjustment and robust standard jaws are used for particularly safe pulling of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows any component sitting on a shaft and accessible from the outside to be removed. The soft-touch knurls guarantee maximum operating comfort even with wet or oily hands. By simply reversing the jaws, the pullers can also be used as internal extractors.



### BENEFITS

- Simple, manual solution of the Jaw clamps using hand knobs (Quick Adjust Technology)
- Optimized quick adjustment form guarantees an exceptionally good haptics (even with wet or oily hands)
- Application also for eccentric components via freely movable pulling jaws gliding on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 0 mm – 350 mm



### TECHNICAL ATTRIBUTES

| #                    | GTIN    | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Included in<br>the set |  |
|----------------------|---------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| <b>20-0x</b><br>New  | -488085 | 0 - 70<br>0 - 2 3/4                                                                                | 75<br>2 15/16                                                                                  | 70 - 105<br>2 3/4 - 4 1/8                                                                      | 13<br>1/2                                                                                      | 40<br>29.50                                                                                     | 25                             | 2.5<br>2.76                                | 0,52<br>2.205                                                                                  | 20x-TK-13              | ✓                                                                                     |
| <b>20-00x</b><br>New | -104282 | 0 - 95<br>0 - 3 3/4                                                                                | 75<br>2 15/16                                                                                  | 70 - 130<br>2 3/4 - 5 1/8                                                                      | 13<br>1/2                                                                                      | 40<br>29.50                                                                                     | 25                             | 2.5<br>2.76                                | 0,3<br>0.662                                                                                   | 20x-TK-13              | ✓                                                                                     |
| <b>20-1x</b><br>New  | -041471 | 9 - 90<br>3/8 - 3 9/16                                                                             | 100<br>3 15/16                                                                                 | 100 - 120<br>3 15/16 - 4 3/4                                                                   | 17<br>11/16                                                                                    | 80<br>59.01                                                                                     | 65                             | 6.5<br>7.17                                | 1,315<br>2.900                                                                                 | 20-STx, 20x-TK-13      | ✓                                                                                     |
| <b>20-10x</b><br>New | -041464 | 10 - 130<br>3/8 - 5 1/8                                                                            | 100<br>3 15/16                                                                                 | 95 - 160<br>3 3/4 - 6 5/16                                                                     | 17<br>11/16                                                                                    | 80<br>59.01                                                                                     | 65                             | 6.5<br>7.17                                | 1,46<br>3.219                                                                                  | 20-STx, 20x-TK-13      | ✓                                                                                     |
| <b>20-2x</b><br>New  | -041495 | 10 - 160<br>3/8 - 6 5/16                                                                           | 162<br>6 3/8                                                                                   | 100 - 220<br>3 15/16 - 8 11/16                                                                 | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 80                             | 8<br>8.82                                  | 3,065<br>8.048                                                                                 | 20-STx, 20x-TK-13      | ✓                                                                                     |
| <b>20-20x</b><br>New | -041488 | 10 - 200<br>3/8 - 7 7/8                                                                            | 162<br>6 3/8                                                                                   | 100 - 260<br>3 15/16 - 10 1/4                                                                  | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 80                             | 8<br>8.82                                  | 3,395<br>7.486                                                                                 | 20-STx,<br>K-2030-20xS | ✓                                                                                     |

PRODUCT DETAILS

|  | #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|---------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|                                                                                 | GTIN    | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                                                                                | t/US t.<br>sh.           | kg/lb                    |                                                                                     |                        |                                                                                     |
| <b>20-3x</b><br><b>New</b>                                                      | -041525 | 0 - 250<br>0 - 9<br>13/16                                                         | 210<br>8 1/4                                                                      | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 105                                                                               | 10.5<br>11.57            | 1,325<br>2.922           | 20-STx                                                                              | ✓                      |                                                                                     |
| <b>20-30x</b><br><b>New</b>                                                     | -041518 | 0 - 350<br>0 - 13<br>3/4                                                          | 200<br>7 7/8                                                                      | 180 - 440<br>7 1/16 -<br>17 5/16                                                  | 27<br>1 1/16                                                                      | 300<br>221.28                                                                     | 105                                                                               | 10.5<br>11.57            | 7,52<br>2.922            | -                                                                                   | ✓                      |                                                                                     |

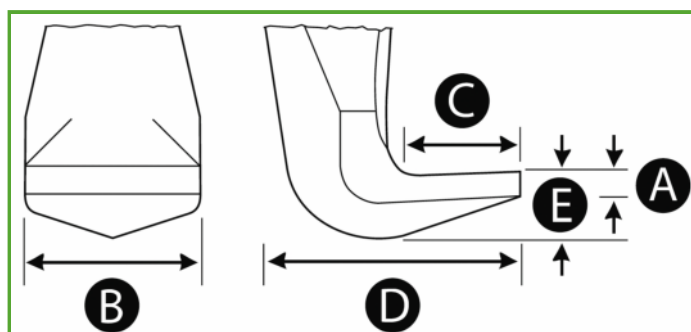
## SERIES 2-PX QUICK-ADJUSTABLE STANDARD JAWS (PAIR)



The pair of two quickly adjustable standard puller jaws is suitable for 2-jaw universal pullers. The robust jaws guarantee particularly safe removal of bearings, gears, and discs. The green hand knobs ensure maximum user comfort and allow for quick, tool-free loosening or fastening of the jaws, even with wet or oily hands.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Through the knurl, a tool-free, quick release or movement of the jaws is made possible.



### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |                                                                                       |
| 1-92-Px  | -061257                                                                             | 100<br>4                                                                            | 132<br>5 3/16                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 0,58<br>1.279                                                                         | ✓                                                                                     |                                                                                       |
| 1-192-Px | -061172                                                                             | 200<br>8                                                                            | 232<br>9 1/8                                                                        | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,17<br>2.580                                                                         | ✓                                                                                     |                                                                                       |
| 1-252-Px | -061219                                                                             | 250<br>10                                                                           | 282<br>11 1/8                                                                       | 10<br>3/8                                                                           | 31<br>1 1/4                                                                         | 20<br>13/16                                                                         | 15<br>9/16                                                                           | 3<br>1/8                                                                              | 1,41<br>3.109                                                                         | ✓                                                                                     |                                                                                       |
| 2-152-Px | -061288                                                                             | 150<br>6                                                                            | 193<br>7 5/8                                                                        | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 1,26<br>2.778                                                                         | ✓                                                                                     |                                                                                       |
| 2-302-Px | -061318                                                                             | 300<br>12                                                                           | 343<br>13 1/2                                                                       | 9<br>3/8                                                                            | 40<br>1 9/16                                                                        | 24<br>15/16                                                                         | 18<br>11/16                                                                          | 4<br>3/16                                                                             | 2,59<br>5.711                                                                         | ✓                                                                                     |                                                                                       |
| 3-202-Px | -426100                                                                             | 200<br>8                                                                            | 255<br>10 1/32                                                                      | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 3,33<br>7.343                                                                         | ✓                                                                                     |                                                                                       |
| 3-302-Px | -061332                                                                             | 300<br>12                                                                           | 350<br>13 3/4                                                                       | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 4,55<br>10.033                                                                        | ✓                                                                                     |                                                                                       |
| 3-402-Px | -061349                                                                             | 400<br>16                                                                           | 450<br>17 11/16                                                                     | 20<br>13/16                                                                         | 67<br>2 5/8                                                                         | 35<br>1 3/8                                                                         | 37<br>1 7/16                                                                         | 4<br>3/16                                                                             | 5,55<br>12.238                                                                        | ✓                                                                                     |                                                                                       |





## PRODUCT DETAILS



| #        |  |  |  |  |  |  |  |  |  |  |
|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                        | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-502-Px | -061356                                                                           | 500<br>20                                                                         | 550<br>21 5/8                                                                     | 20<br>13/16                                                                       | 67<br>2 5/8                                                                       | 35<br>1 3/8                                                                       | 37<br>1 7/16                                                                       | 4<br>3/16                                                                           | 6,35<br>14.002                                                                      | ✓                                                                                   |

### SERIES 20-STX SALES DISPLAYS



The display stand for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with quick-adjust jaws are used for pulling bearings, gears, and discs in all common sizes.

#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Simple manual adjustment of the jaws using hand knobs (Quick Adjust Technology)
- Optimized quick adjustment guarantees a particularly good haptics (even with wet or oily hands)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding

## TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                 |                                                                                       |
| 20-STx | -854729                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 330<br>12 1                                                                         | 0 - 250<br>0 - 9<br>13/16                                                           | 200<br>7 7/8                                                                        | 95 - 340<br>3 3/4 -<br>13 3/8                                                       | 300<br>221.28                                                                       | 105                      | 10.5<br>11.57            | 20,16<br>48.951                                                                       | 20-1x,<br>20-10x,<br>20-2x,<br>20-20x,<br>20-3x | ✓                                                                                     |

SERIES 20-TKX  
SALES DISPLAY WITH 2-JAW UNIVERSAL  
PULLERS



The Plexiglas sales display of the 20-TKx series is equipped with a total of five 2-jaw universal pullers. The Plexiglas stand impresses with its high transparency, ensuring that the products on display are optimally visible from all angles. The following pullers are located on the Plexiglas stand: 20-0x, 20-00x, 20-1x, 20-10x and 20-2x.

BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Simple manual release of the jaws with hand knob (Quick Adjust Technology)
- Optimized quick adjustment guarantees a particularly good haptics (even with wet or oily hands)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding



TECHNICAL ATTRIBUTES

| #                    |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                               |
|----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-------------------------------------------|
|                      | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                             | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                           |
| 20x-<br>TK-13<br>New | -384349                                                                             | 450<br>17 11/16                                                                     | 230<br>9 1/16                                                                       | 215<br>8 7/16                                                                       | 0 - 160<br>0 - 6<br>5/16                                                            | 162<br>6 3/8                                                                        | 95 - 220<br>3 3/4 - 8<br>11/16                                                      | 150<br>110.64                                                                        | 80                       | 8<br>8.82                | 0,3<br>16.582                                                                         | 20-0x, 20-00x,<br>20-1x, 20-10x,<br>20-2x |

## SERIES 30X 3-JAW UNIVERSAL PULLER WITH QUICK ADJUSTMENT AND SOFT-TOUCH KNURLED SURFACES



The 3-jaw universal puller with quick adjustment jaws is used for pulling ball bearings, gears and discs in all common sizes. It allows any component that is seated on a shaft and is freely accessible from the outside to be removed. Equipped with robust standard jaws and soft-touch knurled nuts for maximum operating comfort, this all-round puller ensures particularly safe, very user-friendly, non-destructive Removing for both external extraction and internal extraction.

### BENEFITS

- Simple, manual solution of the Jaw clamps using hand knobs (Quick Adjust Technology)
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Optimized quick adjustment guarantees a particularly good haptics (even with wet or oily hands)
- Application also with eccentric components through freely movable puller hooks sliding on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding



### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Included in<br>the set |  |
|--------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 30-0x  | -104268                                                                                     | 0 - 70<br>0 - 2 3/4                                                                                | 75<br>2 15/16                                                                                  | 70<br>2 3/4                                                                                    | 13<br>1/2                                                                                      | 40<br>29.50                                                                                     | 25                             | 2.5<br>2.76                                | 0,68<br>1.499                                                                                  | -                      | ✓                                                                                     |
| 30-00x | -104251                                                                                     | 0 - 95<br>0 - 3 3/4                                                                                | 75<br>2 15/16                                                                                  | 70<br>2 3/4                                                                                    | 13<br>1/2                                                                                      | 40<br>29.50                                                                                     | 25                             | 2.5<br>2.76                                | 0,74<br>1.632                                                                                  | -                      | ✓                                                                                     |
| 30-1x  | -041549                                                                                     | 0 - 90<br>0 - 3<br>9/16                                                                            | 100<br>3 15/16                                                                                 | 70 - 140<br>2 3/4 - 5<br>1/2                                                                   | 17<br>11/16                                                                                    | 80<br>59.01                                                                                     | 80                             | 8<br>8.82                                  | 1,56<br>3.440                                                                                  | -                      | ✓                                                                                     |
| 30-10x | -041532                                                                                     | 0 - 130<br>0 - 5 1/8                                                                               | 100<br>3 15/16                                                                                 | 70 - 180<br>2 3/4 - 7<br>1/16                                                                  | 17<br>11/16                                                                                    | 80<br>59.01                                                                                     | 80                             | 8<br>8.82                                  | 1,715<br>3.782                                                                                 | -                      | ✓                                                                                     |
| 30-2x  | -041563                                                                                     | 0 - 160<br>0 - 6<br>5/16                                                                           | 150<br>5 7/8                                                                                   | 100 - 220<br>3 15/16 -<br>8 11/16                                                              | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 90                             | 9<br>9.92                                  | 4,1<br>9.041                                                                                   | -                      | ✓                                                                                     |

## PRODUCT DETAILS

| #      |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| 30-20x | -041556                                                                           | 0 - 200<br>0 - 7 7/8                                                              | 150<br>5 7/8                                                                      | 100 - 260<br>3 15/16 -<br>10 1/4                                                  | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 90                       | 9<br>9.92                | 4,42<br>9.746                                                                       | K-2030-20xS            | ✓                                                                                   |
| 30-3x  | -041587                                                                           | 0 - 250<br>0 - 9<br>13/16                                                         | 200<br>7 7/8                                                                      | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 120                      | 12<br>13.23              | 9,73<br>21.455                                                                      | -                      | ✓                                                                                   |
| 30-30x | -041570                                                                           | 105 -<br>375<br>4 1/8 -<br>14 3/4                                                 | 200<br>7 7/8                                                                      | 180 - 440<br>7 1/16 -<br>17 5/16                                                  | 36<br>1 7/16                                                                      | 250<br>184.40                                                                     | 170                      | 17<br>18.74              | 5<br>11.025                                                                         | -                      | ✓                                                                                   |





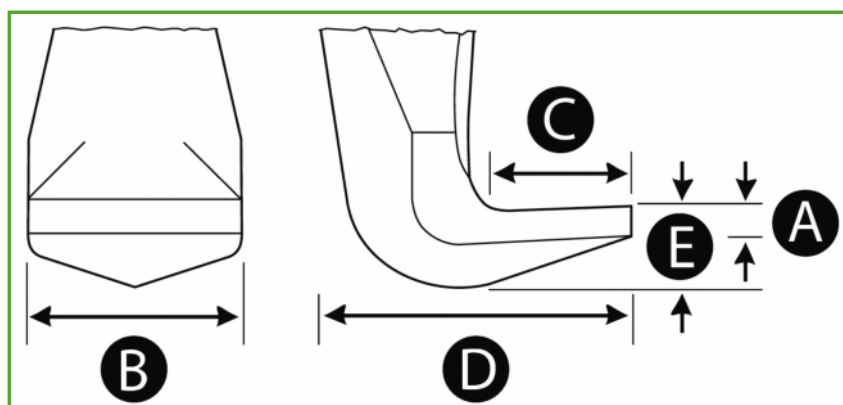
## SERIES 2-SX JAWS



The set of three quickly adjustable standard jaws is suitable for 3-jaw universal pullers. The robust jaws guarantee particularly secure removal of bearings, gears, and disks. The green hand knobs provide maximum operating comfort and enable - even with wet or oily hands - a quick, tool-free loosening or fastening of the jaws.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurled surfaces, tool-free, quick release or repositioning of the jaws is enabled.



### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1-92-Sx  | -061264                                                                                     | 100<br>4                                                                                       | 132<br>5 3/16                                                                                  | 10<br>3/8                                                                                          | 31<br>1 1/4                                                                                        | 20<br>13/16                                                                                        | 15<br>9/16                                                                                          | 3<br>1/8                                                                                             | 0,92<br>2.029                                                                                  | ✓                                                                                     |
| 1-192-Sx | -061196                                                                                     | 200<br>8                                                                                       | 232<br>9 1/8                                                                                   | 10<br>3/8                                                                                          | 31<br>1 1/4                                                                                        | 20<br>13/16                                                                                        | 15<br>9/16                                                                                          | 3<br>1/8                                                                                             | 1,86<br>4.101                                                                                  | ✓                                                                                     |
| 1-252-Sx | -061233                                                                                     | 250<br>10                                                                                      | 282<br>11 1/8                                                                                  | 10<br>3/8                                                                                          | 31<br>1 1/4                                                                                        | 20<br>13/16                                                                                        | 15<br>9/16                                                                                          | 3<br>1/8                                                                                             | 2,305<br>5.083                                                                                 | ✓                                                                                     |
| 2-152-Sx | -061363                                                                                     | 150<br>6                                                                                       | 193<br>7 5/8                                                                                   | 9<br>3/8                                                                                           | 40<br>1 9/16                                                                                       | 24<br>15/16                                                                                        | 18<br>11/16                                                                                         | 4<br>3/16                                                                                            | 2,75<br>6.064                                                                                  | ✓                                                                                     |
| 2-302-Sx | -061370                                                                                     | 300<br>12                                                                                      | 343<br>13 1/2                                                                                  | 9<br>3/8                                                                                           | 40<br>1 9/16                                                                                       | 24<br>15/16                                                                                        | 18<br>11/16                                                                                         | 4<br>3/16                                                                                            | 3,775<br>8.324                                                                                 | ✓                                                                                     |
| 3-202-Sx | -061387                                                                                     | 200<br>8                                                                                       | 255<br>10 1/32                                                                                 | 20<br>13/16                                                                                        | 67<br>2 5/8                                                                                        | 35<br>1 3/8                                                                                        | 37<br>1 7/16                                                                                        | 4<br>3/16                                                                                            | 4,94<br>10.893                                                                                 | ✓                                                                                     |
| 3-302-Sx | -061394                                                                                     | 300<br>12                                                                                      | 350<br>13 3/4                                                                                  | 20<br>13/16                                                                                        | 67<br>2 5/8                                                                                        | 35<br>1 3/8                                                                                        | 37<br>1 7/16                                                                                        | 4<br>3/16                                                                                            | 6,64<br>14.641                                                                                 | ✓                                                                                     |
| 3-402-Sx | -061400                                                                                     | 400<br>16                                                                                      | 450<br>17 11/16                                                                                | 20<br>13/16                                                                                        | 67<br>2 5/8                                                                                        | 35<br>1 3/8                                                                                        | 37<br>1 7/16                                                                                        | 4<br>3/16                                                                                            | 8,14<br>17.949                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>kg/lb |  |
|----------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 3-502-Sx | -061417                                                                                   | 500<br>20                                                                                    | 550<br>21 5/8                                                                                | 20<br>13/16                                                                                      | 67<br>2 5/8                                                                                      | 35<br>1 3/8                                                                                      | 37<br>1 7/16                                                                                      | 4<br>3/16                                                                                          | 9,89<br>21.807                                                                               | ✓                                                                                   |



## SERIES 20XS 2-JAW UNIVERSAL PULLER WITH NARROW, QUICK ADJUSTMENT JAWS SOFT-TOUCH KNURLS



The 2-jaw universal pullers of series 20xS with narrow, quick adjustment jaws are used for the safe and user-friendly pulling of bearings, gears, and disks in all common sizes for crafts, workshops, and industry. This allows any component seated on a shaft and freely accessible from the outside to be removed. The narrow jaws ensure that even tight and hard-to-reach spaces can be accessed. The soft-touch knobs guarantee the highest operating comfort, even with wet or oily hands.

### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- Simple manual release of the jaws with hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 4 mm – 350 mm



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set         |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                             |                                                                                       |
| 20-1xS  | -011351                                                                             | 20 - 90<br>3/16 - 3<br>9/16                                                         | 100<br>3 15/16                                                                      | 70 - 140<br>2 3/4 - 5<br>1/2                                                        | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 1,315<br>2.900                                                                        | 20-STxS,<br>KS-2030-1-193xS | ✓                                                                                     |
| 20-10xS | -011344                                                                             | 20 - 120<br>3/16 - 4<br>3/4                                                         | 100<br>3 15/16                                                                      | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 1,42<br>3.131                                                                         | 20-STxS                     | ✓                                                                                     |
| 20-2xS  | -011375                                                                             | 16 - 160<br>5/8 - 6<br>5/16                                                         | 150<br>5 7/8                                                                        | 100 - 220<br>3 15/16 -<br>8 11/16                                                   | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 3,4<br>7.497                                                                          | 20-STxS                     | ✓                                                                                     |
| 20-20xS | -011368                                                                             | 16 - 200<br>5/8 - 7<br>7/8                                                          | 150<br>5 7/8                                                                        | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 3,3<br>7.277                                                                          | 20-STxS,<br>K-2030-20xS     | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the set |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                     |                                                                                     |
| 20-3xS  | -011450                                                                           | 21 - 250<br>13/16 -<br>9 13/16                                                    | 200<br>7 7/8                                                                      | 180 - 340<br>7 1/16 -<br>13 3/8                                                   | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 90                       | 9<br>9.92                | 6,885<br>15.181                                                                     | 20-STxS             | ✓                                                                                   |
| 20-30xS | -011429                                                                           | 21 - 350<br>13/16 -<br>13 3/4                                                     | 200<br>7 7/8                                                                      | 180 - 440<br>7 1/16 -<br>17 5/16                                                  | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | 90                       | 9<br>9.92                | 7,37<br>16.251                                                                      | 20-STxS             | ✓                                                                                   |





## PRODUCT DETAILS

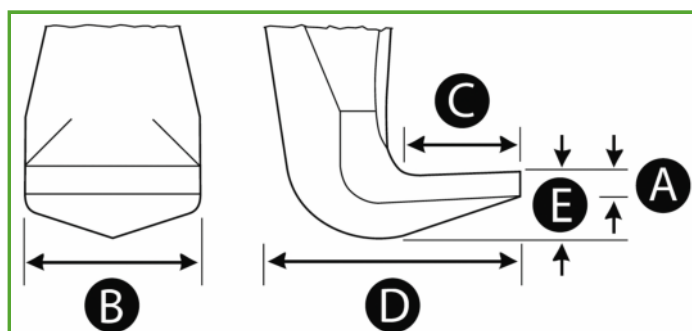
### SERIES 3-PX NARROW, QUICK ADJUSTMENT STANDARD JAWS (PAIR)



The pair of two narrow, quickly adjustable puller jaws is suitable for 2-jaw universal pullers. The narrow puller jaws ensure that even tight and hard-to-reach areas are accessible. The green hand knobs provide maximum ease of use and enable quick, tool-free release or attachment of the puller jaws, even with wet or oily hands.

#### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurling, it is possible to quickly release or move the trigger jaws without tools.



#### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                              | mm/<br>inch                                                                           | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-93-Px  | -011115                                                                             | 100<br>4                                                                            | 127<br>5                                                                            | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,53<br>1.169                                                                         | ✓                                                                                     |                                                                                       |
| 1-193-Px | -011061                                                                             | 200<br>8                                                                            | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,095<br>2.414                                                                        | ✓                                                                                     |                                                                                       |
| 1-253-Px | -011085                                                                             | 250<br>10                                                                           | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,34<br>2.955                                                                         | ✓                                                                                     |                                                                                       |
| 2-153-Px | -013256                                                                             | 150<br>6                                                                            | 186<br>7 5/16                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 2,75<br>6.064                                                                         | ✓                                                                                     |                                                                                       |
| 2-303-Px | -013195                                                                             | 300<br>12                                                                           | 336<br>13 1/4                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 2,59<br>5.711                                                                         | ✓                                                                                     |                                                                                       |
| 3-203-Px | -080364                                                                             | 200<br>8                                                                            | 244<br>9 5/8                                                                        | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 3,33<br>7.343                                                                         | ✓                                                                                     |                                                                                       |
| 3-303-Px | -080395                                                                             | 300<br>12                                                                           | 340<br>13 3/8                                                                       | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 1,515<br>3.341                                                                        | ✓                                                                                     |                                                                                       |

PRODUCT DETAILS

| #        |  |  |  |  |  |  |  |  |  |  |
|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/inch                                                                            | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |
| 3-403-Px | -013225                                                                           | 400<br>16                                                                         | 440<br>17 5/16                                                                    | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 6,155<br>13.572                                                                     | ✓                                                                                   |
| 3-503-Px | -013249                                                                           | 500<br>20                                                                         | 540<br>21 1/4                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 6,35<br>14.002                                                                      | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 30XS 3-JAW UNIVERSAL PULLER WITH NARROW, QUICK ADJUSTMENT JAWS AND SOFT- TOUCH KNURLS



The 3-jaw universal pullers of the series 30xS with narrow, quick adjustment jaws are used for the safe and user-friendly pulling of bearings, gears, and discs. The narrow jaws ensure that even tight and hard-to-reach interspaces are accessed. The soft-touch knurls guarantee the highest operating comfort even with wet or oily hands.

#### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Simple manual release of the jaws using hand knobs (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding

#### TECHNICAL ATTRIBUTES

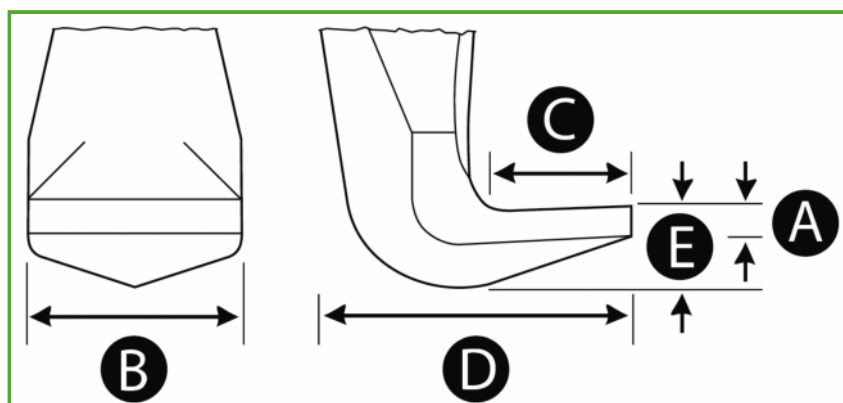
| #       | GTIN    |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force | Max.<br>tension<br>force |  kg/lb |  |
|---------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         |         |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                              | kN                       | t/US t. sh.              |                                                                                             |                                                                                       |
| 30-1xS  | -023743 | 8 - 90<br>5/16 - 3<br>9/16                                                                  | 100<br>3 15/16                                                                              | 70 - 140<br>2 3/4 - 5 1/2                                                                   | 17<br>11/16                                                                                 | 40<br>29.50                                                                                  | 30                       | 3<br>3.31                | 1,56<br>3.440                                                                               | ✓                                                                                     |
| 30-10xS | -011535 | 8 - 130<br>5/16 - 5<br>1/8                                                                  | 100<br>3 15/16                                                                              | 70 - 180<br>2 3/4 - 7<br>1/16                                                               | 17<br>11/16                                                                                 | 40<br>29.50                                                                                  | 30                       | 3<br>3.31                | 1,54<br>3.396                                                                               | ✓                                                                                     |
| 30-2xS  | -080432 | 16 - 160<br>5/8 - 6<br>5/16                                                                 | 150<br>5 7/8                                                                                | 100 - 220<br>3 15/16 - 8<br>11/16                                                           | 22<br>7/8                                                                                   | 120<br>88.51                                                                                 | 50                       | 5<br>5.51                | 4,1<br>9.041                                                                                | ✓                                                                                     |
| 30-20xS | -080425 | 16 - 200<br>5/8 - 7<br>7/8                                                                  | 150<br>5 7/8                                                                                | 100 - 260<br>3 15/16 - 10<br>1/4                                                            | 22<br>7/8                                                                                   | 120<br>88.51                                                                                 | 50                       | 5<br>5.51                | 4,42<br>9.746                                                                               | ✓                                                                                     |
| 30-3xS  | -080463 | 2 - 250<br>1/16 - 9<br>13/16                                                                | 200<br>7 7/8                                                                                | 180 - 340<br>7 1/16 - 13<br>3/8                                                             | 27<br>1 1/16                                                                                | 390<br>287.66                                                                                | 135                      | 13.5<br>14.88            | 9,73<br>21.455                                                                              | ✓                                                                                     |
| 30-30xS | -080449 | 105 - 375<br>4 1/8 - 14<br>3/4                                                              | 200<br>7 7/8                                                                                | 180 - 440<br>7 1/16 - 17<br>5/16                                                            | 36<br>1 7/16                                                                                | 390<br>287.66                                                                                | 135                      | 13.5<br>14.88            | 17,43<br>38.147                                                                             | ✓                                                                                     |

## SERIES 3-SX SLIM, QUICK ADJUSTMENT STANDARD JAWS (SET)

The set of three narrow, quickly adjustable jaws is suitable for 3-jaw universal pullers. The narrow jaws ensure that even tight and hard-to-reach gaps can be accessed. The green hand knobs provide maximum operating comfort and allow for quick, tool-free loosening and fastening of the jaws, even with wet or oily hands.

### BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.
- Thanks to the knurling, tool-free, quick loosening or moving of the jaws is made possible.



### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |
| 1-93-Sx  | -011122                                                                             | 100<br>4                                                                            | 127<br>5                                                                            | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 0,85<br>1.874                                                                         | ✓                                                                                     |
| 1-193-Sx | -011078                                                                             | 200<br>8                                                                            | 227<br>8 15/16                                                                      | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 1,62<br>3.572                                                                         | ✓                                                                                     |
| 1-253-Sx | -011092                                                                             | 250<br>10                                                                           | 277<br>10 7/8                                                                       | 3<br>1/8                                                                            | 14<br>9/16                                                                          | 30<br>1 3/16                                                                        | 7<br>1/4                                                                             | 3<br>1/8                                                                              | 2,18<br>4.807                                                                         | ✓                                                                                     |
| 2-153-Sx | -013263                                                                             | 150<br>6                                                                            | 186<br>7 5/16                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 2,75<br>6.064                                                                         | ✓                                                                                     |
| 2-303-Sx | -013270                                                                             | 300<br>12                                                                           | 336<br>13 1/4                                                                       | 4<br>3/16                                                                           | 19<br>3/4                                                                           | 32<br>1 1/4                                                                         | 8<br>5/16                                                                            | 4<br>3/16                                                                             | 3,775<br>8.324                                                                        | ✓                                                                                     |
| 3-203-Sx | -080418                                                                             | 200<br>8                                                                            | 244<br>9 5/8                                                                        | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 4,94<br>10.893                                                                        | ✓                                                                                     |
| 3-303-Sx | -080401                                                                             | 300<br>12                                                                           | 340<br>13 3/8                                                                       | 6,5<br>1/4                                                                          | 52<br>2 1/16                                                                        | 35<br>1 3/8                                                                         | 17<br>11/16                                                                          | 6,5<br>1/4                                                                            | 1,515<br>3.341                                                                        | ✓                                                                                     |



## PRODUCT DETAILS



| #        |  |  |  |  |  |  |  |  |  |  |
|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                               |                                                                                     |
| 3-403-Sx | -013287                                                                           | 400<br>16                                                                         | 440<br>17 5/16                                                                    | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 7,85<br>17.309                                                                      | ✓                                                                                   |
| 3-503-Sx | -013294                                                                           | 500<br>20                                                                         | 540<br>21 1/4                                                                     | 6,5<br>1/4                                                                        | 52<br>2 1/16                                                                      | 35<br>1 3/8                                                                       | 17<br>11/16                                                                        | 6,5<br>1/4                                                                          | 9,89<br>21.807                                                                      | ✓                                                                                   |

### SERIES K-2030-20XS 2- AND 3-JAW UNIVERSAL PULLER SET WITH TWO DIFFERENT PULLER JAW TYPES



The 15-piece universal puller set with two different types of puller jaws is used for universal applications in 2-jaw and 3-jaw extraction of gearbox gears, bearings, sprockets, and synchronizers. This set contains the basic equipment of pullers needed for universal work.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the given pull-off situation, easily adjustable and configurable for a variety of applications.
- With 2-jaw or 3-jaw, you are always flexible in use.
- Through the included extensions, the 2-jaw pullers can be combined up to a reach of 600 mm and the 3-jaw pullers up to a reach of 450 mm.



#### TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                         |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                     |                                                                                       |
| K-2030-20xS | -041594                                                                             | 10 - 200<br>3/8 - 7<br>7/8                                                          | 600<br>23 5/8                                                                       | 100 - 260<br>3 15/16 -<br>10 1/4                                                    | 22<br>7/8                                                                           | 70                       | 7<br>7.72                | 9,12<br>20.110                                                                        | 2-V-150-P,<br>621220,<br>621355,<br>600-17,<br>30-20-T3,<br>20-20-T | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 20-STXS SALES DISPLAYS



The sales display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers with narrow, quick-adjustable jaws are used for the safe and user-friendly removal of bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for the loosening of any component that sits on a shaft and is accessible from the outside. The narrow jaws ensure that tight and hard-to-reach spaces can also be accessed.



#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- Narrow jaws grip optimally in tight and hard-to-reach spots.
- Simple, manual release of the jaws using the hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding

## TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                   |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                  |                                                                                       |
| 20-STxS | -752285                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 330<br>12 1                                                                         | 4 - 250<br>3/16 -<br>9<br>13/16                                                     | 200<br>7 7/8                                                                        | 70 - 340<br>2 3/4 -<br>13 3/8                                                       | 250<br>184.40                                                                       | 70                       | 7<br>7.72                | 19,87<br>43.813                                                                       | 20-1xS,<br>20-10xS,<br>20-2xS,<br>20-20xS,<br>20-30xS,<br>20-STL | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 20XSP

### 2-JAW UNIVERSAL PULLER WITH NARROW, QUICK ADJUSTMENT JAWS AND SOFT-TOUCH KNURLS IN SET



The 2-jaw universal puller with narrow, quickly adjustable jaws is used for the safe and user-friendly pulling of bearings, gears, and discs in all common sizes. This allows components that sit on shafts and are freely accessible from the outside to be removed. The soft-touch knobs guarantee the highest operating comfort, even with wet or oily hands.

#### BENEFITS

- Narrow jaws grip optimally in tight and hard-to-reach places.
- Simple manual release of the jaws with hand knob (Quick Adjust Technology)
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counterholding
- Quick-adjustable jaws guarantee immediate adjustment to any spread between 16 mm – 350 mm

## TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 20-10xSP | -011139                                                                             | 16 - 120<br>5/8 - 4<br>3/4                                                          | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 25                       | 2.5<br>2.76              | 3,875<br>8.544                                                                        | ✓                                                                                     |
| 20-20xSP | -011146                                                                             | 16 - 200<br>5/8 - 7<br>7/8                                                          | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 - 10<br>1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 5,96<br>13.142                                                                        | ✓                                                                                     |
| 20-30xSP | -011436                                                                             | 21 - 350<br>13/16 -<br>13 3/4                                                       | 400<br>15 3/4                                                                       | 180 - 440<br>7 1/16 - 17<br>5/16                                                    | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | 70                       | 7<br>7.72                | 16,68<br>36.779                                                                       | ✓                                                                                     |

## SERIES 30XSP 3-JAW UNIVERSAL PULLER WITH NARROW JAWS AND SOFT-TOUCH KNOBS IN SET



The 3-jaw universal puller with narrow, quick adjustment jaws is used for the safe pulling of bearings, gears, and discs. Three pairs of jaws enable universal application. This allows components that sit on shafts and are freely accessible from the outside to be detached. The 3-jaw design guarantees an even load distribution and thus an especially secure hold on the part to be pulled. The soft-touch knurled surfaces guarantee the highest level of operating comfort even with wet or oily hands.



### BENEFITS

- The slender design of the jaws grips optimally on narrow and hard-to-reach areas.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Shear-resistant suspension of the claw in the sliding piece (jaw lock Technology)
- Hexagonal profile on the crossbar for secure counter-holding

### TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 30-10xSP | -080487                                                                             | 8 - 130<br>5/16 - 5<br>1/8                                                          | 350<br>13 3/4                                                                       | 70 - 180<br>2 3/4 - 7<br>1/16                                                       | 17<br>11/16                                                                         | 40<br>29.50                                                                         | 30                       | 3<br>3.31                | 1,54<br>3.396                                                                         | ✓                                                                                     |
| 30-20xSP | -011573                                                                             | 11 - 200<br>7/16 - 7<br>7/8                                                         | 300<br>11 13/16                                                                     | 100 - 260<br>3 15/16 - 10<br>1/4                                                    | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 7,66<br>16.890                                                                        | ✓                                                                                     |
| 30-3xSP  | -080470                                                                             | 2 - 250<br>1/16 - 9<br>13/16                                                        | 400<br>15 3/4                                                                       | 180 - 340<br>13 3/8 - 15<br>3/4                                                     | 27<br>1 1/16                                                                        | 220<br>162.27                                                                       | 70                       | 7<br>7.72                | 9,73<br>21.455                                                                        | ✓                                                                                     |
| 30-30xSP | -011597                                                                             | 2 - 250<br>1/16 - 9<br>13/16                                                        | 400<br>15 3/4                                                                       | 180 - 340<br>7 1/16 - 13<br>3/8                                                     | 27<br>1 1/16                                                                        | 220<br>162.27                                                                       | 70                       | 7<br>7.72                | 32<br>16.890                                                                          | ✓                                                                                     |



## SERIES 11-A EXTRA POWERFUL, 3-JAW UNIVERSAL PULLER



The extra sturdy 3-jaw universal puller is used for removing heavy bearings, gears, and discs in all common sizes. This allows loosening any component that sits on a shaft and is freely accessible from the outside. The robust jaws ensure a safe disassembly.

### BENEFITS

- Screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Variable adjustment to any spread between 105 mm – 650 mm
- Safe mounting of the spindle with a movable spindle tip on both smooth surfaces and for centering (Switch Technology)

### TECHNICAL ATTRIBUTES

| #       | GTIN    |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. |  kg/lb |  |
|---------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 11-0-A  | -005886 | 105 - 375<br>4 1/8 - 14 3/4                                                                 | 200<br>7 7/8                                                                                | 220 - 500<br>8 11/16 - 19 11/16                                                             | 36<br>1 7/16                                                                                | 500<br>368.80                                                                                | 150                            | 15<br>16.53                             | 17,99<br>39.668                                                                             | ✓                                                                                     |
| 11-0-A3 | -729263 | 105 - 375<br>4 1/8 - 14 3/4                                                                 | 300<br>11 13/16                                                                             | 220 - 500<br>8 11/16 - 19 11/16                                                             | 36<br>1 7/16                                                                                | 500<br>368.80                                                                                | 150                            | 15<br>16.53                             | 19,5<br>42.998                                                                              | ✓                                                                                     |
| 11-0-A4 | -729348 | 105 - 375<br>4 1/8 - 14 3/4                                                                 | 400<br>15 3/4                                                                               | 220 - 500<br>8 11/16 - 19 11/16                                                             | 36<br>1 7/16                                                                                | 500<br>368.80                                                                                | 150                            | 15<br>16.53                             | 18,6<br>41.013                                                                              | ✓                                                                                     |
| 11-0-A5 | -729423 | 105 - 375<br>4 1/8 - 14 3/4                                                                 | 500<br>19 11/16                                                                             | 220 - 500<br>8 11/16 - 19 11/16                                                             | 36<br>1 7/16                                                                                | 500<br>368.80                                                                                | 150                            | 15<br>16.53                             | 22,78<br>50.230                                                                             | ✓                                                                                     |
| 11-1-A  | -075421 | 125 - 520<br>4 15/16 - 20 1/2                                                               | 200<br>7 7/8                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                               | 41<br>1 5/8                                                                                 | 650<br>479.44                                                                                | 200                            | 20<br>22.05                             | 22,72<br>50.098                                                                             | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
| 11-1-A3 | -729591                                                                           | 125 - 520<br>4 15/16 -<br>20 1/2                                                  | 300<br>11 13/16                                                                   | 280 - 600<br>11 1/32 - 23<br>5/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 24,34<br>53.670                                                                     | ✓                                                                                   |
| 11-1-A4 | -729676                                                                           | 125 - 520<br>4 15/16 -<br>20 1/2                                                  | 400<br>15 3/4                                                                     | 280 - 600<br>11 1/32 - 23<br>5/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 28<br>61.740                                                                        | ✓                                                                                   |
| 11-1-A5 | -729751                                                                           | 125 - 520<br>4 15/16 -<br>20 1/2                                                  | 500<br>19 11/16                                                                   | 280 - 600<br>11 1/32 - 23<br>5/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 27,57<br>60.792                                                                     | ✓                                                                                   |
| 11-2-A  | -006203                                                                           | 155 - 650<br>6 1/8 - 25<br>9/16                                                   | 200<br>7 7/8                                                                      | 290 - 740<br>11 7/16 - 29<br>1/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 25<br>55.125                                                                        | ✓                                                                                   |
| 11-2-A3 | -706158                                                                           | 155 - 650<br>6 1/8 - 25<br>9/16                                                   | 300<br>11 13/16                                                                   | 290 - 740<br>11 7/16 - 29<br>1/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 26,25<br>57.881                                                                     | ✓                                                                                   |
| 11-2-A4 | -729836                                                                           | 155 - 650<br>6 1/8 - 25<br>9/16                                                   | 400<br>15 3/4                                                                     | 290 - 740<br>11 7/16 - 29<br>1/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 26<br>57.330                                                                        | ✓                                                                                   |
| 11-2-A5 | -729911                                                                           | 155 - 650<br>6 1/8 - 25<br>9/16                                                   | 500<br>19 11/16                                                                   | 290 - 740<br>11 7/16 - 29<br>1/8                                                  | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 27,6<br>60.858                                                                      | ✓                                                                                   |



## SERIES 11-AV EXTRA POWERFUL, 3-JAW UNIVERSAL PULLER WITH ADJUSTABLE REACH



The extra powerful 3-jaw universal puller with adjustable reach is used to pull off heavy bearings, gears, and discs in all common sizes. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside.

### BENEFITS

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components via freely movable, sliding jaws on the traverse.
- Variable adjustment to any spread between 37 mm – 650 mm and reach depth between 300 mm – 450 mm
- Safe setup of the spindle by means of a rotatable spindle tip on both smooth surfaces and when centering (Switch Technology)

### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 11-0-AV | -730078                                                                                     | 37 - 375<br>1 7/16 - 15                                                                        | 500<br>12-20                                                                                   | 220 - 500<br>8 11/16 - 19 11/16                                                                | 36<br>1 7/16                                                                                   | 500<br>368.80                                                                                   | 150                            | 15<br>16.53                             | 23,1<br>50.936                                                                                 | ✓                                                                                     |
| 11-1-AV | -730153                                                                                     | 57 - 520<br>2 1/4 - 21                                                                         | 500<br>12-20                                                                                   | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 41<br>1 5/8                                                                                    | 650<br>479.44                                                                                   | 200                            | 20<br>22.05                             | 30,39<br>7.475                                                                                 | ✓                                                                                     |
| 11-2-AV | -730238                                                                                     | 87 - 650<br>3 7/16 - 26                                                                        | 500<br>12-20                                                                                   | 290 - 740<br>11 7/16 - 29 1/8                                                                  | 41<br>1 5/8                                                                                    | 650<br>479.44                                                                                   | 200                            | 20<br>22.05                             | 34<br>74.970                                                                                   | ✓                                                                                     |

## SERIES 11-B EXTRA STRONG, 3-JAW UNIVERSAL PULLER WITH HYDRAULIC SPINDLE

The extra powerful, 3-jaw universal pullers with hydraulic spindle are used for pulling heavy, particularly stuck components. The hydraulic spindle achieves an average tension force of up to 20 t. Thanks to the massive construction, the series 11-B guarantees a particularly powerful, non-destructive disassembly.

### BENEFITS

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key.
- The hydraulic spindle ensures an easy and controlled withdrawal of particularly stubborn parts with minimal effort.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.



### TECHNICAL ATTRIBUTES

| #      | GTIN    |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. |  kg/lb |  |
|--------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 11-0-B | -075346 | 105 - 375<br>4 1/8 - 14 3/4                                                                 | 200<br>7 7/8                                                                                | 220 - 500<br>8 11/16 - 19 11/16                                                             | 17<br>11/16                                                                                 | 45<br>33.19                                                                                  | 150                            | 15<br>16.53                             | 22,7<br>50.054                                                                              | ✓                                                                                     |
| 11-1-B | -006128 | 125 - 520<br>4 15/16 - 20 1/2                                                               | 200<br>7 7/8                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                               | 17<br>11/16                                                                                 | 30<br>22.13                                                                                  | 200                            | 20<br>22.05                             | 29,24<br>64.474                                                                             | ✓                                                                                     |
| 11-2-B | -006388 | 155 - 650<br>6 1/8 - 25 9/16                                                                | 200<br>7 7/8                                                                                | 290 - 740<br>11 7/16 - 29 1/8                                                               | 17<br>11/16                                                                                 | 30<br>22.13                                                                                  | 200                            | 20<br>22.05                             | 29,5<br>65.048                                                                              | ✓                                                                                     |
| 11-3-B | -706073 | 155 - 650<br>6 1/8 - 25 9/16                                                                | 300<br>11 13/16                                                                             | 290 - 740<br>11 7/16 - 29 1/8                                                               | 17<br>11/16                                                                                 | 30<br>22.13                                                                                  | 200                            | 20<br>22.05                             | 32,54<br>71.751                                                                             | ✓                                                                                     |



### SERIES 11-BV EXTRA POWERFUL, 3-JAW UNIVERSAL PULLER WITH ADJUSTABLE REACH AND HYDRAULIC SPINDLE



The extra strong 3-jaw universal pullers with adjustable reach and hydraulic spindle are used for pulling heavy, particularly stuck bearings, gears, and disks. The hydraulic spindle achieves a maximum tension force of 20 t. Thanks to adjustable puller jaws and the solid construction, the series 11-BV guarantees powerful, non-destructive disassembly.

#### BENEFITS

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key
- The hydraulic spindle guarantees easy and controlled removal of particularly tightly fitted parts with minimal effort.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 11-0-BV | -730313                                                                             | 37 - 375<br>1 7/16 -<br>14 3/4                                                      | 450<br>17 11/16                                                                     | 220 - 500<br>8 11/16 - 19<br>11/16                                                  | 17<br>11/16                                                                         | 45<br>33.19                                                                         | 150                      | 15<br>16.53              | 31,19<br>68.774                                                                       | ✓                                                                                     |
| 11-1-BV | -730498                                                                             | 57 - 520<br>2 1/4 - 20<br>1/2                                                       | 450<br>17 11/16                                                                     | 280 - 600<br>11 1/32 - 23<br>5/8                                                    | 17<br>11/16                                                                         | 30<br>22.13                                                                         | 200                      | 20<br>22.05              | 33,15<br>73.096                                                                       | ✓                                                                                     |
| 11-2-BV | -730566                                                                             | 87 - 650<br>3 7/16 -<br>25 9/16                                                     | 450<br>17 11/16                                                                     | 290 - 740<br>11 7/16 - 29<br>1/8                                                    | 17<br>11/16                                                                         | 30<br>22.13                                                                         | 200                      | 20<br>22.05              | 35<br>77.175                                                                          | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y28-11 HYDRAULIC, EXTRA POWERFUL, 3-JAW PULLER WITH ADJUSTABLE REACH AND HOLLOW PISTON CYLINDER



The hydraulic, extra-strong 3-jaw puller with adjustable reach depth and hydraulic hollow piston cylinder for pump drive is used to remove particularly stubborn components. The hydraulic hollow piston cylinder achieves a high pulling force of a maximum of 20 t. The robust construction of the puller adapts to any pulling situation with its individually adjustable spread and reach depth.

#### BENEFITS

- A hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- 3-jaw provides an even distribution of force and allows for greater pulling forces.



#### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y28-11-0 | -469725                                                                                     | 0 - 375<br>0 - 14 3/4                                                                          | 500<br>19 11/16                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 32,9<br>63.945                                                                                 | ✓                                                                                     |
| Y28-11-1 | -711640                                                                                     | 0 - 520<br>0 - 20 1/2                                                                          | 500<br>19 11/16                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 33<br>72.765                                                                                   | ✓                                                                                     |
| Y28-11-2 | -711657                                                                                     | 0 - 650<br>0 - 25 9/16                                                                         | 500<br>19 11/16                                                                                | 290 - 740<br>11 7/16 - 29 1/8                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 38<br>83.790                                                                                   | ✓                                                                                     |

### SERIES Y20-11 2- AND 3-JAW PULLERS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER)



The 3-jaw pullers with adjustable reach of the Y20-11 series are used for pulling particularly large and stuck bearings, gears, discs, etc. in crafts, industry, and workshops. The extra-strong design is capable, thanks to parallel jaws, of safely and efficiently pulling components in any position and under full load. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### BENEFITS

- Three-jaw design ensures an even load distribution and thus a particularly secure grip on the part being pulled.
- The pulling hooks can be moved on the crossbar, adjusted in length, and used as external and internal pullers in various pulling situations by turning them around.
- Suitable for removing asymmetrical workpieces due to adjustable hook positioning.
- Thanks to the adjustable length of the jaws, the puller can be adapted to different reaches

#### TECHNICAL ATTRIBUTES

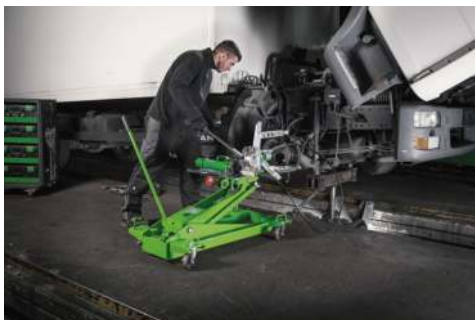
| #        |  |  |  | Max. tensile<br>force | Max. tension<br>force |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kN                    | t/US t. sh.           |                                                                                       |                                                                                       |
| Y20-11-0 | -469718                                                                             | 375<br>19 11/16                                                                     | 280 - 600<br>11 1/32 - 23 5/8                                                       | 200                   | 20<br>22.05           | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y20-11-1 | -711626                                                                             | 500<br>19 11/16                                                                     | 280 - 600<br>11 1/32 - 23 5/8                                                       | 200                   | 20<br>22.05           | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y20-11-2 | -711633                                                                             | 650<br>19 11/16                                                                     | 290 - 740<br>11 7/16 - 29 1/8                                                       | 200                   | 20<br>22.05           | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |

### SERIES DAVID MOBILE 3-JAW HYDRAULIC PULLER "DAVID" WITH ADJUSTABLE REACH

The hydraulic, mobile 3-jaw puller with adjustable reach "DAVID" is used for pulling large bearings, gears, and similar components in heavy industry, trade, and workshops. With a maximum load capacity of 20 tons, the puller provides a strong, hydraulic solution for otherwise difficult tasks in pulling large parts. The jaws are adjustable in length and can be adapted to the required reach.

#### BENEFITS

- Even under full load, the DAVID ensures parallel pulling.
- The three-jaw design guarantees even load distribution and thereby a particularly secure hold on the part to be pulled off.
- The lever actuation is rotatable by 360° for ergonomic operation from the work area.
- The lowering device for controlled load lowering reduces the risk of accidents thanks to the easily accessible valve.
- Through the four swivel casters, it can be used mobile at different workplaces.



#### TECHNICAL ATTRIBUTES

| #                  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | bar                                                                                 | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| YHU-S-<br>Y28-11-1 | -060144                                                                             | 0 - 520<br>0 - 20 1/2                                                               | 500<br>19 11/16                                                                     | 165 - 890<br>6 1/2-35<br>1/32                                                       | 700                                                                                 | 200                      | 20<br>22.05              | 204<br>52.920                                                                         | ✓                                                                                     |



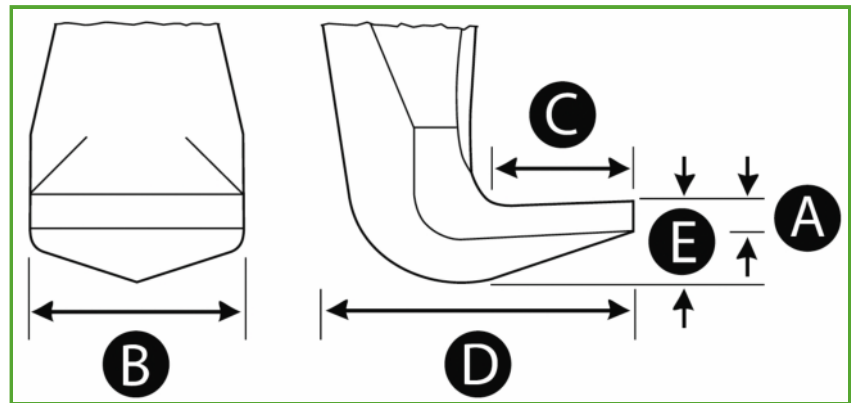
SERIES SP-S  
HEIGHT ADJUSTABLE JAWS (SET)



The set of three height-adjustable puller jaws is suitable for 3-jaw pullers. The robust puller jaws guarantee a particularly safe removal of bearings, gears, and disks.

BENEFITS

- With the free-moving, sliding puller jaws on the crossbar, eccentric components can also be removed.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/inch | <br>mm/<br>inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 4-SP-S | -004711                                                                                     | 500<br>19 11/16                                                                                | 565<br>22 1/4                                                                                  | 25<br>1                                                                                            | 85<br>3 3/8                                                                                        | 45<br>1 3/4                                                                                        | 50<br>1 15/16                                                                                   | 7<br>1/4                                                                                             | 13,65<br>30.098                                                                                | ✓                                                                                     |

SERIES 219  
CLAMP FOR 2-JAW PULLERS

The clamp for 2-jaw pullers is used for stability support during pulling operations with extensions. This compresses the jaws particularly tightly against the part to be pulled.

BENEFITS

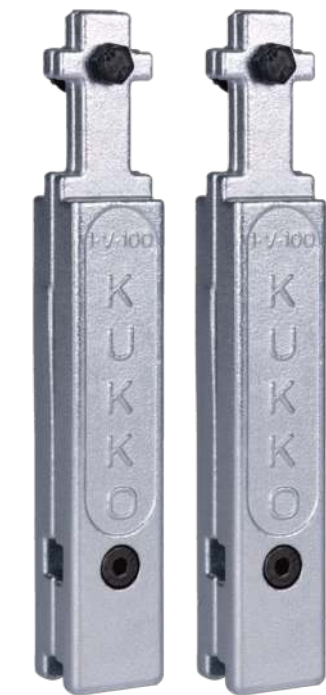
- Maximum stability support during pulling



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 219-1 | -777776                                                                                     | 40 - 190<br>1 9/16 - 7 1/2                                                                     | 8<br>5/16                                                                                      | 0,77<br>1.698                                                                                | 20-1, 20-10                                                                           | ✓                                                                                     |

SERIES V-P  
PULLING JAWS EXTENSIONS (PAIR)



The pair of jaws extensions is used to increase the reach. This allows components that are particularly deep on a shaft to be grasped. The extensions can be combined in any way and thus adapted to the required reach.

BENEFITS

- Unlimited extension of reach
- Cross-referencing allows for increased power uptake and relieves the screw.
- Compatible with various hook types



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1-V-100-P | -985058                                                                                     | 100<br>3 15/16                                                                                 | 0,565<br>1.246                                                                               | ✓                                                                                     |
| 1-V-150-P | -985089                                                                                     | 150<br>5 7/8                                                                                   | 0,805<br>1.775                                                                               | ✓                                                                                     |
| 2-V-150-P | -985201                                                                                     | 150<br>5 7/8                                                                                   | 1,195<br>2.635                                                                               | ✓                                                                                     |

SERIES V-S  
PULLING JAWS EXTENSIONS (SET)



The set of Pulling jaws extensions is used to extend the reach. This allows for the gripping of components that are seated particularly deep on a shaft. The extensions can be combined with each other as desired and thus adapted to the required reach.

BENEFITS

- Unlimited Extension of Reach
- Cross reception enables increased force intake and relieves the screw.
- Compatible with various hook types



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1-V-100-S | -985065                                                                                     | 100<br>3 15/16                                                                                 | 0,84<br>1.852                                                                                | ✓                                                                                     |
| 1-V-150-S | -985096                                                                                     | 150<br>5 7/8                                                                                   | 1,205<br>2.657                                                                               | ✓                                                                                     |
| 2-V-150-S | -985218                                                                                     | 150<br>5 7/8                                                                                   | 1,775<br>3.914                                                                               | ✓                                                                                     |



## SERIES 6 MECHANICAL TORQUE SPINDLE



The mechanical pressure spindle is the heart of every KUKKO puller. It achieves a maximum pulling force of 10 t. The manual operation of the spindle allows for a sensitive control of the extraction process. The fine thread also ensures perfect power transmission. A reversible spindle tip enables a secure placement of the spindle on both smooth surfaces and centrings.

### BENEFITS

- Optimal gliding properties in the thread groove thanks to special coating
- Ideal adaptation of the spindle to the shaft through two-sided spindle tip
- Stored, freely rotating centering tip protects the shaft from damage when applying the pulling force.
- Extremely durable due to rolled thread
- Including KUKKO special grease



### TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             |                                                                                     | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 608080 | -176241                                                                             | 8<br>5/16                                                                           | 80<br>3 1/8                                                                         | M 8x1,25                                                                            | T-handle                                                                            | 0,45<br>0.992                                                                         | ✓                                                                                     |
| 608130 | -481086                                                                             | 8<br>5/16                                                                           | 130<br>5 1/8                                                                        | M 8x1,25                                                                            | T-handle                                                                            | 0,6<br>1.323                                                                          | ✓                                                                                     |
| 609087 | -102493                                                                             | 9<br>3/8                                                                            | 87<br>3 7/16                                                                        | M 9x1,25                                                                            | T-handle                                                                            | 0,055<br>1.213                                                                        | ✓                                                                                     |
| 609105 | -101403                                                                             | 9<br>3/8                                                                            | 105<br>4 1/8                                                                        | M 9x1,25                                                                            | T-handle                                                                            | 0,06<br>1.323                                                                         | ✓                                                                                     |
| 610070 | -362446                                                                             | 10<br>3/8                                                                           | 75<br>2 15/16                                                                       | M 10x1,5                                                                            | 13<br>1/2                                                                           | 0,055<br>1.213                                                                        | ✓                                                                                     |
| 610094 | -122118                                                                             | 10<br>3/8                                                                           | 94<br>3 11/16                                                                       | M 10x1,5                                                                            | T-handle                                                                            | 0,115<br>0.254                                                                        | ✓                                                                                     |
| 610110 | -433726                                                                             | 10<br>3/8                                                                           | 120<br>4 3/4                                                                        | M 10x1,5                                                                            | 8<br>5/16                                                                           | 0,065<br>1.433                                                                        | ✓                                                                                     |
| 610120 | -910005                                                                             | 10<br>3/8                                                                           | 120<br>4 3/4                                                                        | M 10x1,5                                                                            | 13<br>1/2                                                                           | 0,12<br>0.265                                                                         | ✓                                                                                     |
| 612080 | -238468                                                                             | 12<br>1/2                                                                           | 85<br>3 3/8                                                                         | M 12x1,5                                                                            | 13<br>1/2                                                                           | 0,085<br>1.874                                                                        | ✓                                                                                     |
| 612110 | -112881                                                                             | 12<br>1/2                                                                           | 110<br>4 5/16                                                                       | M 12x1,5                                                                            | 13<br>1/2                                                                           | 0,115<br>0.254                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

| #      |  |  |  |  |  |  |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           |                                                                                   | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 612130 | -077081                                                                           | 12<br>1/2                                                                         | 130<br>5 1/8                                                                      | M 12x1,5                                                                          | 13<br>1/2                                                                         | 0,115<br>0.254                                                                      | ✓                                                                                   |
| 612150 | -790201                                                                           | 12<br>1/2                                                                         | 150<br>5 7/8                                                                      | M 12x1,5                                                                          | 13<br>1/2                                                                         | 0,13<br>0.287                                                                       | ✓                                                                                   |
| 612200 | -056208                                                                           | 12<br>1/2                                                                         | 210<br>8 1/4                                                                      | M 12x1,75                                                                         | 13<br>1/2                                                                         | 0,22<br>0.485                                                                       | ✓                                                                                   |
| 614135 | -074271                                                                           | 14<br>9/16                                                                        | 135<br>5 5/16                                                                     | M 14x1,5                                                                          | 17<br>11/16                                                                       | 0,19<br>0.419                                                                       | ✓                                                                                   |
| 614160 | -112966                                                                           | 14<br>9/16                                                                        | 160<br>6 5/16                                                                     | M 14x1,5                                                                          | 17<br>11/16                                                                       | 0,22<br>0.485                                                                       | ✓                                                                                   |
| 614200 | -838576                                                                           | 14<br>9/16                                                                        | 200<br>7 7/8                                                                      | M 14x1,5                                                                          | 17<br>11/16                                                                       | 0,26<br>0.573                                                                       | ✓                                                                                   |
| 614242 | -910012                                                                           | 14<br>9/16                                                                        | 240<br>9 7/16                                                                     | M 14x1,5                                                                          | 17<br>11/16                                                                       | 0,32<br>0.706                                                                       | ✓                                                                                   |
| 614250 | -306709                                                                           | 14<br>9/16                                                                        | 250<br>9 13/16                                                                    | M 14x1,5                                                                          | 17<br>11/16                                                                       | 0,31<br>0.684                                                                       | ✓                                                                                   |
| 616270 | -480829                                                                           | 16<br>5/8                                                                         | 270<br>10 5/8                                                                     | M 16x2,0                                                                          | 17<br>11/16                                                                       | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 616325 | -480904                                                                           | 16<br>5/8                                                                         | 325<br>12 13/16                                                                   | M 16x2,0                                                                          | 17<br>11/16                                                                       | 0,5<br>1.103                                                                        | ✓                                                                                   |
| 616220 | -420856                                                                           | 16<br>5/8                                                                         | 220<br>8 11/16                                                                    | M 16x1,5                                                                          | 17<br>11/16                                                                       | 0,36<br>0.794                                                                       | ✓                                                                                   |
| 618068 | -123771                                                                           | 18<br>11/16                                                                       | 68<br>2 5/16                                                                      | M 18x1,5                                                                          | 19<br>3/4                                                                         | 0,175<br>0.386                                                                      | ✓                                                                                   |
| 618105 | -073779                                                                           | 18<br>11/16                                                                       | 105<br>4 1/8                                                                      | M 18x1,5                                                                          | 19<br>3/4                                                                         | 0,25<br>0.551                                                                       | ✓                                                                                   |
| 618175 | -056215                                                                           | 18<br>11/16                                                                       | 175<br>6 7/8                                                                      | M 18x1,5                                                                          | 19<br>3/4                                                                         | 0,375<br>0.827                                                                      | ✓                                                                                   |
| 618210 | -113048                                                                           | 18<br>11/16                                                                       | 210<br>8 1/4                                                                      | M 18x1,5                                                                          | 19<br>3/4                                                                         | 0,435<br>0.959                                                                      | ✓                                                                                   |
| 621130 | -124358                                                                           | 20,955<br>13/16                                                                   | 130<br>5 1/8                                                                      | G 1/2" / 14                                                                       | 22<br>7/8                                                                         | 0,395<br>0.871                                                                      | ✓                                                                                   |
| 621170 | -067181                                                                           | 20,955<br>13/16                                                                   | 170<br>6 11/16                                                                    | G 1/2" / 14                                                                       | 22<br>7/8                                                                         | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 621220 | -268373                                                                           | 20,955<br>13/16                                                                   | 220<br>8 11/16                                                                    | G 1/2" / 14                                                                       | 22<br>7/8                                                                         | 0,61<br>1.345                                                                       | ✓                                                                                   |
| 621300 | -765346                                                                           | 20,955<br>13/16                                                                   | 300<br>11 13/16                                                                   | G 1/2" / 14                                                                       | 22<br>7/8                                                                         | 0,795<br>1.753                                                                      | ✓                                                                                   |
| 621355 | -236228                                                                           | 20,955<br>13/16                                                                   | 355<br>13 1                                                                       | G 1/2" / 14                                                                       | 22<br>7/8                                                                         | 0,94<br>2.073                                                                       | ✓                                                                                   |
| 623150 | -018961                                                                           | 22,911<br>7/8                                                                     | 150<br>5 7/8                                                                      | G 5/8" / 14                                                                       | 24<br>15/16                                                                       | 0,54<br>1.191                                                                       | ✓                                                                                   |
| 623170 | -124501                                                                           | 22,911<br>7/8                                                                     | 170<br>6 11/16                                                                    | G 5/8" / 14                                                                       | 24<br>15/16                                                                       | 0,61<br>1.345                                                                       | ✓                                                                                   |
| 623230 | -074684                                                                           | 22,911<br>7/8                                                                     | 230<br>9 1/16                                                                     | G 5/8" / 14                                                                       | 24<br>15/16                                                                       | 0,76<br>1.676                                                                       | ✓                                                                                   |
| 623260 | -113123                                                                           | 22,911<br>7/8                                                                     | 260<br>10 1/4                                                                     | G 5/8" / 14                                                                       | 24<br>15/16                                                                       | 0,86<br>1.896                                                                       | ✓                                                                                   |
| 623325 | -125263                                                                           | 22,911<br>7/8                                                                     | 325<br>12 13/16                                                                   | G 5/8" / 14                                                                       | 24<br>15/16                                                                       | 1,055<br>3.418                                                                      | ✓                                                                                   |
| 626300 | -765360                                                                           | 26,441<br>1 1/32                                                                  | 300<br>11 13/16                                                                   | G 3/4" / 14                                                                       | 27<br>1 1/16                                                                      | 1,32<br>2.911                                                                       | ✓                                                                                   |
| 626400 | -125423                                                                           | 26,441<br>1 1/32                                                                  | 400<br>15 3/4                                                                     | G 3/4" / 14                                                                       | 27<br>1 1/16                                                                      | 1,66<br>3.660                                                                       | ✓                                                                                   |



## PRODUCT DETAILS



| #      |  |  |  |  |  |  |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           |                                                                                   | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 626500 | -765377                                                                           | 26,441<br>1 1/32                                                                  | 500<br>19 11/16                                                                   | G 3/4" / 14                                                                       | 27<br>1 1/16                                                                      | 2,085<br>6.284                                                                      | ✓                                                                                   |
| 633400 | -765384                                                                           | 33,249<br>1 5/16                                                                  | 400<br>15 3/4                                                                     | G 1" / 11                                                                         | 36<br>1 7/16                                                                      | 2,71<br>5.976                                                                       | ✓                                                                                   |
| 633500 | -893452                                                                           | 33,249<br>1 5/16                                                                  | 500<br>19 11/16                                                                   | G 1" / 11                                                                         | 36<br>1 7/16                                                                      | 4,125<br>7.563                                                                      | ✓                                                                                   |
| 633600 | -866388                                                                           | 33,249<br>1 5/16                                                                  | 600<br>23 5/8                                                                     | G 1"                                                                              | 36<br>1 7/16                                                                      | 4,5<br>9.923                                                                        | ✓                                                                                   |
| 637350 | -893469                                                                           | 37,897<br>1 1/2                                                                   | 350<br>13 3/4                                                                     | G1" 1/8                                                                           | 41<br>1 5/8                                                                       | 3,12<br>6.880                                                                       | ✓                                                                                   |
| 637500 | -895609                                                                           | 37,897<br>1 1/2                                                                   | 500<br>19 11/16                                                                   | G1" 1/8                                                                           | 41<br>1 5/8                                                                       | 4,24<br>9.349                                                                       | ✓                                                                                   |
| 637600 | -169236                                                                           | 37,897<br>1 1/2                                                                   | 600<br>23 5/8                                                                     | 1.1/8"                                                                            | 41<br>1 5/8                                                                       | 5,275<br>11.631                                                                     | ✓                                                                                   |
| 638300 | -059230                                                                           | 38,1<br>1 1/2                                                                     | 322<br>12 11/16                                                                   | W 1.1/2"                                                                          | 24<br>15/16                                                                       | 2,68<br>5.909                                                                       | ✓                                                                                   |

### SERIES 800-626 MECHANICAL IMPACT SHOCK SPINDLE



The mechanical impact spindle enables easy and controlled extraction of particularly seized parts through impact force. Additionally, the spindle guarantees particularly good sliding properties in the thread groove. The fine thread ensures ideal power transmission. Exactly the required force for extraction is generated.

#### BENEFITS

- Light and controlled removal of particularly stubborn parts through impact action

## TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             |                                                                                     | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 800-626 | -969980                                                                             | 280<br>11 1/32                                                                      | W 1 1/2"-16                                                                         | 30<br>1 3/16                                                                        | 2,15<br>4.741                                                                         | ✓                                                                                     |

SERIES 844-626  
MECHANICAL SPINDLES



The mechanical spindle allows for easy and controlled removal of particularly stubborn parts through impact force. Additionally, it guarantees exceptionally good sliding properties in the thread. The fine thread ensures an ideal power transmission. The exact force required for the removal is generated.

BENEFITS

- Light and controlled removal of particularly stuck parts through impact action



TECHNICAL ATTRIBUTES

| #       |  GTIN |  mm/inch |  |  mm/inch |  kg/lb |  |
|---------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 844-626 | -032851                                                                                  | 200<br>7 7/8                                                                                | W 1 1/2"-16                                                                         | 24<br>15/16                                                                                 | 1,45<br>3.197                                                                               | ✓                                                                                     |



PRODUCT DETAILS

SERIES 600-17  
UNIVERSAL PRESSURE PIECE SET (3-PIECE)



The pressure piece kit is used to stabilize the pressure spindle on a hollow shaft. The kit includes a total of three pressure pieces that have different diameters and can be combined with each other. Thanks to their step-shaped silhouette, the pressure pieces fit perfectly on the hollow shaft. Depending on the size, the different pressure pieces can also be nested together to achieve the exact diameter of the shaft.

- BENEFITS**
- Adjustment possibility for the spindle in hollow shaft



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>kg/lb | Included in the set |  |
|--------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 600-17 | -914188                                                                                     | 20; 32; 41<br>13/16; 1 1/4; 1 5/8                                                             | 0,11<br>0.243                                                                               | K-20-15             | ✓                                                                                     |

## SERIES K-600 REVERSABLE SPINDLE TIP



The reversible pressure piece set is considered the optimal addition for KUKKO pressure spindles with interchangeable tips and can be used for any mounting position. For individual adjustment to the shaft, the pressure piece is inserted into the spindle. It is possible to choose between different pressure pieces (e.g., with a flat or concave bearing surface). The set also includes a 3-piece universal pressure piece set for stepwise adjustment on hollow shafts, as well as a magnetic mini-LED.

### BENEFITS

- Every installation position can be covered.
- Dual spindle tip for smooth surfaces and centering
- Gentle extraction with interchangeable tips



### TECHNICAL ATTRIBUTES

| #       | GTIN    |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  kg/lb |                      |  |
|---------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-600-A | -833960 | 20, 32, 41<br>13/16;1<br>1/4;1 5/8                                                          | 6,4<br>1/4                                                                                  | 34<br>1 5/16                                                                                | 33<br>1 5/16                                                                                | 38<br>1 1/2                                                                                 | 0,61<br>1.345                                                                              | 612080,<br>612110,<br>612130,<br>612150,<br>612200,<br>614135,<br>614160,<br>614200,<br>614242,<br>614250 | ✓                                                                                     |
| K-600-B | -833977 | 20, 32, 41<br>13/16;1<br>1/4;1 5/8                                                          | 10,4<br>7/16                                                                                | 48<br>1 7/8                                                                                 | 48<br>1 7/8                                                                                 | 52<br>2 1/16                                                                                | 0,705<br>1.654                                                                             | 616270,<br>616325,<br>616220,<br>618105,<br>618175,<br>618210                                             | ✓                                                                                     |

## PRODUCT DETAILS



#



GTIN



mm/inch



mm/  
inch



mm/inch



mm/inch



mm/inch



kg/lb



| #       | GTIN    | mm/inch                            | mm/<br>inch | mm/inch     | mm/inch      | mm/inch       | kg/lb        |                                                                                                                                                                             |   |
|---------|---------|------------------------------------|-------------|-------------|--------------|---------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| K-600-C | -833984 | 20, 32, 41<br>13/16;1<br>1/4;1 5/8 | 12,5<br>1/2 | 61<br>2 3/8 | 59<br>2 5/16 | 68<br>2 11/16 | 0,3<br>0.662 | 620172,<br>621130,<br>621170,<br>621220,<br>621300,<br>621355,<br>623150,<br>623170,<br>623230,<br>623260,<br>623325,<br>623360,<br>623450,<br>626300,<br>626400,<br>626500 | ✓ |
| K-600-D | -833991 | 20, 32, 41<br>13/16;1<br>1/4;1 5/8 | 18,9<br>3/4 | 64<br>2 1/2 | 62<br>2 7/16 | 78<br>3 1/16  | 0,3<br>0.662 | 633400,<br>633500,<br>633600,<br>637350,<br>637500,<br>637600                                                                                                               | ✓ |

SERIES 606  
POWERPLATE



The Powerplates of series 606 were specially developed for center protection during the pulling of components. They enable damage-free pulling and are especially gentle on the shaft and spindle. The maintenance-free Powerplates impress with a well-thought-out design featuring a rotatable, glide-mounted core that allows for significantly increased tension force—even for components with oversized or missing centering holes. The rotatable core also protects the contact surface on the shaft or spindle, prevents localized stresses, and extends the service life of components.



BENEFITS

- Rotatable core guarantees maximum force transmission
- Magnetic adhesion enables safe and precise work
- Enables safe pulling even for oversized or missing drill holes



TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 606-1-18 New | -012761                                                                                     | 18<br>11/16                                                                                    | 12,3<br>1/2                                                                                    | 0,012<br>0.662                                                                                 | ✓                                                                                     |
| 606-2-28 New | -012778                                                                                     | 28<br>1 1/8                                                                                    | 13,8<br>9/16                                                                                   | 0,034<br>0.075                                                                                 | ✓                                                                                     |
| 606-3-38 New | -012785                                                                                     | 38<br>1 1/2                                                                                    | 14,5<br>9/16                                                                                   | 0,067<br>0.148                                                                                 | ✓                                                                                     |
| 606-4-48 New | -012792                                                                                     | 48<br>1 7/8                                                                                    | 15,5<br>5/8                                                                                    | 0,12<br>0.265                                                                                  | ✓                                                                                     |
| 606-5-58 New | -012808                                                                                     | 58<br>2 5/16                                                                                   | 16,5<br>5/8                                                                                    | 0,26<br>0.573                                                                                  | ✓                                                                                     |



PRODUCT DETAILS

SERIES 606-A  
POWERPLATE



The Powerplate set of series 606-A comprises a total of five Powerplates in different sizes (ø 18, 28, 38, 48, 58 mm). The Powerplates were specially developed for center protection when pulling ball bearings, sockets, pulleys, and gears. They enable damage-free pulling of the components and are particularly gentle on shaft and spindle.

BENEFITS

- Rotatable core guarantees maximum force transmission
- Enables safe pulling even for oversized or missing drill holes
- Magnetic adhesion enables safe and precise work



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 606-A New | -023965                                                                                   | 18 - 58<br>11/16-2 5/16                                                                      | 0,1<br>0.221                                                                               | ✓                                                                                   |

SERIES K-606  
POWERPLATE



The 5-piece Powerplate set of the series K-606 was specially developed for center protection when pulling off components. It enables damage-free pulling and is particularly gentle on the shaft and spindle. The maintenance-free Powerplates impress with a well-thought-out design featuring a rotating, glide-mounted core, which allows for significantly increased tension force—even for components with an excessive or missing center bore. The rotating core also protects the contact surface on the shaft or spindle, prevents localized load, and extends the service life of the components.



BENEFITS

- Rotatable core guarantees maximum force transmission
- Enables safe pulling even for oversized or missing drill holes
- Magnetic adhesion enables safe and precise work



TECHNICAL ATTRIBUTES

| #                  | <br>GTIN | <br>mm/inch | Consists of                                            | <br>kg/lb |  |
|--------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-606-A <b>New</b> | -488894                                                                                     | 18 - 58<br>11/16-2 5/16                                                                        | 606-1-18, 606-2-28,<br>606-3-38, 606-4-48,<br>606-5-58 | 0,6<br>1.323                                                                                   | ✓                                                                                     |

PRODUCT DETAILS

SERIES 8-0  
HYDRAULIC SPINDLE



The grease hydraulic spindle of the series 8-0 is the motor of the Puller and achieves a maximum tension force of up to 12 t. The hydraulic spindle is suitable for pulling particularly stubborn bearings, gears, and discs that cannot be loosened with pure muscle power. Thanks to the integrated grease hydraulic, no external pump is required.

BENEFITS

- The hydraulic spindle enables easy and controlled removal of particularly stubborn parts with minimal effort.

TECHNICAL ATTRIBUTES

| #                  | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max. tensile<br>force | Max. tension<br>force | <br>kg/lb |  |   |
|--------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---|
|                    |                                                                                             |                                                                                                |                                                                                                 | kN                    | t/US t. sh.           |                                                                                                |                                                                                       |   |
| 8-0-621 <b>New</b> | -774263                                                                                     | G 1/2"                                                                                         | 10<br>3/8                                                                                       | 15<br>11.06           | 100                   | 10<br>11.02                                                                                    | 1,57<br>3.462                                                                         | ✓ |
| 8-0-626 <b>New</b> | -774270                                                                                     | G 3/4"                                                                                         | 12<br>1/2                                                                                       | 20<br>14.75           | 120                   | 12<br>13.23                                                                                    | 2,095<br>4.278                                                                        | ✓ |

## SERIES 8 LONG HYDRAULIC SPINDLE



The grease-hydraulic spindle of series 8 is the motor of the puller and achieves an average tension force of up to 20 t. The hydraulic spindle is suitable for pulling particularly stubborn bearings, gears, and discs that cannot be loosened by sheer muscle power. Thanks to integrated grease hydraulics, no external pump is required.

### BENEFITS

- The hydraulic spindle guarantees easy and controlled extraction of particularly stubborn parts with minimal effort.
- Hydraulic spindle doubles the manual pulling force by 100%



### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max. tensile<br>force | Max. tension<br>force | <br>kg/lb | <br>MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>DFW |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                                                                             |                                                                                                |                                                                                                 | kN                    | t/US t. sh.           |                                                                                                |                                                                                                                                          |
| 8-1-B | -034596                                                                                     | G1"<br>10<br>3/8                                                                               | 45<br>33.19                                                                                     | 150                   | 15<br>16.53           | 7,655<br>16.879                                                                                | ✓                                                                                                                                        |
| 8-1-F | -034671                                                                                     | G1"<br>10<br>3/8                                                                               | 45<br>33.19                                                                                     | 150                   | 15<br>16.53           | 8,79<br>19.382                                                                                 | ✓                                                                                                                                        |
| 8-2-K | -034831                                                                                     | G 1<br>1/8"<br>10<br>3/8                                                                       | 30<br>22.13                                                                                     | 200                   | 20<br>22.05           | 9,795<br>21.598                                                                                | ✓                                                                                                                                        |
| 8-2-M | -034916                                                                                     | G 1<br>1/8"<br>10<br>3/8                                                                       | 30<br>22.13                                                                                     | 200                   | 20<br>22.05           | 11,14<br>24.564                                                                                | ✓                                                                                                                                        |



## SERIES 8-HP HYDRAULIC SPINDLE WITH HAND LEVER OPERATION



The hydraulic spindle with hand lever operation from the 8-HP series is versatile and suitable for pulling particularly stubborn components. It achieves a medium tension force of up to 20 tons. Thanks to integrated fat hydraulics, no external pump is required. The hydraulic spindle is securely screwed into the Puller using a screw-in spindle. The lever arm of the pump can be swiveled 360°. By using an extension and a pressure piece, the hydraulic spindle can be adapted to various installation situations.

### BENEFITS

- The hydraulic spindle guarantees easy and controlled removal of particularly stuck parts with minimal effort.
- Significant reduction in removing times thanks to simple and fast handling
- Protection of the hydraulic spindle by overload valve
- Ergonomic operation thanks to a lever arm that can be swiveled 360°.
- With extension pieces, the range of the hydraulic spindle can be adjusted to the respective requirements.



### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>kN | Max. tensile<br>force | Max. tension<br>force | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          |                                                                                             |                                                                                                |                                                                                           |                       | t/US t. sh.           |                                                                                                |                                                                                       |
| 8-HP-621 | -182242                                                                                     | G 1/2"                                                                                         | 52<br>2 1/16                                                                              | 40                    | 4<br>4.41             | 7,2<br>15.876                                                                                  | ✓                                                                                     |
| 8-HP-623 | -182259                                                                                     | G 5/8"                                                                                         | 52<br>2 1/16                                                                              | 60                    | 6<br>6.61             | 5,56<br>12.260                                                                                 | ✓                                                                                     |
| 8-HP-626 | -182273                                                                                     | G 3/4"                                                                                         | 52<br>2 1/16                                                                              | 120                   | 12<br>13.23           | 8,82<br>19.448                                                                                 | ✓                                                                                     |
| 8-HP-633 | -182280                                                                                     | G 1"                                                                                           | 52<br>2 1/16                                                                              | 120                   | 12<br>13.23           | 7,46<br>16.449                                                                                 | ✓                                                                                     |
| 8-HP-637 | -182297                                                                                     | G 1 1/8"                                                                                       | 52<br>2 1/16                                                                              | 150                   | 15<br>16.53           | 8,07<br>19.184                                                                                 | ✓                                                                                     |
| 8-HP-800 | -182303                                                                                     | W 1 1/2"                                                                                       | 52<br>2 1/16                                                                              | 200                   | 20<br>22.05           | 12,54<br>27.651                                                                                | ✓                                                                                     |

## SERIES K-8-HP HYDRAULIC SPINDLE WITH HAND LEVER OPERATION IN L-BOXX WITH LOCKING RING



The hydraulic spindle with hand lever operation in the case is suitable for pulling off particularly stubborn bearings, gears, and discs with a pulling force of up to 21 t. Thanks to the integrated grease hydraulic, no external pump is required. The lever arm of the pump can be swiveled 360°. With the help of the fixing ring, the hydraulic spindle can also be used with components with standard through holes.

### BENEFITS

- The hydraulic spindle guarantees easy and controlled removal of particularly stuck parts with minimal effort.
- Significant reduction in removing times thanks to simple and fast handling
- Protection of the hydraulic spindle by overload valve
- Ergonomic operation thanks to a lever arm that can swivel 360°.
- By using extension pieces, the reach of the hydraulic spindle can be adapted to the respective requirements.



### TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>kN | Max. tensile force | Max. tension force |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|
|            |                                                                                             |                                                                                                |                                                                                           |                    | t/US t. sh.        |                                                                                       |
| K-8-HP-621 | -041396                                                                                     | G 1/2"                                                                                         | 52<br>2 1/16                                                                              | 40                 | 4<br>4.41          | ✓                                                                                     |
| K-8-HP-623 | -041402                                                                                     | G 5/8"                                                                                         | 52<br>2 1/16                                                                              | 60                 | 6<br>6.61          | ✓                                                                                     |
| K-8-HP-626 | -041419                                                                                     | G 3/4"                                                                                         | 52<br>2 1/16                                                                              | 120                | 12<br>13.23        | ✓                                                                                     |
| K-8-HP-633 | -041426                                                                                     | G 1"                                                                                           | 52<br>2 1/16                                                                              | 120                | 12<br>13.23        | ✓                                                                                     |
| K-8-HP-637 | -041440                                                                                     | G 1 1/8"                                                                                       | 52<br>2 1/16                                                                              | 150                | 15<br>16.53        | ✓                                                                                     |
| K-8-HP-800 | -041457                                                                                     | W 1 1/2"                                                                                       | 52<br>2 1/16                                                                              | 200                | 20<br>22.05        | ✓                                                                                     |

SERIES 800  
SHORT HYDRAULIC SPINDLE



The grease-hydraulic spindle of the 800 series is the motor of the puller and achieves an average tension force of up to 20 t. A true power pack, the spindle impresses with its compact design, ease of use, and portability. Thanks to its favorable installation dimensions, the spindle can be used universally.

BENEFITS

- The hydraulic spindle guarantees easy and controlled removal of particularly stuck parts with minimal effort.
- Hydraulic spindle doubles the manual pulling force by 100 %
- Convenient format for quick, portable use



TECHNICAL ATTRIBUTES

| #   | <br>GTIN |  | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | SW<br><br>mm/inch | <br>kg/lb |  |
|-----|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 800 | -034343                                                                                     | W 1.1/2"-16(55°;16Gang)                                                             | 10<br>3/8                                                                                      | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 13<br>1/2                                                                                              | 1,46<br>3.219                                                                                  | ✓                                                                                     |
| 801 | -784446                                                                                     | W 1.1/2"-16(55°;16Gang)                                                             | 10<br>3/8                                                                                      | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                              | 1,47<br>3.241                                                                                  | ✓                                                                                     |
| 802 | -784514                                                                                     | M40x1,5                                                                             | 10<br>3/8                                                                                      | 100<br>73.76                                                                                    | 200                            | 20<br>22.05                             | 19<br>3/4                                                                                              | 1,55<br>3.418                                                                                  | ✓                                                                                     |
| 804 | -456787                                                                                     | W 1.1/2"-16(55°;16Gang)                                                             | 10<br>3/8                                                                                      | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                              | 1,475<br>3.252                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 800-0  
SPINDLE EXTENSIONS

The spindle extension is used to extend the spindle for the system series 800. It allows for quick adjustment to various requirements. Depending on the application, the extensions are available in different sizes.

BENEFITS

- Quick adaptation to the respective pull-off situation thanks to spindle extension



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 800-050 | -031113                                                                                     | 50<br>1 15/16                                                                                  | 0,13<br>0.287                                                                                | ✓                                                                                     |
| 800-100 | -031298                                                                                     | 100<br>3 15/16                                                                                 | 0,335<br>0.739                                                                               | ✓                                                                                     |
| 800-150 | -031373                                                                                     | 150<br>5 7/8                                                                                   | 0,54<br>1.191                                                                                | ✓                                                                                     |



SERIES 9  
HYDRAULIC ADDITIONAL PRESSES



The hydraulic additional press of series 9 serves to increase the pressure performance of mechanical puller devices when dealing with particularly stubborn bearings, gears, and discs. With the help of the hydraulic additional press, extraction forces of up to 30 t can be achieved.

BENEFITS

- Hydraulic additional press ensures easy and controlled removal of particularly stubborn parts with little effort.
- Oöses for attaching a fall protection system as well as for tool organization with tool brands, issue cards, or electronic systems.
- Time-saving hydraulic upgrade without spindle replacement
- The automatic pulls the piston back to the starting position.

TECHNICAL ATTRIBUTES

| #              |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in the<br>set |  |
|----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|                | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                           | kN                       | t/US t. sh.              | kg/lb                                                                                 |                        |                                                                                       |
| 9-1 <b>New</b> | -005053                                                                             | 60<br>2 3/8                                                                         | 10<br>3/8                                                                           | 35<br>25.82                                                                        | 100                      | 10<br>11.02              | 0,825<br>1.819                                                                        | -                      | ✓                                                                                     |
| 9-2 <b>New</b> | -005138                                                                             | 87<br>3 7/16                                                                        | 15<br>9/16                                                                          | 50<br>36.88                                                                        | 150                      | 15<br>16.53              | 1,88<br>4.145                                                                         | K-226-4/12             | ✓                                                                                     |
| 9-3 <b>New</b> | -924408                                                                             | 113<br>4 7/16                                                                       | 7<br>1/4                                                                            | 35<br>25.82                                                                        | 300                      | 30<br>33.07              | 5,16<br>11.378                                                                        | -                      | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 120 | 130

# UNIVERSAL PULLER „VARIO“



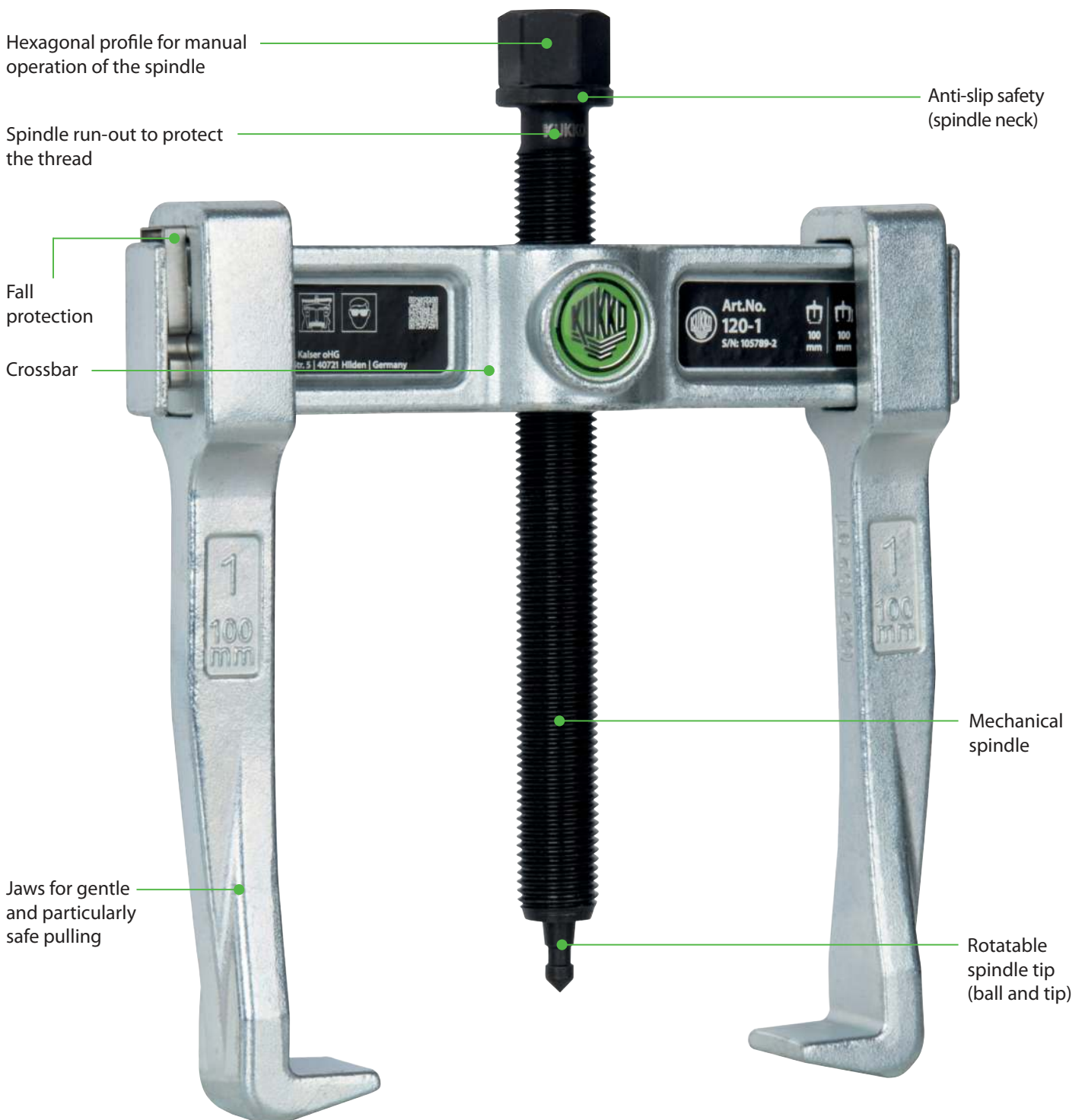
# APPLICATION

The 2-jaw and 3-jaw universal pullers “Vario” with spring-loaded Fall protection from series 120 and 130 are suitable for pulling off bearings, gears and discs seated on a shaft and accessible from the outside. The Fall protection prevents the jaws from slipping off the crossbar.

## Benefits

- By pressing down the Fall protection, especially quick reversing of the jaws is guaranteed
- Fall protection protects against slipping of the jaws from the crossbar
- Application also possible on eccentric components due to freely moving jaws sliding on the crossbar
- Variable adjustment to different spreads (depending on the model)
- Secure placement of the spindle by means of the rotatable spindle tip on both smooth surfaces and in centerings (Switch Technology)

# CONSTRUCTION OF THE UNIVERSAL PULLER “VARIO”





## FEATURES OF THE SERIES

### SERIES 120

**2-jaw universal puller  
with spring-loaded Fall protection**



**120-10**

The 2-jaw universal pullers of series 20 can be used universally, even in confined spaces.

### SERIES 130

**3-jaw universal puller  
with spring-loaded Fall protection**



**130-10**

Thanks to the 3-jaw design, the pullers of series 30 ensure an even force distribution and thus enable even greater pulling forces.

## APPLICATION EXAMPLE



Pulling off a gear wheel with the 120-10



## SERIES 120 2- AND 3-JAW UNIVERSAL PULLERS "VARIO" WITH SPRING-LOADED HOOK SAFETY



The 2-jaw and 3-jaw Universal Pullers "VARIO" with spring-loaded hook safety are used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industries. This allows for the removal of any component that sits on a shaft and is easily accessible from the outside. Equipped with robust, always parallel puller jaws, the pullers ensure a particularly safe, damage-free disassembly during both external extraction and internal pulling. The hook safety prevents the puller jaws from slipping off the crossbar.

### BENEFITS

- Fall protection protects against the jaws sliding off the crossbar.
- By pressing the safety lock, a particularly fast inversion of the jaws is guaranteed.
- Application also for eccentric components through free-moving, sliding puller jaws on the crossbar.
- Adjustment to any span between 10 mm – 350 mm
- Safe mounting of the spindle with a movable spindle tip on both smooth surfaces and for centering (Switch Technology)



### TECHNICAL ATTRIBUTES

| #      | GTIN    |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Max. tensile force<br>kN | Max. tension force<br>t/US t. sh. |  kg/lb | Included in the set |  |
|--------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|---------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|        |         | mm/inch                                                                                     | mm/inch                                                                                     | mm/inch                                                                                     | mm/inch                                                                                     |                                                                                              |                          |                                   |                                                                                             |                     |                                                                                       |
| 120-1  | -918551 | 20 - 100<br>13/16 - 3 15/16                                                                 | 100<br>3 15/16                                                                              | 100 - 130<br>3 15/16 - 5 1/8                                                                | 17<br>11/16                                                                                 | 80<br>59.01                                                                                  | 30                       | 3<br>3.31                         | 1,06<br>3.528                                                                               | 120-ST              | ✓                                                                                     |
| 120-10 | -918599 | 20 - 150<br>13/16 - 5 7/8                                                                   | 100<br>3 15/16                                                                              | 100 - 180<br>3 15/16 - 7 1/16                                                               | 17<br>11/16                                                                                 | 80<br>59.01                                                                                  | 30                       | 3<br>3.31                         | 1,16<br>2.558                                                                               | 120-ST              | ✓                                                                                     |
| 120-2  | -918636 | 20 - 150<br>13/16 - 5 7/8                                                                   | 150<br>5 7/8                                                                                | 100 - 180<br>3 15/16 - 7 1/16                                                               | 17<br>11/16                                                                                 | 80<br>59.01                                                                                  | 30                       | 3<br>3.31                         | 1,28<br>2.822                                                                               | 120-ST              | ✓                                                                                     |
| 120-20 | -918674 | 10 - 250<br>3/8 - 9 13/16                                                                   | 150<br>5 7/8                                                                                | 130 - 300<br>5 1/8 - 11 13/16                                                               | 24<br>15/16                                                                                 | 100<br>73.76                                                                                 | 30                       | 3<br>3.31                         | 3,005<br>7.718                                                                              | 120-ST              | ✓                                                                                     |
| 120-3  | -918711 | 10 - 250<br>3/8 - 9 13/16                                                                   | 200<br>7 7/8                                                                                | 125 - 300<br>4 15/16 - 11 13/16                                                             | 24<br>15/16                                                                                 | 100<br>73.76                                                                                 | 30                       | 3<br>3.31                         | 3,84<br>8.467                                                                               | 120-ST              | ✓                                                                                     |

## PRODUCT DETAILS

| #      |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included<br>in the set |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| 120-30 | -918759                                                                           | 10 - 350<br>3/8 - 1 3/4                                                           | 200<br>7 7/8                                                                      | 125 - 400<br>4 15/16 - 15 3/4                                                     | 24<br>1 5/16                                                                      | 120<br>88.51                                                                      | 40                       | 4<br>4.41                | 5,025<br>11.576                                                                     | -                      | ✓                                                                                   |

### SERIES 130 3-JAW UNIVERSAL PULLER "VARIO" WITH SPRING-LOADED SAFETY

The 3-jaw universal puller "VARIO" with spring-loaded fall protection is used for pulling bearings, gears, and discs in all common sizes. This allows for the safe and damage-free loosening of any component that sits on a shaft and is freely accessible from the outside.

#### BENEFITS

- Fall protection protects against the jaws sliding off the crossbar.
- By pressing down the safety latch, a particularly fast flipping of the jaws is guaranteed.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Application also for eccentric components through freely movable, sliding jaws on the crossbar.
- Safe installation of the spindle using a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)



## TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 130-10 | -918834                                                                             | 20 - 150<br>13/16 - 5 7/8                                                           | 100<br>3 15/16                                                                      | 100 - 180<br>3 15/16 - 7 1/16                                                       | 17<br>1 11/16                                                                       | 80<br>59.01                                                                         | 30                       | 3<br>3.31                | 1,24<br>2.734                                                                         | ✓                                                                                     |
| 130-2  | -918872                                                                             | 20 - 150<br>13/16 - 5 7/8                                                           | 150<br>5 7/8                                                                        | 100 - 180<br>3 15/16 - 7 1/16                                                       | 17<br>1 11/16                                                                       | 80<br>59.01                                                                         | 30                       | 3<br>3.31                | 1,75<br>3.859                                                                         | ✓                                                                                     |
| 130-20 | -918919                                                                             | 20 - 260<br>13/16 - 10 1/4                                                          | 150<br>5 7/8                                                                        | 120 - 300<br>4 3/4 - 11 13/16                                                       | 24<br>1 5/16                                                                        | 110<br>81.14                                                                        | 35                       | 3.5<br>3.86              | 4,28<br>9.437                                                                         | ✓                                                                                     |
| 130-3  | -918957                                                                             | 20 - 260<br>13/16 - 10 1/4                                                          | 200<br>7 7/8                                                                        | 120 - 300<br>4 3/4 - 11 13/16                                                       | 24<br>1 5/16                                                                        | 110<br>81.14                                                                        | 35                       | 3.5<br>3.86              | 5,365<br>11.830                                                                       | ✓                                                                                     |

### SERIES 120-ST SALES DISPLAY FOR 2-JAW UNIVERSAL PULLER "VARIO" WITH SPRING-LOADED END STOP



The display for 2-jaw universal pullers is the ideal solution for the presentation and storage of various sizes of 2-jaw universal pullers. The 2-jaw universal pullers "VARIO" with spring-loaded safety are used for pulling bearings, gears, and discs in all common sizes.

#### BENEFITS

- The sales and workshop stand provides organized storage and presentation of the 2-jaw pullers.
- The safety device protects against the slipping of the puller jaws from the crossbar.
- By pressing down the anti-slip safety, a particularly fast rotation of the jaws is guaranteed.
- Application also with eccentric components through freely movable, sliding puller jaws on the crossbar.
- Safe mounting of the spindle with a movable spindle tip on both smooth surfaces and for centering (Switch Technology)

#### TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                             |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                            |                                                                                       |
| 120-ST | -961489                                                                             | 630<br>24 13/16                                                                     | 250<br>9 13/16                                                                      | 316<br>12 7/16                                                                      | 20 -<br>250<br>13/16 -<br>9<br>13/16                                                | 200<br>7 7/8                                                                        | 100 -<br>300<br>3 15/16 -<br>11 13/16                                               | 85<br>62.70                                                                         | 30                       | 3<br>3.31                | 14,79<br>32.612                                                                       | 120-1,<br>120-10,<br>120-2,<br>120-20,<br>120-3,<br>20-STL | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 110

# UNIVERSAL PULLER "TECHNO" WITH LOCKING PIN





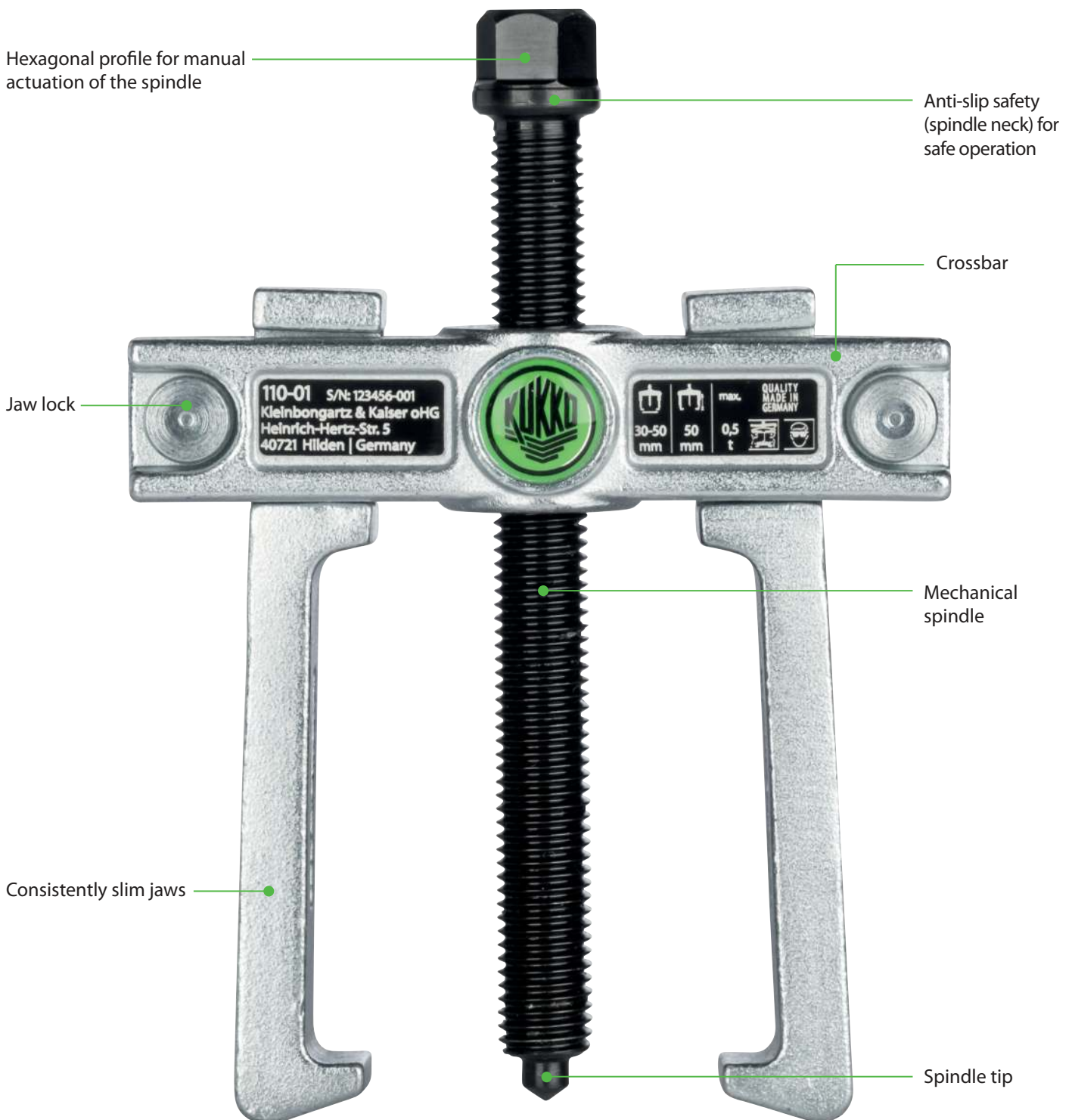
## APPLICATION

The 2-jaw universal puller "Techno" is used for the removal of various components (e.g. ball bearing, gears, discs, etc.) in workshops as well as in the agricultural sector. The two locking pins prevent the jaws from slipping off the crossbar, thus ensuring particularly safe pulling.

### Benefits

- Locking pin protects against the jaws slipping off the crossbar
- Optionally convertible from an external extractor to an internal extractor by reversing the jaws
- Anti-slip safety (spindle neck) on the spindle head for safe use with open-end wrench
- Spindle run-out to protect the thread

## STRUCTURE OF THE UNIVERSAL PULLER „TECHNO“



## JAW LOCK

The jaw lock ensures that the jaws cannot slip off the crossbar. Additionally, the removable pin allows rapid reversal of the jaws, making the puller universally applicable.



Manually removable jaw lock



Spring-loaded ball secures the pin from slipping out



Jaw lock in use

## APPLICATION EXAMPLES



Pulling a pulley from a machine gearbox with the 110-02



Pulling a pulley from a washing machine motor with the 110-01



Pulling a wheel hub from a steering knuckle with the 110-2

## SERIES 110 2-JAW UNIVERSAL PULLER "TECHNO" WITH JAW BRAKE



The 2-jaw universal puller "Techno" with claw lock is used for pulling bearings, gears, and discs in all common sizes for agriculture and workshops. This allows any component that sits on a shaft and is freely accessible from outside to be removed. Equipped with constant, always parallel, and slender jaws, the puller ensures particularly safe, non-destructive disassembly during both external extraction and internal extraction. The locking pin prevents the jaws from slipping off the crossbar.

### BENEFITS

- The hook lock prevents the jaws from slipping off the crossbar.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Spindle outlet to protect the thread
- Secure setup of the spindle with a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)



### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 110-01 | -923753                                                                                     | 22 - 50<br>7/8 - 1<br>15/16                                                                    | 50<br>1 15/16                                                                                  | 45 - 55<br>1 3/4 - 2<br>3/16                                                                   | 10<br>3/8                                                                                      | 12<br>8.85                                                                                      | 5                              | 0.5<br>0.55                             | 0,265<br>0.584                                                                                 | ✓                                                                                     |
| 110-02 | -923760                                                                                     | 22 - 85<br>7/8 - 3<br>3/8                                                                      | 50<br>1 15/16                                                                                  | 45 - 90<br>1 3/4 - 3<br>9/16                                                                   | 10<br>3/8                                                                                      | 12<br>8.85                                                                                      | 10                             | 1<br>1.10                               | 0,31<br>0.684                                                                                  | ✓                                                                                     |
| 110-1  | -923777                                                                                     | 28 - 100<br>1 1/8 - 3<br>15/16                                                                 | 100<br>3 15/16                                                                                 | 80 - 105<br>3 1/8 - 4 1/8                                                                      | 17<br>11/16                                                                                    | 35<br>25.82                                                                                     | 20                             | 2<br>2.20                               | 1,18<br>2.602                                                                                  | ✓                                                                                     |
| 110-10 | -923784                                                                                     | 33 - 120<br>1 5/16 - 4<br>3/4                                                                  | 100<br>3 15/16                                                                                 | 90 - 140<br>3 9/16 - 5<br>1/2                                                                  | 17<br>11/16                                                                                    | 35<br>25.82                                                                                     | 20                             | 2<br>2.20                               | 1,255<br>2.767                                                                                 | ✓                                                                                     |
| 110-2  | -923791                                                                                     | 42 - 165<br>1 5/8 - 6<br>1/2                                                                   | 150<br>5 7/8                                                                                   | 100 - 190<br>3 15/16 - 7<br>1/2                                                                | 19<br>3/4                                                                                      | 100<br>73.76                                                                                    | 50                             | 5<br>5.51                               | 2,46<br>5.424                                                                                  | ✓                                                                                     |
| 110-20 | -923807                                                                                     | 52 - 200<br>2 1/16 - 7<br>7/8                                                                  | 150<br>5 7/8                                                                                   | 115 - 230<br>4 1/2 - 9<br>1/16                                                                 | 19<br>3/4                                                                                      | 80<br>59.01                                                                                     | 40                             | 4<br>4.41                               | 2,645<br>5.832                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

| #            |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
| <b>110-3</b> | -923814                                                                           | 62 - 250<br>2 7/16 - 9<br>13/16                                                   | 200<br>7 7/8                                                                      | 140 - 280<br>5 1/2 - 11<br>1/32                                                   | 22<br>7/8                                                                         | 120<br>88.51                                                                      | 60                       | 6<br>6.61                | 4,88<br>10.760                                                                      | ✓                                                                                   |
| <b>110-4</b> | -956317                                                                           | 152 - 350<br>5 1 - 13<br>3/4                                                      | 250<br>9 13/16                                                                    | 230 - 380<br>9 1/16 - 14<br>15/16                                                 | 22<br>7/8                                                                         | 150<br>110.64                                                                     | 70                       | 7<br>7.72                | 6,21<br>13.693                                                                      | ✓                                                                                   |





KUKKO // *Pull forward*



SERIES 200-1 | K-200

# UNIVERSAL PULLER FOR AGRICULTURE AND WORKSHOP



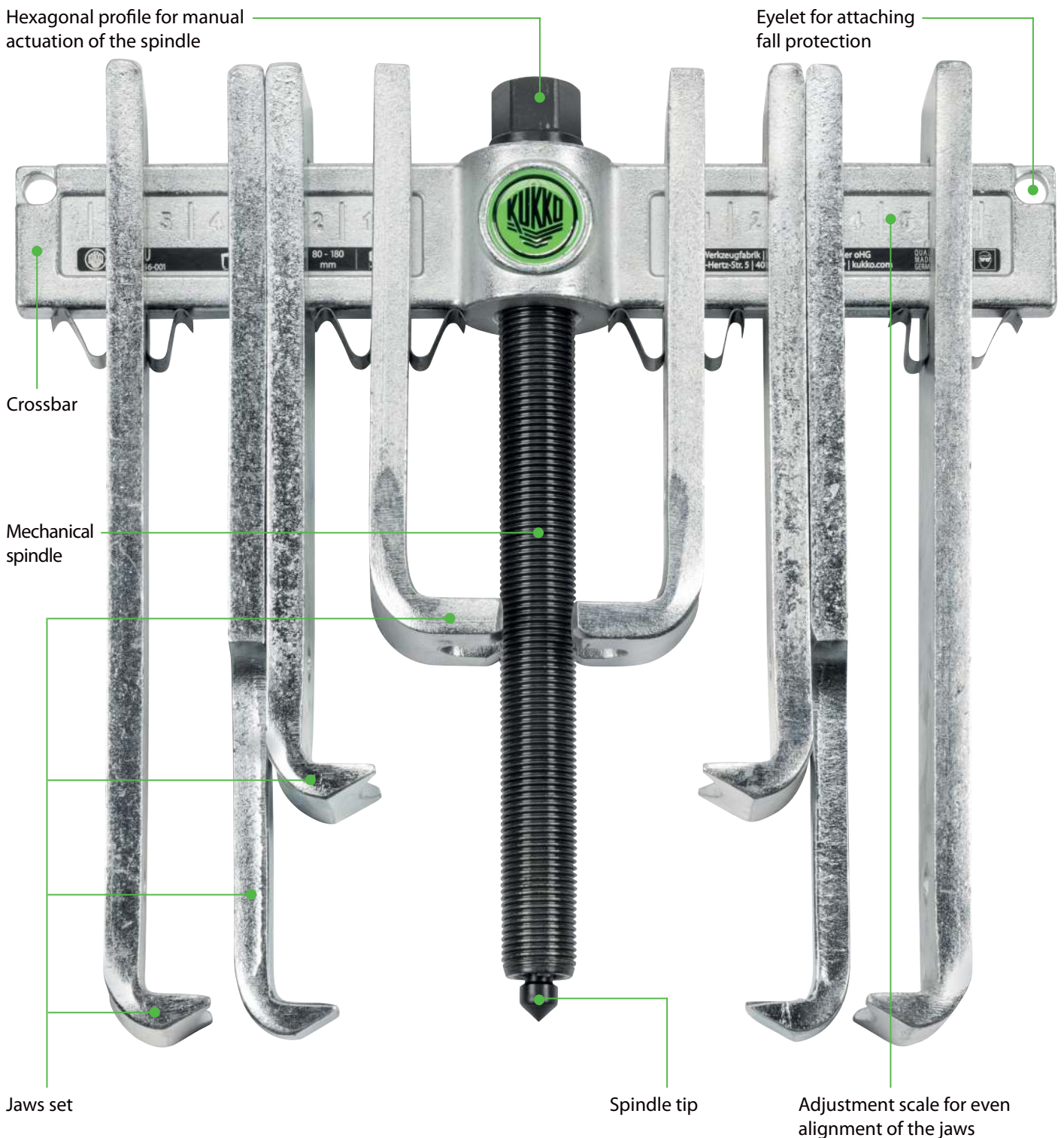
## APPLICATION

Due to its particularly robust design, the 2-jaw universal puller "Economy" is the ideal choice for pulling operations in agriculture as well as in workshops. Thanks to the versatile, combinable set of jaws, a wide variety of components in all common sizes can be removed without damage.

### Benefits

- Multifunctional application thanks to four different pairs of jaws for individual adjustment to the required reach
- Jaws can be connected via screw connection for a reach of up to 580 mm
- Optionally convertible from an external extractor to an internal extractor by reversing the jaws
- Secure placement of the spindle through a rotatable spindle tip on both smooth surfaces and centering points (Switch Technology)

## STRUCTURE OF A UNIVERSAL PULLER (EXAMPLE 200-1)





## FEATURES OF THE SERIES

### SERIES 200-1

#### 2-jaw universal puller "Economy"



Due to the differently sized jaws, the 2-jaw universal puller can be individually adjusted to the required reach.

### SERIES K-200

#### 2-jaw universal puller "Economy" in Set



The 2-jaw universal puller "Economy" is also available in a robust protective and transport case.

## APPLICATION EXAMPLES



The jaws are mounted on the crossbar; a scale on the crossbar facilitates correct adjustment of the distances



The jaws can be connected to each other by a screw connection



The 2-jaw universal puller "Economy" with extended jaws for increased reach

SERIES 200-1  
2-JAW UNIVERSAL PULLER "ECONOMY" WITH  
DIFFERENTLY SIZED PULLER JAWS IN THE SET



The 2-jaw universal puller "Economy" with a versatile combination puller jaw set is used for pulling bearings, gears, and discs in all common sizes in agriculture and workshops. It can loosen any component that is on a shaft and is freely accessible from the outside. The different lengths of the puller jaws allow the puller to be individually adjusted to the respective reach.

BENEFITS

- Multifunctional use thanks to four different pairs of jaws for individual adjustment to the respective reach
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Secure attachment of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tension<br>force<br>t/US t. sh. | Max.<br>tensile<br>force<br>kN | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 200-1 | -025686                                                                                     | 0 - 250<br>0 - 9 7/8                                                                           | 585<br>23 1/32                                                                                 | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 5<br>5.51                               | 50                             | 1,2<br>15.347                                                                                  | ✓                                                                                     |



SERIES K-200  
2-JAW UNIVERSAL PULLER "ECONOMY" WITH  
DIFFERENTLY SIZED PULLER JAWS IN METAL  
CASE



The 2-jaw universal puller "Economy" with a versatile combination of puller jaw set is used for pulling bearings, gears, and discs in all common sizes in agriculture and workshops. This allows for the loosening of any component mounted on a shaft and freely accessible from the outside. With the various lengths of puller jaws, the puller can be individually adjusted to the respective reach.

BENEFITS

- Multifunctional use thanks to four different pairs of jaws for individual adjustment to the respective reach
- Pulling jaws can be connected via screw connection up to a reach depth of 580 mm.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Safe setting up of the spindle using a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.



TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |             |                                                                                       |
| K-200-1 | -670756                                                                             | 0 - 250<br>0 - 9 7/8                                                                | 585<br>7 1/8                                                                        | 22<br>7/8                                                                           | 50                       | 5<br>5.51                | 8,92<br>19.669                                                                        | 200-1       | ✓                                                                                     |

### SERIES 300-1

### 2-JAW UNIVERSAL PULLER "ECONOMY" WITH DIFFERENTLY SIZED PULLER JAWS IN THE SET



The 2-jaw universal puller "Economy" with a versatile combination puller jaw set is used for pulling bearings, gears, and discs in all common sizes in agriculture and workshops. It can loosen any component that is on a shaft and is freely accessible from the outside. The different lengths of the puller jaws allow the puller to be individually adjusted to the respective reach.

#### BENEFITS

- Multifunctional use thanks to four different pairs of jaws for individual adjustment to the respective reach
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- Secure attachment of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.



#### TECHNICAL ATTRIBUTES

| #         |  |  |  |  |  | Max.<br>tension<br>force | Max.<br>tensile<br>force |  |  |
|-----------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|           | GTIN                                                                               | mm/inch                                                                            | mm/inch                                                                            | mm/inch                                                                            | Nm/ft lb                                                                           | t/US t. sh.              | kN                       | kg/lb                                                                                |                                                                                      |
| 300-1 New | -034527                                                                            | 0 - 250<br>0 - 9 7/8                                                               | 585<br>23 1/32                                                                     | 22<br>7/8                                                                          | 120<br>88.51                                                                       | 7.5<br>8.27              | 75                       | 9,36<br>20.639                                                                       | ✓                                                                                    |

KUKKO // *Pull forward*



SERIES 41 | 42

# PULLERS WITH SWIVELING JAWS





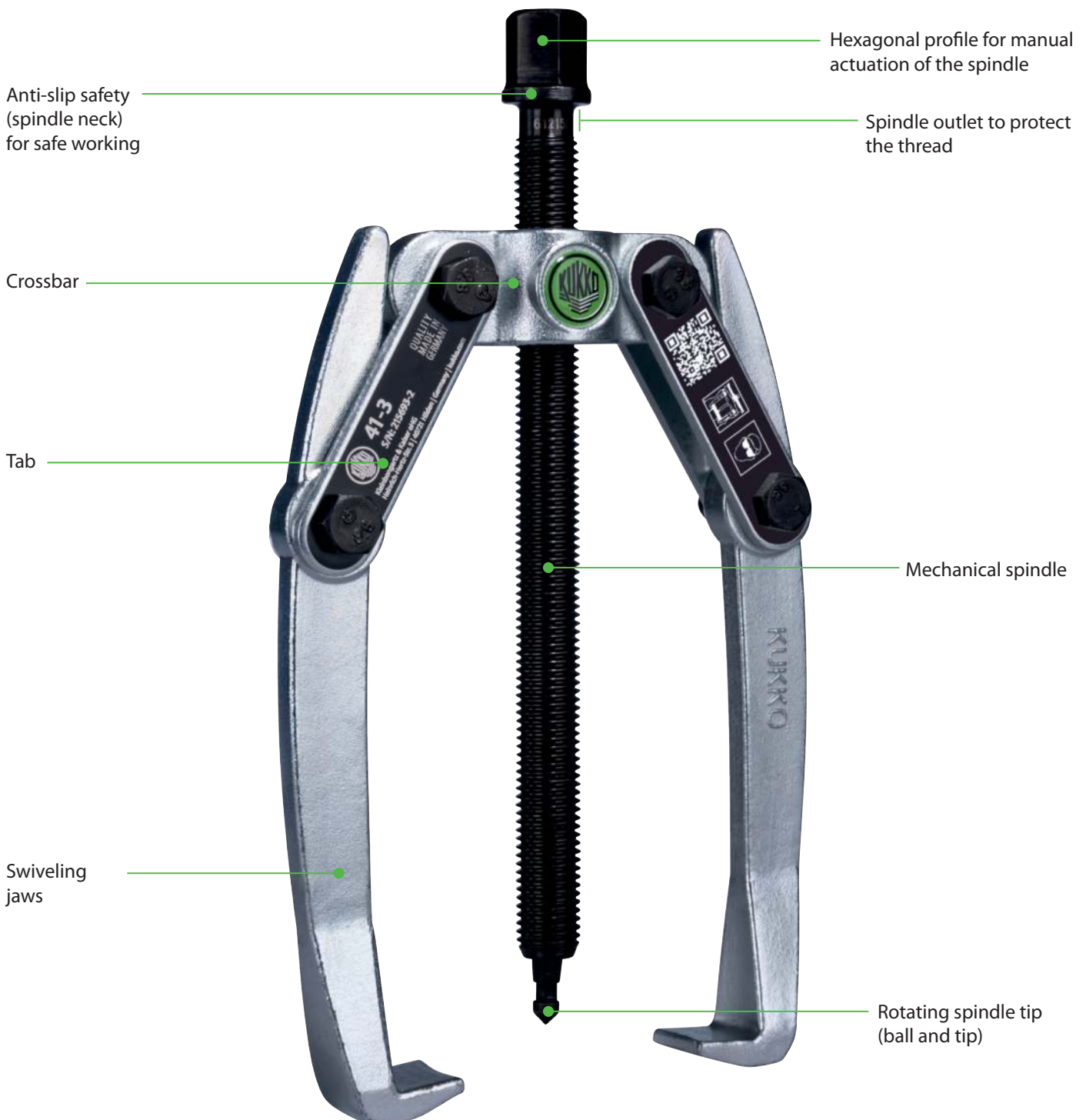
## APPLICATION

The universal pullers of series 41 and 42 are suitable for non-destructive removal of various components (such as gears, ball bearings, pulleys, etc.). The swiveling jaws guarantee maximum freedom of movement for individual adjustment to the desired spread and reach, thus enabling pulling even in confined spaces.

### Benefits

- Swiveling jaws allow work in extremely tight spaces while individually adjusting spread and reach
- Secure spindle placement thanks to the rotating spindle tip on both smooth surfaces and centering points (from size 41-3 onward)
- Integrated, freely moving pin on the T-handle ensures manual spindle drive in the tightest spaces (up to size 41-2)
- 3-jaw design ensures even force distribution and enables higher extraction forces (series 41-B and 42-B)

## CONSTRUCTION OF A UNIVERSAL PULLER USING EXAMPLE 41-3





# BESONDERHEITEN DER SERIESN

## SERIES 41

**2-armiger Universal-Abzieher  
mit T-Griff**



41-2

Der 2-armige Universal-Abzieher mit frei beweglichem Pin am T-Griff eignet sich für Abziehvorgänge auf engstem Raum. Beim filigranen, manuellen Bedienen der Spindel wird genau diejenige Kraft erzeugt, die zum Abziehen benötigt wird.

## SERIES 41

**2-armiger Universal-Abzieher  
mit Sechskant**



41-3

Die SERIES 41 eignet sich aufgrund der 2-Armigkeit für Abziehvorgänge bei eingeschränkten Umgebungsverhältnissen. Der Sechskant am Spindelkopf ermöglicht eine maximale Kraftübertragung.

## SERIES 41-B

**2-armiger Universal-Abzieher  
mit Hydraulikspindel**



41-5-B

Die Hydraulikspindel garantiert ein leichtes und kontrolliertes Abziehen von besonders festsitzenden Bauteilen mit minimalem Kraftaufwand.

## SERIES 42

**3-armiger Universal-Abzieher  
mit T-Griff**



42-2

Der Benefit der SERIES 42 ist die 3-Armigkeit, wodurch eine besonders gleichmäßige Kraftverteilung ermöglicht wird. Dies sorgt für noch höhere Abziehkraften.

## SERIES 42

**2-armiger Universal-Abzieher  
mit Sechskant**



42-3

Neben dem Vorteil der 3-Armigkeit verfügt der Abzieher über eine duale Spindelspitze, die ein Bearbeiten unterschiedlichster Oberflächen ermöglicht.

## SERIES 42-B

**2-armiger Universal-Abzieher  
mit Hydraulikspindel**



42-5-B

Die SERIES 42-B garantiert dank der 3-Armigkeit eine gleichmäßigere Kraftverteilung sowie ein müheloses Abziehen von besonders festsitzenden Bauteilen mittels der Hydraulik.

## ANWENDUNGSBEISPIELE



Abziehen eines Pumprads von einer Wasserpumpe am Auto mit dem 41-2



Demontage einer Umlenkrolle von einem Maschinenbauteil mit dem 42-3



Kugellager-Demontage von einem Antriebswellenflansch mit Hydraulikspindel



Abziehen eines kleinen Kugellagers von einer E-Motor-Welle mit dem 41-0

## SERIES 41 2-JAW UNIVERSAL PULLER WITH SWIVELING JAWS



The 2-jaw universal puller with swiveling jaws is used for pulling bearings, gears, and discs. The swiveling jaws also allow for individual adjustment to the respective span and depth even in restricted environmental conditions.

### BENEFITS

- Swiveling puller jaws allow for work in tight spaces while simultaneously providing individual adjustment for spread and reach.
- Anti-slip safety (spindle neck) at the spindle head for safe work with wrench
- Spindle outlet for thread protection
- Safe setup of the spindle via a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology) (applies from size 41-3).
- Integrated, freely movable T-handle guarantees manual spindle drive in the tightest spaces (applies only to sizes 41-1 and 41-2)



### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 41-0 | -362859                                                                                     | 0 - 60<br>1/2 - 2 3/8                                                                          | 40<br>1 5/8                                                                                    | 13<br>1/2                                                                                      | 25<br>18.44                                                                                     | 10                             | 1<br>1.10                               | 0,205<br>0.551                                                                                 | ✓                                                                                     |
| 41-1 | -015038                                                                                     | 0 - 65<br>1/2 - 2 5/8                                                                          | 65<br>2 5/8                                                                                    | T-handle                                                                                       | 0.00                                                                                            | 10                             | 1<br>1.10                               | 0,22<br>0.485                                                                                  | ✓                                                                                     |
| 41-2 | -015113                                                                                     | 0 - 80<br>1/2 - 3<br>3/16                                                                      | 80<br>3 3/16                                                                                   | T-handle                                                                                       | 0.00                                                                                            | 15                             | 1.5<br>1.65                             | 0,25<br>0.551                                                                                  | ✓                                                                                     |
| 41-3 | -787829                                                                                     | 0 - 90<br>5/8 - 4                                                                              | 120<br>4 3/4                                                                                   | 13<br>1/2                                                                                      | 40<br>29.50                                                                                     | 30                             | 3<br>3.31                               | 0,66<br>1.455                                                                                  | ✓                                                                                     |
| 41-4 | -836268                                                                                     | 0 - 130<br>3/4 - 5 1/8                                                                         | 160<br>6 3/8                                                                                   | 17<br>11/16                                                                                    | 85<br>62.70                                                                                     | 50                             | 5<br>5.51                               | 1,38<br>3.043                                                                                  | ✓                                                                                     |
| 41-5 | -836343                                                                                     | 0 - 180<br>1 1/32 - 7<br>1/8                                                                   | 200<br>7 7/8                                                                                   | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                             | 7<br>7.72                               | 3,28<br>7.232                                                                                  | ✓                                                                                     |



SERIES 41-B  
2- AND 3-JAW UNIVERSAL PULLERS WITH  
SWIVELING JAWS



The 2-jaw and 3-jaw universal pullers with swiveling puller jaws are used for removing bearings, gears, and discs in all common sizes for craftsmanship, workshops, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The swiveling puller arms also ensure maximum freedom of movement for individual adaptation to the respective spread and reach, even in restricted working conditions.

BENEFITS

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle features a rotatable spindle tip for safe placement on smooth surfaces and during centering.
- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.



TECHNICAL ATTRIBUTES

| #      |  |  |  |  | Max.<br>tensile<br>force | Max. tension<br>force |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.           | kg/lb                                                                                 |                                                                                       |
| 41-5-B | -887345                                                                             | 0 - 180<br>1 1/32 - 7 1/8                                                           | 200<br>7 7/8                                                                        | 15<br>11.06                                                                         | 100                      | 10<br>11.02           | 4,875<br>10.749                                                                       | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 42 3-JAW UNIVERSAL PULLER WITH SWIVELING JAWS



The 3-jaw universal puller with swiveling puller jaws is used for pulling bearings, gears, and disks in all common sizes. It allows for loosening externally accessible parts. The swiveling puller jaws can be adjusted to the spread and reach.

#### BENEFITS

- Swiveling puller jaws allow for work in tight spaces while simultaneously providing individual adjustment for spread and reach.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Spindle outlet for thread protection
- Spindle outlet to protect the thread
- Secure installation of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology) (applies from size 42-3)



#### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 42-0 | -362026                                                                                     | 0 - 60<br>1/2 - 2 3/8                                                                          | 40<br>1 5/8                                                                                    | 13<br>1/2                                                                                      | 25<br>18.44                                                                                     | 15                             | 1.5<br>1.65                             | 0,27<br>0.595                                                                                  | ✓                                                                                     |
| 42-1 | -015298                                                                                     | 0 - 65<br>1/2 - 2 5/8                                                                          | 65<br>2 5/8                                                                                    |                                                                                                | 0.00                                                                                            | 15                             | 1.5<br>1.65                             | 0,295<br>0.650                                                                                 | ✓                                                                                     |
| 42-2 | -015373                                                                                     | 0 - 80<br>1/2 - 3<br>3/16                                                                      | 80<br>3 3/16                                                                                   |                                                                                                | 0.00                                                                                            | 15                             | 1.5<br>1.65                             | 0,33<br>0.728                                                                                  | ✓                                                                                     |
| 42-3 | -787904                                                                                     | 0 - 90<br>5/8 - 4                                                                              | 120<br>4 3/4                                                                                   | 13<br>1/2                                                                                      | 40<br>29.50                                                                                     | 30                             | 3<br>3.31                               | 0,87<br>1.918                                                                                  | ✓                                                                                     |
| 42-4 | -836428                                                                                     | 0 - 130<br>3/4 - 5 1/8                                                                         | 160<br>6 3/8                                                                                   | 17<br>11/16                                                                                    | 85<br>62.70                                                                                     | 50                             | 5<br>5.51                               | 2,08<br>6.174                                                                                  | ✓                                                                                     |
| 42-5 | -836596                                                                                     | 0 - 180<br>1 1/32 - 7<br>1/8                                                                   | 200<br>7 7/8                                                                                   | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                             | 7<br>7.72                               | 4,295<br>9.470                                                                                 | ✓                                                                                     |

SERIES 42-B  
2- AND 3-JAW UNIVERSAL PULLERS WITH  
SWIVELING JAWS



The 2-jaw and 3-jaw universal pullers with swiveling puller jaws are used for removing bearings, gears, and discs in all common sizes for craftsmanship, workshops, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The swiveling puller arms also ensure maximum freedom of movement for individual adaptation to the respective spread and reach, even in restricted working conditions.



BENEFITS

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited spatial conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle features a rotatable spindle tip for secure placement on smooth surfaces and during centering.
- 3-jaw ensures an even force distribution and allows for greater pulling forces

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 42-5-B | -887352                                                                                     | 0 - 180<br>1 1/32 - 7 1/8                                                                      | 200<br>7 7/8                                                                                   | 15<br>11.06                                                                                     | 100                            | 10<br>11.02                          | 5,695<br>12.557                                                                                | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 46 | 47

# HEAVY-DUTY PULLERS WITH SWIVELING JAWS AND COMBI-CROSSBAR





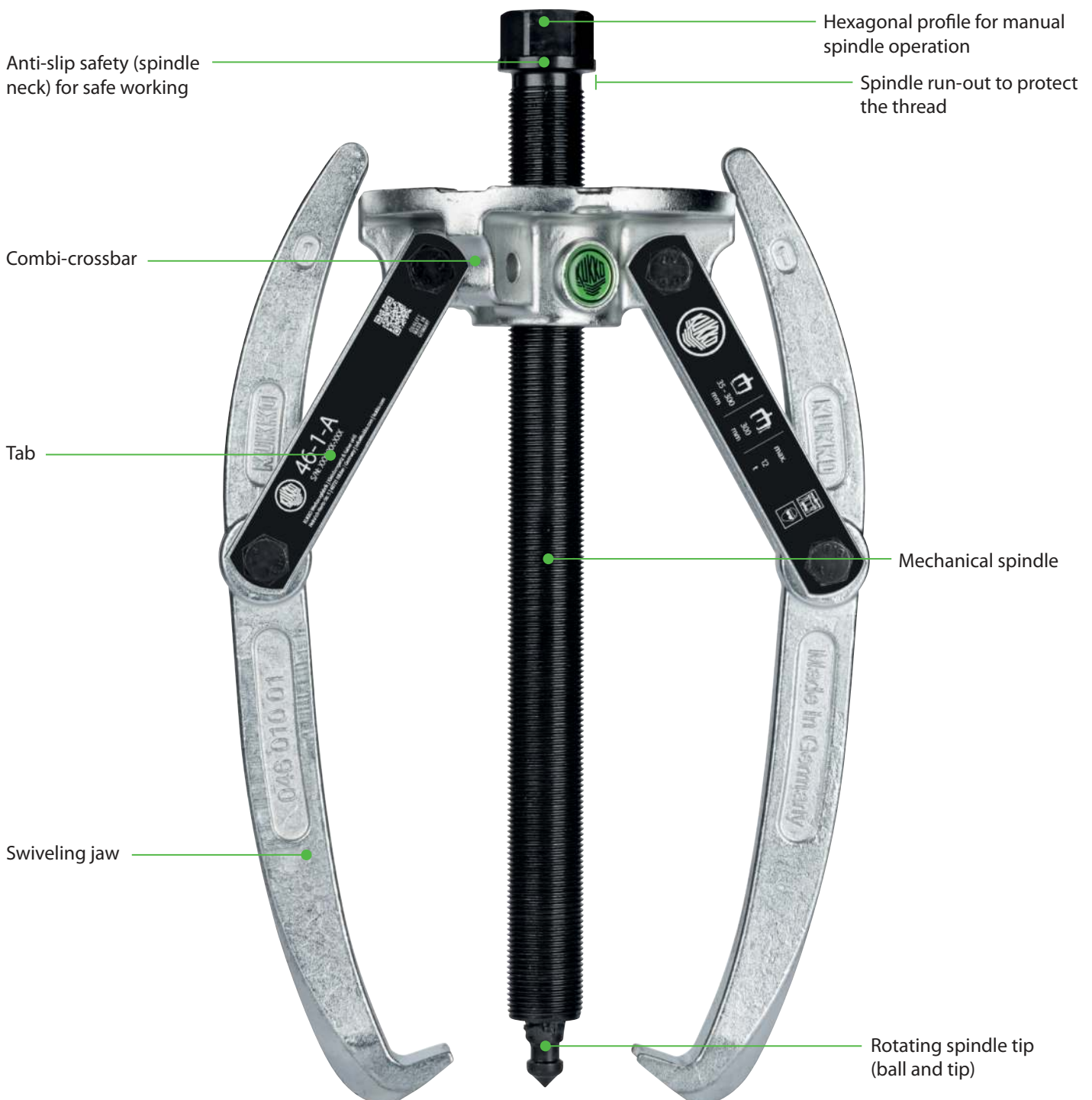
## APPLICATION

There are pulling processes where it is necessary to pull in confined spaces. To still be able to grip installed parts, the heavy-duty Pullers of Series 46 and 47 are equipped with swiveling jaws. These guarantee maximum freedom of movement for individual adjustment to the desired spread and reach.

### Benefits

- Swiveling jaws allow you to work in very tight spaces while simultaneously adapting individually to the spread and reach
- The combi-crossbar can be used as both a 2-jaw and a 3-jaw
- Anti-slip safety (spindle neck) on the spindle head for safe working with a wrench
- Spindle run-out to protect the thread
- 3-jaw design provides an even force distribution and enables higher extraction forces (Series 47)

## CONSTRUCTION





## FEATURES OF THE SERIES

### SERIES 46



Series 46 is suitable for pulling operations in confined environment conditions. The swiveling jaws guarantee precise adjustment of the required spread and reach.

### SERIES 47



Series 47 is also used under confined environment conditions. Thanks to the 3-jaw design, force distribution is even further improved.

### SERIES 46-B



Series 46-B is recommended for pulling operations in confined environment conditions, where a medium tension force of 15 t can be achieved with little effort.

### SERIES 47-B



Series 47-B is used in tight spaces and offers all the advantages of hydraulics and the 3-jaw design.

## COMBI-CROSSBAR – FROM 2 TO 3

### SERIES 46

Free hangers for  
more jaws

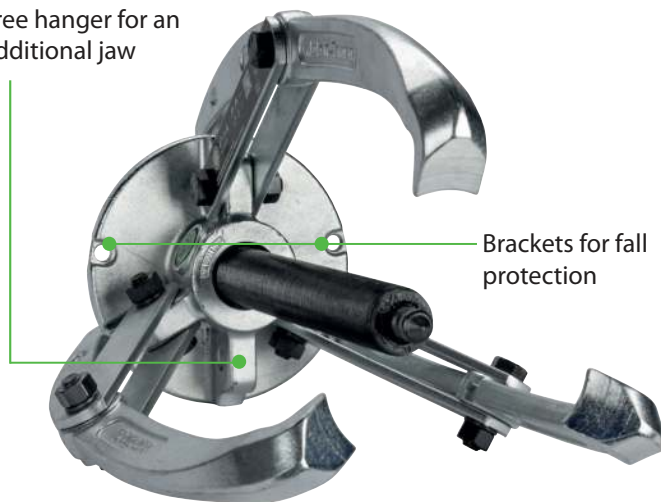
Bracket for fall  
protection



### SERIES 47

Free hanger for an  
additional jaw

Brackets for fall  
protection



The combi-crossbar offers the advantage that it can be used as both a 2-jaw and a 3-jaw. Depending on the installation situation, the puller can be converted in just a few simple steps. Another special feature of the combi-crossbar are the brackets for the fall protection (Series 660).

## APPLICATION EXAMPLE



Pulling a gearwheel with the 47-1-A

PRODUCT DETAILS

SERIES 46  
HEAVY, 2-JAW UNIVERSAL PULLER WITH  
SWIVELING PULLER JAWS AND  
COMBINATION CROSSBAR



The heavy, 2-jaw universal puller with swiveling puller jaws and a combination crossbar is used to pull large bearings, gears, and discs in all common sizes. This allows for the removal of any component that sits on a shaft and is freely accessible from the outside.

BENEFITS

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used in both 2-jaw and 3-jaw versions.
- Anti-slip safety (spindle neck) at spindle head for safe working with wrench.
- Spindle outlet to protect the thread



TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 46-1-A | -016936                                                                             | 0 - 300<br>1 3/8 - 11 7/8                                                           | 300<br>11 7/8                                                                       | 36<br>1 7/16                                                                        | 450<br>331.92                                                                       | 120                      | 12<br>13.23              | 1,125<br>2.481                                                                        | ✓                                                                                     |
| 46-2-A | -017193                                                                             | 0 - 500<br>1 3/8 - 19 3/4                                                           | 450<br>17 3/4                                                                       | 36<br>1 7/16                                                                        | 450<br>331.92                                                                       | 120                      | 12<br>13.23              | 12,235<br>26.978                                                                      | ✓                                                                                     |

SERIES 46-B  
HEAVY, 2-JAW UNIVERSAL PULLER WITH  
SWIVELING PULLER JAWS, COMBINATION  
CROSSBAR, AND HYDRAULIC SPINDLE



The heavy, 2-jaw universal puller with swiveling puller jaws, combination crossbar, and hydraulic spindle is used for pulling large, particularly tightly seated components. The hydraulic spindle achieves an average pulling force of up to 15 t. The swiveling puller jaws ensure maximum freedom of movement even in restricted environmental conditions. Thanks to the combination crossbar, the puller can be used as both a 2-jaw and 3-jaw tool.

BENEFITS

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used as both a 2-jaw and a 3-jaw.
- Hydraulic spindle ensures easy and controlled removal of particularly tight-fitting parts with minimal effort.
- In limited space conditions that require direct access to the component, the mechanical spindle can be used.
- The mechanical spindle has a rotatable spindle tip for secure placement on smooth surfaces and centering.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 46-1-B | -017018                                                                                     | 0 - 300<br>1 3/8 - 11 7/8                                                                      | 300<br>11 7/8                                                                                  | 450<br>331.92                                                                                   | 150                            | 15<br>16.53                          | 19,22<br>42.380                                                                                | ✓                                                                                     |
| 46-2-B | -017278                                                                                     | 0 - 500<br>1 3/8 - 19 3/4                                                                      | 450<br>17 3/4                                                                                  | 450<br>331.92                                                                                   | 150                            | 15<br>16.53                          | 16<br>35.280                                                                                   | ✓                                                                                     |



SERIES 47  
HEAVY 3-JAW UNIVERSAL PULLER WITH  
SWIVELING PULLER JAWS AND  
COMBINATION CROSSBAR



The heavy 3-jaw universal puller with swiveling jaws and combination crossbar is used for pulling large bearings, gears, and discs in all common sizes. This allows for the removal of any component that sits on a shaft and is freely accessible from the outside.

BENEFITS

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used as both a 2-jaw and a 3-jaw.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Anti-slip safety (spindle neck) for safe working with wrench
- Spindle outlet for protecting the thread



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 47-1-A | -017681                                                                                     | 0 - 300<br>1 3/8 - 11 7/8                                                                      | 300<br>11 7/8                                                                                  | 36<br>1 7/16                                                                                   | 450<br>331.92                                                                                   | 120                            | 12<br>13.23                             | 12,205<br>27.011                                                                               | ✓                                                                                     |
| 47-2-A | -017841                                                                                     | 0 - 500<br>1 3/8 - 19 3/4                                                                      | 450<br>17 3/4                                                                                  | 36<br>1 7/16                                                                                   | 450<br>331.92                                                                                   | 120                            | 12<br>13.23                             | 14,68<br>32.369                                                                                | ✓                                                                                     |

### SERIES 47-B HEAVY 3-JAW UNIVERSAL PULLER WITH SWIVELING JAWS, COMBINATION CROSSBAR, AND HYDRAULIC SPINDLE



The heavy, 3-jaw universal puller with swiveling jaws, combo crossbar, and hydraulic spindle is used for pulling large, particularly seized components. The hydraulic spindle achieves an average pulling force of up to 15 tons. The swiveling jaws also ensure maximum freedom of movement even in restricted environmental conditions. Thanks to the combo crossbar, the puller can be used as both a 2-jaw and a 3-jaw tool.

#### BENEFITS

- Swiveling jaws allow for operation in the tightest spaces while simultaneously providing individual adjustment to the spread and depth.
- The crossbar can be used as both a 2-jaw and a 3-jaw.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Fat hydraulic spindle guarantees easy and controlled removal of particularly stubborn parts with minimal effort.
- In confined spaces that require direct access to the component, the mechanical spindle can be used.



#### TECHNICAL ATTRIBUTES

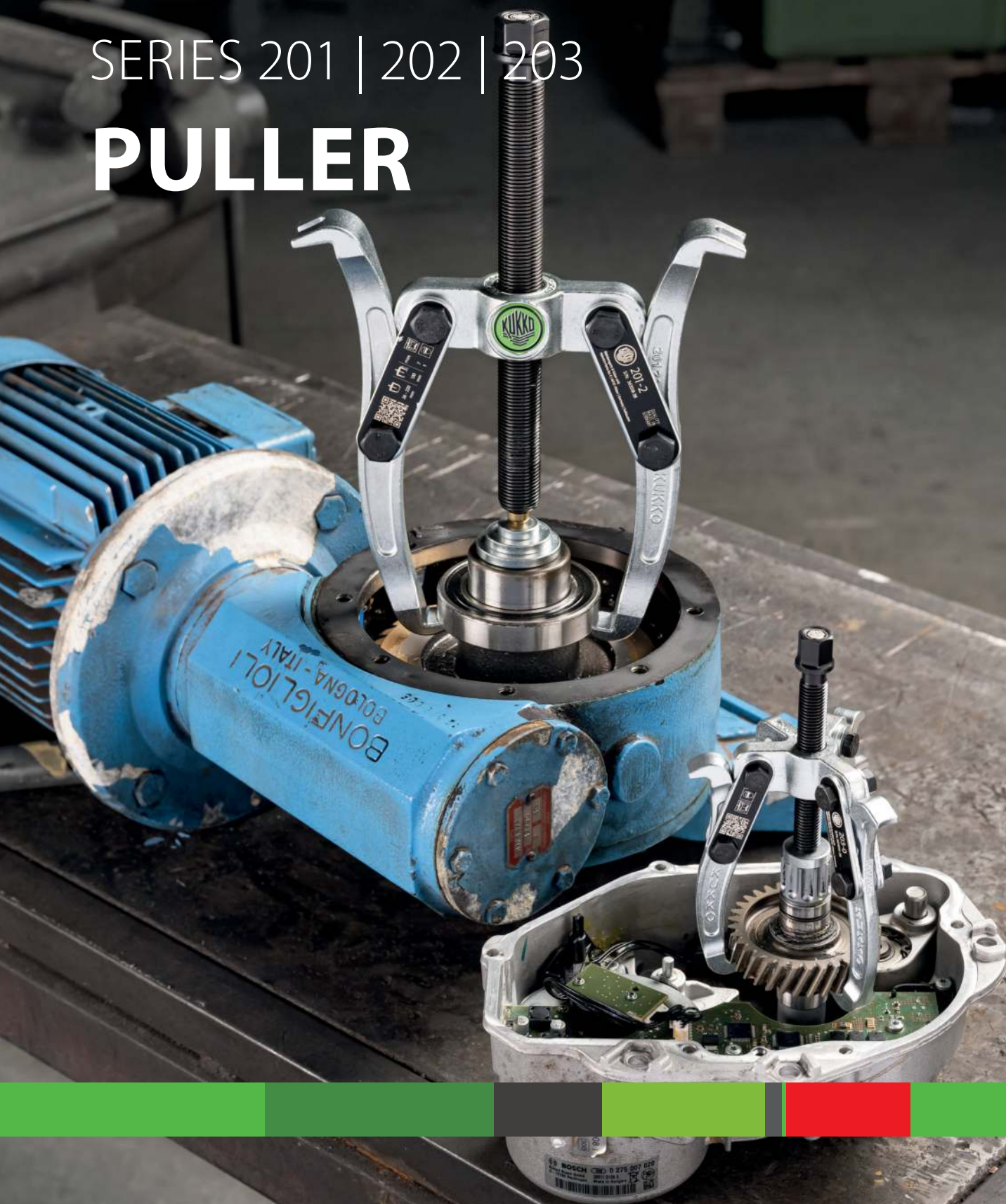
| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 47-1-B | -017766                                                                                     | 0 - 300<br>1 3/8 - 11<br>7/8                                                                   | 300<br>11 7/8                                                                                  | 45<br>33.19                                                                                     | 150                            | 15<br>16.53                          | 20,92<br>46.129                                                                                | ✓                                                                                     |
| 47-2-B | -017926                                                                                     | 0 - 500<br>1 3/8 - 19<br>3/4                                                                   | 450<br>17 3/4                                                                                  | 45<br>33.19                                                                                     | 150                            | 15<br>16.53                          | 20,14<br>44.409                                                                                | ✓                                                                                     |

KUKKO // Pull forward



SERIES 201 | 202 | 203

**PULLER**





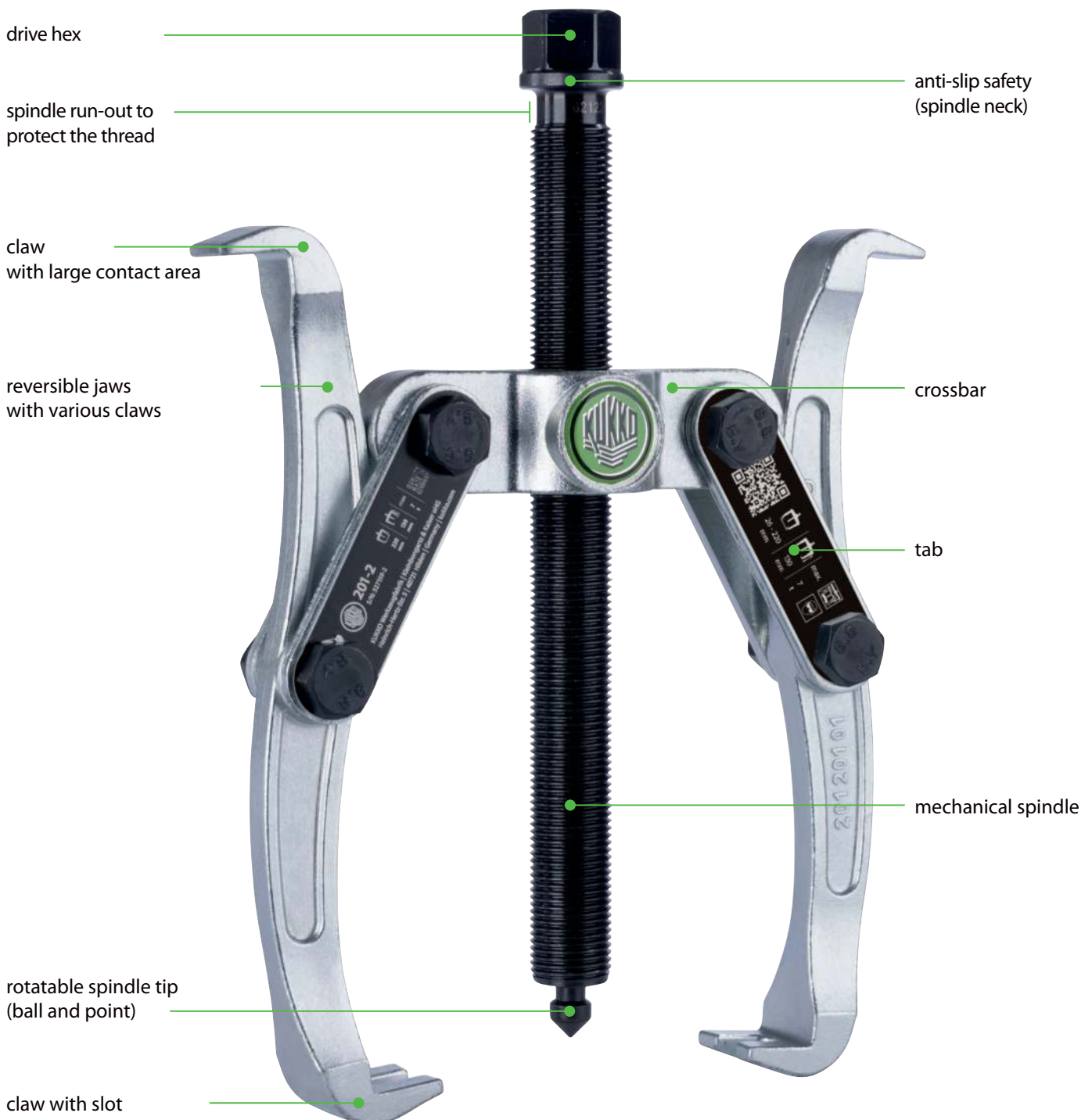
## APPLICATION

The 2-jaw and 3-jaw pullers are equipped with oscillating and reversible jaws that are used for centric pulling of bearings, gears and discs in all common sizes for craftsmen, workshops and industry. This allows any component mounted on a shaft and freely accessible from the outside to be removed. The oscillating jaws with adjustable reach guarantee maximum flexibility and can be used on both sides. The shape of the claw differs depending on the design.

### Benefits

- Adjustable and 180° rotatable jaws for individual adjustment of the reach
- Oscillating jaws offer a variety of adjustment options
- Jaws with different claw shapes for flexible operation
- Claw end with slot provides support for a screw for additional assistance during pulling
- 3-jaw design ensures even force distribution and allows for greater pulling forces (series 202 and 203)
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling (series 203)

## CONSTRUCTION OF A PULLER USING THE 201-2 AS AN EXAMPLE





## SPECIAL FEATURES OF THE SERIES

### SERIES 201

**2-jaw puller  
with oscillating and  
reversible jaws**



**201-1**

The series 201 is suitable for pulling operations in confined spaces. The oscillating and reversible jaws guarantee various setting options for the jaws.

### SERIES 202

**3-jaw puller  
with oscillating and  
reversible jaws**



**202-2**

The benefit of series 202 is the 3-jaw design, which enables particularly even force distribution. This allows for even higher pulling forces.

### SERIES 203

**3-jaw puller  
with oscillating and  
reversible jaws and crossbar**



**203-4**

The special feature of series 203 is the crossbar, which allows the puller to be used for both 2-jaw and 3-jaw pulling.

## CROSSBAR AND REVERSIBLE CLAWS



**Crossbar  
with 3 claws**



**Crossbar  
with 2 claws**

The pullers of series 203 have a crossbar, which is used for both 2-jaw and 3-jaw pulling operations.



The reversible jaws and different claw shapes guarantee maximum flexibility when pulling.

## APPLICATION EXAMPLES



The oscillating jaws of series 201, 202 and 203 can be perfectly applied to the part to be pulled.



The multiple holes in the jaws allow quick adjustment to the desired reach.



3-jaw puller with crossbar when removing a gear from an electric motor.



Thanks to the crossbar, the 203-0 can also be used for 2-jaw pulling after a quick conversion.



## SERIES 201 2-JAW TAB PULLER WITH OSCILLATING, REVERSIBLE PULLER JAWS



The 2-jaw puller with oscillating and reversible jaws is used for centric pulling of bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside. The oscillating jaws with adjustable reach are applicable on both sides. Depending on the design, the claw shape varies.

### BENEFITS

- Adjustable and 180° rotatable puller jaws for individual adjustment of the reach.
- Oscillating puller jaws offer versatile adjustment options
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off
- Safe mounting of the spindle via a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)



### TECHNICAL ATTRIBUTES

| #     | GTIN    |  mm/inch |  mm/inch |  mm/inch |  Nm/ft lb | Claw end with slit | Max. tensile force<br>kN | Max. tension force<br>t/US t. sh. |  kg/lb |  |
|-------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------|--------------------------|-----------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 201-0 | -026423 | 0 - 100<br>5/8 - 3 7/8                                                                      | 75<br>3                                                                                     | 13<br>1/2                                                                                   | 25<br>18.44                                                                                  | No                 | 15                       | 1.5<br>1.65                       | 0,43<br>0.948                                                                               | ✓                                                                                     |
| 201-1 | -026591 | 0 - 150<br>3/4 - 5 7/8                                                                      | 85<br>3 3/8                                                                                 | 17<br>11/16                                                                                 | 75<br>55.32                                                                                  | No                 | 50                       | 5<br>5.51                         | 0,86<br>1.896                                                                               | ✓                                                                                     |
| 201-2 | -026676 | 0 - 220<br>1 1/32 - 8 5/8                                                                   | 130<br>5 1/8                                                                                | 22<br>7/8                                                                                   | 150<br>110.64                                                                                | Yes                | 70                       | 7<br>7.72                         | 2,44<br>5.380                                                                               | ✓                                                                                     |
| 201-3 | -026751 | 0 - 300<br>1 1/2 - 11 7/8                                                                   | 260<br>10 1/4                                                                               | 27<br>1 1/16                                                                                | 250<br>184.40                                                                                | Yes                | 100                      | 10<br>11.02                       | 5,28<br>11.642                                                                              | ✓                                                                                     |
| 201-4 | -026836 | 0 - 380<br>1 1/2 - 15                                                                       | 300<br>11 7/8                                                                               | 27<br>1 1/16                                                                                | 250<br>184.40                                                                                | No                 | 100                      | 10<br>11.02                       | 5,62<br>12.392                                                                              | ✓                                                                                     |

## SERIES 202 3-JAW PULLER WITH OSCILLATING, REVERSIBLE JAWS



The 3-jaw puller with oscillating and reversible jaws is used for centralized extraction of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows the loosening of any component that sits on a shaft and is freely accessible from the outside. The oscillating jaws with adjustable reach can be applied on both sides. Depending on the design, the claw shape varies. The 3-jawed design ensures even load distribution and a particularly safe grip on the part being extracted.

### BENEFITS

- Adjustable and 180° rotatable puller jaws for individual adjustment of the reach.
- Oscillating puller jaws offer a variety of adjustment options
- Pulling jaws with different claw shapes for flexible working.
- Claw end with slot provides support for screw for additional support when pulling off
- 3-jaw design ensures an even distribution of force and allows for greater pulling forces.



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Claw<br>end<br>with<br>slit | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            |                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 202-0 | -027093                                                                             | 0 - 100<br>5/8 - 3<br>7/8                                                           | 75<br>3                                                                             | 13<br>1/2                                                                           | 25<br>18.44                                                                         | No                          | 15                       | 1.5<br>1.65              | 0,59<br>1.301                                                                         | ✓                                                                                     |
| 202-1 | -027178                                                                             | 0 - 150<br>3/4 - 5<br>7/8                                                           | 85<br>3 3/8                                                                         | 17<br>11/16                                                                         | 75<br>55.32                                                                         | No                          | 50                       | 5<br>5.51                | 1,17<br>2.580                                                                         | ✓                                                                                     |
| 202-2 | -027253                                                                             | 0 - 220<br>1 1/32 - 8<br>5/8                                                        | 130<br>5 1/8                                                                        | 22<br>7/8                                                                           | 150<br>110.64                                                                       | Yes                         | 70                       | 7<br>7.72                | 2,98<br>6.571                                                                         | ✓                                                                                     |
| 202-3 | -027338                                                                             | 0 - 300<br>1 3/16 -<br>11 7/8                                                       | 260<br>10 1/4                                                                       | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | Yes                         | 100                      | 10<br>11.02              | 6,775<br>14.939                                                                       | ✓                                                                                     |



PRODUCT DETAILS

|  | #     |  |  |  |  |  | Claw<br>end<br>with<br>slit | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                | GTIN  | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          |                                                                                   |                             | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
|                                                                                | 202-4 | -027413                                                                           | 0 - 380<br>1 3/16 -<br>15                                                         | 300<br>11 7/8                                                                     | 27<br>1 1/16                                                                      | 250<br>184.40                                                                     | No                          | 100                      | 10<br>11.02              | 7,135<br>15.733                                                                     | ✓                                                                                   |

## SERIES 203

### 3-JAW PULLER WITH OSCILLATING, REVERSIBLE PULLER JAWS AND COMBINATION CROSSBAR



The 2-jaw and 3-jaw puller with combination crossbar features oscillating and reversible jaws and is used for concentric extraction of bearings, gears, and discs. This allows for loosening any component that sits on a shaft and is freely accessible from the outside.

#### BENEFITS

- Thanks to the combination crossbar, the puller can be used for 2-jaw and 3-jaw pulling.
- Adjustable and 180° rotatable puller jaws for individual adaptation of the reach.
- Oscillating jaws offer a variety of adjustment options.
- Pulling arms with different jaw shapes for flexible working.
- Claw end with slot provides support for screw for additional support when pulling off



#### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Claw end with slit | Max. tensile force | Max. tension force |  | Included in the set |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/ inch                                                                            | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            |                    | kN                 | t/US t. sh.        | kg/lb                                                                                 |                     |                                                                                       |
| 203-0 | -027666                                                                             | 0 - 120<br>5/8 - 4<br>3/4                                                           | 75<br>3                                                                             | 13<br>1/2                                                                           | 25<br>18.44                                                                         | No                 | 15                 | 1.5<br>1.65        | 0,66<br>1.455                                                                         | -                   | ✓                                                                                     |
| 203-1 | -027741                                                                             | 0 - 180<br>3/4 - 7<br>1/8                                                           | 85<br>3 3/8                                                                         | 17<br>11/16                                                                         | 75<br>55.32                                                                         | No                 | 50                 | 5<br>5.51          | 1,26<br>2.778                                                                         | 224-678             | ✓                                                                                     |
| 203-2 | -027826                                                                             | 0 - 280<br>1 1/32 -<br>11 1/32                                                      | 130<br>5 1/8                                                                        | 22<br>7/8                                                                           | 150<br>110.64                                                                       | Yes                | 70                 | 7<br>7.72          | 3,1<br>6.836                                                                          | 224-677,<br>224-678 | ✓                                                                                     |
| 203-3 | -027901                                                                             | 0 - 350<br>1 1/2 -<br>13 3/4                                                        | 260<br>10 1/4                                                                       | 27<br>1 1/16                                                                        | 250<br>184.40                                                                       | Yes                | 100                | 10<br>11.02        | 6,86<br>15.126                                                                        | -                   | ✓                                                                                     |

## PRODUCT DETAILS



#



GTIN

mm/  
inch

mm/inch



mm/inch



Nm/ft lb

Claw  
end  
with  
slitMax.  
tensile  
forceMax.  
tension  
force

kg/lb

Included in  
the set

| #     | GTIN    | mm/<br>inch                  | mm/inch       | mm/inch      | Nm/ft lb      | Claw<br>end<br>with<br>slit | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | kg/lb           | Included in<br>the set |   |
|-------|---------|------------------------------|---------------|--------------|---------------|-----------------------------|--------------------------------|-----------------------------------------|-----------------|------------------------|---|
| 203-4 | -028083 | 0 - 400<br>1 1/2 -<br>15 3/4 | 300<br>11 7/8 | 27<br>1 1/16 | 250<br>184.40 | No                          | 100                            | 10<br>11.02                             | 7,225<br>15.931 | -                      | ✓ |

### SERIES 201-F NON-SPARKING PULLER



The 2-jaw, Non-Sparking puller with oscillating and reversible jaws of the 201-F series are used for centric pulling of components. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum bronze, Non-Sparking pullers are particularly suitable for use in explosion-hazardous areas. The oscillating jaws with adjustable reach can be used on both sides and therefore offer maximum flexibility during pulling.

The Non-Sparking puller from KUKKO 201-1-F, 201-2-F, 202-1-F and 202-2-F have been tested and certified by the accredited ATEX certification body J.S. Hamilton Poland. The EU-wide recognized certification confirms their suitability for explosion-hazardous areas, for example in mining with methane or coal dust risk. The tested materials prevent spark formation and ensure maximum safety as well as reliability in use according to the highest international standards.

#### BENEFITS

- Safe application in explosive areas (ATEX zones)
- Adjustable and 180° rotatable jaws for individual adjustment of the reach
- Oscillating puller jaws offer a variety of adjustment options.
- Spindle outlet for thread protection

## TECHNICAL ATTRIBUTES

#



GTIN

mm/  
inch

mm/inch



mm/inch



Nm/ft lb

Claw  
end  
with  
slitMax.  
tensile  
forceMax.  
tension  
force

kg/lb



| #       | GTIN    |     | mm/<br>inch               | mm/inch      | mm/inch     | Nm/ft lb      | Claw<br>end<br>with<br>slit | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | kg/lb           |   |
|---------|---------|-----|---------------------------|--------------|-------------|---------------|-----------------------------|--------------------------------|-----------------------------------------|-----------------|---|
| 201-1-F | -010873 | Yes | 0 - 150<br>0 - 5 7/8      | 85<br>3 3/8  | 17<br>11/16 | 75<br>55.32   | No                          | 50                             | 1.5<br>1.65                             | 6,775<br>14.939 | ✓ |
| 201-2-F | -010897 | Yes | 0 - 220<br>0 - 8<br>11/16 | 130<br>5 1/8 | 22<br>7/8   | 150<br>110.64 | Yes                         | 70                             | 7<br>7.72                               | 2,45<br>5.402   | ✓ |

## SERIES 202-F NON-SPARKING PULLER



The 3-jaw, non-sparking puller with oscillating and reversible jaws of the 201-F series are used for centric pulling of components. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum bronze, non-sparking puller are particularly suitable for Application in potentially explosive areas. The oscillating jaws with adjustable reach can be used on both sides and therefore offer maximum flexibility when pulling.

The non-sparking puller from KUKKO 201-1-F, 201-2-F, 202-1-F and 202-2-F have been tested and certified by the accredited ATEX certification body J.S. Hamilton Poland. The EU-wide recognized certification confirms their suitability for potentially explosive areas, for example in mining with methane or coal dust risk. The tested materials prevent sparking and ensure maximum safety and reliability in Application to the highest international standards.

### BENEFITS

- Safe application in explosive areas (ATEX zones)
- Adjustable and 180° rotatable jaws for individual adjustment of the reach
- Oscillating puller jaws offer a variety of adjustment options.
- Anti-slip safety (spindle neck) for safe working with wrench
- Spindle outlet for thread protection

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Claw end with slit | Max. tensile force | Max. tension force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                |                                                                                     | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            |                    | kN                 | t/US t. sh.        | kg/lb                                                                                 |                                                                                       |
| 202-1-F | -010880                                                                             | Yes                                                                                 | 0 - 150<br>0 - 5 7/8                                                                | 85<br>3 3/8                                                                         | 17<br>11/16                                                                         | 75<br>55.32                                                                         | No                 | 50                 | 3<br>3.31          | 6,775<br>14.939                                                                       | ✓                                                                                     |
| 202-2-F | -024603                                                                             | Yes                                                                                 | 0 - 220<br>0 - 8<br>11/16                                                           | 130<br>5 1/8                                                                        | 22<br>7/8                                                                           | 150<br>110.64                                                                       | Yes                | 70                 | 7<br>7.72          | 2,99<br>6.593                                                                         | ✓                                                                                     |



**KUKKO // Pull forward**



SERIES 205 | 206 | 207 | Y205 | Y206 | Y208  
| GOLIATH

# HEAVY-DUTY PULLERS



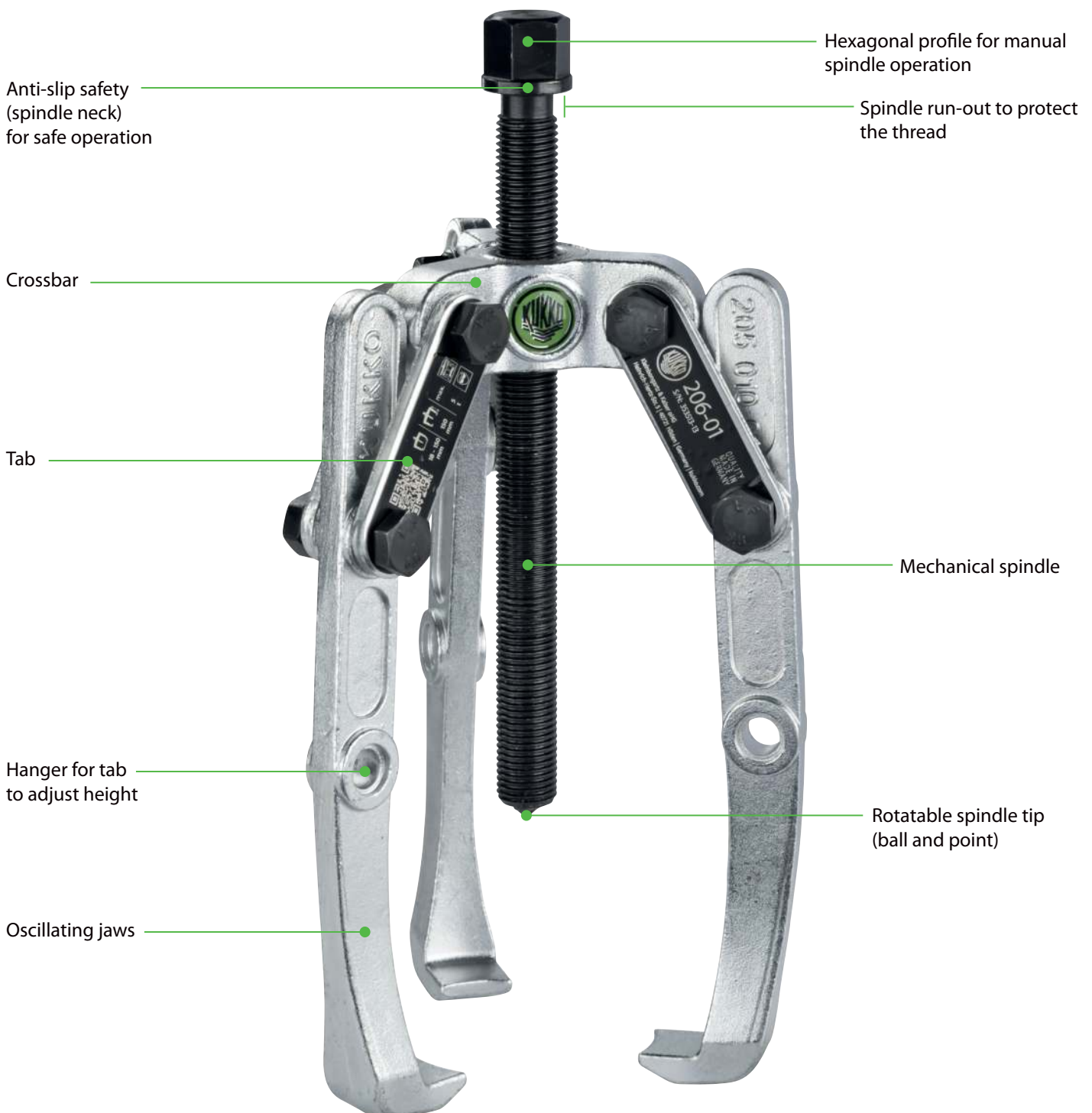
## APPLICATION

The heavy-duty pullers are equipped with oscillating jaws. The advantage of these swinging jaws is that they can be adapted to a wide variety of installation situations—even in confined spaces. This guarantees maximum freedom of movement for individual adjustment to the desired spread. In addition, the reach can be individually adjusted via hangers on the jaws.

### Benefits

- Adjustable jaws for individual adjustment of reach
- Oscillating jaws offer a variety of adjustment options
- Jaws with different claw shapes for flexible operation
- Claw end with slot provides support for screw for additional assistance when pulling
- Thanks to the combination crossbar, the puller can be used for 2-jaw and 3-jaw pulling (series 207)
- 3-jaw design ensures even force distribution and enables higher pulling forces (series 206 and 207)

## CONSTRUCTION OF A PULLER



# FEATURES OF THE SERIES

## SERIES 205

### 2-jaw pullers



205-00

Series 205 is suitable for pulling operations in restricted environments. The oscillating and height-adjustable jaws guarantee precise setting of the required spread and reach.

## SERIES 206

### 3-jaw pullers



206-01

The benefit of series 206 is the 3-jaw design, which allows for particularly even force distribution. This enables even higher pulling forces.

## SERIES 207

### 3-jaw pullers with combination crossbar



207-1

The distinguishing feature of series 207 is the combination crossbar, which allows the puller to be used for both 2-jaw and 3-jaw pulling.

## SERIES 205-B

### 2-jaw hydraulic pullers



205-1-B

## SERIES 206-B

### 3-jaw hydraulic pullers



206-02-B

## SERIES 207-B

### 3-jaw hydraulic pullers with combination crossbar



207-1-B

The pullers are also available with a hydraulic spindle, achieving a tension force of up to 15 t. The hydraulic spindle guarantees easy and controlled removal of especially tight-fitting components with minimal effort.



## APPLICATION EXAMPLES



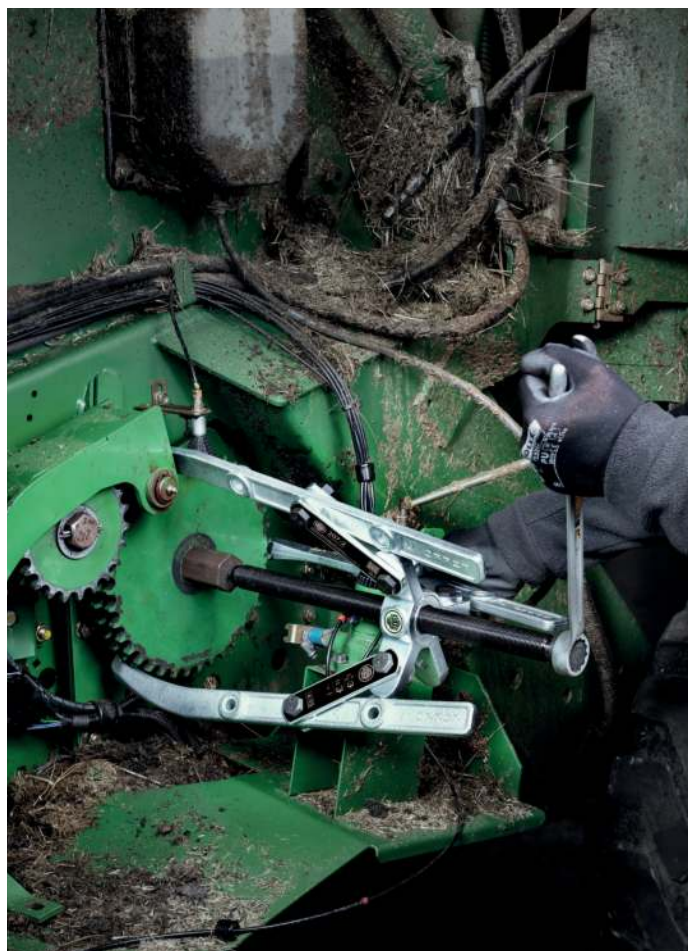
Removing a transmission gear using the 205-01



Removing a ball bearing from a gear shaft using the hydraulic puller 206-1-B



Pulling a ball bearing using the heavy-duty puller 207-02



Pulling a gear using the heavy-duty puller 207-2



# PULLERS WITH PUMP HYDRAULICS

Whenever manual force reaches its limits, hydraulics provide maximum force transmission. Hydraulic pullers are capable of solving even the most extreme pulling problems. For this purpose, the puller is combined with a hollow piston cylinder or a hydraulic pressure cylinder.

## FEATURES OF THE SERIES

### SERIES Y-205

#### Hydraulic 2-jaw puller



Y28-205

The hydraulic 2-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling especially large and tight-fitting bearings, gears, and discs of all common sizes. The hydraulic hollow piston cylinder delivers high tension force. The oscillating jaws adapt to any installation situation and are universally applicable thanks to the adjustable reach.

### SERIES Y-206

#### Hydraulic 2- and 3-jaw puller



Y28-206

The hydraulic 2- and 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling especially large and tight-fitting bearings, gears, and discs of all common sizes. The hydraulic hollow piston cylinder delivers high tension force. The oscillating jaws adapt to any installation situation and are universally applicable thanks to the adjustable reach. The 3-jaw design ensures even load distribution and therefore a particularly secure grip.

### SERIES Y-208

#### Hydraulic 3-jaw combination puller



Y18-208

The hydraulic 3-jaw puller with adjustable reach, hydraulic pressure cylinder for pump drive, and combination crossbar is used for pulling especially large and tight-fitting bearings, gears, and discs of all common sizes. The hydraulic pressure cylinder delivers high tension force. The oscillating jaws adapt to any installation situation and are universally applicable thanks to the adjustable reach. Thanks to the combination crossbar, the puller can be used as either a 2-jaw or 3-jaw device.

## APPLICATION IMAGE



The hydraulic puller Y28-205 was mounted on the pulley and is ready for use

# MOBILE HYDRAULIC PULLER “GOLIATH”

The mobile hydraulic puller “GOLIATH” is used for pulling large bearings, gears, and similar components in the heavy industry, railways, power plants, and other applications. With a pulling force of up to 50 t, the hydraulic puller is the ideal solution for truly large pulling jobs. The puller can be used as either a 2-jaw or 3-jaw device.

## Benefits

- Hydraulics guarantee easy and controlled removal of particularly large and tight-fitting parts with minimal effort
- Y-shaped, mobile carrier frame with 4 smooth rolling rollers (including locking capability) enables easy and comfortable positioning of the puller and guarantees a secure stand
- Hydraulic puller can be used as either 2-jaw or 3-jaw device
- Hydraulic height adjustment guarantees comfortable operation
- Magnetic closure guarantees quick spindle tip exchange (series 140)

## CONSTRUCTION



## APPLICATION EXAMPLES



The mobile hydraulic puller “GOLIATH” Goliath-556 removing a tight-fitting wheel bearing from a harbor crane

## SERIES 205 HEAVY 2-JAW PULLER WITH OSCILLATING AND HEIGHT-ADJUSTABLE PULLER JAWS



The heavy, 2-jaw puller with oscillating and height-adjustable jaws is used for the central extraction of large bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for loosening any component that is mounted on a shaft and accessible from the outside. The oscillating jaws adapt to any installation situation and can be universally used due to the adjustable reach. Depending on the version, the claw shape varies.

### BENEFITS

- Adjustable puller jaws for individual adaptation of the reach.
- Oscillating puller jaws offer a variety of adjustment options
- Claw end with slot provides support for screw for additional support when pulling off
- Safe installation of the spindle using a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)

### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 205-00 | -028571                                                                                     | 0 - 100<br>5/8 - 3 7/8                                                                         | 100<br>3 7/8                                                                                   | 13<br>1/2                                                                                      | 50<br>36.88                                                                                     | 35                             | 3.5<br>3.86                             | 0,485<br>1.069                                                                                 | ✓                                                                                     |
| 205-01 | -028656                                                                                     | 0 - 150<br>3/4 - 5 7/8                                                                         | 150<br>5 7/8                                                                                   | 17<br>11/16                                                                                    | 120<br>88.51                                                                                    | 50                             | 5<br>5.51                               | 1,035<br>2.977                                                                                 | ✓                                                                                     |
| 205-02 | -028731                                                                                     | 0 - 250<br>1 1/32 - 9<br>7/8                                                                   | 220<br>8 5/8                                                                                   | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                             | 7<br>7.72                               | 2,545<br>5.612                                                                                 | ✓                                                                                     |
| 205-1  | -028816                                                                                     | 0 - 300<br>1 1/2 - 11<br>7/8                                                                   | 280<br>11 1/32                                                                                 | 27<br>1 1/16                                                                                   | 280<br>206.53                                                                                   | 100                            | 10<br>11.02                             | 5,5<br>12.128                                                                                  | ✓                                                                                     |
| 205-2  | -028991                                                                                     | 0 - 400<br>1 1/2 - 15<br>3/4                                                                   | 400<br>15 3/4                                                                                  | 27<br>1 1/16                                                                                   | 300<br>221.28                                                                                   | 100                            | 10<br>11.02                             | 6,71<br>14.796                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

| #          |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|            | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
| 205-3      | -029073                                                                           | 0 - 500<br>1 1/2 - 19<br>3/4                                                      | 540<br>21                                                                         | 27<br>1 1/16                                                                      | 320<br>236.03                                                                     | 120                      | 12<br>13.23              | 8,545<br>18.842                                                                     | ✓                                                                                   |
| 205-4 New  | -171949                                                                           | 0 - 500<br>0 - 16 9/16                                                            | 450<br>17 11/16                                                                   | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 15,5<br>34.178                                                                      | ✓                                                                                   |
| 205-40 New | -034602                                                                           | 0 - 500<br>0 - 19<br>11/16                                                        | 760<br>29 15/16                                                                   | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 20,5<br>66.150                                                                      | ✓                                                                                   |
| 205-5 New  | -034619                                                                           | 0 - 700<br>0 - 19<br>11/16                                                        | 700<br>27 9/16                                                                    | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 30<br>66.150                                                                        | ✓                                                                                   |





## PRODUCT DETAILS

### SERIES 205-B HEAVY, 2-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE PULLER ARMS AND HYDRAULIC SPINDLE



The heavy 2-jaw puller with oscillating, height-adjustable puller jaws and hydraulic spindle is used for concentric pulling of large, particularly stuck bearings, gears, and discs. The hydraulic spindle achieves an average pulling force of up to 12 t. The oscillating puller jaws adapt to any installation situation and can be used universally due to the adjustable reach.

#### BENEFITS

- Adjustable puller jaws for individual reach adjustment
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off
- The hydraulic spindle guarantees easy and controlled removal of particularly tight-fitting parts with minimal effort.

#### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 205-02-B | -886072                                                                                     | 0 - 250<br>1 1/32 - 9<br>7/8                                                                   | 220<br>8 5/8                                                                                   | 15<br>11.06                                                                                     | 100                            | 10<br>11.02                          | 4,295<br>9.470                                                                                 | ✓                                                                                     |
| 205-1-B  | -886089                                                                                     | 0 - 300<br>1 1/2 - 11<br>7/8                                                                   | 280<br>11 1/32                                                                                 | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 7,595<br>16.747                                                                                | ✓                                                                                     |
| 205-2-B  | -886096                                                                                     | 0 - 400<br>1 1/2 - 15<br>3/4                                                                   | 400<br>15 3/4                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 8,978<br>19.796                                                                                | ✓                                                                                     |
| 205-3-B  | -886102                                                                                     | 0 - 500<br>1 1/2 - 19<br>3/4                                                                   | 540<br>21 1/4                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 1,46<br>3.219                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 206 HEAVY, 3-JAW PULLER WITH OSCILLATING AND HEIGHT-ADJUSTABLE JAWS



The heavy, 3-jaw puller with oscillating and height-adjustable puller jaws is used for centric pulling of large bearings, gears, and discs in all common sizes. It can be used to detach components that sit on shafts and are freely accessible from the outside.

#### BENEFITS

- Adjustable puller jaws for individual adjustment of reach depth
- Puller jaws with different claw shapes for flexible working
- Claw end with slot provides support for screw for additional support when pulling off
- Safe installation of the spindle using a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)



#### TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 206-00 | -029158                                                                             | 0 - 100<br>5/8 - 3 7/8                                                              | 100<br>3 7/8                                                                        | 13<br>1/2                                                                           | 50<br>36.88                                                                         | 35                       | 3.5<br>3.86              | 0,605<br>1.433                                                                        | ✓                                                                                     |
| 206-01 | -029233                                                                             | 0 - 150<br>3/4 - 5 7/8                                                              | 150<br>5 7/8                                                                        | 17<br>11/16                                                                         | 120<br>88.51                                                                        | 50                       | 5<br>5.51                | 1,42<br>3.131                                                                         | ✓                                                                                     |
| 206-02 | -029318                                                                             | 0 - 250<br>1 1/32 - 9<br>7/8                                                        | 220<br>8 5/8                                                                        | 22<br>7/8                                                                           | 150<br>110.64                                                                       | 70                       | 7<br>7.72                | 3,36<br>7.409                                                                         | ✓                                                                                     |
| 206-1  | -029493                                                                             | 0 - 300<br>1 1/2 - 11<br>7/8                                                        | 280<br>11 1/32                                                                      | 27<br>1 1/16                                                                        | 280<br>206.53                                                                       | 100                      | 10<br>11.02              | 7,025<br>15.986                                                                       | ✓                                                                                     |
| 206-2  | -029561                                                                             | 0 - 450<br>1 1/2 - 15<br>3/4                                                        | 400<br>15 3/4                                                                       | 27<br>1 1/16                                                                        | 300<br>221.28                                                                       | 100                      | 10<br>11.02              | 8,845<br>19.503                                                                       | ✓                                                                                     |

## PRODUCT DETAILS



| #                 |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                   | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
| <b>206-3</b>      | -029646                                                                           | 0 - 500<br>1 1/2 - 19<br>3/4                                                      | 540<br>21                                                                         | 27<br>1 1/16                                                                      | 320<br>236.03                                                                     | 120                      | 12<br>13.23              | 12,075<br>26.625                                                                    | ✓                                                                                   |
| <b>206-4 New</b>  | -034626                                                                           | 0 - 500<br>0 - 16 9/16                                                            | 450<br>17 11/16                                                                   | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 22,5<br>49.613                                                                      | ✓                                                                                   |
| <b>206-40 New</b> | -034633                                                                           | 0 - 500<br>0 - 19<br>11/16                                                        | 760<br>29 15/16                                                                   | 36<br>1 7/16                                                                      | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 30,3<br>66.150                                                                      | ✓                                                                                   |
| <b>206-5 New</b>  | -034640                                                                           | 0 - 900<br>0 - 19<br>11/16                                                        | 700<br>27 9/16                                                                    | 41<br>1 5/8                                                                       | 650<br>479.44                                                                     | 200                      | 20<br>22.05              | 45<br>99.225                                                                        | ✓                                                                                   |

## SERIES 206-B HEAVY 3-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE JAWS AND HYDRAULIC SPINDLE

The heavy, 3-jaw puller with oscillating, height-adjustable jaws and grease-hydraulic spindle is used for centric extraction of large, especially tight-fitting bearings, gears and discs. The grease-hydraulic spindle achieves an average tension force of up to 12 t. The oscillating jaws adapt to any installation situation and, thanks to the adjustability of the reach, are universally applicable.

### BENEFITS

- Adjustable puller jaws for individual reach adjustment
- Pulling jaws with different claw shapes for flexible working.
- Claw end with slot provides support for screw for additional support when pulling off
- Hydraulic spindle guarantees easy and controlled pulling of particularly tightly seated parts with minimal effort.



### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 206-02-B | -886119                                                                                     | 0 - 250<br>1 1/32 - 9<br>7/8                                                                   | 220<br>8 5/8                                                                                   | 15<br>11.06                                                                                     | 100                            | 10<br>11.02                          | 5,24<br>11.554                                                                                 | ✓                                                                                     |
| 206-1-B  | -412448                                                                                     | 0 - 300<br>1 1/2 - 11<br>7/8                                                                   | 280<br>11 1/32                                                                                 | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 9,285<br>20.473                                                                                | ✓                                                                                     |
| 206-2-B  | -886126                                                                                     | 0 - 450<br>1 1/2 - 15<br>3/4                                                                   | 400<br>15 3/4                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 9,42<br>20.771                                                                                 | ✓                                                                                     |
| 206-3-B  | -886133                                                                                     | 0 - 500<br>1 1/2 - 19<br>3/4                                                                   | 540<br>21 1/4                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 14,095<br>32.965                                                                               | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 207

### HEAVY, 3-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE PULLER ARMS AND COMBINED CROSSBAR



The heavy, 3-jaw puller with oscillating, height-adjustable puller jaws and combination crossbar is used for concentric extraction of large bearings, gears, and discs. This allows for the loosening of any component that sits on a shaft and is freely accessible from the outside.

#### BENEFITS

- Adjustable Puller Jaws for Individual Adjustment of Reach Depth
- Pulling jaws with different claw shapes for flexible working.
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.
- The claw end with slot provides support for screw for additional support during pulling out.

## TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 207-00 | -029721                                                                                     | 0 - 120<br>5/8 - 4 3/4                                                                         | 100<br>3 7/8                                                                                   | 13<br>1/2                                                                                      | 50<br>36.88                                                                                     | 35                             | 3.5<br>3.86                             | 0,73<br>1.610                                                                                  | ✓                                                                                     |
| 207-01 | -029806                                                                                     | 0 - 200<br>3/4 - 7 7/8                                                                         | 150<br>5 7/8                                                                                   | 17<br>11/16                                                                                    | 120<br>88.51                                                                                    | 50                             | 5<br>5.51                               | 1,495<br>3.296                                                                                 | ✓                                                                                     |
| 207-02 | -029981                                                                                     | 0 - 300<br>1 1/32 - 11 7/8                                                                     | 220<br>8 5/8                                                                                   | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                             | 7<br>7.72                               | 3,46<br>7.629                                                                                  | ✓                                                                                     |
| 207-1  | -030048                                                                                     | 0 - 400<br>1 1/2 - 15 3/4                                                                      | 280<br>11 1/32                                                                                 | 27<br>1 1/16                                                                                   | 280<br>206.53                                                                                   | 100                            | 10<br>11.02                             | 7,405<br>16.427                                                                                | ✓                                                                                     |
| 207-2  | -030123                                                                                     | 0 - 450<br>1 1/2 - 17 3/4                                                                      | 400<br>15 3/4                                                                                  | 27<br>1 1/16                                                                                   | 300<br>221.28                                                                                   | 100                            | 10<br>11.02                             | 9,04<br>20.727                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

| #     |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|       | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
| 207-3 | -030208                                                                           | 0 - 550<br>1 1/2 - 21<br>5/8                                                      | 540<br>21                                                                         | 27<br>1 1/16                                                                      | 320<br>236.03                                                                     | 120                      | 12<br>13.23              | 12,045<br>27.452                                                                    | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 207-B

### HEAVY, 3-JAW PULLER WITH OSCILLATING, HEIGHT-ADJUSTABLE PULLER ARMS, COMBINATION CROSSBAR, AND HYDRAULIC SPINDLE



The heavy, 3-jaw puller with oscillating, height-adjustable jaws, combination crossbar and grease-hydraulic spindle is used for centered pulling of large, particularly tight-fitting bearings and discs. The grease-hydraulic spindle achieves a maximum average tension force of 12 t. The oscillating jaws adapt to any installation situation and are universally applicable thanks to the adjustable reach. Thanks to the combination crossbar, the puller can be used as both a 2-jaw and a 3-jaw puller.

#### BENEFITS

- Adjustable puller jaws for individual reach adjustment
- Puller jaws with different claw shapes for flexible working
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.
- Claw end with slot provides support for screw for additional support when pulling off

## TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 207-02-B | -886140                                                                                     | 0 - 300<br>1 1/32 - 11 7/8                                                                     | 170<br>6 3/4                                                                                   | 15<br>11.06                                                                                     | 100                            | 10<br>11.02                          | 4,99<br>11.003                                                                                 | ✓                                                                                     |
| 207-1-B  | -886157                                                                                     | 0 - 400<br>1 1/2 - 15 3/4                                                                      | 230<br>9 1/16                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 9,45<br>20.837                                                                                 | ✓                                                                                     |
| 207-2-B  | -886164                                                                                     | 0 - 450<br>1 1/2 - 17 3/4                                                                      | 350<br>13 3/4                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 10,8<br>3.969                                                                                  | ✓                                                                                     |
| 207-3-B  | -886171                                                                                     | 0 - 550<br>1 1/2 - 21 5/8                                                                      | 490<br>19 3/8                                                                                  | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                          | 14,31<br>31.554                                                                                | ✓                                                                                     |

### SERIES Y-205 HYDRAULIC 2-JAW PULLER WITH ADJUSTABLE REACH AND HYDRAULIC HOLLOW PISTON CYLINDER

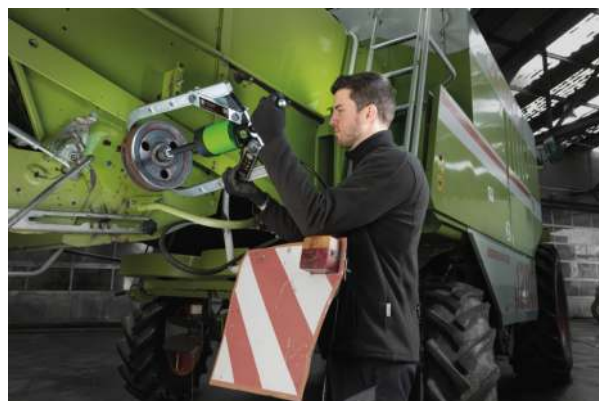


The hydraulic 2-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly large and seized bearings, gears, and discs in all common sizes for trade, workshop, and industry. The hydraulic hollow piston cylinder achieves a high pulling force of up to 50 t. This allows for the loosening of any component that is mounted on a shaft and is freely accessible from the outside. The oscillating jaws adapt to any installation situation and can be universally used due to the adjustable reach.



#### BENEFITS

- A hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>bar | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y28-205 | -036088                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 300<br>11 13/16                                                                                | 200                            | 20<br>22.05                          | 700                                                                                         | 21,5<br>47.408                                                                                 | ✓                                                                                     |
| Y28-215 | -833915                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 600<br>23 5/8                                                                                  | 200                            | 20<br>22.05                          | 700                                                                                         | 26<br>57.330                                                                                   | ✓                                                                                     |
| Y38-205 | -037078                                                                                     | 0 - 700<br>0 - 27 9/16                                                                         | 520<br>20 1/2                                                                                  | 300                            | 30<br>33.07                          | 700                                                                                         | 41<br>90.405                                                                                   | ✓                                                                                     |
| Y58-205 | -038068                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 700<br>27 9/16                                                                                 | 500                            | 50<br>55.12                          | 700                                                                                         | 9<br>19.845                                                                                    | ✓                                                                                     |
| Y58-215 | -854675                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 1.200<br>47 1/4                                                                                | 500                            | 50<br>55.12                          | 700                                                                                         | 0,3<br>0.662                                                                                   | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES Y0-205 2-JAW PULLER WITH SWIVELING EXTRACTOR JAWS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)



The 2-jaw pullers with swiveling jaws of the Y-205 series are used for pulling particularly large and stuck bearings, gears, discs, etc. in crafts, industry, and workshops. Due to their simple adjustability, the puller is also suitable for various pulling situations. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### BENEFITS

- Universally usable thanks to adjustable reach
- The greater the pulling force, the stronger the grip of the jaws on the workpiece being pulled.

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-205 | -035906                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 300<br>11 13/16                                                                                | 200                            | 20<br>22.05                             | 11,425<br>25.192                                                                             | YRH-202, Y205-20,<br>Y206-30, HKSH-<br>Y20-98-162-51                                  | ✓                                                                                     |
| Y20-215 | -833892                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 600<br>23 5/8                                                                                  | 200                            | 20<br>22.05                             | 0,3<br>0.662                                                                                 | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y30-205 | -036996                                                                                     | 0 - 700<br>0 - 27 9/16                                                                         | 520<br>20 1/2                                                                                  | 300                            | 30<br>33.07                             | 25<br>55.125                                                                                 | YRH-302, Y305-20,<br>Y306-30, HKSH-<br>Y30-117-178-65                                 | ✓                                                                                     |
| Y50-205 | -037986                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 700<br>27 9/16                                                                                 | 500                            | 50<br>55.12                             | 5<br>11.025                                                                                  | YRH-603, Y505-20,<br>Y506-30, HKSH-<br>Y60-158-247-76                                 | ✓                                                                                     |
| Y50-215 | -854651                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 1.200<br>47 1/4                                                                                | 500                            | 50<br>55.12                             | 0,3<br>0.662                                                                                 | YRH-603, HKSH-<br>Y60-158-247-76                                                      | ✓                                                                                     |

## SERIES Y-206 HYDRAULIC 2-JAW AND 3-JAW PULLER WITH ADJUSTABLE REACH AND HYDRAULIC HOLLOW PISTON CYLINDER



The hydraulic 2-jaw and 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling off particularly large and stuck components. The hydraulic hollow piston cylinder achieves a high pulling force of up to 50 t. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustable reach.

### BENEFITS

- Hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating jaws offer a variety of adjustment options.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- The mobile puller can be used as both a 2-jaw and a 3-jaw puller.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Y28-206 | -036248                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 300<br>11 13/16                                                                                | 700                                                                                        | 200                            | 20<br>22.05                             | 31,48<br>69.413                                                                                | Y28-256,<br>Y28-200    | ✓                                                                                     |
| Y38-206 | -037238                                                                                     | 0 - 900<br>0 - 35 7/16                                                                         | 520<br>20 1/2                                                                                  | 700                                                                                        | 300                            | 30<br>33.07                             | 54<br>119.070                                                                                  | Y38-356,<br>Y38-300    | ✓                                                                                     |
| Y58-206 | -038228                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 700<br>27 9/16                                                                                 | 700                                                                                        | 500                            | 50<br>55.12                             | 125<br>275.625                                                                                 | Y58-556,<br>Y58-500    | ✓                                                                                     |
| Y28-216 | -833922                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 600<br>23 5/8                                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 37<br>81.585                                                                                   | -                      | ✓                                                                                     |
| Y58-216 | -854682                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 1.200<br>47 1/4                                                                                | 700                                                                                        | 500                            | 50<br>55.12                             | 0,3<br>0.662                                                                                   | -                      | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y0-206 3-JAW PULLER WITH SWIVELING EXTRACTOR JAWS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)



The 3-jaw pullers with swiveling puller jaws of the Y-206 series are used for pulling particularly large and stuck bearings, gears, discs, etc., in crafts, industry, and workshops. Due to their easy adjustability, the puller is also suitable for various pulling situations. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### BENEFITS

- Universally applicable thanks to adjustable reach
- The larger the pulling force, the stronger the grip of the jaws on the workpiece being pulled.

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-206 | -036163                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 300<br>11 13/16                                                                                | 200                            | 20<br>22.05                             | 16,44<br>36.250                                                                              | YRH-202, Y205-20,<br>Y206-30, HKSH-<br>Y20-98-162-51                                  | ✓                                                                                     |
| Y30-206 | -037153                                                                                     | 0 - 900<br>0 - 35 7/16                                                                         | 520<br>20 1/2                                                                                  | 300                            | 30<br>33.07                             | 4<br>8.820                                                                                   | YRH-302, Y305-20,<br>Y306-30, HKSH-<br>Y30-117-178-65                                 | ✓                                                                                     |
| Y50-206 | -038143                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 700<br>27 9/16                                                                                 | 500                            | 50<br>55.12                             | 80,3<br>17.640                                                                               | YRH-603, Y505-20,<br>Y506-30, HKSH-<br>Y60-158-247-76                                 | ✓                                                                                     |
| Y20-216 | -833908                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 600<br>23 5/8                                                                                  | 200                            | 20<br>22.05                             | 0,3<br>0.662                                                                                 | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y50-216 | -854668                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 1.200<br>47 1/4                                                                                | 500                            | 50<br>55.12                             | 0,3<br>0.662                                                                                 | YRH-603, HKSH-<br>Y60-158-247-76                                                      | ✓                                                                                     |

SERIES Y-208  
MOBILE, 2-JAW AND 3-JAW PULLERS WITH  
PUMP HYDRAULIC AND ADJUSTABLE REACH



The hydraulic 2-jaw and 3-jaw puller with adjustable reach, hydraulic pressure cylinder for pump drive, and combination crossbar is used to pull particularly large and firmly seated bearings, gears, and discs. The hydraulic pressure cylinder achieves a maximum tension force of 10 t. The oscillating jaws adapt to every installation situation and can be used universally thanks to the adjustable reach.

BENEFITS

- Hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating jaws offer a variety of adjustment options.
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.
- 3-jaw ensures an even force distribution and allows for greater pulling forces



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y08-208 | -461774                                                                                     | 0 - 250<br>0 - 9 13/16                                                                         | 215<br>8 7/16                                                                                  | 625                                                                                        | 45                             | 4.5<br>4.96                          | 5,39<br>11.885                                                                                 | ✓                                                                                     |
| Y18-208 | -461699                                                                                     | 0 - 500<br>0 - 19 11/16                                                                        | 500<br>19 11/16                                                                                | 561                                                                                        | 100                            | 10<br>11.02                          | 17,41<br>38.389                                                                                | ✓                                                                                     |



PRODUCT DETAILS

SERIES Y0-208  
3-JAW PULLER WITH SWIVELING JAWS  
(WITHOUT HYDRAULIC PRESSURE CYLINDER  
FOR PUMP DRIVE)



The 3-jaw combination pullers with swiveling puller jaws from series Y-208 are used for pulling particularly large and tight-fitting bearings, gears, discs, etc. in craft, industry, and workshops. Combination pullers can be used both as 3-jaw and 2-jaw. A hydraulic pressure cylinder with collar thread from series YRE is also required for application.

BENEFITS

- Universally applicable thanks to adjustable reach and number of hooks
- The larger the pull force, the stronger the grip of the jaws on the workpiece being pulled.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y05-208 | -172366                                                                                     | 0 - 250<br>0 - 9 13/16                                                                         | 215<br>8 7/16                                                                                  | 45                             | 4.5<br>4.96                             | 3,29<br>7.254                                                                                | YRE-050, MZSS-<br>Y05-38-216-127                                                      | ✓                                                                                     |
| Y10-208 | -172441                                                                                     | 0 - 500<br>0 - 19 11/16                                                                        | 500<br>19 11/16                                                                                | 100                            | 10<br>11.02                             | 10,32<br>2.911                                                                               | YRE-101, MZSS-<br>Y10-57-350-255                                                      | ✓                                                                                     |

## SERIES YX8-X00 HYDRAULIC UNIVERSAL PULLER SET



The 18-piece hydraulic universal puller sets of series YXB-X00 are used for pulling, separating, and internal extraction of particularly large and tightly seated bearings, gears, discs, etc. in industry and commercial vehicles. The set requires no additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers, separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for every situation.

### BENEFITS

- By storing it in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle removal even during heavy work
- The combination of hydraulics and the respective devices enables the easy and controlled removal of particularly stubborn parts.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                                    |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                                                                                   |                                                                                     |
| Y28-200 | -870828                                                                           | 50 -<br>500<br>1<br>15/16 -<br>19<br>11/16                                        | 0 - 300<br>0 - 11<br>13/16                                                        | 30 - 180<br>1 3/16 -<br>7 1/16                                                    | 25 - 155<br>1 - 6 1/8                                                             | 135 -<br>300<br>5 5/16 -<br>11 13/16                                              | 1.000<br>39 3/8                                                                   | 700                                                                               | 200                      | 20<br>22.05              | 85<br>187.425                                                                       | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y20-206,<br>Y218-06-<br>P,<br>Y218-08-<br>P,<br>Y218-31-<br>P,<br>Y218-33,<br>Y205-20,<br>Y218-10,<br>Y218-11,<br>Y20-216 | ✓                                                                                   |
| Y38-300 | -870835                                                                           | 50 -<br>900<br>1<br>15/16 -<br>35<br>7/16                                         | 0 - 520<br>0 - 20<br>1/2                                                          | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 30 - 250<br>1 3/16 -<br>9 13/16                                                   | 180 -<br>420<br>7 1/16 -<br>16 9/16                                               | 1.200<br>47 1/4                                                                   | 700                                                                               | 300                      | 30<br>33.07              | 188<br>414.540                                                                      | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y30-206,<br>Y318-36-<br>P,<br>Y318-33,<br>Y318-38-<br>P,<br>Y318-41-<br>P,<br>Y305-20,<br>Y318-10,<br>Y318-11             | ✓                                                                                   |

PRODUCT DETAILS



| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                                                                 |                                                                                     |
| Y58-500 | -870842                                                                           | 460 -<br>1.200<br>18 1/8<br>- 47<br>1/4                                           | 0 - 700<br>0 - 27<br>9/16                                                         | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 75 - 330<br>2 15/16 -<br>12 1                                                     | 235 -<br>540<br>9 1/4 -<br>21 1/4                                                 | 1.500<br>59 1/16                                                                  | 498                                                                               | 500                      | 50<br>55.12              | 335<br>738.675                                                                      | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y50-206,<br>Y518-08-<br>P,<br>Y518-31-<br>P,<br>Y518-33,<br>Y505-20,<br>Y518-10,<br>Y518-11,<br>Y50-216 | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES YX8-X56 HYDRAULIC EXTERNAL PULLER SETS



The 9- and 15-piece hydraulic puller sets are used for extracting particularly large and stubborn bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for use. In addition to a hydraulic hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers to provide a solution for various situations during external extraction.

#### BENEFITS

- Application-oriented assembly for universal use
- Through the storage in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle extraction even for heavy-duty tasks
- The combination of hydraulics and the respective devices enables the easy and controlled removal of particularly stubborn parts.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                                     |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y28-256 | -036811                                                                                   | 50 - 500<br>1 15/16 -<br>19 11/16                                                            | 0 - 300<br>0 - 11 13/16                                                                      | 700                                                                                      | 200                            | 20<br>22.05                             | 68<br>149.940                                                                                | YHP-325,<br>YRH-202,<br>Y20-206,<br>Y205-20,<br>Y218-10,<br>Y218-11,<br>Y20-216 | ✓                                                                                   |
| Y38-356 | -037801                                                                                   | 50 - 900<br>1 15/16 -<br>35 7/16                                                             | 0 - 520<br>0 - 20 1/2                                                                        | 700                                                                                      | 300                            | 30<br>33.07                             | 93,42<br>205.991                                                                             | YHP-325,<br>YRH-302,<br>Y30-206,<br>Y305-20,<br>Y318-10,<br>Y318-11             | ✓                                                                                   |
| Y58-556 | -038631                                                                                   | 100 -<br>1.200<br>3 15/16 -<br>47 1/4                                                        | 0 - 700<br>0 - 27 9/16                                                                       | 498                                                                                      | 500                            | 50<br>55.12                             | 175<br>385.875                                                                               | YHP-325,<br>YRH-603,<br>Y50-206,<br>Y505-20,<br>Y518-10,<br>Y518-11,<br>Y50-216 | ✓                                                                                   |



### SERIES GOLIATH MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH



The mobile hydraulic puller "GOLIATH" is used for pulling off large bearings, gears, and similar components in the heavy industry, railway, power plants, and other applications. With a pulling force of up to 50 tons, the hydraulic puller is the ideal solution for truly large pulling processes. The application of the pulling force on the pressure cylinder equipped with a central pressure spindle is performed by a two-stage electric-hydraulic pump, which is operated via remote control. The puller can be used as both a 2-jaw and a 3-jaw puller.

#### BENEFITS

- Hydraulics ensure easy and controlled removal of particularly large and seized parts with minimal effort.
- Hydraulic height adjustment guarantees comfortable working
- The Y-shaped, mobile supporting frame with the 4 smooth rolling rollers (including locking capability) allows for easy and comfortable attachment of the puller and guarantees a secure stance.
- The hydraulic puller can be used as both a 2-jaw and a 3-jaw tool.



#### TECHNICAL ATTRIBUTES

| #                  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>bar | <br>V | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Goliath-256</b> | -102714                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 300<br>11 13/16                                                                                | 400 - 1000<br>15 3/4-39<br>3/8                                                                 | 700                                                                                        | 230 V                                                                                    | 200                            | 20<br>22.05                             | 225<br>496.125                                                                                 | ✓                                                                                     |
| <b>Goliath-356</b> | -102752                                                                                     | 0 - 900<br>0 - 35<br>7/16                                                                      | 520<br>20 1/2                                                                                  | 400 - 1000<br>15 3/4-39<br>3/8                                                                 | 700                                                                                        | 230 V                                                                                    | 300                            | 30<br>33.07                             | 330,3<br>566.685                                                                               | ✓                                                                                     |
| <b>Goliath-556</b> | -102783                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 700<br>27 9/16                                                                                 | 400 - 1000<br>15 3/4-39<br>3/8                                                                 | 700                                                                                        | 230 V                                                                                    | 500                            | 50<br>55.12                             | 328<br>723.240                                                                                 | ✓                                                                                     |

## SERIES YRH HOLLOW PISTON CYLINDER

The hydraulic hollow piston cylinders of the YRH series are used for application with the KUKKO hydraulic program in crafts, industry, and workshops. They can be used both as pressure and traction cylinders, enabling a force-saving and versatile operation even in challenging extraction situations or when a lot of force is needed.

### BENEFITS

- All models feature a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and mounting threads on the cylinder base allow for easy assembly.
- Tensioned retractable spring increases the insertion speed and thereby enhances the performance.
- The integrated scraper removes contaminants from the piston, thereby extending the life of the cylinder.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  | Max. tensile force | Max. tension force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     |                                                                                     |                                                                                     | mm/<br>inch                                                                         | bar                                                                                 | cm³                                                                                 | kN                 | t/US t.<br>sh.     | kg/lb                                                                               |                                                                                       |
| YRH-132 | -854460                                                                             | 73<br>2 7/8                                                                         | 133<br>5 1/4                                                                        | 60<br>2 3/8                                                                         | 2<br>3/4"-12<br>UN                                                                  | 3/4"-16<br>UN                                                                       | -                                                                                   | 8<br>5/16                                                                           | 700                                                                                 | 0.00001<br>m³                                                                       | 130                | 13<br>14.33        | 2,04<br>5.292                                                                       | ✓                                                                                     |
| YRH-202 | -046711                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 162<br>6 3/8                                                                        | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 50<br>1 15/16                                                                       | 700                                                                                 | 0.000173<br>m³                                                                      | 200                | 20<br>22.05        | 7,575<br>16.703                                                                     | -                                                                                     |
| YRH-206 | -870934                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 306<br>12 1/16                                                                      | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 150<br>5 7/8                                                                        | 700                                                                                 | 0.000527<br>m³                                                                      | 200                | 20<br>22.05        | 14,185<br>31.278                                                                    | ✓                                                                                     |
| YRH-302 | -046896                                                                             | 117<br>4 5/8                                                                        | 177<br>6<br>15/16                                                                   | 178,5<br>7 1/32                                                                     | 4<br>1/2"-12<br>UN                                                                  | 1<br>7/8"-16<br>UN                                                                  | 1<br>1/4"-7<br>UNC                                                                  | 65<br>2 1/2                                                                         | 700                                                                                 | 0.00031<br>m³                                                                       | 300                | 30<br>33.07        | 10,7<br>3.749                                                                       | -                                                                                     |
| YRH-603 | -046971                                                                             | 159<br>6 1/4                                                                        | 219<br>8 5/8                                                                        | 247,5<br>9 3/4                                                                      | 6<br>1/4"-12<br>UN                                                                  | 2<br>3/4"-16<br>UN                                                                  | 1<br>5/8"-5<br>1/2<br>UNS                                                           | 75<br>2 15/16                                                                       | 700                                                                                 | 0.00068<br>m³                                                                       | 600                | 60<br>66.14        | 30,3<br>6.615                                                                       | -                                                                                     |

## PRODUCT DETAILS

### SERIES YRE HYDRAULIC PRESSURE CYLINDERS WITH COLLAR THREAD



The hydraulic pressure cylinders with collar threads of the YRE series are used with the KUKKO hydraulic program for application in all situations in crafts, industry, and workshops. The model with a large stroke length allows for energy-saving and versatile work even in difficult pulling situations or when a lot of force is required.

#### BENEFITS

- All models have a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and fastening threads on the cylinder bottom enable easy assembly.
- The prestressed retractable spring increases the retraction speed and thus boosts performance.
- The integrated wiper removes contaminants from the piston and thereby extends the lifespan of the cylinder.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     | mm/inch                                                                             | bar                                                                                 | cm³                                                                                 | kN                                                                                   | t/US t.<br>sh.           | kg/lb                    |                                                                                       |                                                                                       |
| YRE-050 | -046551                                                                             | 38<br>1 1/2                                                                         | 98<br>3 7/8                                                                         | 216<br>8 1/2                                                                        | 25<br>1                                                                             | 1 1/2"-16<br>UN                                                                     | 125<br>4 15/16                                                                      | 700                                                                                 | 0.0001<br>m³                                                                        | 50                                                                                   | 5<br>5.51                | 2,2<br>4.851             | ✓                                                                                     |                                                                                       |
| YRE-101 | -870927                                                                             | 57<br>2 1/4                                                                         | 117<br>4 5/8                                                                        | 250<br>13 3/4                                                                       | 40<br>1 9/16                                                                        | 2.1/4"-14<br>UNS                                                                    | 250<br>9 13/16                                                                      | 700                                                                                 | 0.000406<br>m³                                                                      | 100                                                                                  | 10<br>11.02              | 6,4<br>14.112            | ✓                                                                                     |                                                                                       |
| YRE-106 | -879401                                                                             | 57<br>2 1/4                                                                         | 117<br>4 5/8                                                                        | 247<br>9 3/4                                                                        | 40<br>1 9/16                                                                        | 2.1/4"-14<br>UNS                                                                    | 155<br>6 1/8                                                                        | 700                                                                                 | 0.000242<br>m³                                                                      | 100                                                                                  | 10<br>11.02              | 4,375<br>9.647           | -                                                                                     |                                                                                       |
| YRE-701 | -021251                                                                             | 152<br>5 1                                                                          | 212<br>8 3/8                                                                        | 285<br>11 1/4                                                                       | 70<br>2 3/4                                                                         | 5.3/4"-12<br>UN                                                                     | 155<br>6 1/8                                                                        | 700                                                                                 | 0.001752<br>m³                                                                      | 750                                                                                  | 75<br>82.67              | 32<br>70.560             | ✓                                                                                     |                                                                                       |

## SERIES YHP ACCESSORIES FOR HYDRAULIC PULLING



YHP-326



YHP-320



YM-235



YF-200

The YHP series offers a versatile range of accessories for hydraulic pulling. The assortment includes hydraulic hand pumps, hydraulic hoses, pressure gauges, and adapters. All components are available both individually and in various combinations. The hydraulic hand pump is available in several versions - such as a standalone device (YHP-320), in combination with a hydraulic hose (YHP-321), with a pressure gauge (YHP-324), with hose and pressure gauge (YHP-325), as well as a complete set with hose, pressure gauge, and metal case. Furthermore, the hand pump is available in two different variants, each with varying usable oil volumes depending on the application area.

### BENEFITS

- The entire series is equipped with numerous safety features that ensure reliable performance while guaranteeing high occupational safety.
- Compatible with common hydraulic puller devices and systems



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>cm <sup>3</sup> | <br>bar | Max. tension force<br>t/US t. sh. | <br>kg/lb | Consists of                          |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------|
| YHP-320 | -045721                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 7,28<br>16.052                                                                               | YHP-320                              | ✓                                                                                     |
| YHP-321 | -111198                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 8,375<br>18.467                                                                              | YHP-320, YF-200                      | ✓                                                                                     |
| YHP-324 | -045806                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 9,605<br>21.278                                                                              | YHP-320,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-325 | -045981                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 10,05<br>3.308                                                                               | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-326 | -046483                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 16,13<br>35.567                                                                              | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-420 | -609688                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420                              | ✓                                                                                     |
| YHP-421 | -022968                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 4,5<br>0.662                                                                                 | YHP-420, YF-200                      | ✓                                                                                     |
| YHP-424 | -103988                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-425 | -103995                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 9,65<br>21.278                                                                               | YHP-420,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YF-200  | -045646                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,06<br>3.528                                                                                | YF-200                               | ✓                                                                                     |
| YM-235  | -157769                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,605<br>3.638                                                                               | YM-235                               | ✓                                                                                     |
| YGA-2   | -458644                                                                                     | -                                                                                                      | -                                                                                          | 75<br>82.67                       | 0,21<br>0.463                                                                                | YGA-2                                | ✓                                                                                     |



SERIES Y-X00  
MOUNTING FOR HYDRAULIC CYLINDER



The recordings of hydraulic cylinders from the series Y-X00 are used to secure tools in the hydraulic program of KUKKO in crafts, industry, and workshops. The adapters in various sizes secure heavy equipment to the respective hydraulic device and are suitable for the GOLIATH series, among others.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  |                                     |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y200-00 | -507724                                                                                     | 3 7/8"-12 UN                                                                        | Y28-180, Y28-205, Y28-206,<br>Y28-200, Y28-218, Y28-256,<br>Goliath-200, Goliath-218,<br>Goliath-256, YRH-202, YRH-206 | ✓                                                                                     |
| Y300-00 | -507748                                                                                     | 4 1/2"-12 UN                                                                        | Y38-180, Y38-205, Y38-206,<br>Y38-300, Y38-318, Y38-356,<br>Goliath-300, Goliath-318,<br>Goliath-356, YRH-302          | ✓                                                                                     |
| Y500-00 | -507755                                                                                     | 6 1/4"-12 UN                                                                        | Y58-180, Y58-205, Y58-206,<br>Y58-500, Y58-518, Y58-556,<br>Goliath-500, Goliath-518,<br>Goliath-556, YRH-603          | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-10-11 ACCESSORIES FOR HYDRAULIC PULLING

The accessories for hollow piston cylinders are used for compatibility with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The hand cranks and center spindle are designed for the hollow piston cylinders of the YRH series.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y218-10 | -040368                                                                                     | 120<br>4 3/4                                                                                   | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,865<br>4.112                                                                               | YRH-202,<br>YRH-206                                                                   | ✓                                                                                     |
| Y218-11 | -040443                                                                                     | 514<br>20 1/4                                                                                  | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,69<br>3.726                                                                                | YRH-206,<br>YRH-202                                                                   | ✓                                                                                     |
| Y318-10 | -041761                                                                                     | 150<br>5 7/8                                                                                   | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 0,88<br>1.940                                                                                | YRH-302                                                                               | ✓                                                                                     |
| Y318-11 | -041846                                                                                     | 610<br>24 1/64                                                                                 | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 3,205<br>7.166                                                                               | YRH-302                                                                               | ✓                                                                                     |
| Y318-12 | -749865                                                                                     | 400<br>15 3/4                                                                                  | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 8<br>17.640                                                                                  | YRH-302                                                                               | ✓                                                                                     |
| Y518-10 | -044243                                                                                     | 240<br>9 7/16                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 2,1<br>4.631                                                                                 | YRH-603                                                                               | ✓                                                                                     |
| Y518-11 | -044328                                                                                     | 750<br>29 1/2                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 6,745<br>14.873                                                                              | YRH-603                                                                               | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES YD PRESSURE PIECE FOR HOLLOW PISTON CYLINDER



The pressure pieces for hollow piston cylinders are screwed into the internal thread of the piston rod of the hollow piston cylinder. The center spindle can be inserted directly into the threaded piece or secured and adjusted using a quick adjustment nut when using a pressure piece with a smooth bore. When using the closed pressure piece, the cylinders can be used as lifting jacks.

#### BENEFITS

- Pressure pieces enable the versatile application of the hollow piston cylinder from KUKKO as a pressure or pull cylinder.

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  |  | Max. tension<br>force<br><br>t/US t. sh. | <br>YRH-302 | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YDB-33E | -400308                                                                                     | 58<br>2 5/16                                                                                   | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                                         | 0,21<br>0.463                                                                                  | ✓                                                                                     |
| YDB-55E | -400483                                                                                     | 85<br>3 3/8                                                                                    | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                                         | 0,5<br>1.103                                                                                   | ✓                                                                                     |
| YDG-20E | -399091                                                                                     | 50<br>1 15/16                                                                                  | 1"-8 UNC                                                                            | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                             | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| YDG-30E | -399176                                                                                     | 60<br>2 3/8                                                                                    | 1 1/4"-7<br>UNC                                                                     | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                                         | 0,285<br>0.628                                                                                 | ✓                                                                                     |
| YDG-50E | -399251                                                                                     | 85<br>3 3/8                                                                                    | 1 5/8"-5<br>1/2 UNS                                                                 | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                                         | 0,85<br>1.874                                                                                  | ✓                                                                                     |
| YDM-20E | -414183                                                                                     | 50<br>1 15/16                                                                                  | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                             | 0,28<br>0.617                                                                                  | ✓                                                                                     |
| YDM-30E | -414268                                                                                     | 58<br>2 5/16                                                                                   | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                                         | 0,38<br>0.838                                                                                  | ✓                                                                                     |
| YDM-50E | -414343                                                                                     | 85<br>3 3/8                                                                                    | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                                         | 1,6<br>3.528                                                                                   | ✓                                                                                     |
| YDB-27E | -400223                                                                                     | 50<br>1 15/16                                                                                  | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                             | 0,17<br>0.375                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-17 PRESSURE PIECE FOR AXLE BORES



The pressure pieces for axle bores are used for pulling bearings and gears in craft, industry, and workshops that are mounted on hollow shafts or in housings. The spindle pressure piece serves as a counter-axis to the puller, transferring the force onto the pressure piece through the spindle.

#### BENEFITS

- Broader application possibilities for various extraction situations
- The set is available in both 12-piece and 6-piece versions, and if needed, the pressure pieces are also available individually.



## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-01-17 | -233173                                                                                   | 20 - 23<br>13/16-7/8                                                                         | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-02-17 | -233258                                                                                   | 23 - 26<br>7/8-1 1/32                                                                        | 1               | 0,4<br>0.882                                                                                 | ✓                                                                                   |
| Y-03-17 | -233333                                                                                   | 26 - 30<br>1 1/32-1 3/16                                                                     | 1               | 0,5<br>1.103                                                                                 | ✓                                                                                   |
| Y-04-17 | -233418                                                                                   | 29 - 33<br>1 1/8-1 5/16                                                                      | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-05-17 | -233586                                                                                   | 33 - 39<br>1 5/16-1 9/16                                                                     | 1               | 0,165<br>0.364                                                                               | ✓                                                                                   |
| Y-06-17 | -233661                                                                                   | 36 - 42<br>1 7/16-1 5/8                                                                      | 1               | 0,2<br>0.441                                                                                 | ✓                                                                                   |
| Y-07-17 | -233746                                                                                   | 39 - 46<br>1 9/16-1 13/16                                                                    | 1               | 0,22<br>0.485                                                                                | ✓                                                                                   |
| Y-08-17 | -233821                                                                                   | 42 - 48<br>1 5/8-1 7/8                                                                       | 1               | 0,288<br>0.635                                                                               | ✓                                                                                   |
| Y-09-17 | -233906                                                                                   | 45 - 52<br>1 3/4-2 1/16                                                                      | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-10-17 | -234163                                                                                   | 49 - 58<br>1 15/16-2 5/16                                                                    | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-11-17 | -234248                                                                                   | 51 - 62<br>2 1/64-2 7/16                                                                     | 1               | 0,52<br>1.147                                                                                | ✓                                                                                   |
| Y-12-17 | -234408                                                                                   | 55 - 65<br>2 3/16-2 9/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-13-17 | -234576                                                                                   | 58 - 68<br>2 5/16-2 11/16                                                                    | 1               | 0,65<br>1.433                                                                                | ✓                                                                                   |
| Y-14-17 | -234651                                                                                   | 61 - 71<br>2 3/8-2 13/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-15-17 | -234736                                                                                   | 65 - 74<br>2 9/16-2 15/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-16-17 | -234811                                                                                   | 71 - 81<br>2 13/16-3 3/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-17-17 | -234996                                                                                   | 77 - 88<br>3 1/32-3 7/16                                                                     | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |



PRODUCT DETAILS



| #           | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|-------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-18-17     | -235078                                                                                   | 20 - 62<br>13/16-2 7/16                                                                      | 11              | 2,235<br>4.928                                                                               | ✓                                                                                   |
| Y-19-17     | -235153                                                                                   | 33 - 81<br>1 5/16-3 3/16                                                                     | 12              | 5,7<br>12.569                                                                                | ✓                                                                                   |
| Y-20-17     | -235238                                                                                   | 55 - 88<br>2 3/16-3 7/16                                                                     | 6               | 4,9<br>10.805                                                                                | ✓                                                                                   |
| Y-60-100-17 | -120466                                                                                   | 64 - 70<br>2 1/2-2 3/4                                                                       | 3               | 4,455<br>9.823                                                                               | ✓                                                                                   |

KUKKO // Pull forward



SERIES 208 | 209

# PULLER "ECONOMY"



## APPLICATION

The 2-jaw and 3-jaw Puller "Economy" of series 208 and 209 feature oscillating, height adjustable jaws. The bent and swiveling jaws adapt to any installation situation. In addition, the possibility to adjust the spread and reach provides maximum flexibility during pulling.

### Benefits

- Adjustable jaws for individual adjustment of the reach thanks to multiple holes in the jaws
- Oscillating jaws offer a variety of adjustment options
- Jaws with different claw shapes for flexible working (depending on model size)
- Secure positioning of the spindle due to the rotatable spindle tip, both on smooth surfaces and for centering (not valid for items 208-0 and 209-0)
- 3-jaw design ensures uniform force distribution and allows for greater pulling forces (series 209)
- Grease-hydraulic spindle guarantees easy and controlled removal of particularly tight parts with minimal effort (items 208-2-B and 209-2-B)

## STRUCTURE OF A PULLER USING THE EXAMPLE 208-0



## DISTINCTIVE FEATURES OF THE SERIES

### SERIES 208



The 2-jaw Puller "Economy" is suitable for pulling operations in restricted environments. The oscillating and height adjustable jaws guarantee precise adjustment of the spread and reach.

### SERIES 208 (HYDRAULIC)



The 2-jaw Puller "Economy" with a grease-hydraulic spindle guarantees easy removal of particularly tight components without much effort. The 2-jaw design enables work in confined spaces.

### SERIES 209



The 3-jaw Puller "Economy" guarantees particularly uniform force distribution and allows for even higher pulling forces. The oscillating and height adjustable jaws guarantee precise adjustment of the spread and reach.

### SERIES 209 (HYDRAULIC)



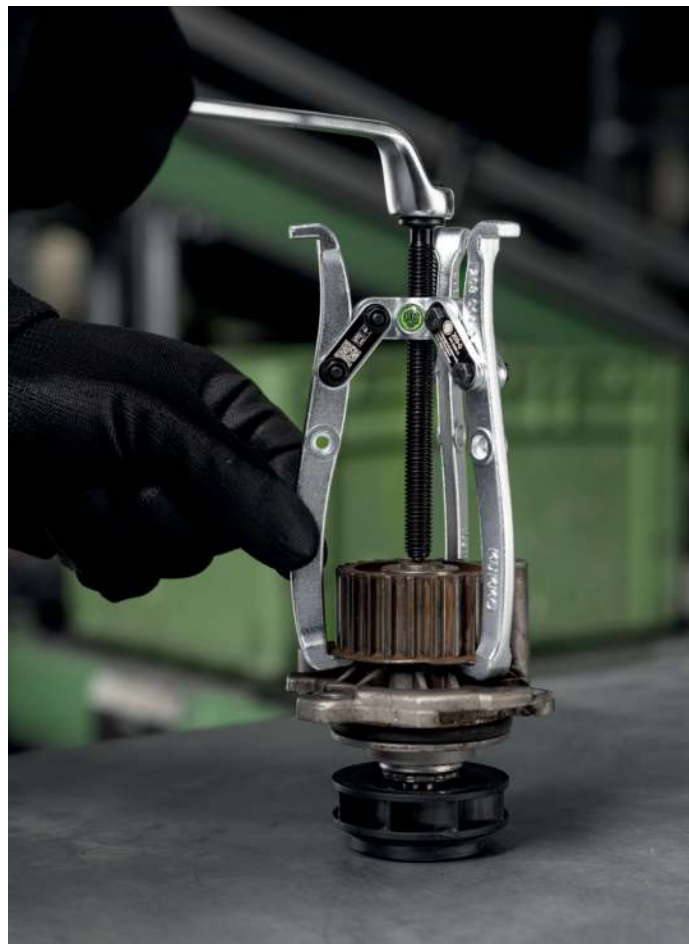
The 3-jaw Puller "Economy" with grease-hydraulic spindle guarantees easy removal of particularly tight components without much effort. The 3-jaw design also ensures even force distribution.



## EXAMPLES OF APPLICATION



Pulling a ball bearing from a shaft with the 208-01.



Pulling a fan impeller with the 209-0.



Pulling the hand wheel from a shut-off valve with the 209-02.



Conversion to adjust the reach and spread using the example of the 208-01.

## SERIES 208

### 2- AND 3-JAW PULLERS "ECONOMY" WITH OSCILLATING AND HEIGHT-ADJUSTABLE PULLER JAWS

The 2-jaw puller "Economy" with oscillating and height-adjustable jaws is used for pulling bearings, gears, and discs in all common sizes for crafts, workshops, and industry. The oscillating and curved jaws adapt to any installation situation and are universally applicable due to the adjustable reach and spread.

#### BENEFITS

- Adjustable puller jaws for individual adaptation of the reach due to multiple drilling in the puller jaws.
- Oscillating puller jaws offer a variety of adjustment options.
- Safe installation of the spindle with a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.
- Spindle outlet for thread protection



208-01  
208-02

208-0

208-2-B



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 208-01  | -432408                                                                             | 0 - 170<br>3/4 - 6 3/4                                                              | 95<br>4 7/8                                                                         | 17<br>11/16                                                                         | 20<br>14.75                                                                         | 20                       | 2<br>2.20                | 1<br>2.205                                                                            | ✓                                                                                     |
| 208-02  | -432651                                                                             | 0 - 230<br>3/4 - 9<br>1/16                                                          | 150<br>7 1/2                                                                        | 22<br>7/8                                                                           | 50<br>36.88                                                                         | 25                       | 2.5<br>2.76              | 2,49<br>5.490                                                                         | ✓                                                                                     |
| 208-0   | -432248                                                                             | 12 - 100<br>1 3/16 - 3<br>7/8                                                       | 50<br>3 7/8                                                                         | 13<br>1/2                                                                           | 20<br>14.75                                                                         | 10                       | 1<br>1.10                | 0,5<br>1.103                                                                          | ✓                                                                                     |
| 208-2-B | -432811                                                                             | 64 - 400<br>4 3/8 - 15<br>3/4                                                       | 225<br>15 3/4                                                                       | 12<br>1/2                                                                           | 20<br>14.75                                                                         | 120                      | 12<br>13.23              | 0,3<br>0.662                                                                          | ✓                                                                                     |

## SERIES 209 3-JAW PULLER "ECONOMY" WITH OSCILLATING AND HEIGHT-ADJUSTABLE JAWS



209-01  
209-02

209-0

209-2-B

The 3-jaw puller "Economy" with oscillating and height-adjustable jaws is used for pulling bearings, gears, and discs in all common sizes for craft, workshop, and industry. The oscillating and curved jaws adapt to any installation situation and are universally applicable due to the adjustability of the reach and spread. The 3-jaw design ensures an even load distribution, providing a particularly secure hold on the part being pulled.

### BENEFITS

- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options
- Secure setup of the spindle through a rotatable spindle tip both on smooth surfaces and during centering (Switch Technology)
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Spindle outlet for thread protection



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 209-01  | -432576                                                                             | 0 - 170<br>3/4 - 6 3/4                                                              | 95<br>4 7/8                                                                         | 17<br>1 1/16                                                                        | 20<br>14.75                                                                         | 20                       | 2<br>2.20                | 1,32<br>2.911                                                                         | ✓                                                                                     |
| 209-02  | -432736                                                                             | 160 - 230<br>7 7/8 - 9<br>1/16                                                      | 150<br>7 1/2                                                                        | 22<br>7/8                                                                           | 50<br>36.88                                                                         | 25                       | 2.5<br>2.76              | 3,1<br>6.836                                                                          | ✓                                                                                     |
| 209-0   | -432323                                                                             | 12 - 100<br>1 3/16 - 3<br>7/8                                                       | 50<br>3 7/8                                                                         | 13<br>1/2                                                                           | 20<br>14.75                                                                         | 10                       | 1<br>1.10                | 0,485<br>1.069                                                                        | ✓                                                                                     |
| 209-2-B | -432996                                                                             | 64 - 450<br>4 3/8 - 19<br>3/4                                                       | 400<br>15 3/4                                                                       |                                                                                     | 45<br>33.19                                                                         | 150                      | 15<br>16.53              | 15,45<br>34.067                                                                       | ✓                                                                                     |



KUKKO // *Pull forward*



SERIES 201-S | 202-S

# PULLER FOR FAN WHEELS





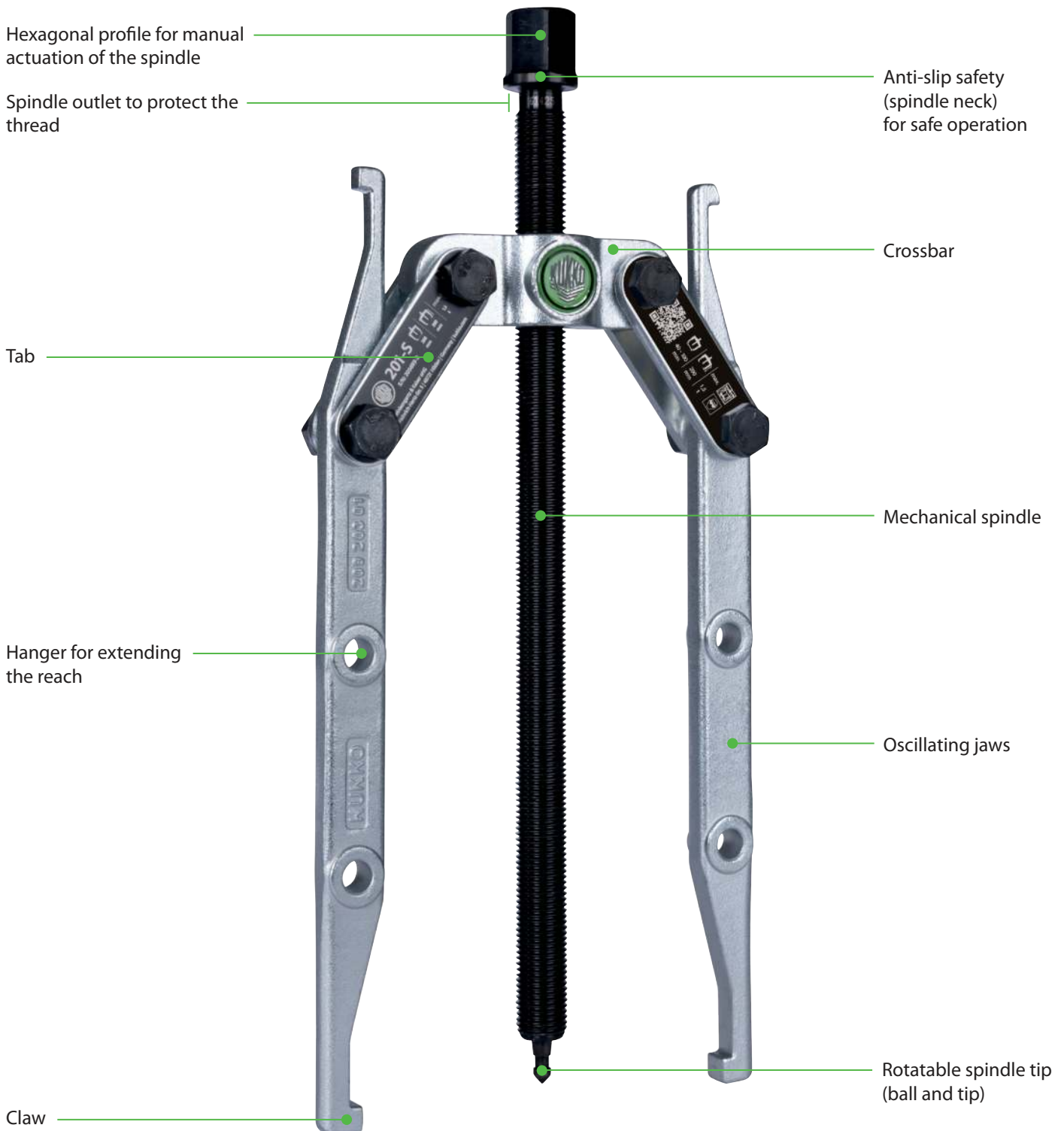
## APPLICATION

Thanks to the particularly slim design of the jaws, the puller is used for dismantling fan wheels. The swiveling jaws adapt to any installation situation. In addition, the jaws are 180° rotatable and can be used on both sides, providing access to different claw sizes.

### Benefits

- Adjustable jaws for individual adaptation of the reach thanks to multiple boreholes in the jaws
- Oscillating jaws offer a variety of adjustment options
- Jaws are 180° rotatable and can be used on both sides
- Jaws with different claw sizes for flexible working
- 3-jaw design ensures even force distribution and enables greater pulling forces (Series 202-S)

## CONSTRUCTION OF A PULLER USING THE EXAMPLE 201-S



## SPECIAL FEATURES OF THE SERIES

### SERIES 201-S



The 2-jaw puller for fan wheels is universally applicable even in confined spaces.

### SERIES 202-S



The 3-jaw puller for fan wheels ensures even force distribution and thus enables even greater pulling forces.

## APPLICATION EXAMPLES



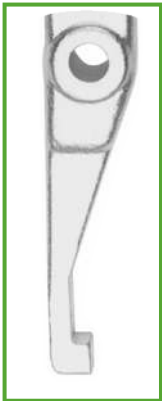
The multiple boreholes in the jaws guarantee individual adjustment to the reach



By rotating the jaws 180°, a different claw size can be used for pulling.

PRODUCT DETAILS

SERIES 201-S  
2-JAW PULLER FOR FAN WHEELS WITH  
OSCILLATING AND HEIGHT-ADJUSTABLE  
PULLER JAWS



The 2-jaw puller with oscillating and adjustable-height puller jaws is used for pulling off fan wheels and ship propellers in all common sizes. The oscillating puller jaws adapt to any installation situation and are universally applicable due to the adjustable reach.

BENEFITS

- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Jaws are rotatable by 180° and can be used on both sides.
- Puller jaws with varying claw sizes for flexible work
- Secure setup of the spindle with a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 201-S | -026911                                                                                     | 11 - 200<br>3/4 - 7 7/8                                                                        | 200<br>7 7/8                                                                                   | 17<br>11/16                                                                                    | 30<br>22.13                                                                                     | 15                             | 1.5<br>1.65                             | 1,16<br>2.558                                                                                  | ✓                                                                                     |

SERIES 202-S  
3-JAW PULLER FOR FAN WHEELS WITH  
OSCILLATING AND HEIGHT-ADJUSTABLE  
PULLER JAWS



The 3-jaw puller with oscillating and height-adjustable jaws is used to remove fan wheels and ship propellers in all common sizes. Thanks to its particularly slender design, the jaws grip through the two slots and engage the flange of the fan.

BENEFITS

- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- The jaws are rotatable by 180° and can be used on both sides.
- Jaws with different claw sizes for flexible work
- Secure setup of the spindle with a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)



TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 202-S | -027581                                                                             | 11 - 200<br>3/4 - 7 7/8                                                             | 200<br>7 7/8                                                                        | 17<br>11/16                                                                         | 35<br>25.82                                                                         | 20                       | 2<br>2.20                | 1,74<br>3.837                                                                         | ✓                                                                                     |



KUKKO // *Pull forward*



SERIES 43 | 44 | 45

# PULLERS WITH FORCE-AMPLIFYING AND SELF-CENTERING JAWS



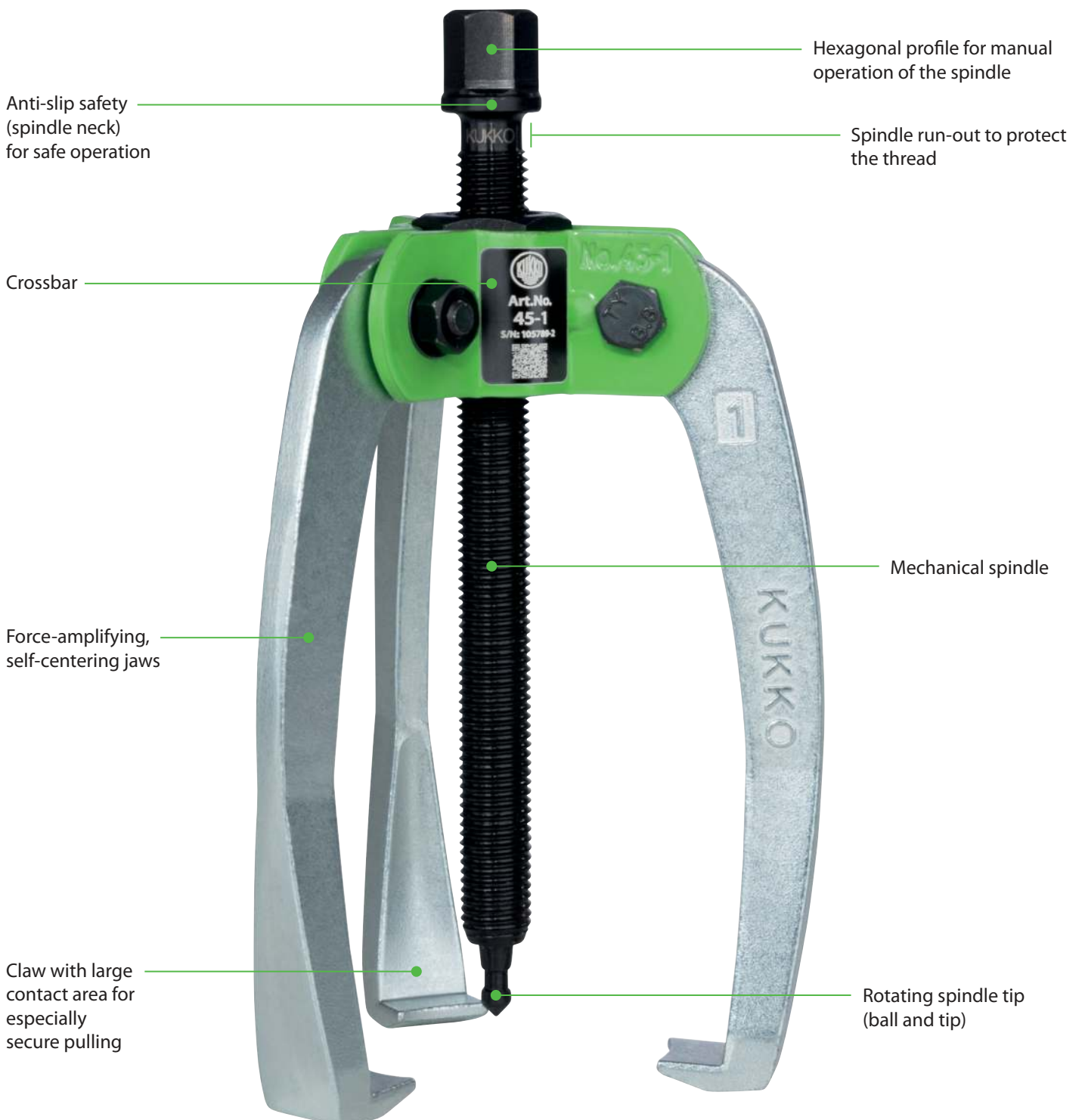
# APPLICATION

This product group includes both the handy small part Pullers of series 43 and 43-1 as well as the especially robust industrial Pullers of series 44 and 45. The common feature of these Pullers is the force-amplifying, self-centering jaws, which are positioned by manually tightening the spindle.

## Benefits

- Self-centering of the jaws by manual tightening of the spindle (Autogrip Technology)
- Slim design of the jaws enables access to areas with limited space (series 43 and 43-1)
- Integrated, freely movable pin on the T-handle ensures manual spindle operation in confined spaces (series 43 and 43-1)
- Safe placement of the spindle thanks to the rotating spindle tip on both smooth surfaces and centers (Switch Technology) (series 44 and 45)
- 3-jaw design ensures even force distribution and enables greater extraction forces (series 43-1 and 45)

## STRUCTURE OF A PULLER USING 45-1 AS AN EXAMPLE





## SPECIAL FEATURES OF THE SERIES

### SERIES 43



The handy 2-jaw small part Puller of series 43 is used for sensitive pulling of small components. The slim design as well as the freely movable pin on the T-handle guarantee pulling in confined spaces.

### SERIES 43-10



The handy 3-jaw small part Puller of series 43-1 has the same characteristics as series 43. Additionally, the 3-jaw design ensures more even force distribution and greater extraction forces.

### SERIES 44



The robust 2-jaw industrial Pullers of series 44 are used for powerful pulling of larger components. As the spindle pressure increases, the part being pulled is increasingly and securely gripped by the interconnected jaws.

### SERIES 45



The robust 3-jaw industrial Pullers of series 45 offer the same functionality as series 44. The difference lies in the 3-jaw design, resulting in more even force distribution and higher extraction forces.

## HYDRAULIC UPGRADE: SPINDLE REPLACEMENT (45-8)

With just a few steps, the mechanical spindle can be removed and replaced with a hydraulic spindle. This is demonstrated here using the example of the industrial Puller 45-8:



45-8 with mechanical spindle



Removing the mechanical spindle



Inserting the hydraulic spindle



45-8 with hydraulic spindle



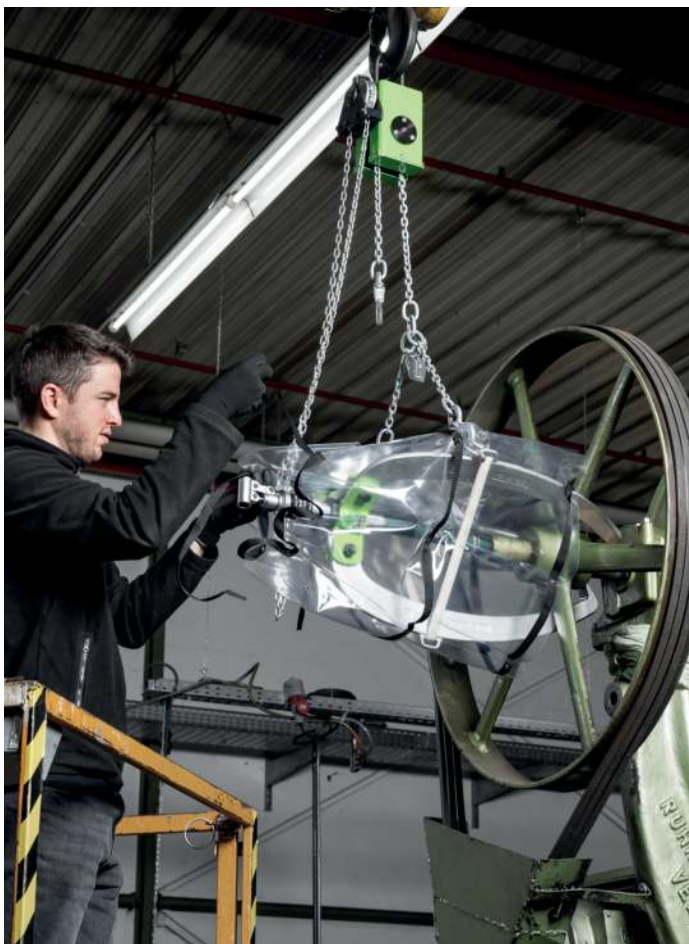
## EXAMPLES OF APPLICATION



Pulling a pulley using the 45-8 with a mechanical spindle. For locking and holding, the Puller is attached to the URANUS.



Pulling a pulley using the 45-8 with hydraulic spindle



Use of the 45-8 with a safety tarpaulin



An additional lashing strap secures the jaws

SERIES 43  
HANDY, 2-JAW SMALL PARTS PULLER WITH  
FORCE-AMPLIFYING, SELF-CENTERING JAWS



The handy 2-jaw small parts puller with force-amplifying and self-centering jaws is used for sensitive pulling of small ball bearings, gears and washers for tight, hard-to-reach gaps. The compact and space-saving design of the puller with narrow jaws that widen toward the claw is particularly suitable for electric motors. The freely movable pin on the T-handle guarantees comfortable one-handed tightening of the spindle in the tightest space.

BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in tight spaces
- The slim design of the jaws allows access to hard-to-reach areas.
- No additional tool is needed for the pulling process.



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set                     |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------|
| 43-1 | -015458                                                                                     | 0 - 60<br>3/8 - 2 3/4                                                                          | 50<br>2 3/4                                                                                    | 10                             | 1<br>1.10                            | 0,22<br>0.485                                                                                 | 24-A, K-142/4,<br>24-B, K-142/6,<br>K-22-A | ✓                                                                                     |
| 43-2 | -015861                                                                                     | 0 - 70<br>3/8 - 2 3/8                                                                          | 70<br>2                                                                                        | 10                             | 1<br>1.10                            | 0,24<br>0.529                                                                                 | -                                          | ✓                                                                                     |
| 43-3 | -015946                                                                                     | 0 - 80<br>3/8 - 3 3/16                                                                         | 80<br>3 3/16                                                                                   | 10                             | 1<br>1.10                            | 0,265<br>0.584                                                                                | -                                          | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 43-10 HANDY, 3-JAW SMALL PARTS PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS



The handy 3-jaw small parts puller with force-amplifying and self-centering jaws is used for sensitive Pulling of small bearings, gears and washers in tight, hard-to-reach gaps. The compact and space-saving design of the puller with slender jaws that become wider towards the claw is particularly suitable for electric motors. The freely movable pin on the T-handle guarantees comfortable one-handed tightening of the spindle in the tightest spaces.

#### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, free-moving pin on the T-handle guarantees manual spindle drive in tight spaces
- The slim design of the jaws allows access to hard-to-reach places.
- No additional tool is required for the pulling process.

#### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 43-11 | -015526                                                                                     | 0 - 60<br>3/8 - 2 3/8                                                                          | 50<br>2                                                                                        | 15                          | 1.5<br>1.65                          | 0,275<br>0.606                                                                                 | ✓                                                                                     |
| 43-12 | -015601                                                                                     | 0 - 70<br>3/8 - 2 3/4                                                                          | 70<br>2 3/4                                                                                    | 15                          | 1.5<br>1.65                          | 0,305<br>0.772                                                                                 | ✓                                                                                     |
| 43-13 | -015786                                                                                     | 0 - 80<br>3/8 - 3 3/16                                                                         | 80<br>3 3/16                                                                                   | 15                          | 1.5<br>1.65                          | 0,335<br>0.739                                                                                 | ✓                                                                                     |



## SERIES 43-0 HANDY 2-JAW AND 3-JAW SMALL PARTS PULLER WITH FORCE-AMPLIFYING AND SELF- CENTERING JAWS

The handy 2-jaw and 3-jaw small parts puller with force-amplifying and self-centering jaws is used for sensitive pulling of small bearings, gears and washers in narrow, hard-to-reach gaps. The compact and space-saving design of the puller with narrow jaws that widen toward the claw is particularly suitable for electric motors. The freely movable pin on the T-handle guarantees comfortable one-handed tightening of the spindle in the tightest spaces.



43-0-1



43-0-11

### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in tight spaces
- The slim design of the jaws allows access to hard-to-reach places.
- No additional tool is needed for the pulling process.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 43-0-1  | -023330                                                                                     | 0 - 60<br>3/8 - 2 3/8                                                                          | 50<br>2                                                                                        | 10                             | 1<br>1.10                            | 0,25<br>0.551                                                                                 | 27-A                   | ✓                                                                                     |
| 43-0-11 | -023347                                                                                     | 0 - 60<br>3/8 - 2 3/8                                                                          | 50<br>2                                                                                        | 15                             | 1.5<br>1.65                          | 0,3<br>0.662                                                                                  | -                      | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 44 HANDY, 2-JAW INDUSTRIAL PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS



44-1

44-2

44-3

44-4

44-5

44-6

44-7

44-8

The handy 2-jaw industrial puller with force-amplifying and self-centering jaws is used for pulling ball bearings, gears and discs in all common sizes for trade, workshop and industry. This allows any component to be released that sits on a shaft and is freely accessible from the outside. When the spindle pressure is applied, the part to be pulled is gripped ever more firmly by the interconnected jaws.

#### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Safe setup of the spindle through a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)
- Spindle outlet to protect the thread



#### TECHNICAL ATTRIBUTES

| #    |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             |                                                                                     | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |                                                                                       |
| 44-1 | -016028                                                                             | 0 - 100<br>1/2 - 3<br>7/8                                                           | 100<br>3 7/8                                                                        | 13<br>1/2                                                                           | M12 x<br>1,5                                                                        | 50<br>36.88                                                                         | 30                       | 3<br>3.31                | 0,525<br>1.158                                                                        | -                                                                                     | ✓                                                                                     |
| 44-2 | -016103                                                                             | 0 - 120<br>3/4 - 4<br>3/4                                                           | 120<br>4 3/4                                                                        | 17<br>11/16                                                                         | M14 x<br>1,5                                                                        | 85<br>62.70                                                                         | 50                       | 5<br>5.51                | 1<br>2.205                                                                            | -                                                                                     | ✓                                                                                     |
| 44-3 | -016288                                                                             | 0 - 160<br>7/8 - 6<br>3/8                                                           | 160<br>6 3/8                                                                        | 19<br>3/4                                                                           | M18 x<br>1,5                                                                        | 140<br>103.26                                                                       | 60                       | 6<br>6.61                | 1,9<br>4.190                                                                          | -                                                                                     | ✓                                                                                     |
| 44-4 | -016363                                                                             | 0 - 250<br>7/8 - 9<br>7/8                                                           | 200<br>7 7/8                                                                        | 24<br>15/16                                                                         | G 5/8<br>inch                                                                       | 190<br>140.14                                                                       | 70                       | 7<br>7.72                | 3,28<br>7.232                                                                         | 8-HP-623,<br>K-8-<br>HP-623                                                           | ✓                                                                                     |

## PRODUCT DETAILS

| #           |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           |                                                                                   | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |                                                                                     |
| <b>44-5</b> | -815133                                                                           | 45 - 300<br>1 3/4 -<br>11 13/16                                                   | 250<br>9 7/8                                                                      | 27<br>1 1/16                                                                      | G 3/4<br>inch                                                                     | 200<br>147.52                                                                     | 95                       | 9.5<br>10.47             | 5,02<br>11.466                                                                      | 8-HP-626,<br>K-8-<br>HP-626,<br>8-0-626                                             | ✓                                                                                   |
| <b>44-6</b> | -815218                                                                           | 55 - 375<br>2 3/16 -<br>14 3/4                                                    | 280<br>11                                                                         | 27<br>1 1/16                                                                      | G 3/4<br>inch                                                                     | 200<br>147.52                                                                     | 95                       | 9.5<br>10.47             | 5,32<br>11.731                                                                      | 8-HP-626,<br>K-8-<br>HP-626,<br>8-0-626                                             | ✓                                                                                   |
| <b>44-7</b> | -007125                                                                           | 40 - 450<br>1 9/16 -<br>17 11/16                                                  | 380<br>14 15/16                                                                   | 36<br>1 7/16                                                                      | G 1<br>inch                                                                       | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 11,86<br>26.151                                                                     | 8-HP-633,<br>K-8-<br>HP-633,<br>8-1-B, 8-1-<br>F                                    | ✓                                                                                   |
| <b>44-8</b> | -007132                                                                           | 100 -<br>650<br>3 15/16 -<br>25 9/16                                              | 500<br>19 11/16                                                                   | 36<br>1 7/16                                                                      | G 1<br>inch                                                                       | 450<br>331.92                                                                     | 150                      | 15<br>16.53              | 14,5<br>31.973                                                                      | 8-HP-633,<br>K-8-<br>HP-633,<br>8-1-B, 8-1-<br>F                                    | ✓                                                                                   |



## SERIES 45 HANDY, FORCE-AMPLIFYING, SELF-CENTERING 3-JAW INDUSTRIAL PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS



45-1  
45-2  
45-3  
45-4

45-5  
45-6  
45-7  
45-8

The handy, 3-jaw industrial puller with force-amplifying and self-centering jaws is used for pulling off bearings, gears and discs in all common sizes for trades, workshops and industry. This makes it possible to remove any component that sits on a shaft and is freely accessible from the outside. When spindle pressure is applied, the part to be pulled off is gripped ever more tightly by the interconnected jaws. The 3-jaw design guarantees even load distribution and therefore a particularly secure hold on the part to be pulled off.

### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Safe positioning of the spindle through a rotatable spindle tip on both smooth surfaces and during centerings (Switch Technology)
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.
- Spindle outlet to protect the thread



### TECHNICAL ATTRIBUTES

| #    | GTIN    | mm/<br>inch                     | mm/inch        | mm/inch      | SW            | Nm/ft lb      | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | kg/lb          |                                         |   |
|------|---------|---------------------------------|----------------|--------------|---------------|---------------|--------------------------------|-----------------------------------------|----------------|-----------------------------------------|---|
| 45-1 | -016448 | 0 - 100<br>1/2 - 3<br>7/8       | 100<br>3 7/8   | 13<br>1/2    | M12 x<br>1,5  | 50<br>36.88   | 40                             | 4<br>4.41                               | 0,665<br>1.466 | -                                       | ✓ |
| 45-2 | -016516 | 0 - 120<br>3/4 - 4<br>3/4       | 120<br>4 3/4   | 17<br>11/16  | M14 x<br>1,5  | 120<br>88.51  | 60                             | 6<br>6.61                               | 1,124<br>2.478 | -                                       | ✓ |
| 45-3 | -016691 | 0 - 160<br>7/8 - 6<br>3/8       | 160<br>6 3/8   | 19<br>3/4    | M18 x<br>1,5  | 180<br>132.77 | 80                             | 8<br>8.82                               | 2,45<br>5.402  | -                                       | ✓ |
| 45-4 | -016776 | 0 - 250<br>7/8 - 9<br>7/8       | 200<br>7 7/8   | 24<br>15/16  | G 5/8<br>inch | 200<br>147.52 | 95                             | 9.5<br>10.47                            | 4,18<br>9.217  | 8-HP-623,<br>K-8-<br>HP-623             | ✓ |
| 45-5 | -815393 | 45 - 300<br>1 3/4 -<br>11 13/16 | 250<br>9 13/16 | 27<br>1 1/16 | G 3/4<br>inch | 200<br>147.52 | 95                             | 9.5<br>10.47                            | 6,51<br>14.355 | 8-HP-626,<br>K-8-<br>HP-626,<br>8-0-626 | ✓ |

## PRODUCT DETAILS

| #    |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           |                                                                                   | Nm/ft lb                                                                          | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |                                                                                     |
| 45-6 | -815478                                                                           | 55 - 375<br>2 3/16 -<br>14 3/4                                                    | 280<br>11 1/32                                                                    | 27<br>1 1/16                                                                      | G 3/4<br>inch                                                                     | 200<br>147.52                                                                     | 95                       | 9.5<br>10.47             | 6,95<br>15.325                                                                      | 8-HP-626,<br>K-8-<br>HP-626,<br>8-0-626                                             | ✓                                                                                   |
| 45-7 | -821646                                                                           | 40 - 450<br>1 9/16 -<br>17 11/16                                                  | 380<br>14 15/16                                                                   | 36<br>1 7/16                                                                      | G 1<br>inch                                                                       | 400<br>295.04                                                                     | 120                      | 12<br>13.23              | 15,75<br>34.729                                                                     | 8-HP-633,<br>K-8-<br>HP-633,<br>8-1-B, 8-1-<br>F                                    | ✓                                                                                   |
| 45-8 | -007149                                                                           | 100 -<br>650<br>3 15/16 -<br>25 9/16                                              | 500<br>19 11/16                                                                   | 36<br>1 7/16                                                                      | G 1<br>inch                                                                       | 450<br>331.92                                                                     | 150                      | 15<br>16.53              | 19,71<br>43.461                                                                     | 8-HP-633,<br>K-8-<br>HP-633,<br>8-1-B, 8-1-<br>F                                    | ✓                                                                                   |





KUKKO // *Pull forward*



SERIES 114

# Kombi-Puller



## APPLICATION

The adjustable, 2-jaw/3-jaw Kombi-Pullers of Series 114 with self-centering jaws (Autogrip Technology) are versatile for external extraction as well as internal extraction of ball bearings, gears, discs and similar components in all common sizes for craft, workshop and industry. For contactless and especially gentle extraction, the puller can be combined with a sliding hammer using a suitable thread adapter. The 3-jaw design guarantees an even load distribution and thus particularly secure retention on the part being removed. If there is little space around the component, the 3-jaw puller can be converted to a 2-jaw puller thanks to the crossbar.

### Benefits

- Self-centering jaws with spring tension (Autogrip Technology)
- Crossbar enables both 2-jaw and 3-jaw extraction
- Optionally convertible from an external extractor to an internal extractor by reversing the jaws
- 3-jaw design ensures even force distribution and allows for higher pulling forces

## CONSTRUCTION





## DETAILED VIEWS



Opening the bayonet lock on the Kombi-Puller of Series 114



The mounting points of the jaws are located beneath the spring plate



The Kombi-Puller of Series 114 when changing the hook position on the crossbar



Quick conversion from external to internal extractor

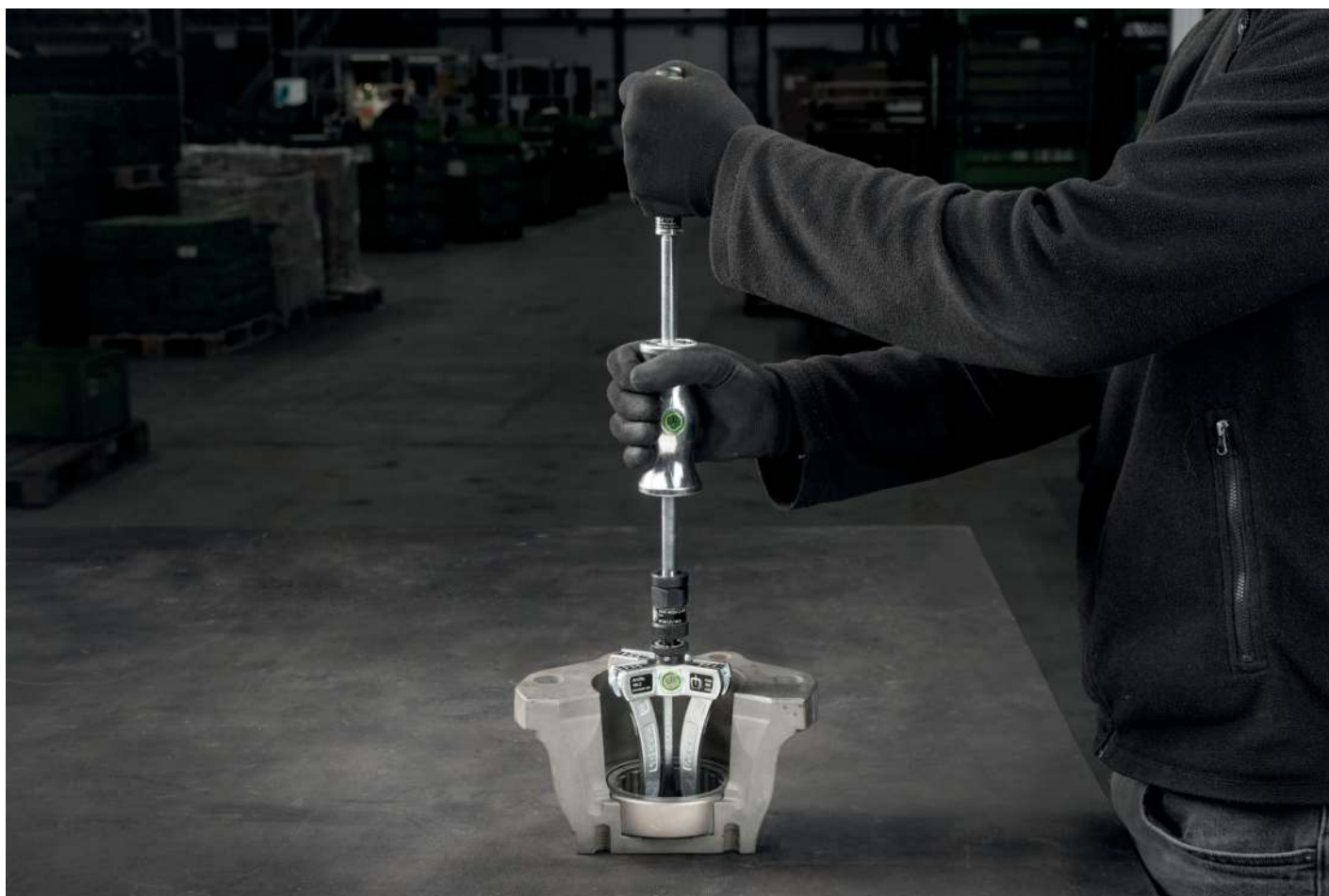
## APPLICATION EXAMPLES



The 2-jaw Kombi-Puller of Series 114 during external extraction of a ball bearing from a gearbox component



The 3-jaw Kombi-Puller of Series 114 during external extraction of a ball bearing from a gearbox component



The 114-2 as an internal extractor in combination with a sliding hammer for extracting a cylindrical roller bearing from a housing



## SERIES 114



During external extraction, the part to be removed, which is seated on a shaft and is accessible from the outside, is gripped from the outside with the jaws. By tightening the spindle, the component is secured. Subsequently, the hexagon on the spindle head is moved with an actuation tool until the component is released.

### BENEFITS

- Self-centering jaws with spring tension (Autogrip Technology)
- Optional convertible from an external puller to an internal extractor by reversing the jaws.
- The combination crossbar allows for both 2-jaw and 3-jaw Pulling.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.



### TECHNICAL ATTRIBUTES

| #                |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                                                                                     | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| <b>114-1 New</b> | -892400                                                                             | 0 - 75<br>0 - 2<br>15/16                                                            | 75<br>2 15/16                                                                       | 55 - 85<br>2 3/16 - 3<br>3/8                                                        | 13<br>1/2                                                                           | M12 x<br>1,5                                                                        | 40<br>0.00                                                                          | 20                       | 2<br>2.20                | 0,835<br>1.841                                                                        | ✓                                                                                     |
| <b>114-2 New</b> | -009372                                                                             | 0 - 100<br>0 - 3<br>15/16                                                           | 100<br>3 15/16                                                                      | 62 - 100<br>2 7/16 - 3<br>15/16                                                     | 17<br>1/2                                                                           | M14 x<br>1,5                                                                        | 60<br>44.26                                                                         | 50                       | 5<br>5.51                | 0,3<br>0.662                                                                          | ✓                                                                                     |
| <b>114-3 New</b> | -010941                                                                             | 0 - 175<br>0 - 6 7/8                                                                | 175<br>6 7/8                                                                        | 40 - 110<br>1 9/16 - 4<br>5/16                                                      | 17<br>11/16                                                                         | M16 x<br>1,5                                                                        | 115<br>84.82                                                                        | 70                       | 7<br>7.72                | 0,3<br>0.662                                                                          | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 482 | 483 | 48

# HANDY PULLERS WITH FORCE-AMPLIFYING, SELF-CENTERING AND CLAMPING JAWS



## APPLICATION

The handy 2-jaw and 3-jaw pullers with force-amplifying, self-centering and clamping jaws are used for pulling ball bearings, gears, and discs in narrow, hard-to-reach spaces. Due to the integrated force transmission with a spring mechanism, the clamping force increases proportionally with the pulling force. By tightening the spindle, the jaws are automatically centered.

### Benefits

- Self-centering jaws by manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle guarantees manual spindle drive in tight spaces
- Slim design of the jaws enables access to hard-to-reach areas
- Thread design enables quick tightening of the spindle, as fewer turns are required (series 482)
- Hexagon on the spindle suitable for use with powered tools (482-3 to 482-5, 483-3 to 483-5)

## STRUCTURE OF A PULLER, EXAMPLE: 482-3





## FEATURES OF THE SERIES

### SERIES 482

**2-jaw puller  
with self-centering jaws**



The handy, 2-jaw puller of series 482 is used for dismantling hard-to-reach components.

### SERIES 483

**3-jaw puller  
with self-centering jaws**



Thanks to the 3-jaw design, the pullers of series 483 ensure uniform force distribution, allowing for even greater pulling forces.

### SERIES 48

**Battery terminal puller  
with one-hand clamping**



The handy, 2-jaw puller with self-centering jaws is used for pulling battery terminals.

## APPLICATION EXAMPLES



Positioning the jaws on the component to be removed



Removal of a ball bearing from a gear wheel



## SERIES 482 HANDY 2-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING, TENSIONING JAWS



482-1

482-2

482-3

482-4

482-5

The handy 2-jaw puller with force-amplifying, self-centering and clamping jaws is used for pulling bearings, gear wheels and discs in tight clearances. This makes it possible to loosen components that sit on shafts and are freely accessible from the outside.

### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- An integrated, free-moving pen at the T-handle ensures manual spindle drive in the tightest spaces.
- The slim design of the jaws allows access to poorly accessible areas.
- The thread design allows for a quick tightening of the spindle, as fewer rotations are required.



### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 482-1 | -479779                                                                                     | 0 - 60<br>5/8 - 2<br>3/8                                                                       | 40<br>1 5/8                                                                                    | T-handle                                                                                       | 0.00                                                                                            | 15                             | 1.5<br>1.65                             | 0,27<br>0.518                                                                                  | K-482                  | ✓                                                                                     |
| 482-2 | -479854                                                                                     | 4 - 85<br>3/4 - 3<br>3/8                                                                       | 90<br>4                                                                                        | T-handle                                                                                       | 0.00                                                                                            | 15                             | 1.5<br>1.65                             | 0,36<br>0.794                                                                                  | K-482                  | ✓                                                                                     |
| 482-3 | -479939                                                                                     | 4 - 150<br>3/4 - 5<br>7/8                                                                      | 150<br>5 7/8                                                                                   | 13<br>1/2                                                                                      | 35<br>25.82                                                                                     | 25                             | 2.5<br>2.76                             | 0,875<br>1.929                                                                                 | K-482                  | ✓                                                                                     |
| 482-4 | -480096                                                                                     | 0 - 200<br>3/4 - 7<br>7/8                                                                      | 200<br>7 7/8                                                                                   | 17<br>11/16                                                                                    | 40<br>29.50                                                                                     | 30                             | 3<br>3.31                               | 1,68<br>3.704                                                                                  | -                      | ✓                                                                                     |
| 482-5 | -480171                                                                                     | 0 - 250<br>3/4 - 9<br>7/8                                                                      | 250<br>9 7/8                                                                                   | 17<br>11/16                                                                                    | 40<br>29.50                                                                                     | 30                             | 3<br>3.31                               | 1,92<br>4.234                                                                                  | -                      | ✓                                                                                     |

## SERIES 483 HANDY, 3-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING, CLAMPING JAWS

The handy 3-jaw puller with force-amplifying, self-centering and tensioning jaws is used for pulling off bearings, gears and discs in tight spaces. This makes it possible to loosen any component that sits on a shaft and is freely accessible from the outside.

### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- The slim design of the jaws enables access to difficult-to-reach areas.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.
- The thread shape allows for quick tightening of the spindle, as fewer rotations are required.



483-2

483-3

483-4

483-5



### TECHNICAL ATTRIBUTES

| #     | GTIN    |  mm/inch |  mm/inch |  SW mm/inch |  Nm/ft lb | Max. tensile force<br>kN | Max. tension force<br>t/US t. sh. |  kg/lb |  |
|-------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 483-2 | -480331 | 4 - 85<br>3/4 - 3 3/8                                                                       | 90<br>4                                                                                     | T-handle                                                                                       | 0.00                                                                                         | 15                       | 1.5<br>1.65                       | 0,425<br>0.937                                                                              | ✓                                                                                     |
| 483-3 | -480416 | 4 - 150<br>3/4 - 5 7/8                                                                      | 150<br>5 7/8                                                                                | 13<br>1/2                                                                                      | 35<br>25.82                                                                                  | 25                       | 2.5<br>2.76                       | 1,16<br>2.558                                                                               | ✓                                                                                     |
| 483-4 | -480584 | 0 - 200<br>3/4 - 7 7/8                                                                      | 200<br>7 7/8                                                                                | 17<br>11/16                                                                                    | 40<br>29.50                                                                                  | 30                       | 3<br>3.31                         | 1,72<br>3.793                                                                               | ✓                                                                                     |
| 483-5 | -480669 | 0 - 250<br>3/4 - 9 7/8                                                                      | 250<br>9 7/8                                                                                | 17<br>11/16                                                                                    | 40<br>29.50                                                                                  | 30                       | 3<br>3.31                         | 2,395<br>5.281                                                                              | ✓                                                                                     |

SERIES 48  
SINGLE-HANDED TENSIONING PULLER



The handy 2-jaw puller with self-centering jaws is used to remove battery terminals. It can loosen any component that sits on a shaft and is freely accessible from the outside. The narrow jaws are suitable for tight, hard-to-reach spots. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in confined spaces. The pulling process occurs in direct contact with the part to be tightened, thereby ensuring a controlled application of force.

BENEFITS

- Self-centering of the jaws by manually tightening the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in the tightest spaces
- Easy one-handed operation for flexible working
- The slim design of the jaws allows access to hard-to-reach places. No additional tool is required for the pulling process.

TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 48 | -170539                                                                                     | 0 - 60<br>0 - 2 3/8                                                                            | 40<br>1 5/8                                                                                    | 15                          | 1.5<br>1.65                          | 0,225<br>0.496                                                                                 | ✓                                                                                     |

SERIES K-482  
HANDY 2-JAW PULLER SET



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of            |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| K-482 | -123245                                                                                     | 0 - 150<br>0 - 5 7/8                                                                           | 0 - 150<br>0 - 5 7/8                                                                           | 13<br>1/2                                                                                      | 25                             | 2.5<br>2.76                             | 2,44<br>5.380                                                                                  | 482-1,<br>482-2, 482-3 | ✓                                                                                     |

The 3-piece, handy puller with force-amplifying, self-centering and tensioning jaws in the set is used for 2-jaw pulling of bearings, gears, and discs in tight and poorly accessible spaces. This allows for loosening externally accessible parts.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Integrated, freely movable T-handle guarantees manual spindle drive in tight spaces.
- The slim design of the jaws allows access to hard-to-reach areas.





KUKKO // *Pull forward*



SERIES 844-B | 845-B

# PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS AND GREASE HYDRAULIC SPINDLE



# APPLICATION

The handy 2-jaw and 3-jaw Pullers with force-amplifying, self-centering jaws and grease hydraulic spindle are used for pulling especially tight ball bearings, gears, and discs in all common sizes for craft, workshop, and industry. By tightening the spindle, the jaws are automatically centered.

## Benefits

- Self-centering of the jaws by manual tightening of the spindle (Autogrip Technology)
- Spindle extensions allow quick adaptation to a wide variety of requirements
- Hydraulic spindle guarantees easy and controlled removal of particularly tight parts with minimal effort
- Slim design of the jaws enables access to poorly accessible areas

## CONSTRUCTION OF A PULLER USING THE EXAMPLE 844-3-B



## SPECIAL FEATURES OF THE SERIES

### SERIES 844-B



The grease hydraulic spindle of the Series 800 is the motor of the puller and achieves a tension force of 10 t. The spindle is knurled on the sides to provide particularly good grip for the fingers when readjusting.

### SERIES 845-B



The 3-jaw design guarantees even load distribution and thus particularly secure hold on the part to be pulled.

## APPLICATION EXAMPLES



Pulling a ball bearing from the gear wheel



Removal of a ball bearing from drive flange

## SERIES 844-B HANDY 2-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS AND HYDRAULIC SPINDLE



The handy 2-jaw puller with force-amplifying, self-centering jaws and a grease-hydraulic spindle is used for pulling particularly tight bearings, gears and discs. The spindle stands out for its compact design and ease of use.

### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Spindle extensions allow for a quick adaptation to a wide range of requirements.
- The hydraulic spindle guarantees easy and controlled removal of especially stuck parts with little effort.
- The slim design of the jaws allows access to hard-to-reach places.
- No additional tools are needed for the pulling process.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set                      |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|
| 844-1-B | -031601                                                                                     | 26 - 100<br>2 - 3 7/8                                                                          | 100<br>3 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 3,39<br>7.475                                                                                  | 845-150,<br>845-855,<br>845-858,<br>845-851 | ✓                                                                                     |
| 844-2-B | -031946                                                                                     | 51 - 150<br>3 - 5 7/8                                                                          | 150<br>5 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 4,45<br>9.812                                                                                  | 845-150,<br>845-855,<br>845-858,<br>845-851 | ✓                                                                                     |
| 844-3-B | -032448                                                                                     | 39 - 150<br>3 - 5 7/8                                                                          | 250<br>9 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 4,92<br>10.849                                                                                 | 845-851,<br>845-855,<br>845-858,<br>845-250 | ✓                                                                                     |
| 844-4-B | -076091                                                                                     | 64 - 200<br>3 7/8 - 7<br>7/8                                                                   | 200<br>7 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 4,9<br>10.805                                                                                  | 845-250,<br>845-855,<br>845-858,<br>845-851 | ✓                                                                                     |



PRODUCT DETAILS

|  | #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set                      |  |
|--------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                | 844-5-B | -032776                                                                                   | 96 - 250<br>5 1/8 - 9<br>7/8                                                                 | 250<br>9 7/8                                                                                 | 40<br>29.50                                                                                   | 100                            | 10<br>11.02                             | 5,12<br>11.290                                                                               | 845-250,<br>845-851,<br>845-855,<br>845-858 | ✓                                                                                   |

## SERIES 845-B HANDY, 3-JAW PULLER WITH FORCE-AMPLIFYING, SELF-CENTERING JAWS AND HYDRAULIC SPINDLE



The handy 2-jaw and 3-jaw pullers with force-amplifying, self-centering jaws and a grease-hydraulic spindle are used for pulling particularly tight bearings, gears and discs in all common sizes for trades, workshops and industry. The grease-hydraulic spindle achieves a tension force of 10 t. This allows any component to be loosened that is seated on a shaft and is freely accessible from the outside. When tightening the spindle, the jaws are automatically centered.

### BENEFITS

- Self-centering of the jaws through manual tightening of the spindle (Autogrip Technology)
- Spindle extensions allow for a quick adaptation to a wide range of requirements.
- The hydraulic spindle guarantees easy and controlled removal of especially stuck parts with little effort.
- The slim design of the jaws allows access to hard-to-reach places.
- No additional tools are needed for the pulling process.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set                      |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------|
| 845-1-B | -033278                                                                                     | 26 - 100<br>2 - 3 7/8                                                                          | 100<br>3 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 4,11<br>9.063                                                                                  | 845-150,<br>845-855,<br>845-858,<br>845-851 | ✓                                                                                     |
| 845-2-B | -033438                                                                                     | 75 - 150<br>3 - 5 7/8                                                                          | 150<br>5 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 2<br>4.410                                                                                     | 845-150,<br>845-855,<br>845-858,<br>845-851 | ✓                                                                                     |
| 845-3-B | -033681                                                                                     | 39 - 150<br>3 - 5 7/8                                                                          | 250<br>9 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 5,99<br>13.208                                                                                 | 845-250,<br>845-851,<br>845-855,<br>845-858 | ✓                                                                                     |

PRODUCT DETAILS



| #                                                                                       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br><br>kN | Max.<br>tension<br>force<br><br>t/US t. sh. | <br>kg/lb | Included in<br>the set                      |  |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------|
|  845-4-B | -033841                                                                                   | 64 - 200<br>3 7/8 - 7 7/8                                                                    | 200<br>7 7/8                                                                                 | 40<br>29.50                                                                                   | 100                                | 10<br>11.02                                 | 5,96<br>13.142                                                                               | 845-250,<br>845-855,<br>845-858,<br>845-851 | ✓                                                                                   |
| 845-5-B                                                                                 | -034008                                                                                   | 96 - 250<br>5 1/8 - 9 7/8                                                                    | 250<br>9 7/8                                                                                 | 40<br>29.50                                                                                   | 100                                | 10<br>11.02                                 | 6,6<br>14.553                                                                                | 845-851                                     | ✓                                                                                   |

SERIES 845-150  
HYDRAULIC "4 PULLER" SET WITH SELF-CENTERING PULLER JAWS



The 11-piece hydraulic "4 Puller" set with self-centering jaws is used for pulling bearings, gears, discs, etc. in crafts, industry, and workshops. The set includes pullers, hydraulic spindle, jaws, as well as 2-jaw and 3-jaw combo crossbars that can be combined into four different pullers through the easily interchangeable, multiple combinable individual parts.

BENEFITS

- Application-oriented assembly for universal use
- Pullers of series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.
- Through the various pullers, spans of 50-150 mm are covered, thus providing suitable pullers for most pulling situations.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                              |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 845-150 | -717871                                                                                     | 26 - 150<br>1 1/32 - 5<br>7/8                                                                  | 0 - 150<br>0 - 5 7/8                                                                           | 100                            | 10<br>11.02                          | 9,66<br>21.300                                                                                | 800, 845-004,<br>844-020,<br>800-050,<br>800-100,<br>844-100,<br>844-150 | ✓                                                                                     |



SERIES 845-250  
HYDRAULIC "6 PULLER" SET WITH SELF-CENTERING PULLER JAWS



The 15-piece hydraulic "6 Puller" set with self-centering jaws is used for pulling bearings, gears, discs, etc. in craft, industry, and workshops. The set includes pullers, hydraulic spindle, hooks, as well as 2-jaw and 3-jaw combination crossbars that can be combined into six different pullers through easily interchangeable, multifunctional individual components.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The pullers of the series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.
- Through the various pullers, span widths of 50-150 mm are covered, making suitable pullers available for most pulling situations.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br><br>kN | Max. tension<br>force<br><br>t/US t. sh. | <br>kg/lb | Consists of                                                                                      |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 845-250 | -717956                                                                                     | 39 - 250<br>1 9/16 - 9<br>13/16                                                                | 0 - 250<br>0 - 9 13/16                                                                         | 100                                | 10<br>11.02                              | 15,57<br>34.332                                                                               | 800, 845-004,<br>844-020,<br>800-050,<br>800-100,<br>800-150,<br>844-200,<br>844-250,<br>844-251 | ✓                                                                                     |

SERIES 845-851  
HYDRAULIC "10 PULLER" SET WITH SELF-CENTERING PULLER JAWS



The 21-piece hydraulic "10 Puller" set with self-centering puller jaws is used for pulling bearings, gears, discs, etc. in crafts, industry, and workshops. The set includes pullers, hydraulic spindles, jaws, as well as 2-jaw and 3-jaw combo crossbars, which can be combined into ten different pullers through the easily interchangeable, multiple combinable individual parts.

BENEFITS

- Application-oriented assembly for universal use
- The pullers of the series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.
- Through the various pullers, span widths of 50-150 mm are covered, making suitable pullers available for most pulling situations.



TECHNICAL ATTRIBUTES

| #       |  |  |  | Max.<br>tensile<br>force | Max. tension<br>force |  | Consists of                                                                                                              |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|-----------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.           | kg/lb                                                                                |                                                                                                                          |                                                                                       |
| 845-851 | -172854                                                                             | 26 - 250<br>1 1/32 - 9<br>13/16                                                     | 0 - 250<br>0 - 9 13/16                                                              | 100                      | 10<br>11.02           | 19,72<br>43.483                                                                      | 800, 845-004,<br>844-020,<br>800-050,<br>800-100,<br>800-150,<br>844-100,<br>844-150,<br>844-200,<br>844-250,<br>844-251 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 845-855  
HYDRAULIC UNIVERSAL PULLER SET



The 29-piece hydraulic universal puller set with a pulling device and self-centering jaws is used for Pulling and Separation of bearings, gears, discs, etc. As a set of the 800 series, it enables a variety of hydraulic Pulling options with consistent modularity.

BENEFITS

- Application-oriented assembly for universal use
- Pullers of series 800 use the same hydraulic spindle and do not require additional accessories.
- For the series 800, there are numerous easily exchangeable and combinable individual parts and supplements.
- Through the ten different pullers, spans of 50-250 mm are covered, making suitable pullers available for most pulling situations.

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                              |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                                                                                                                             |                                                                                       |
| 845-855 | -172939                                                                             | 26 - 250<br>1 1/32 -<br>9 13/16                                                     | 0 - 250<br>0 - 9 13/16                                                              | 85 - 270<br>3 3/8 - 10<br>5/8                                                       | 780<br>30 11/16                                                                     | 25 - 155<br>1 - 6 1/8                                                               | 100                      | 10<br>11.02              | 37<br>81.585                                                                          | 800,<br>800-050,<br>800-100,<br>800-150,<br>844-020,<br>844-100,<br>844-150,<br>844-200,<br>844-250,<br>844-251,<br>845-004,<br>Y-215-3,<br>818-820,<br>818-250,<br>818-280 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 845-858 HYDRAULIC UNIVERSAL PULLER AND EXTRACTOR SET

The 34-piece hydraulic universal puller and extractor set with self-centering jaws and pulling device is used for Pulling, Separation, and internal extraction of bearings, gears, discs, etc. As a set of the 800 series, it enables hydraulic Pulling capabilities with high modularity.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Pullers of series 800 use the same hydraulic spindle and do not require any additional accessories.
- For the series 800, there are numerous easily interchangeable and combinable individual parts and enhancements.
- Through the ten different pullers, spans of 50-250 mm are covered, thus making suitable pullers available for most extraction situations.



#### TECHNICAL ATTRIBUTES

| #       | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  mm/inch | Max.<br>tensile<br>force | Max.<br>tension<br>force |  kg/lb | Consists<br>of                                                                                                                                                                          |  |
|---------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         |         |                                                                                                 |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             | kN                       | t/US t.<br>sh.           |                                                                                             |                                                                                                                                                                                         |                                                                                       |
| 845-858 | -173011 | 26 -<br>250<br>1 1/32 -<br>9 13/16                                                              | 0 - 250<br>0 - 9<br>13/16                                                                   | 30 - 180<br>1 3/16 - 7<br>1/16                                                              | 85 - 270<br>3 3/8 - 10<br>5/8                                                               | 780<br>30 11/16                                                                             | 25 - 155<br>1 - 6 1/8                                                                       | 100                      | 10<br>11.02              | 37<br>81.585                                                                                | 800,<br>800-050,<br>800-100,<br>800-150,<br>844-020,<br>844-100,<br>844-150,<br>844-200,<br>844-250,<br>844-251,<br>845-004,<br>Y-215-3,<br>818-820,<br>818-250,<br>818-280,<br>818-021 | ✓                                                                                     |



SERIES 820  
2-JAW PULLER WITH HYDRAULIC SPINDLE



The 2-jaw puller with hydraulic spindle is used for safely pulling particularly stubborn bearings, gears, and discs in all common sizes for handcraft, workshop, and industry. The hydraulic spindle of series 800 is the motor of the puller and achieves a tension force of 10 t. As a true powerhouse, the spindle impresses with a compact design, easy usability, and portable application. The spindle is ribbed on the sides to provide particularly good grip for the fingers when resetting.

BENEFITS

- The screw connection allows easy loosening and particularly tight fastening of the jaws with an allen key
- The hydraulic spindle guarantees easy and controlled pulling of particularly stubborn parts with minimal effort.
- Application also for eccentric components through free-moving, sliding puller jaws on the crossbar.
- Variable adjustment for any spread between 85 mm – 225 mm
- Optional convertible from an external puller to an internal extractor by reversing the jaws.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 820-0 | -173684                                                                                     | 85 - 225<br>3 3/8 - 8<br>7/8                                                                   | 225<br>8 7/8                                                                                   | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 7,24<br>15.964                                                                                 | 818-215                | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 818-215 HYDRAULIC BEARING PULLER AND EXTRACTOR SET



The 20-piece hydraulic bearing puller and extractor set is used for pulling and internal extraction of ball bearings, roller bearings, internal rings, and other flush-mounted parts when there is insufficient space for puller jaws. As a set of series 800, it allows for high modularity.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Pullers of series 800 use the same hydraulic spindle and do not require any additional accessories.
- For the series 800, there are numerous easily interchangeable and combinable individual parts and enhancements.
- The hydraulics enable high pulling performance with low effort.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |                                                          | Consists<br>of |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                              | kN                       | t/US t.<br>sh.           | kg/lb                                                                                                                                         |                |                                                                                       |
| 818-215 | -173271                                                                             | 85 -<br>225<br>3 3/8 -<br>8 7/8                                                     | 225<br>8 7/8                                                                        | 30 - 180<br>1 3/16 - 7<br>1/16                                                      | 85 - 270<br>3 3/8 - 10<br>5/8                                                       | 780<br>30 11/16                                                                     | 22 - 155<br>7/8 - 6<br>1/8                                                          | 100                                                                                  | 10<br>11.02              | 27,12<br>59.800          | 800,<br>800-050,<br>800-100,<br>800-150,<br>818-250,<br>818-279,<br>818-280,<br>818-820,<br>820-225-<br>P,<br>Y-215-2,<br>Y-215-3,<br>818-021 | ✓              |                                                                                       |

KUKKO // *Pull forward*



SERIES 12

# „ALLIGATOR“ PULLER WITH FIXED JAWS



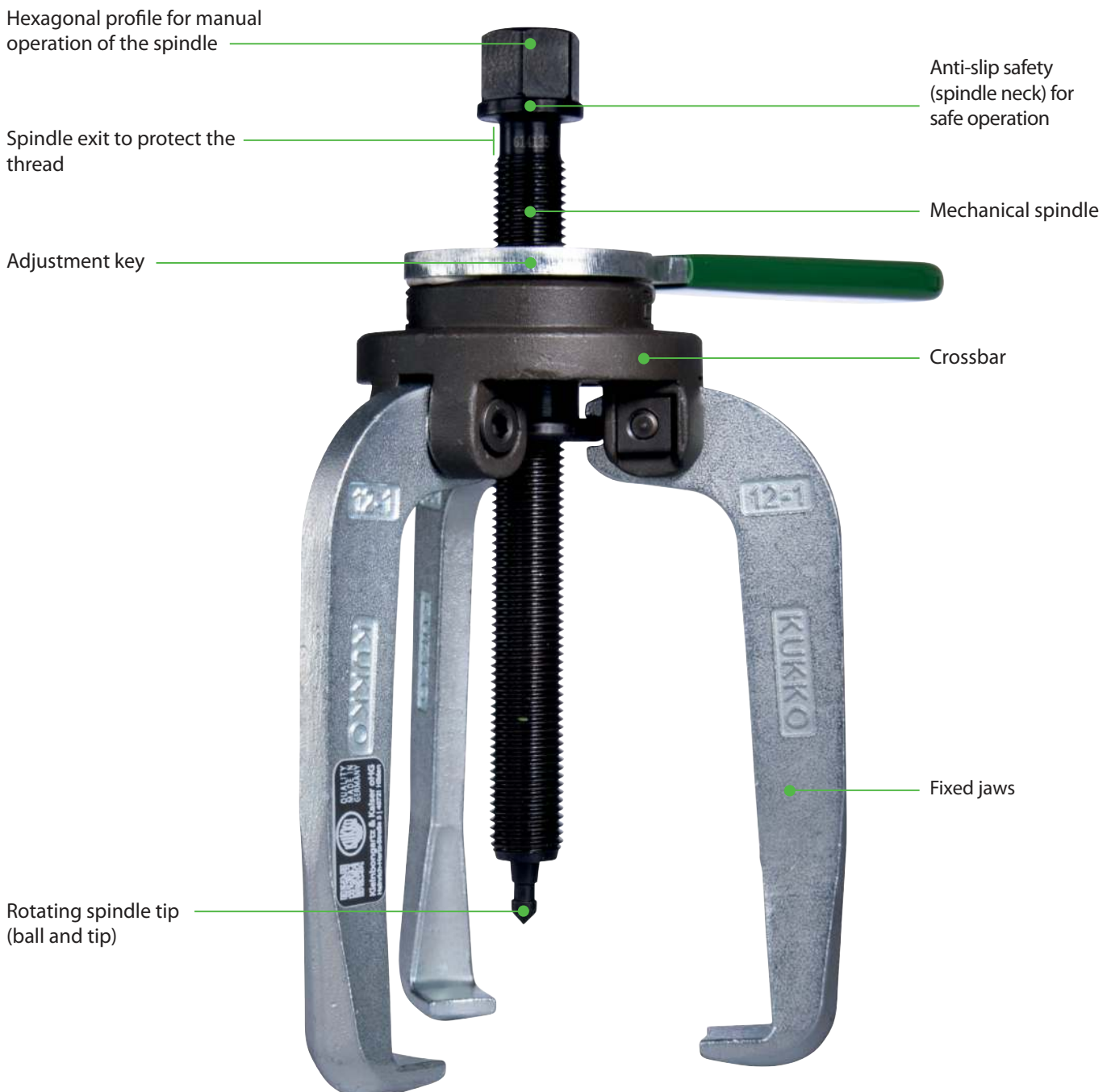
## APPLICATION

The 3-jaw „Alligator“ pullers with fixed jaws and anti-slip safety (spindle neck) are used for pulling particularly stubborn bearings, gears, disks, etc. in all common sizes for trades, workshops, and industry. This allows any component mounted on a shaft and freely accessible from the outside to be removed. By tightening the key, the jaws are automatically centered and firmly clamped. This prevents slipping and movement of the jaws.

### Benefits

- The Alligator mechanism ensures that the jaws can only be opened and closed by operating the adjustment key
- Key ensures a force-locked fixing of the puller without the jaws slipping off or shifting
- Self-centering of the jaws by tightening the key
- Secure placement of the spindle thanks to the rotating spindle tip (ball and tip) both on smooth surfaces and for centerings (Switch Technology)
- Anti-slip safety (spindle neck) at the spindle head for safe operation using a wrench

## CONSTRUCTION OF THE PULLER USING THE 12-1 AS AN EXAMPLE





## SPECIAL FEATURES OF THE SERIES

### SERIES 12



The 3-jaw „Alligator“ puller with fixed jaws and anti-slip safety (spindle neck) is used for pulling particularly stubborn bearings, gears, and disks.

### SERIES 12-A

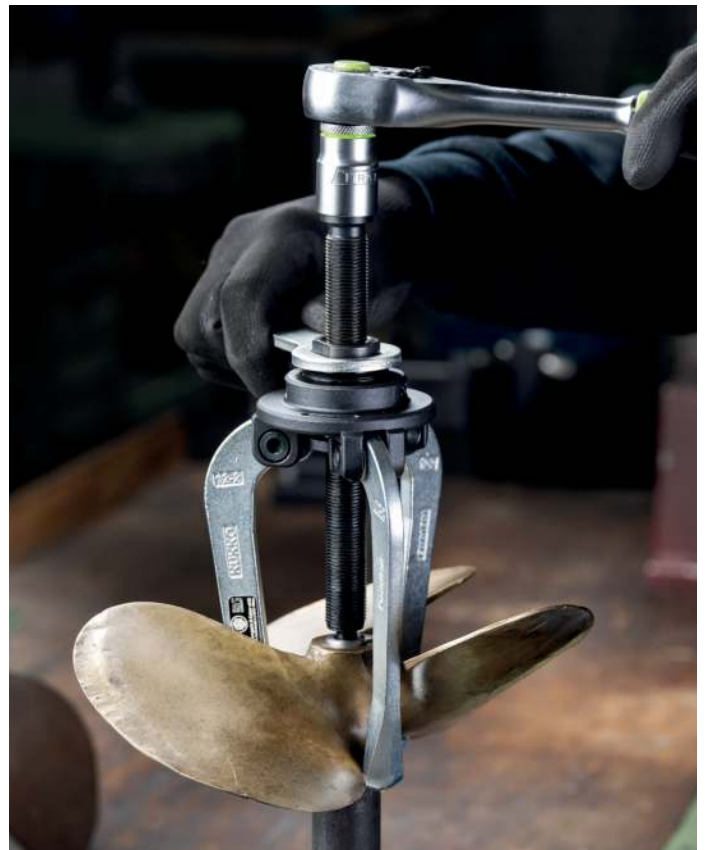


The 3-jaw „Alligator“ puller with presettable jaws is equipped with a hook rest on the inside and outside. This makes it universally usable as both an external puller and an internal extractor.

## APPLICATION EXAMPLES



Removing a pulley from a car alternator



Dismantling a propeller with the 12-2

## SERIES 12

### 3-JAW PULLER "ALLIGATOR" WITH FIXED PULLER JAWS AND ANTI-SLIP SAFETY



The 3-jaw puller "Alligator" with fixed jaws and anti-slip safety is used for pulling particularly stubborn bearings, gears, and discs in all common sizes for craft, workshop, and industry. This allows for loosening any component that is seated on a shaft and is freely accessible from the outside. By tightening the key, the puller jaws are forced to be centered and tightened securely. This prevents slipping or movement of the jaws.

#### BENEFITS

- The Alligator puller guarantees that the jaws can only be opened and closed by operating the tensioning key.
- The key ensures a force-strong fixing of the puller without dropping off or deviating of the jaws.
- Self-centering of the jaws by tightening the key
- Secure attachment of the spindle through a rotatable spindle tip on both smooth surfaces and during centering (Switch Technology)
- In models starting from size 12-4, there is a hook support on both the inside and outside, allowing the puller to be used for both external extraction and internal extraction (the use as a mobile press is also possible).



#### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 12-1 | -006616                                                                                     | 0 - 100<br>3/4 - 3 7/8                                                                         | 100<br>3 7/8                                                                                   | 17<br>11/16                                                                                    | 180<br>132.77                                                                                   | 80                             | 8<br>8.82                               | 1,24<br>2.734                                                                                  | ✓                                                                                     |
| 12-2 | -006791                                                                                     | 9 - 150<br>1 3/8 - 5 7/8                                                                       | 125<br>4 7/8                                                                                   | 19<br>3/4                                                                                      | 190<br>140.14                                                                                   | 90                             | 9<br>9.92                               | 1,72<br>3.793                                                                                  | ✓                                                                                     |
| 12-3 | -006876                                                                                     | 16 - 200<br>2 - 7 7/8                                                                          | 165<br>6 1/2                                                                                   | 24<br>15/16                                                                                    | 250<br>184.40                                                                                   | 100                            | 10<br>11.02                             | 3,5<br>7.718                                                                                   | ✓                                                                                     |

SERIES 12-A  
3-JAW PULLER WITH ADJUSTABLE  
EXTRACTION JAWS FOR INTERNAL AND  
EXTERNAL PULLING



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 12-4 | -850509                                                                                     | 0 - 250<br>0 - 9 7/8                                                                           | 225<br>8 7/8                                                                                   | 27<br>1 1/16                                                                                   | 300<br>221.28                                                                                   | 100                            | 10<br>11.02                             | 11,99<br>26.438                                                                                | ✓                                                                                     |
| 12-5 | -850684                                                                                     | 0 - 350<br>0 - 13 3/4                                                                          | 275<br>10 7/8                                                                                  | 27<br>1 1/16                                                                                   | 300<br>221.28                                                                                   | 100                            | 10<br>11.02                             | 13,485<br>29.734                                                                               | ✓                                                                                     |
| 12-6 | -850769                                                                                     | 0 - 450<br>0 - 17 3/4                                                                          | 300<br>11 7/8                                                                                  | 36<br>1 7/16                                                                                   | 280<br>206.53                                                                                   | 150                            | 15<br>16.53                             | 32,5<br>71.663                                                                                 | ✓                                                                                     |
| 12-7 | -850844                                                                                     | 0 - 650<br>0 - 25 5/8                                                                          | 350<br>13 3/4                                                                                  | 36<br>1 7/16                                                                                   | 280<br>206.53                                                                                   | 150                            | 15<br>16.53                             | 40,3<br>8.820                                                                                  | ✓                                                                                     |

The 3-jaw puller with adjustable puller jaws for external and internal extraction is used for pulling bearings, gears, discs, etc. in all common sizes for crafts, workshops, and industry. This allows for the loosening of any component that either sits on a shaft and is freely accessible from the outside or is fitted internally and thus needs to be pulled differently. The models are equipped with one jaw support on the inside and the outside, allowing them to be used for both external pulling and internal extraction.

BENEFITS

- The cross hooks ensure maximum stability for suspending the jaws in the sliding piece (Armlock Technology)
- The three-jaw design ensures even load distribution and a particularly secure hold.
- Smooth adjustment of the symmetrically tensioning arms to the required spread with a key allows for variable application.
- Also usable as a mobile press

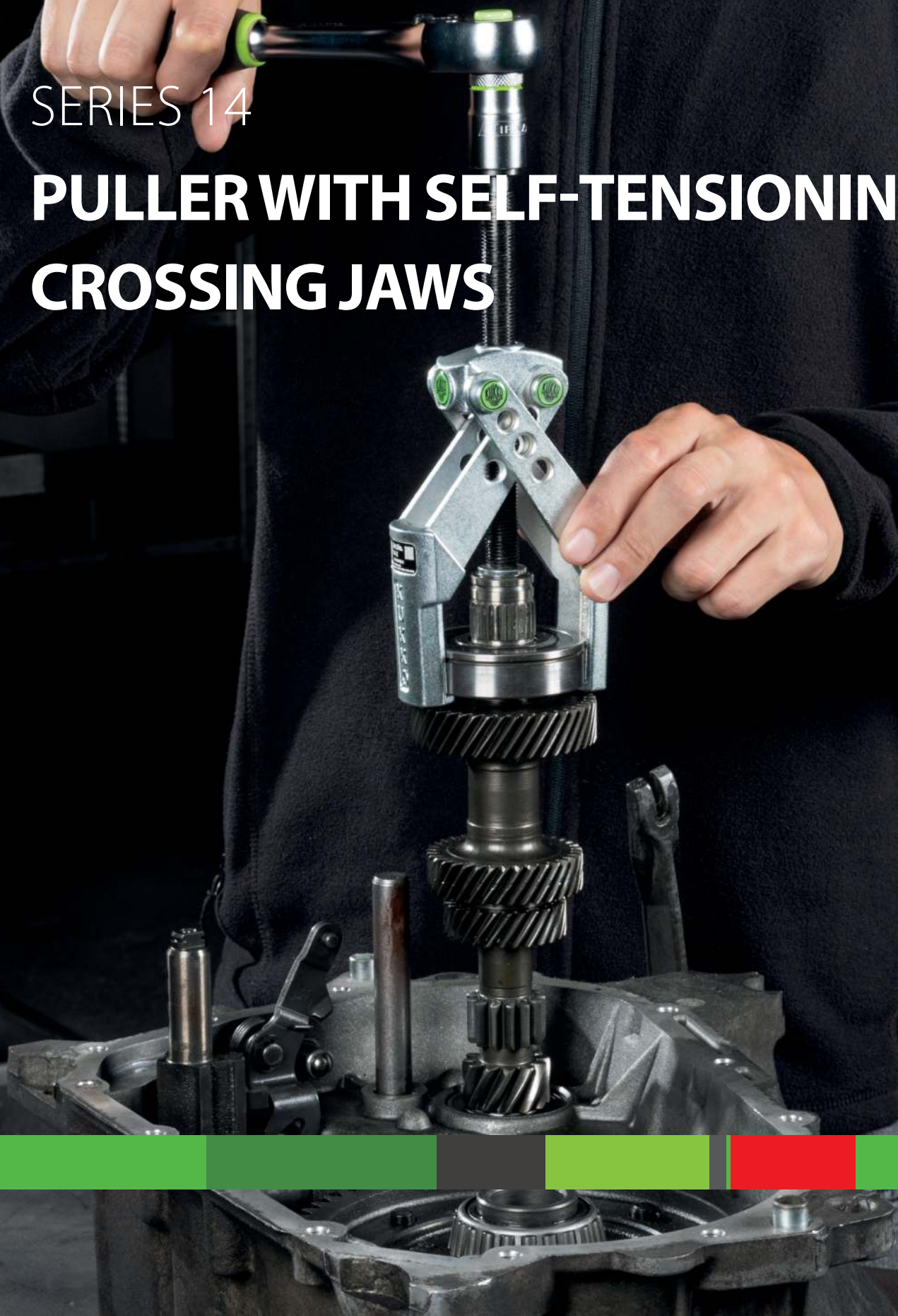


KUKKO // *Pull forward*



SERIES 14

# PULLER WITH SELF-TENSIONING, CROSSING JAWS





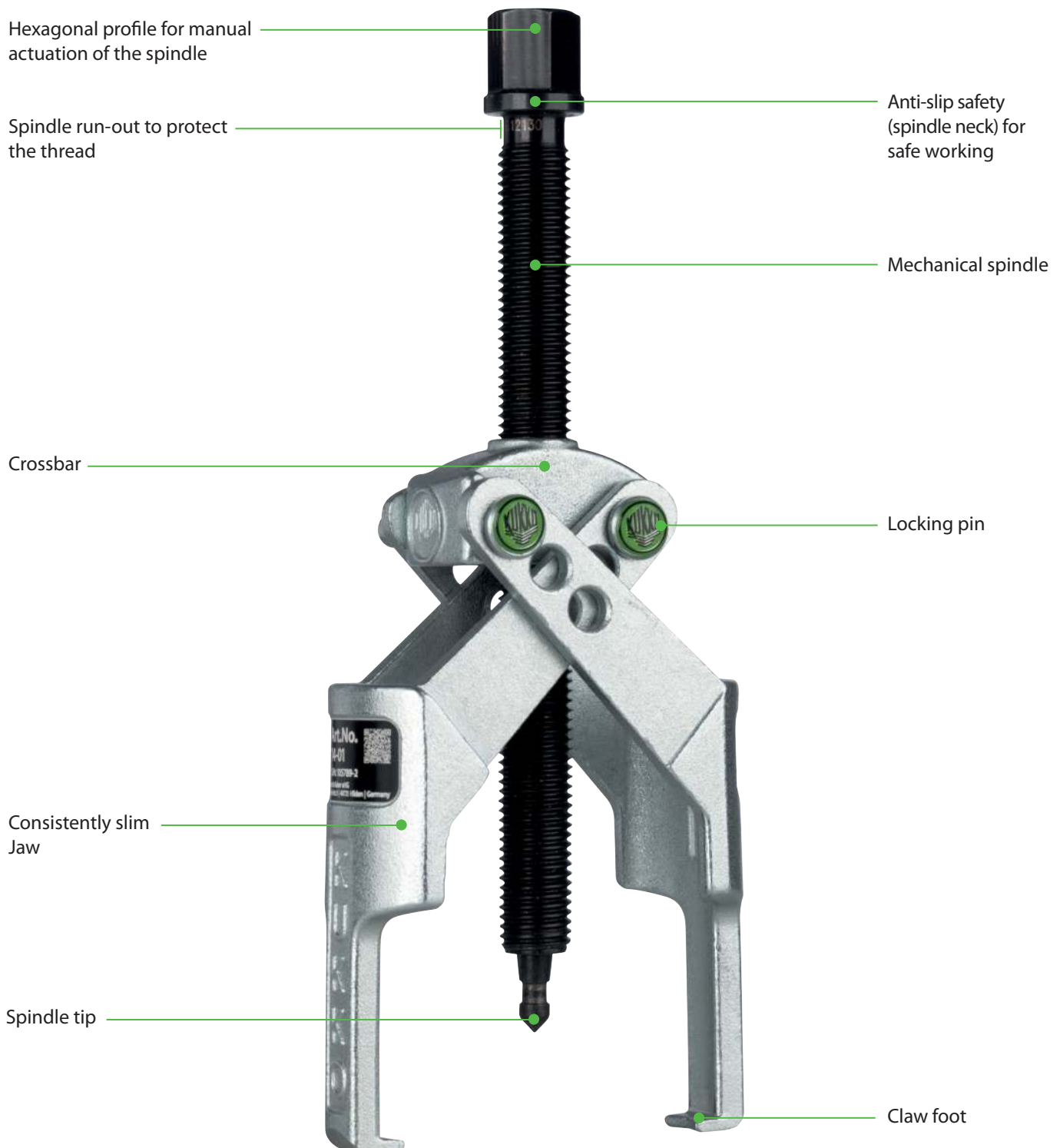
# APPLICATION

The special feature of the series 14 is the intersecting jaws with claw feet. During the pulling process, the scissor-like hook guide presses the claw feet against the part to be pulled. This means that even the narrowest gaps between pinions, bearings and similar components can be reached. Due to their design, the pullers are also characterized by an extremely wide clamping range.

## Benefits

- Quick and easy assembly of the jaws
- Extremely wide spread due to variable mounting of the jaws
- Spread and reach can be individually adjusted
- If space is limited, the two jaws can be fitted first, before they are fitted in the second step with Crossbar and holding pins can be fixed

## STRUCTURE OF THE PULLER USING EXAMPLE 14-1



## LOCKING PIN

The self-locking retaining pins guarantee quick and easy adjustment for variable span width ranges. The spread and reach can thus be individually adjusted.



Manually removable locking pins



Reassembling the individual components and reversing the jaws



Legs are adjusted and locking pin is inserted

## APPLICATION EXAMPLES



The scissor-like hook guide ensures a secure hold. The claw feet enclose the pulley



Pulling a ball bearing from a gear shaft



The crossover of the jaws increases the span range many times over

### SERIES 14 2-JAW PULLER WITH SELF-CLAMPING, CROSSING PULLER JAWS



The 2-jaw puller with self-gripping, intersecting puller arms is used for extracting sprockets, pulleys, bearings, and similar components in tight spaces. Self-locking retaining pins ensure quick and easy adjustment for variable spread ranges. The puller is self-gripping and simple to handle. During the pulling process, the scissor-like arm guidance firmly presses the claws against the part to be pulled. This provides a secure hold at all times.

#### BENEFITS

- Fast and easy assembly of the jaws
- Extremely high spread range due to variable mounting of the jaws
- Span width and span depth can be individually adjusted.
- In confined spaces, the two jaws can be mounted first and then fixed in the second step with a crossbar and retaining pins.
- Self-locking stop pins that do not fall out while working thanks to ball retention.



#### TECHNICAL ATTRIBUTES

| #    |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 14-1 | -455421                                                                             | 0 - 100<br>1/4 - 3 7/8                                                              | 85<br>3 3/8                                                                         | 13<br>1/2                                                                           | 50<br>36.88                                                                         | 25                       | 2.5<br>2.76              | 0,475<br>1.047                                                                        | ✓                                                                                     |
| 14-2 | -248443                                                                             | 2 - 140<br>3/8 - 5 1/2                                                              | 125<br>4 7/8                                                                        | 17<br>11/16                                                                         | 80<br>59.01                                                                         | 35                       | 3.5<br>3.86              | 1,06<br>3.528                                                                         | ✓                                                                                     |
| 14-3 | -248511                                                                             | 5 - 140<br>5/8 - 5 1/2                                                              | 160<br>6 3/8                                                                        | 17<br>11/16                                                                         | 100<br>73.76                                                                        | 45                       | 4.5<br>4.96              | 1,28<br>2.822                                                                         | ✓                                                                                     |

## SERIES 14-S 2-JAW PULLER WITH NARROW, SELF-CLAMPING, CROSSING PULLER JAWS



The 2-jaw puller with narrow, self-gripping, intersecting jaws is used for extracting sprockets, pulleys, bearings, and similar components in tight spaces. Self-locking retaining pins ensure quick and easy adjustment for variable span ranges. The puller is self-gripping and easy to handle. During the extraction process, the scissor-like arm guidance presses the claws firmly against the part being pulled. This ensures a secure grip at all times.

### BENEFITS

- Fast and easy assembly of the jaws
- Extremely high spread range due to variable mounting of the jaws
- Span width and span depth can be individually adjusted.
- In confined spaces, the two jaws can be mounted first and then fixed in the second step with a crossbar and retaining pins.
- Self-locking stop pins that do not fall out while working thanks to ball retention.



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 14-01 | -459559                                                                             | 0 - 100<br>1/4 - 3 7/8                                                              | 85<br>3 3/8                                                                         | 13<br>1/2                                                                           | 30<br>22.13                                                                         | 10                       | 1<br>1.10                | 0,45<br>0.992                                                                         | ✓                                                                                     |
| 14-02 | -774300                                                                             | 0 - 140<br>1/4 - 5 1/2                                                              | 125<br>6 3/8                                                                        | 17<br>11/16                                                                         | 30<br>22.13                                                                         | 10                       | 1<br>1.10                | 1,6<br>3.528                                                                          | ✓                                                                                     |
| 14-03 | -460111                                                                             | 0 - 140<br>1/4 - 5 1/2                                                              | 160<br>6 3/8                                                                        | 17<br>11/16                                                                         | 40<br>29.50                                                                         | 20                       | 2<br>2.20                | 1,12<br>2.470                                                                         | ✓                                                                                     |



KUKKO // *Pull forward*



SERIES 112 113

# PULLER FOR ROLLER BEARINGS WITH CONE KNOB



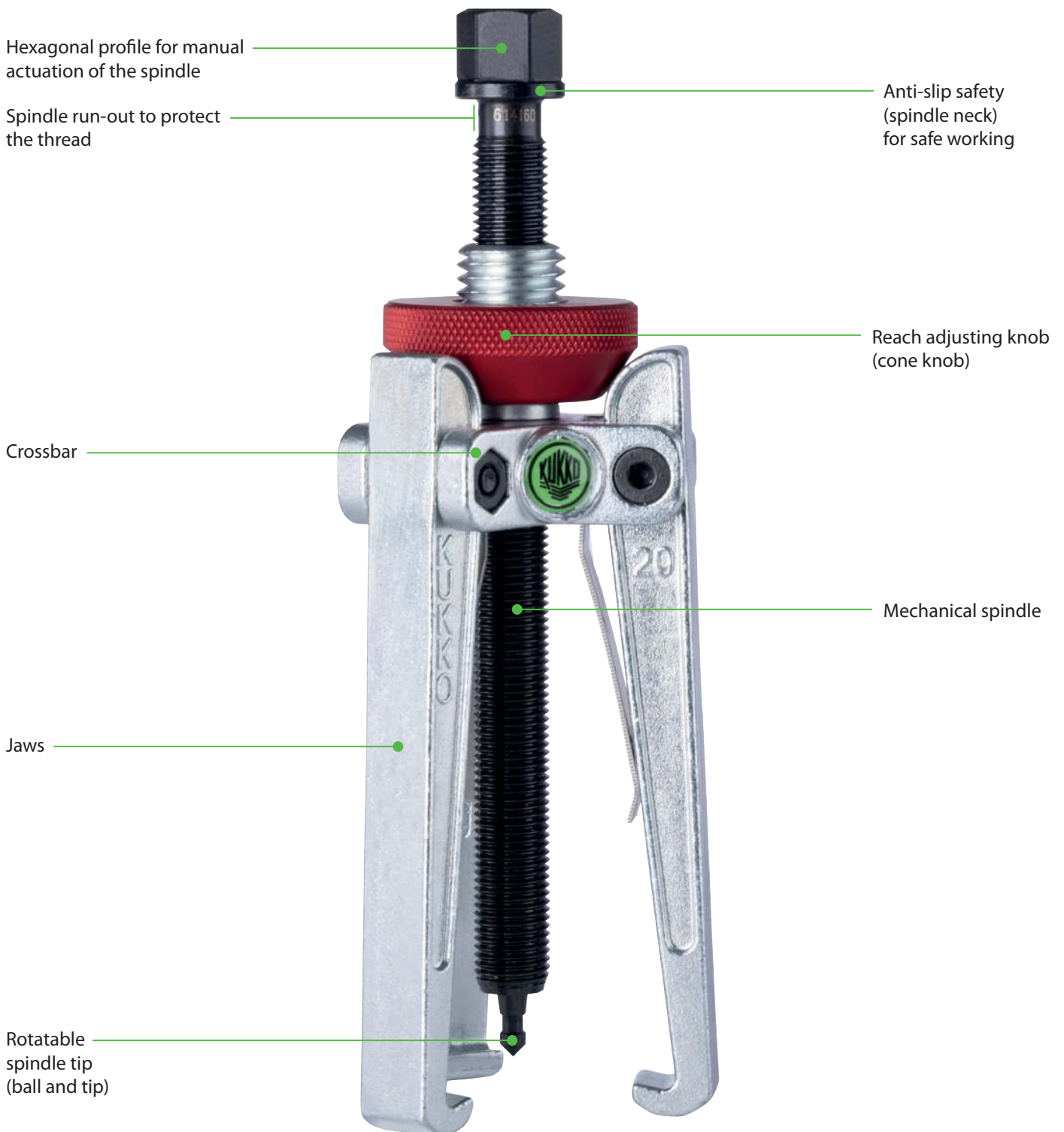
## APPLICATION

The 2-jaw and 3-jaw Pullers with cone knob were developed in cooperation with a Scandinavian ball bearing manufacturer for the proper removal of roller bearings. Both the proportions and the consistently straight jaws are specially designed to meet the requirements for centric extraction of small and medium-sized bearings.

### Benefits

- Automatic self-centering of the jaws by tightening the reach adjusting knob
- Reach adjusting knob and spring ensure a secure fixing of the Puller without slipping or skidding of the jaws
- Claw-like end of the jaws grips the bearing positively
- For identical extraction operations, the spread only needs to be set once
- Spindle run-out to protect the thread

## CONSTRUCTION OF A PULLER USING 113-3 AS AN EXAMPLE



## SPECIAL FEATURES OF THE SERIES

### SERIES 112



The central, manual fixation by the user-friendly reach adjusting knob ensures that the bearing seat of the shaft and the bearing are removed safely and gently.

### SERIES 113



The 3-jaw design guarantees an even load distribution and thus an especially secure hold on the part to be removed.

## APPLICATION EXAMPLES



The 2-jaw Puller for roller bearings 112-20 with cone knob when removing a ball bearing on a water pump



The 3-jaw Puller for roller bearings 113-3 with cone knob when removing a ball bearing on a gearbox



## SERIES 112 2-JAW PULLER FOR BALL BEARINGS (SWEDISH MODEL) WITH CONE KNOB



The 2-jaw pullers with cone knob of series 112 have been developed for the proper removal of rolling bearings in collaboration with a Scandinavian ball bearing manufacturer. Both the proportions of the puller and the consistently straight jaws are specially tailored to the requirements for central pulling of small and medium-sized bearings in limited environmental conditions. This counteracts possible damage to the bearing and bearing seat during removal.

### BENEFITS

- Automatic self-centering of the jaws by tightening the tension ring
- The tension ring and spring ensure a force-fitting fixation of the puller without slipping or deflection of the jaws.
- Claw-shaped leg end grasps the bearing in a form-fit manner.
- The spread only needs to be set once for identical pull-off processes.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.



### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 112-1  | -418143                                                                                     | 0 - 55<br>3/8 - 2<br>3/16                                                                      | 45<br>1 3/4                                                                                    | 13<br>1/2                                                                                      | 25<br>18.44                                                                                     | 15                             | 1.5<br>1.65                             | 0,405<br>0.992                                                                                 | ✓                                                                                     |
| 112-10 | -418891                                                                                     | 0 - 65<br>3/8 - 2 5/8                                                                          | 70<br>2 3/4                                                                                    | 13<br>1/2                                                                                      | 25<br>18.44                                                                                     | 15                             | 1.5<br>1.65                             | 0,46<br>1.014                                                                                  | ✓                                                                                     |
| 112-2  | -419218                                                                                     | 0 - 90<br>5/8 - 4                                                                              | 70<br>2 3/4                                                                                    | 17<br>11/16                                                                                    | 55<br>40.57                                                                                     | 30                             | 3<br>3.31                               | 0,86<br>1.896                                                                                  | ✓                                                                                     |
| 112-20 | -420283                                                                                     | 0 - 100<br>5/8 - 3 7/8                                                                         | 100<br>3 7/8                                                                                   | 17<br>11/16                                                                                    | 55<br>40.57                                                                                     | 30                             | 3<br>3.31                               | 0,945<br>2.084                                                                                 | ✓                                                                                     |
| 112-3  | -420368                                                                                     | 3 - 185<br>1 - 7 1/4                                                                           | 165<br>6 1/2                                                                                   | 17<br>11/16                                                                                    | 65<br>47.94                                                                                     | 40                             | 4<br>4.41                               | 2,17<br>4.785                                                                                  | ✓                                                                                     |



SERIES 113  
3-JAW PULLER FOR ROLLING BEARINGS  
(SWEDISH MODEL) WITH CONE KNOB



The 3-jaw Pullers with cone knob of series 113 were developed for the correct removal of rolling bearings in collaboration with a Scandinavian ball bearing manufacturer. Both the proportions of the Puller and the consistently straight jaws are specifically tailored to meet the requirements for centric extraction of small and medium-sized bearings under limited surrounding conditions. This prevents possible damage to the bearing and bearing seat during removal. The 3-jaw design guarantees an even load distribution.

BENEFITS

- Automatic self-centering of the jaws by tightening the tension ring
- The tension ring and spring ensure a force-fitting fixation of the puller without slipping or deflection of the jaws.
- Claw-shaped leg end grasps the bearing in a form-fit manner.
- The spread only needs to be set once for identical pull-off processes.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.

TECHNICAL ATTRIBUTES

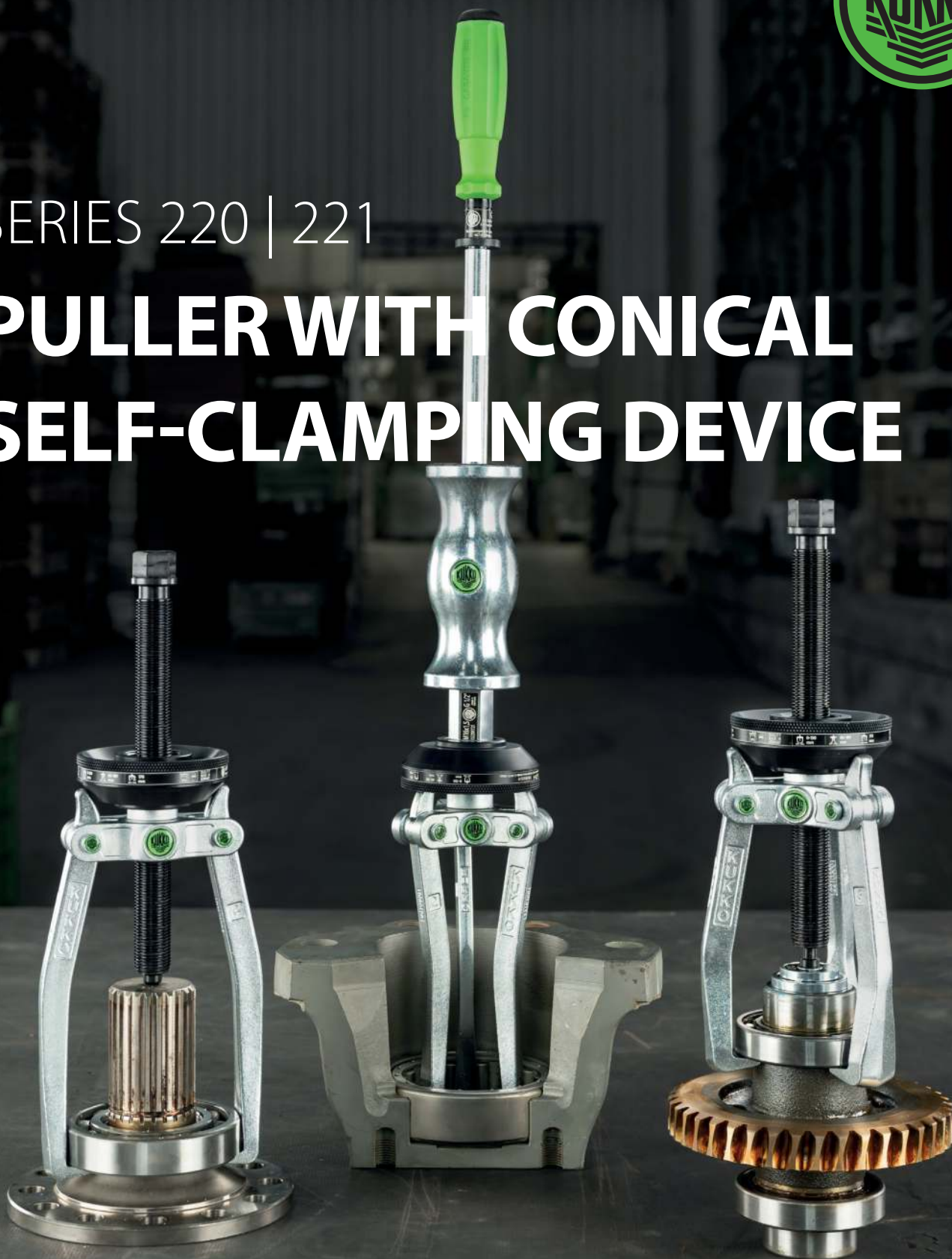
| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 113-20 | -422423                                                                                     | 1 - 125<br>3/4 - 4 7/8                                                                         | 100<br>3 7/8                                                                                   | 17<br>11/16                                                                                    | 45<br>33.19                                                                                     | 30                             | 3<br>3.31                               | 1,23<br>2.712                                                                                  | ✓                                                                                     |
| 113-3  | -422751                                                                                     | 3 - 185<br>1 - 7 1/4                                                                           | 165<br>6 1/2                                                                                   | 17<br>11/16                                                                                    | 60<br>44.26                                                                                     | 40                             | 4<br>4.41                               | 2,94<br>6.483                                                                                  | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 220 | 221

# PULLER WITH CONICAL SELF-CLAMPING DEVICE



# USE

The 2- and 3-jaw pullers with conical self-clamping of the 220 and 221 series are used for centric pulling of bearings, gears and pulleys in all common sizes for trade, workshop and industry. They can be used to remove any component that sits on a shaft and is freely accessible from the outside. The jaws are automatically centered when the clamping cone is tightened. The desired spread can be set by operating the clamping cone. The jaws can also be pre-tensioned using the cone to prevent them from slipping. Can be used both as an external extractor and an internal extractor (in combination with a sliding hammer) by simply turning the jaws and the clamping cone. Depending on the model, there are jaws of different lengths, resulting in a total of 24 possible uses.

## Benefits

- Self-centering of the legs by tightening the clamping cone
- Clamping cone regulates the setting of the desired clamping depth
- Can be optionally converted from an external extractor to an internal extractor by reversing the jaws and the clamping cone

## DESIGN OF A PULLER WITH CONICAL SELF-CLAMPING



# SPECIAL FEATURES OF THE SERIES

## SERIES 220 | 221

**2- and 3-jaw pullers  
with conical self-clamping**



220-1

221-1

The 2- and 3-jaw pullers with conical self-clamping of the 220-0 and 221-0 series can be used universally, even in confined spaces. The pullers are available in four different sizes. Depending on the model, the pullers have different jaws for even more specific machining of the workpiece.

## K-220 SERIES

**Puller with conical self-clamping  
in Set**



K-220-221-A

The 19-piece puller set for universal puller solutions is used for centric pulling of bearings, gears and washers in all common sizes. It can be used to remove any component that sits on a shaft and is freely accessible from the outside. Eight different pullers can be assembled with this 8-in-1 set.

## SERIES 220 / 221



The pullers in the 220 series are used for pulling gears, ball bearings, bearing rings, sealing rings and other parts in confined spaces, for example in aircraft, ships or electric cars. Can be used as an external extractor, internal extractor and for pulling parts with threaded holes. The use of the puller with sliding hammer is particularly recommended when there is no support surface or it is too sensitive.

## X-SB-224 SERIES



224-676

The equipped tool cabinets made of sturdy solid sheet metal are used to store tools safely and clearly. The tool cabinet contains various pullers and separators, a sliding hammer, two 3-jaw pullers with interchangeable hooks and various internal extractors with counter stays. This makes the range suitable for external extraction, internal extractors and also for separation.



# STEP-BY-STEP INSTRUCTIONS FOR CONVERTING THE 220-1



Removing the clamping cone



Removing the socket pins



Turning the jaws over



Inserting the socket pins



Fitting the clamping cone rotated by 180

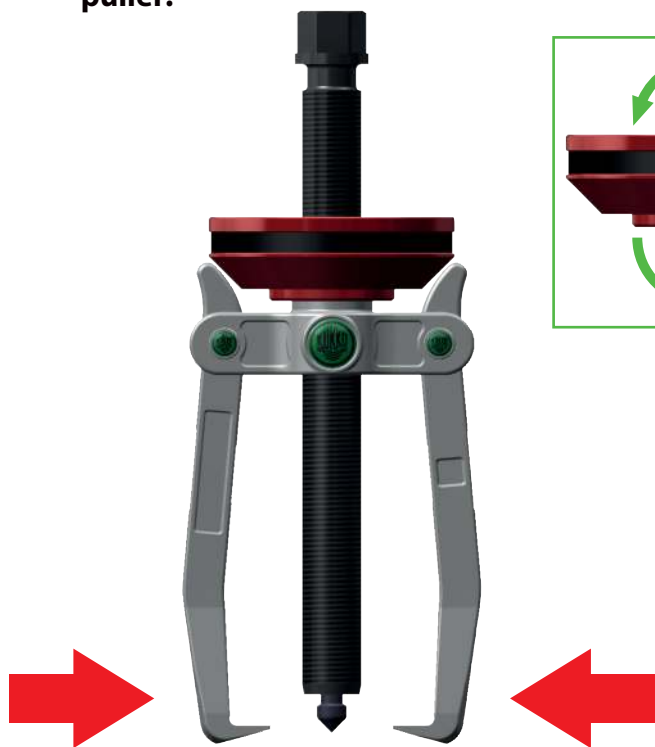


The internal extractor is ready for use

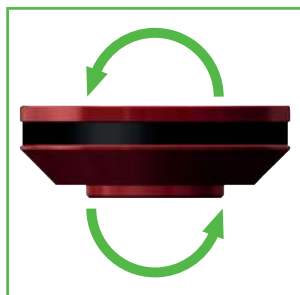
# PRINCIPLE SKETCH: EXTERNAL PULLER AND INTERNAL EXTRACTOR

The jaws are pretensioned exclusively via the clamping cone. The cone sits on an external thread on the crossbar and has no contact with the spindle. The mechanical spindle is used to generate the pulling force.

## External puller:

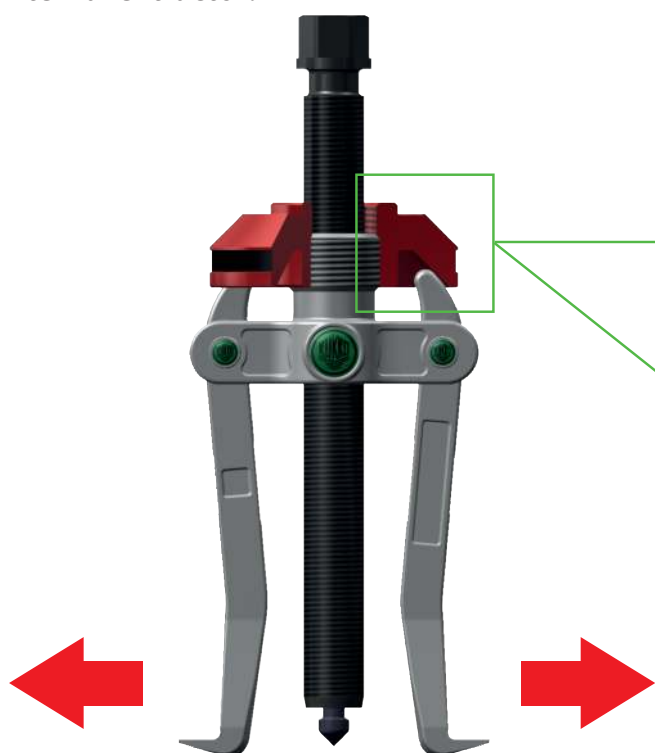


By tightening the clamping cone, the jaws are guided inwards as the outer cone presses against the legs.

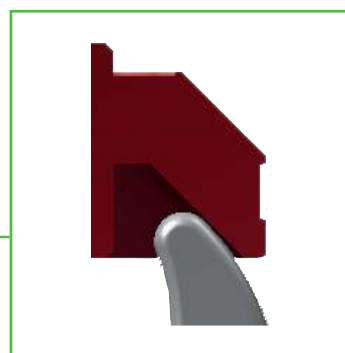
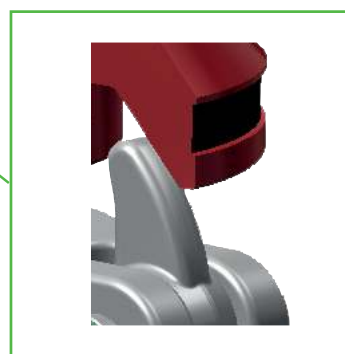


The clamping cone is rotated by 180°. The legs can be removed and reversed by loosening the bolts.

## Internal extractor:



The jaws are guided outwards via the inner cone. This serves to pretension the legs to prevent them from slipping.



Detailed view:  
During internal extractor, the jaws are guided outwards through the inner contour of the clamping cone.



## APPLICATION EXAMPLES



External extraction of a ball bearing from a drive shaft



External extraction of a ball bearing from a gear shaft



Internal extractor of a ball bearing from a housing



The 224-676 tool cabinet offers secure storage

## SERIES 220 2-JAW PULLER WITH CONICAL SELF- TENSIONING

The 2-jaw pullers with conical self-tensioning are used for the concentric removal of bearings, gears, and discs. By tightening the tension cone, the puller jaws are automatically centered. By operating the tension cone, the desired spread can be adjusted. Usable as both external extractors and internal extractors (in combination with a sliding hammer or a counter stay) by simply flipping the puller jaws and the tension cone.

### BENEFITS

- Self-centering of the jaws by tightening the tension cone
- The clamping cone regulates the setting of the desired reach.
- Optional convertible from an external puller to an internal extractor by reversing the puller jaws and the tension cone.



### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | <br>Max.<br>tensile<br>force<br>kN | <br>Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Included in<br>the set  |  |
|-------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------|
| 220-1 | -080128                                                                                     | 0 - 120<br>0 - 4 3/4                                                                               | 120<br>4 3/4                                                                                   | 60 - 150<br>2 3/8 - 5<br>7/8                                                                   | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 50                                                                                                                    | 5<br>5.51                                                                                                                          | 2,45<br>5.402                                                                                  | K-220-221-A             | ✓                                                                                     |
| 220-2 | -080135                                                                                     | 0 - 150<br>0 - 5 7/8                                                                               | 170<br>6 11/16                                                                                 | 60 - 180<br>2 3/8 - 7<br>1/16                                                                  | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 50                                                                                                                    | 5<br>5.51                                                                                                                          | 2,45<br>5.402                                                                                  | 224-178,<br>K-220-221-A | ✓                                                                                     |
| 220-3 | -080142                                                                                     | 0 - 120<br>0 - 4 3/4                                                                               | 120<br>4 3/4                                                                                   | 60 - 150<br>2 3/8 - 5<br>7/8                                                                   | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 50                                                                                                                    | 5<br>5.51                                                                                                                          | 2<br>5.402                                                                                     | K-220-221-A             | ✓                                                                                     |
| 220-4 | -080159                                                                                     | 0 - 150<br>0 - 5 7/8                                                                               | 170<br>6 11/16                                                                                 | 60 - 180<br>2 3/8 - 7<br>1/16                                                                  | 22<br>7/8                                                                                      | 150<br>110.64                                                                                   | 70                                                                                                                    | 7<br>7.72                                                                                                                          | 2,45<br>5.402                                                                                  | K-220-221-A             | ✓                                                                                     |



## SERIES 221 3-JAW PULLER WITH CONICAL SELF- TENSIONING



The 3-jaw pullers with conical self-tightening are used for centric pulling of bearings, gears, and discs. By tightening the tension cone, the puller jaws are automatically centered. By operating the tension cone, the desired spread can be adjusted. Usable as both external pullers and internal extractors (in combination with a sliding hammer or a counter stay) by simply flipping the puller jaws and the tension cone. The 3-jaw design ensures even load distribution and thus a particularly secure grip on the part to be pulled.

### BENEFITS

- Self-centering of the jaws by tightening the tension cone
- The clamping cone regulates the setting of the desired reach.
- Optional convertible from an external puller to an internal extractor by reversing the puller jaws and the tension cone.
- 3-jaw ensures an even distribution of force and allows for greater pulling forces.



### TECHNICAL ATTRIBUTES

| #     | GTIN    |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Included in<br>the set  |  |
|-------|---------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------|
| 221-1 | -080166 | 0 - 120<br>0 - 4 3/4                                                                            | 120<br>4 3/4                                                                                    | 60 - 150<br>2 3/8 - 5<br>7/8                                                                    | 22<br>7/8                                                                                       | 130<br>95.89                                                                                 | 65                             | 6.5<br>7.17                                | 2,45<br>5.402                                                                               | K-220-221-A             | ✓                                                                                     |
| 221-2 | -080173 | 0 - 150<br>0 - 5 7/8                                                                            | 170<br>6 11/16                                                                                  | 60 - 180<br>2 3/8 - 7<br>1/16                                                                   | 22<br>7/8                                                                                       | 130<br>95.89                                                                                 | 65                             | 6.5<br>7.17                                | 2,45<br>5.402                                                                               | 224-178,<br>K-220-221-A | ✓                                                                                     |
| 221-3 | -080180 | 0 - 120<br>0 - 4 3/4                                                                            | 120<br>4 3/4                                                                                    | 60 - 150<br>2 3/8 - 5<br>7/8                                                                    | 22<br>7/8                                                                                       | 130<br>95.89                                                                                 | 65                             | 6.5<br>7.17                                | 2,3<br>5.402                                                                                | K-220-221-A             | ✓                                                                                     |
| 221-4 | -080197 | 0 - 150<br>0 - 5 7/8                                                                            | 170<br>6 11/16                                                                                  | 60 - 180<br>2 3/8 - 7<br>1/16                                                                   | 22<br>7/8                                                                                       | 150<br>110.64                                                                                | 70                             | 7<br>7.72                                  | 2,45<br>5.402                                                                               | K-220-221-A             | ✓                                                                                     |

SERIES 220/221  
UNIVERSAL PULLER WITH SLIDING HAMMER



The 2-jaw and 3-jaw pullers with conical self-tensioning are used for the centric removal of bearings, gears, and discs in all common sizes for crafts, workshops, and industry. This allows for the removal of any component that sits on a shaft and is freely accessible from the outside. By tightening the tension cone, the puller jaws are automatically centered. By operating the tension cone, the desired spread can be adjusted. Additionally, the puller jaws can be pre-tensioned using the cone to prevent possible slipping.



BENEFITS

- By modifying the puller jaws, various pulling methods are ensured.
- The internal puller can be designed either as a 2-jaw or 3-jaw tool, providing a flexible grip for the respective part.
- The jaws self-center and secure themselves tightly to the part being pulled off.
- The cone-directed span width adjustment makes the universal puller also variable depending on the size of the part and allows for quick adjustment to the pulling situation.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.



TECHNICAL ATTRIBUTES

| #    |  |  |  |  |  |  |  |  | Included in the set |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                   | kg/lb                                                                                 |                     |                                                                                       |
| 220+ | -009754                                                                             | 0 - 150<br>0 - 5 7/8                                                                | 170<br>6 11/16                                                                      | 60 - 180<br>2 3/8 - 7 1/16                                                          | 500<br>19 11/16                                                                     | 250<br>9 13/16                                                                      | 1.7                                                                                  | 6,19<br>4.090                                                                         | K-220               | ✓                                                                                     |

SERIES K-220  
UNIVERSAL PULLER WITH SLIDING HAMMER  
IN CASE



The 13-piece universal puller set with 2-jaw and 3-jaw Puller and sliding hammer is used for centered Pulling of bearings, gears, and discs. This allows any component that sits on a shaft and is freely accessible from the outside to be released. Tightening the clamping cone automatically centers the jaws. By operating the clamping cone, the desired spread can be set. In addition, the jaws can be pre-tensioned using the cone to prevent possible slipping.

BENEFITS

- By modifying the puller jaws, various pulling methods are ensured.
- The internal puller can be designed either as a 2-jaw or 3-jaw tool, providing a flexible grip for the respective part.
- The jaws self-center and secure themselves tightly to the part being pulled off.
- The cone-directed span width adjustment makes the universal puller also variable depending on the size of the part and allows for quick adjustment to the pulling situation.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.



TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  | Consists of                                                                     |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                   | kg/lb                                                                                 |                                                                                 |                                                                                       |
| K-220 | -023231                                                                             | 0 - 150<br>0 - 5 7/8                                                                | 170<br>6 11/16                                                                      | 60 - 180<br>2 3/8 - 7 1/16                                                          | 500<br>19 11/16                                                                     | 250<br>9 13/16                                                                      | 1.7                                                                                  | 9<br>4.090                                                                            | 220-221-GH,<br>221-2-165-S,<br>221-4-165-S,<br>220-1-T,<br>221-1-T,<br>220-1-33 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES K-220-221 PULLERS AND SETS FOR UNIVERSAL PULL-OFF APPLICATIONS



The 19-piece puller set for universal pulling solutions in the K-220-221 series is used for central Pulling of bearings, gears and discs in all common sizes for trade, workshop and industry. With this 8-in-1 set, eight different Puller can be assembled: 220-1 and 221-1, 220-2 and 221-2, 220-3 and 221-3 as well as 220-4 and 221-4. By tightening the clamping cone, the jaws are automatically centered.

#### BENEFITS

- Self-centering of the jaws by tightening the tension cone
- The clamping cone regulates the setting of the desired reach.
- Optional convertible from an external puller to an internal extractor by reversing the puller jaws and the tension cone.



## TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                                                                 |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                                                             |                                                                                       |
| K-220-221-A | -023248                                                                             | 0 - 150<br>0 - 5 7/8                                                                | {9796}<br>{10132}                                                                   | 60 - 180<br>2 3/8 - 7<br>1/16                                                       | 22<br>7/8                                                                           | {8768}<br>{9968}                                                                    | 70                       | 7<br>7.72                | 10,855<br>4.090                                                                       | 221-1-120-S,<br>221-2-165-S,<br>221-3-120-S,<br>221-4-165-S,<br>220-1-T,<br>221-1-T,<br>621220,<br>220-1-33 | ✓                                                                                     |



PRODUCT DETAILS

SERIES 224-178  
PULLER SET IN SLIDING HAMMER



The 20-piece puller set with sliding hammer 224-178 is used for centric Pulling of bearings, gears, and discs. Tightening the clamping cone automatically centers the jaws. By operating the clamping cone, the desired spread can be set. Can be used both as an external puller and as an internal extractor by simply reversing the jaws and the clamping cone.

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  | Max.<br>tension<br>force |  | Consists<br>of                            |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | kg                                                                                | mm/inch                                                                           | mm/inch                                                                           | t/US t.<br>sh.           | kg/lb                                                                               |                                           |                                                                                     |
| 224-178 | -446603                                                                           | 0 - 150<br>0 - 5 7/8                                                              | 0 - 170<br>0 - 6 11/16                                                            | 60 - 180<br>2 3/8 - 7 1/16                                                        | 1.7                                                                               | 250<br>9 13/16                                                                    | 500<br>19 11/16                                                                   | 0.00                     | 7,4<br>16.317                                                                       | 221-3,<br>22-0+17,<br>220-1-T,<br>221-1-T | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES 224-675 PULLER SET WITH SLIDING HAMMER



The universal puller set with sliding hammer 224-675 is used for centered pulling, internal extraction and separation of bearings, gears and discs in all common sizes for trade, workshop and industrial applications. The set includes various pullers and pulling devices, a sliding hammer device, two 2-jaw pullers and one 3-jaw puller, as well as various internal extractors with counter stays. The range stands out for its multifunctional applications and is suitable for external extraction, internal extraction and separation pulling.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                             |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | kg                                                                                | mm/<br>inch                                                                       | mm/<br>inch                                                                       | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                                                                            |                                                                                     |
| 224-675 | -061158                                                                           | 0 - 400<br>0 - 15<br>3/4                                                          | 280<br>11 1/32                                                                    | 14 - 150<br>9/16 - 5<br>7/8                                                       | 0 - 280<br>0 - 11<br>1/32                                                         | 6 - 115<br>1/4 - 4<br>1/2                                                         | 1.7                                                                               | 250<br>9 13/16                                                                    | 470<br>18 1/2                                                                     | 130                      | 13<br>14.33              | 28,1<br>61.961                                                                      | 207-1,<br>201-1,<br>201-2,<br>220-3,<br>221-3,<br>21-2,<br>21-4,<br>21-5,<br>21-6,<br>68-0,<br>68-2,<br>15-00,<br>15-2,<br>GA7-10,<br>220-1-T,<br>221-1-T,<br>22-0-17,<br>G-22,<br>022-206 | ✓                                                                                   |

PRODUCT DETAILS

SERIES WT-220  
BLACKBOARDS



The puller assortment Universal WT-220 is a wall panel equipped with matching tools for application and storage in workshops and industries. The assortment includes a 3-jaw tab puller with oscillating, height adjustable jaws and combination crossbar (series 207) as well as 2-jaw and 3-jaw pullers with conical self-tightening and sliding hammer.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

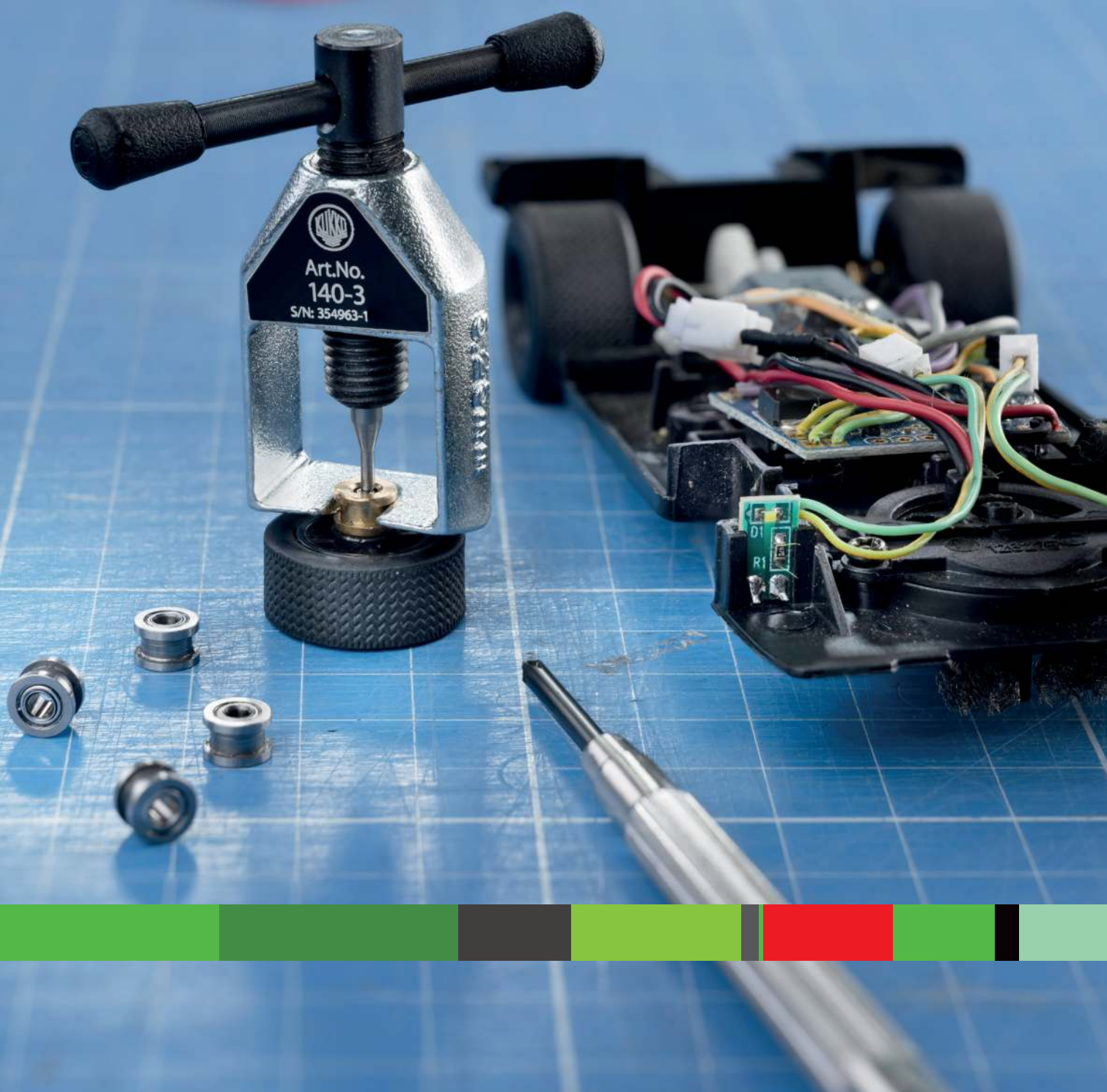
TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                        |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-220 | -023255                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 10,855<br>4.090                                                                              | 220-2, 221-4,<br>207-2, 22-0+17,<br>699915, WT-000 | ✓                                                                                     |

KUKKO // *Pull forward*



# SERIES 140 | MICRO **MICRO PULLER**





## APPLICATION

---

Micro Pullers are used when the smallest components need to be removed. This includes, for example, pulling off pressure gauges, speedometer cables, clocks, or similar parts. The Micro Puller is also used particularly frequently in model making.

### Benefits

- Integrated, freely movable pin on the T-handle guarantees manual spindle drive in the tightest spaces
- Handy, compact design for precise work in confined spaces
- Slim jaws reach even the tightest gaps
- Magnetic closure guarantees quick replacement of the spindle tip (Series 140)

## CONSTRUCTION OF A MICRO PULLER

---



## FEATURES OF THE SERIES

### SERIES 140

Micro Puller for small parts and model making



The handy and space-saving small-parts puller has slim jaws that are particularly suitable for tight, hard-to-reach places.

### SERIES MICRO

Micro Puller for small parts and model making



The handy and space-saving model features slim jaws and a particularly fine spindle tip, which are suitable for very tight and hard-to-reach places.

## REPLACING THE SPINDLE TIP



The spindle tip of the Micro Puller is magnetically attached to the spindle and can therefore be replaced effortlessly. Simply pull out the spindle tip and replace it with another one. This interchangeability makes the puller even more versatile.

## APPLICATION EXAMPLE



Removing a ball bearing from a model car tire with the 140-3

SERIES MICRO  
MICRO PULLER FOR SMALL PARTS AND  
MODEL BUILDING



The micro puller is used for removing speedometer cables, pressure gauges, clocks, and similar parts. Especially in model making, the small parts puller is a helpful and reliable tool. The handy and space-saving model features narrow gripping jaws and a particularly fine spindle tip, making it suitable for very tight, hard-to-reach areas. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in confined spaces.

BENEFITS

- Integrated, free-moving pin on the T handle ensures manual spindle drive in the tightest spaces
- Compact and handy design for precise work in tight spaces
- Narrow gripping jaws reach even the tightest spaces.
- Particularly fine spindle tip for delicate extraction

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| MICRO | -974755                                                                                     | 2,5 - 10<br>1/8 - 3/8                                                                          | 10<br>3/8                                                                                      | 1<br>1/32                                                                                      | 0,085<br>1.874                                                                                 | ✓                                                                                     |

## SERIES 140 MICRO PULLER FOR SMALL PARTS AND MODEL BUILDING



The micro puller is used for removing speedometer cables, pressure gauges, clocks, and similar parts. Especially in model making, the small parts puller is a helpful and reliable tool. The handy and space-saving model features narrow jaws that are particularly suitable for tight, hard-to-reach areas. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in cramped spaces. The spindle tip can be easily replaced using a magnetic closure.

### BENEFITS

- Integrated, free-moving pin on the T handle ensures manual spindle drive in the tightest spaces
- Compact and handy design for precise work in tight spaces
- Narrow gripping jaws reach even the tightest spaces.
- The magnetic closure ensures a quick exchange of the spindle tip.



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Included in the set |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                               |                     |                                                                                       |
| 140-1 | -266720                                                                             | 2,5 - 10<br>1/8 - 3/8                                                               | 10<br>3/8                                                                           | 0,9, 1,3, 1,8<br>1/16                                                               | 0,035<br>0.772                                                                      | 140-S               | ✓                                                                                     |
| 140-2 | -266737                                                                             | 3,5 - 15<br>3/16 - 5/8                                                              | 15<br>5/8                                                                           | 0,9, 1,3, 1,8, 2,0<br>1/16                                                          | 0,04<br>0.882                                                                       | 140-S               | ✓                                                                                     |
| 140-3 | -266751                                                                             | 5,5 - 18<br>1/4 - 3/4                                                               | 18<br>3/4                                                                           | 0,9, 1,3, 1,8, 2,0,<br>3,0<br>1/16, 1/8                                             | 0,035<br>0.772                                                                      | 140-S               | ✓                                                                                     |



SERIES 140-S  
MICRO PULLER FOR SMALL PARTS AND  
MODEL MAKING IN A SET



The 11-piece micro puller set is used for pulling speedometer cables, pressure gauges, clocks, and similar parts. Especially in model building, the handy and space-saving small parts puller is a helpful and reliable tool for tight, hard-to-reach places.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Integrated, freely movable T-handle ensures manual spindle drive in confined spaces.
- Compact, handy design for precise work in the tightest spaces.
- Narrow gripping jaws reach even the tightest spaces



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of            |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 140-S | -951138                                                                                     | 2,5 - 18<br>1/8 - 11/16                                                                        | 18<br>11/16                                                                                    | 0,9, 1,3,<br>1,8, 2,0,<br>3,0<br>1/16,<br>1/16,<br>1/16, 1/8                                   | 0,625<br>1.378                                                                               | 140-1, 140-2,<br>140-3 | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 204 | 210

# BEARING SEPARATORS AND PULLERS



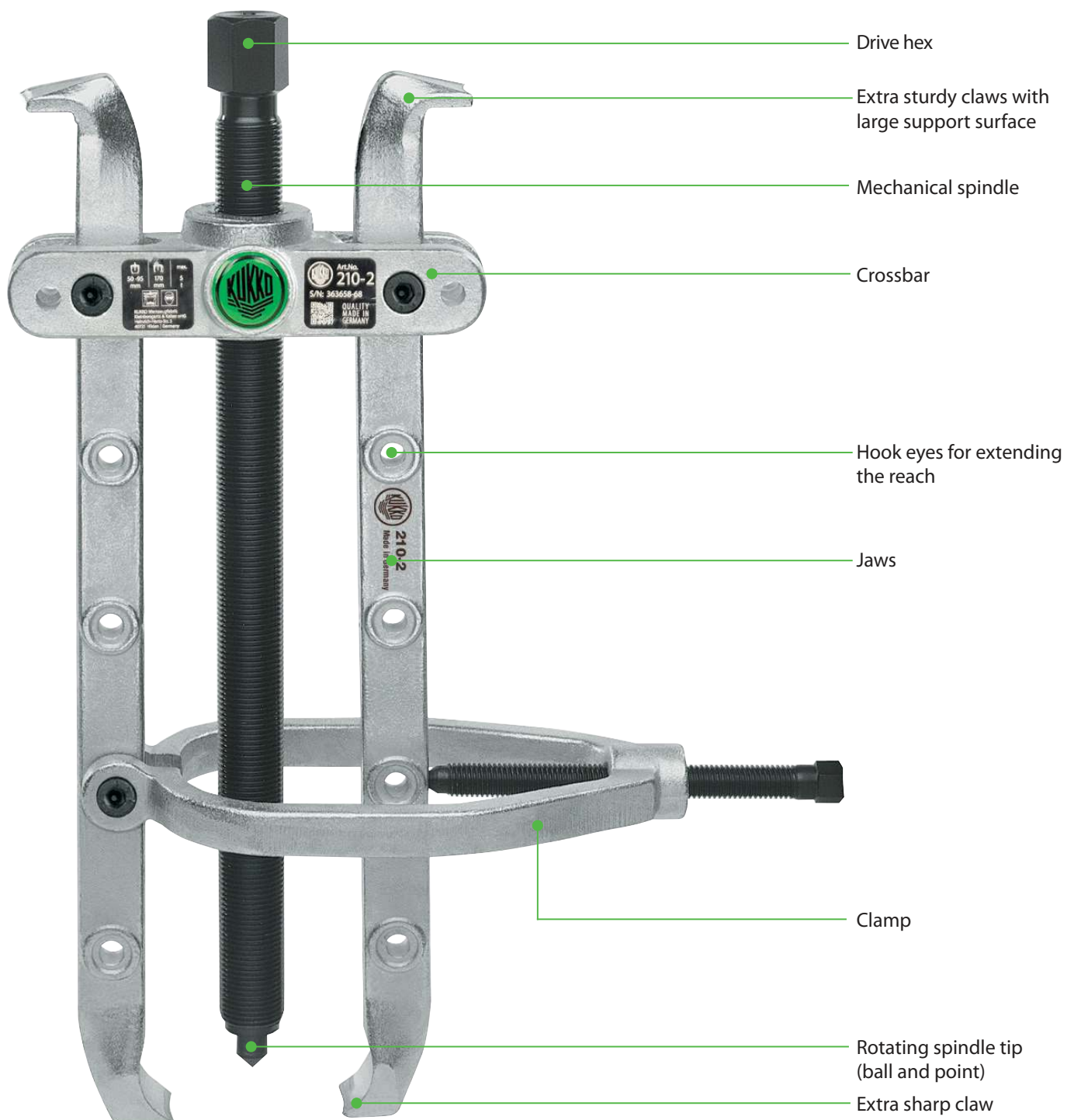
## APPLICATION

The 2-jaw pullers with side clamp of series 204 and 210 are used for pulling particularly tight-fitting or flush-mounted components. A typical application example in the automotive sector is the replacement of wheel bearings. It may happen that the inner ring of the bearing remains on the shaft. The sharp claws of the puller grip under the part to be pulled and release it, even before the actual pulling process. At the same time, the side clamp increases the contact pressure of the jaws.

### Benefits

- Side clamp ensures that the jaws are pressed especially firmly against the part to be pulled
- Double force application from both above and the side guarantees a 100% secure grip
- Jaws with extra sharp claws release the part to be pulled even before the actual pulling process
- Anti-slip safety (spindle neck) on the spindle head for safe working with a wrench
- Spindle run-out for thread protection

## STRUCTURE OF A BEARING PULLER (EXAMPLE 210-2)





## FEATURES OF THE SERIES

### SERIES 204

**2-jaw bearing pullers  
with side clamp**



**204-0 (with T-handle)**

The 2-jaw bearing puller with side clamp and separating claw is used for pulling flush-mounted ball bearings, bearing rings, and workpieces. The special claw shape of the jaws grips under the part to be pulled when the clamp is tightened and releases it even before the actual pulling process.

### SERIES 210

**2-jaw bearing separator "Cobra"  
with adjustable reach and side clamp**



**210-1**

The 2-jaw bearing separator "Cobra" features jaws that can be rotated 180° and used on both sides. One side has standard claws, the other side is equipped with special separating claws. Thanks to multiple holes in the jaws, different reaches can be set for flexible working.

## EXTENDING THE SPREAD AND REACH



The holes in the crossbar allow for individual adjustment of spread and reach.



By reversing the jaws, the claws can be changed to suit the application.



## SPECIAL APPLICATION: WHEEL BEARING REPLACEMENT



First, the dust cap is removed from the wheel hub using the puller from series 225-SK



Thanks to the large support surface of the bearing puller (series 204-V), the adapter fits perfectly onto the hollow shaft



Subsequently, the bearing inner ring on the wheel bearing can be easily removed

## APPLICATION EXAMPLES



Pulling a ball bearing from a chainsaw crankshaft using the 204-0



The clamp presses the jaws tightly against the part to be pulled



Jaws with different claw shapes on the 210-1



Pulling a tapered roller bearing from a gear shaft using the 210-3

SERIES 204-0  
2-JAW BEARING PULLER “COBRA” WITH  
LATERAL CLAMPING JAW AND SEPARATING  
CLAW



The 2-jaw bearing puller “Cobra” with lateral clamp and separating claw is used for pulling flush-mounted ball bearings, bearing rings, and workpieces. The special claw shape of the puller jaws grips under the part to be removed and loosens it before the actual pulling process.

BENEFITS

- Integrated, freely movable pin on the T-handle guarantees manual spindle drive in the tightest of spaces.
- The side clamp ensures that the puller jaws are pressed particularly tightly against the part being pulled off.
- Double force application from above and side guarantees 100% secure grip
- The slim design of the jaws allows access to hard-to-reach places.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 204-0  | -028168                                                                                     | 12 - 50<br>1 - 2                                                                               | 70<br>2 3/4                                                                                    | T-handle                                                                                       | 0.00                                                                                            | 10                             | 1<br>1.10                               | 0,69<br>1.521                                                                                  | 27-A                   | ✓                                                                                     |
| 204-02 | -339516                                                                                     | 26 - 90<br>1 5/8 - 4                                                                           | 100<br>3 7/8                                                                                   | 22<br>7/8                                                                                      | 75<br>55.32                                                                                     | 40                             | 4<br>4.41                               | 1,985<br>4.377                                                                                 | K-204-<br>V-210-1      | ✓                                                                                     |

SERIES 204  
2-JAW BEARING PULLER WITH FIXED ARMS  
AND LATERAL CLAMPING LEVER



The 2-jaw bearing puller "Cobra" with side clamp is used for pulling particularly stuck ball bearings, bearing rings, and workpieces. With this, it is possible to loosen any component that is mounted on a shaft and is freely accessible from the outside. Thanks to the clamp, the contact pressure of the puller jaws is increased manifold. When the clamp is tightened, the sharp claws of the puller jaws grip underneath the part to be pulled off and loosen it even before the actual pulling process.

BENEFITS

- The lateral clamp ensures that the puller jaws are pressed particularly firmly against the part to be pulled off.
- The slim design of the jaws allows access to hard-to-reach places.
- Anti-slip safety (spindle neck) at the spindle head for safe working with a wrench.
- Spindle output for the protection of the thread



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 204-1 | -028243                                                                                     | 6 - 80<br>1 3/16 - 3 3/16                                                                      | 90<br>4                                                                                        | 19<br>3/4                                                                                      | 100<br>73.76                                                                                    | 50                             | 5<br>5.51                               | 1,385<br>3.054                                                                                 | K-127-A/6              | ✓                                                                                     |
| 204-2 | -028328                                                                                     | 16 - 100<br>1 5/8 - 3 7/8                                                                      | 100<br>3 7/8                                                                                   | 22<br>7/8                                                                                      | 120<br>88.51                                                                                    | 60                             | 6<br>6.61                               | 2,04<br>5.292                                                                                  | -                      | ✓                                                                                     |
| 204-3 | -028403                                                                                     | 6 - 150<br>2 - 5 7/8                                                                           | 140<br>5 1/2                                                                                   | 24<br>15/16                                                                                    | 175<br>129.08                                                                                   | 75                             | 7.5<br>8.27                             | 3,16<br>6.968                                                                                  | -                      | ✓                                                                                     |

## SERIES 210 2-JAW BEARING SEPARATOR "COBRA" WITH ADJUSTABLE REACH AND SIDE CLAMP

The 2-jaw bearing separator "Cobra" with adjustable reach and side clamp is used to pull off flush-mounted bearings, gear wheels and discs in all common sizes. This makes it possible to remove any component that sits on a shaft and is freely accessible from the outside.

### BENEFITS

- Adjustable and 180° rotatable jaws for individual adjustment of the reach due to multiple drilling in the jaws.
- Puller jaws with different support surfaces for flexible work
- The side clamp ensures that the puller jaws are pressed particularly tightly against the part to be pulled.



### TECHNICAL ATTRIBUTES

| #     | GTIN    |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|-------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|       |         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                        |                                                                                       |
| 210-1 | -030383 | 20 - 95<br>2 - 3 3/4                                                                | 170<br>6 3/4                                                                        | 22<br>7/8                                                                           | 100<br>73.76                                                                        | 50                       | 5<br>5.51                | 2,645<br>5.832                                                                        | K-204-<br>V-210-1      | ✓                                                                                     |
| 210-2 | -030468 | 20 - 135<br>2 - 5 3/8                                                               | 270<br>10 5/8                                                                       | 24<br>15/16                                                                         | 140<br>103.26                                                                       | 80                       | 8<br>8.82                | 4,325<br>9.537                                                                        | -                      | ✓                                                                                     |
| 210-3 | -030536 | 20 - 150<br>2 - 5 7/8                                                               | 325<br>12 7/8                                                                       | 24<br>15/16                                                                         | 200<br>147.52                                                                       | 100                      | 10<br>11.02              | 4,64<br>10.231                                                                        | -                      | ✓                                                                                     |



KUKKO // *Pull forward*



SERIES 225

# PULLER WITH SELF-CENTERING JAWS



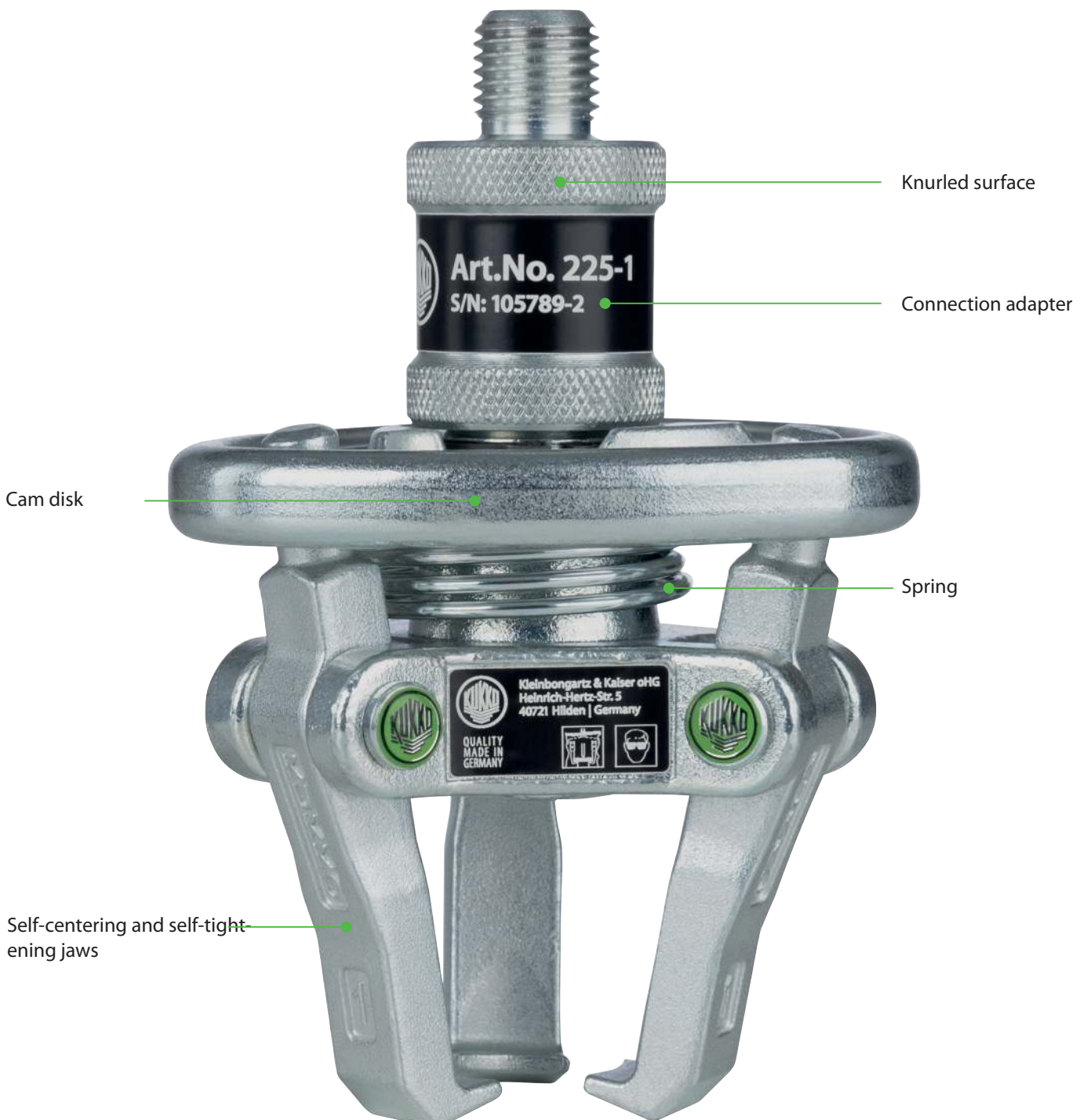
## APPLICATION

The 3-jaw pullers of the 225 series with self-centering jaws are used for pulling bearings, gears, and discs. The specially shaped jaws are connected by a spring. This ensures the self-tightening of the jaws and prevents possible slipping during the pulling process. Thanks to the quick-release fastener, the jaws can be quickly attached to the part to be removed.

### Benefits

- Spring ensures self-tightening of the jaws
- Plug-in bolts guarantee quick replacement of the jaws
- The 3-jaw design ensures even distribution of force and enables greater extraction forces

## STRUCTURE OF A PULLER USING THE EXAMPLE OF 225-1



# SPECIAL FEATURES OF THE SERIES

## SERIES 225

**3-jaw puller  
with self-centering jaws**



**225-1**

The 3-jaw puller with self-centering jaws is used for pulling bearings, gears, and discs. This allows any component that is mounted on a shaft and accessible from the outside to be removed.

## SERIES 225-G

**3-jaw puller  
with sliding hammer**



**225-2**

The 3-jaw puller with self-centering jaws and sliding hammer is used for pulling bearings, gears, and discs. The sliding hammer guarantees space-saving and material-friendly extraction.

## SERIES 225-SK

**3-jaw puller  
with self-centering jaws**



**225-SK-2**

The 3-jaw puller with self-centering, extra fine jaws is used for the safe and damage-free removal of push-on hubcaps, wheel covers, as well as dust and grease caps.

## SERIES 225-SK-G

**3-jaw puller  
with self-centering jaws**



**225-SK-G-2**

The extra fine jaws enable the disassembly of push-on hubcaps, wheel covers, as well as dust and grease caps. The sliding hammer guarantees space-saving and material-friendly extraction.

## SERIES 225-S

**Bolt extractor device set  
with thread adapters**



**225**

The bolt extractor device set with thread adapters of the 225 series is used for extracting bolts, e.g., brake shoe bolts or spring bolts on commercial vehicles.



## SPECIAL APPLICATION: WHEEL BEARING REPLACEMENT



First, use the puller from the 225-SK series to remove the dust cap from the wheel hub.



Thanks to the large support surface of the bearing puller (series 204-V), the adapter fits perfectly onto the hollow shaft.



Subsequently, the inner bearing ring of the wheel bearing can be easily disassembled.

## APPLICATION EXAMPLES



Attaching the puller to the part to be removed



Attaching the 3-K handle G-22 to the sliding hammer



Connecting the sliding hammer via the thread adapter of the puller



Disassembling a belt pulley from a transmission part



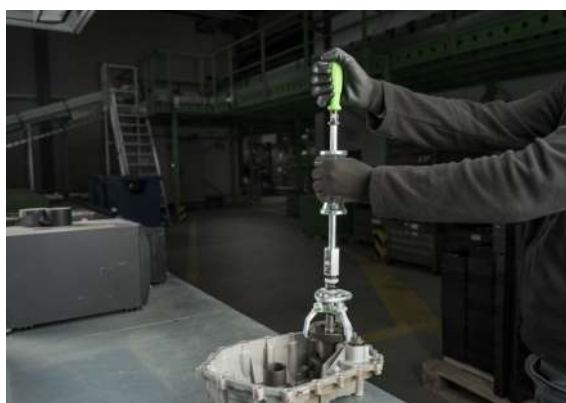
### SERIES 225-G 3-JAW PULLER WITH SELF-CENTERING JAWS AND SLIDING HAMMER



The 3-jaw puller with self-centering jaws and sliding hammer is used for removing bearings, gears, and discs. The sliding hammer ensures a space-saving and material-friendly extraction. This allows for the loosening of components that sit on shafts and are freely accessible from the outside. Thanks to the spring-connected jaws, slipping is prevented.

#### BENEFITS

- The spring ensures self-tensioning of the puller jaws.
- Steckbolts ensure a quick exchange of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Sliding hammer requires no impact surface and guarantees a gentle extraction.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer while being easy to handle.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 225-1-G | -080043                                                                                     | 18,4 - 50<br>1 3/16 - 2                                                                        | 35<br>1 3/8                                                                                    | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                       | 60                             | 6<br>6.61                               | 3,88<br>8.555                                                                                  | ✓                                                                                     |
| 225-2-G | -080050                                                                                     | 58 - 90<br>2 3/4 - 3 1/2                                                                       | 35<br>2 3/16                                                                                   | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                       | 60                             | 6<br>6.61                               | 3,995<br>8.809                                                                                 | ✓                                                                                     |
| 225-3-G | -080067                                                                                     | 38 - 70<br>2 - 2 3/4                                                                           | 35<br>1 3/8                                                                                    | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                       | 60                             | 6<br>6.61                               | 3,98<br>8.776                                                                                  | ✓                                                                                     |

SERIES 225-0  
3-JAW PULLER WITH SELF-CENTERING JAWS



The 3-jaw puller with self-centering jaws is used for pulling bearings, gears, and discs. It allows components that sit on shafts and are freely accessible from the outside to be removed. Thanks to the spring-connected jaws, slipping is prevented.

BENEFITS

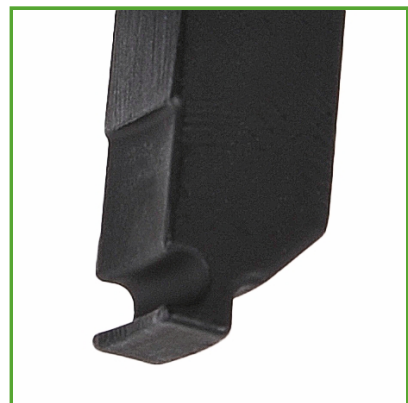
- The spring ensures self-tensioning of the jaws.
- Steckbolts ensure a quick exchange of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 225-1 | -123405                                                                                     | 18,4 - 50<br>1 3/16 - 2                                                                        | 35<br>1 3/8                                                                                    | 60                          | 6<br>6.61                            | 1,12<br>2.470                                                                                  | ✓                                                                                     |
| 225-2 | -123412                                                                                     | 58 - 90<br>2 3/4 - 3 1/2                                                                       | 35<br>2 3/16                                                                                   | 60                          | 6<br>6.61                            | 1,235<br>2.723                                                                                 | ✓                                                                                     |
| 225-3 | -123429                                                                                     | 38 - 70<br>2 - 2 3/4                                                                           | 35<br>1 3/8                                                                                    | 60                          | 6<br>6.61                            | 1,22<br>2.690                                                                                  | ✓                                                                                     |

SERIES 225-SK-G  
3-JAW PULLER WITH SELF-CENTERING JAWS  
AND SLIDING HAMMER



The 3-jaw puller with self-centering puller jaws and sliding hammer is used for the safe and damage-free removal of fitted hub caps, wheel trims, as well as dust and grease caps. The sliding hammer guarantees a space-saving and at the same time material-friendly extraction. The puller jaws are connected by a spring, which prevents slipping during the pulling process.

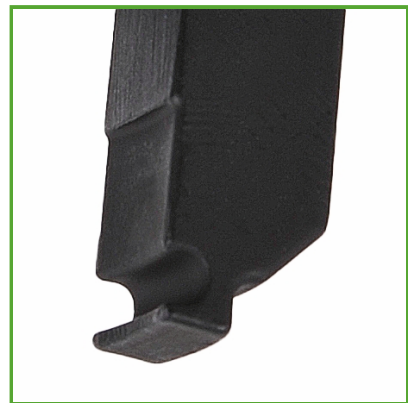
BENEFITS

- The spring ensures self-tensioning of the jaws.
- Steckbolts ensure a quick exchange of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Narrow puller jaws grip optimally in tight and hard-to-reach places.
- Sliding hammer requires no support surface and guarantees a gentle extraction.

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 225-SK-G | -080074                                                                                     | 24<br>15/16                                                                                    | 65<br>2 9/16                                                                                   | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                        | 1,9<br>4.190                                                                                   | ✓                                                                                     |

SERIES 225-SK  
3-JAW PULLER WITH SELF-CENTERING JAWS



The 3-jaw puller with self-centering jaws is used for the safe and damage-free removal of pressed-on hub caps, wheel covers, as well as dust and grease caps. The puller jaws are connected by a spring, preventing slipping during the extraction process.

BENEFITS

- The spring ensures self-tensioning of the jaws.
- The dowel pins ensure a quick replacement of the jaws.
- 3-jaw provides an even distribution of force and allows for greater pulling forces.
- Narrow puller jaws grip optimally in tight and hard-to-reach places.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 225-SK | -324215                                                                                     | 65<br>2 9/16                                                                                   | 24<br>1 5/16                                                                                   | 1,9<br>4.190                                                                                   | ✓                                                                                     |



PRODUCT DETAILS

SERIES 225-S  
THREAD ADAPTER PULLER SET



The bolt extraction device set with thread adapters of series 225-S is used for extracting bolts such as brake shoe bolts or spring bolts on commercial vehicles. It includes a kg impact hammer in solid design as well as a set with 7 different thread inserts to be prepared for any extraction situation.

BENEFITS

- The large impact hammer allows you to pull out even very stubborn bolts.
- The two handles allow for good handling
- Versatile use due to the wide selection of different thread sizes

TECHNICAL ATTRIBUTES

| #   |  |  |  |  |  |  |  |  |
|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|     | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  |                                                                                     | mm                                                                                    | kg/lb                                                                                 |                                                                                       |
| 225 | -019470                                                                             | 700<br>27 9/16                                                                      | 280<br>11 1/32                                                                      | 8                                                                                   | M8x1, M10x1,<br>M14x1,5,<br>M14,<br>M16x1,5,<br>M16, M20x1,5                        | M16x1,5,<br>G1/2                                                                      | 11,02<br>24.299                                                                       | ✓                                                                                     |









# INTERNAL

During internal extraction, components that sit in a recess and therefore cannot be gripped from the outside are dismantled without destruction. A sliding hammer or a counter stay is always required to extract internal parts. With a sliding hammer, extraction can be done in a confined space without external support, whereas a counter stay allows for more precise work and greater force.





KUKKO // *Pull forward*



SERIES 21 | 21-E | Y-21-E

# INTERNAL EXTRACTORS



# APPLICATION

Internal extractors are used for pulling internally mounted bearings, bearing outer rings, and sockets in handicraft, workshops, and industry. The internal extractors of series 21 come with extra-large gripping edges, which allow for secure removal of internal parts. Depending on the application, various sizes of 2-jaw or 3-jaw internal extractors are available. The segmented design of series 21-E with extra fine gripping edges allows for safe extraction of flush-mounted parts.

## Benefits

- The sturdy design as well as the built-in spindle stop guarantee strong and secure working
- Thanks to the exceptional clamping action and the mechanical spindle, bearings seated tightly on the back wall are extracted securely and quickly
- The shape ensures safe gripping when seating and pivoting with bearings or inner rings that form a blind hole
- Thanks to its segmentation and fine spindle, the segment extractors of series 21-E are ideal for precise and gentle work

## PRODUCT RANGE OVERVIEW

### Internal extractor single



21-4



21-4-E

With the internal extractors, you can choose between multi-part models (series 21) with extra-large gripping edges and segmented models (series 21-E) with extra fine gripping edges.

### Internal extractor Set



27-A



28-A

The internal extractors are also available in portable, fully equipped sets. These compact to-go solutions include everything required for non-destructive removal of internal components.

### Internal extractor Special applications



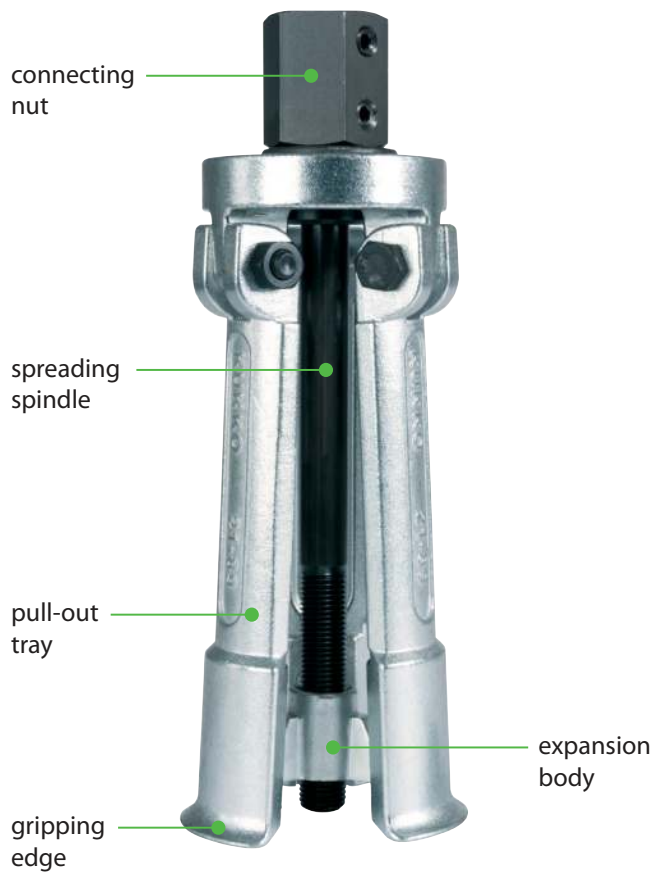
223

Used for pulling off parts with centrally threaded holes in trades, industry, and workshops. The ergonomically shaped, solid sliding weight allows optimal transfer of applied force and achieves a strong impact effect.

## DISTINCTIONS OF THE SERIES

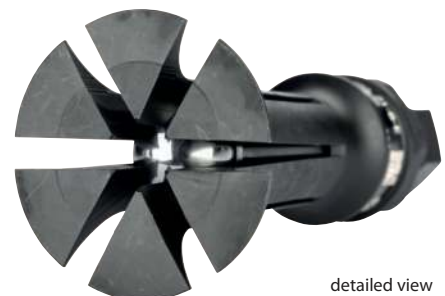
### SERIES 21

#### 2-jaw and 3-jaw internal extractors



### SERIES 21-E

#### Segment internal extractor



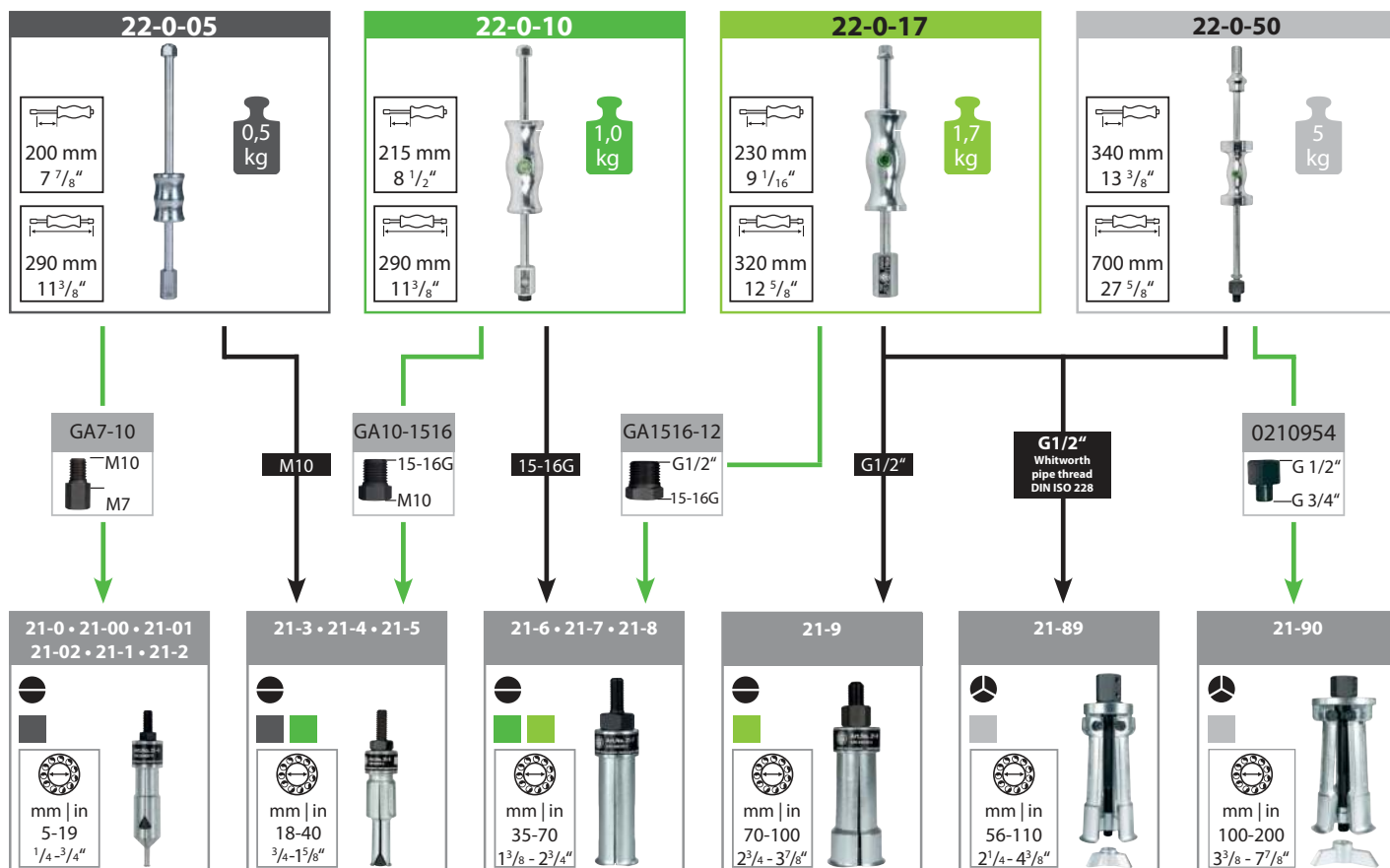
## ADVANTAGES OF COUNTER STAY AND SLIDING HAMMER

When using an internal extractor, a sliding hammer (series 22-0) or a counter stay (series 22) is always required. The advantage of the sliding hammer is that extraction can be performed without bracing in very confined spaces, whereas a counter stay allows for more precise and powerful work.

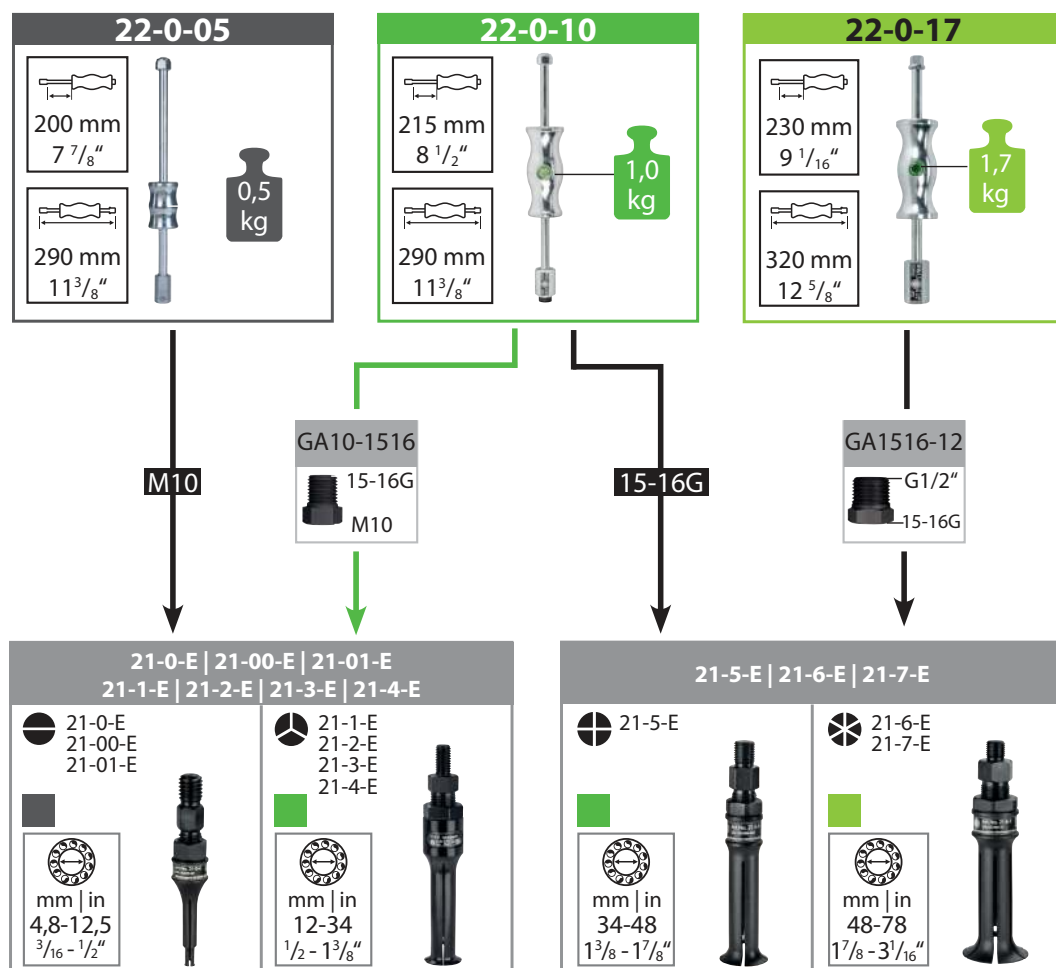


# COMBINATION OPTIONS

Sliding hammers of series 22-0 in combination with internal extractors of series 21



Sliding hammers of series 22-0 in combination with internal extractors of series 21-E



Internal extractor series 21  
with sliding hammer

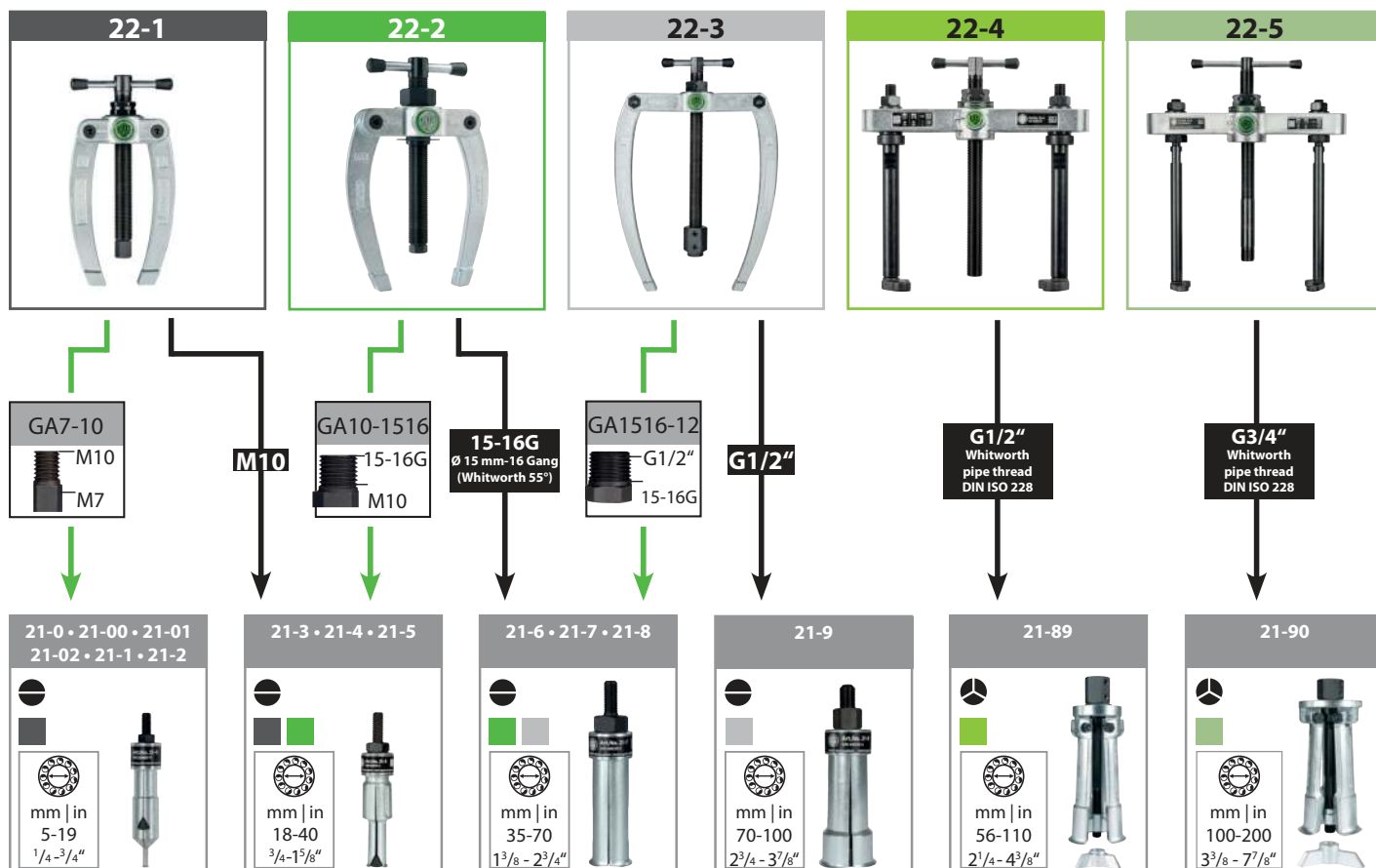


Internal extractor of series 21-E  
with sliding hammer

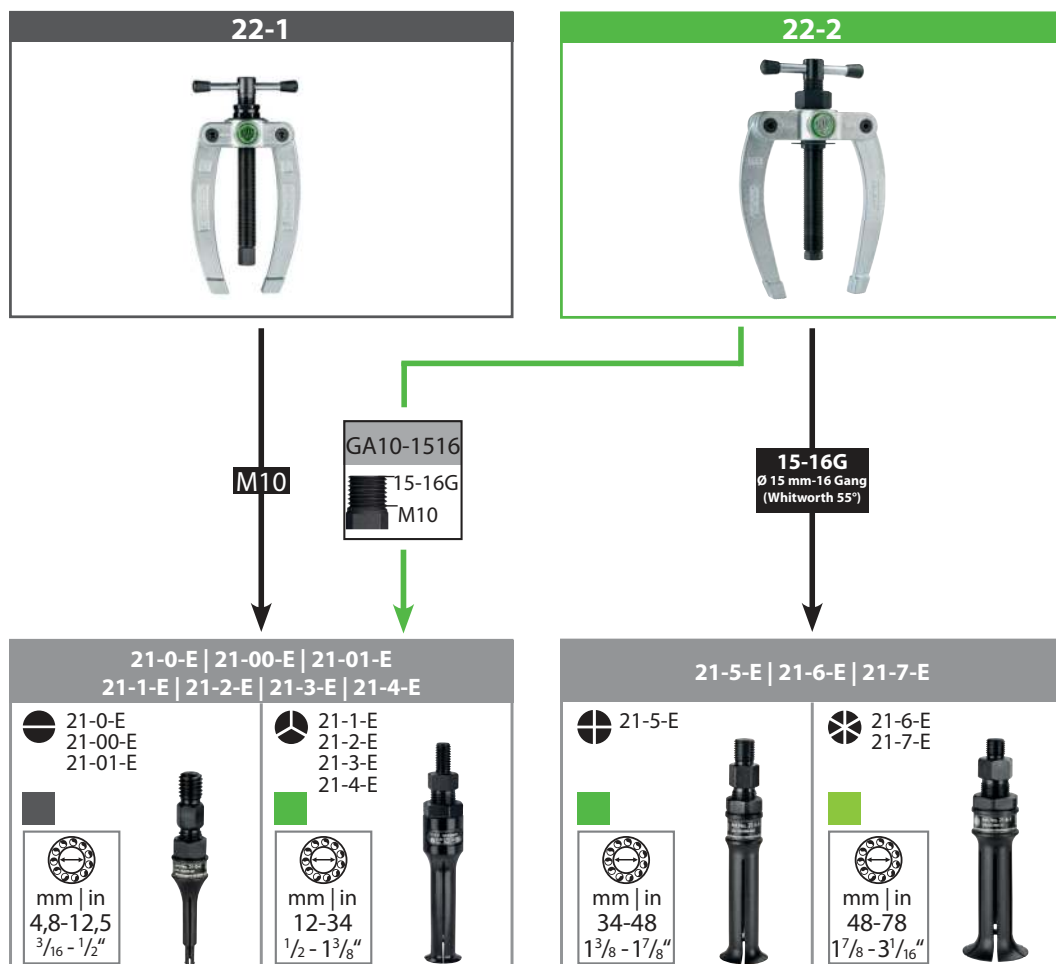


# COMBINATION OPTIONS

Counter stays of series 22 in combination with internal extractors of series 21



Counter stays of series 22 in combination with internal extractors of series 21-E



Internal extractor series 21  
with counter stay



Internal extractor of series 21-E  
with counter stay

## OPTIONAL EXTENSIONS

With an extension (series 21-V), the reach can be extended on internal extractors of series 21. This also enables reaching parts sitting deeper within the socket.



## APPLICATION EXAMPLES



Extracting a cylinder sleeve with the 21-90 and the counter stay 22-5



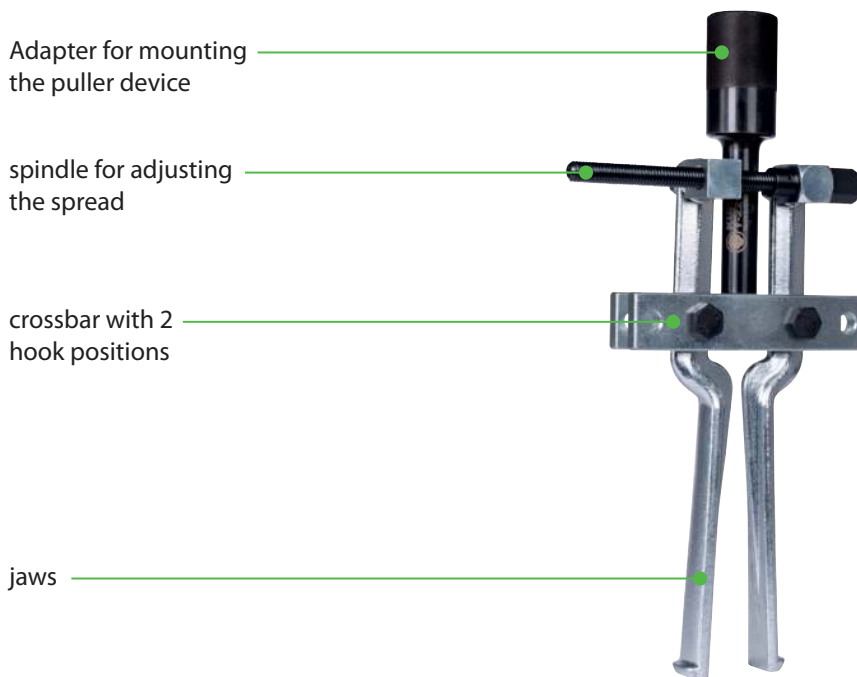
Internal extraction of a dowel pin with a sliding hammer and thread adapter

# THE HYDRAULIC INTERNAL EXTRACTORS OF SERIES Y-21-E

The internal extractors of series Y-21-E are used for extracting especially tight, internally mounted bearings, bearing outer rings, and sockets in handicraft, workshops, and industry. The hydraulics allow for the application of very high forces that would not be achievable with mechanical tools. The internal extractors of series Y-21-E are combined with the hydraulic puller devices of series Y-180.

## Benefits

- The hydraulic puller device Y-180 required in combination with the internal extractor enables easy and controlled removal of particularly tight parts
- Reduced workload guarantees maximum time savings
- Gentle extraction thanks to controllable hydraulics



## APPLICATION EXAMPLE



Combination of hydraulic puller device (series Y-180) and internal extractor Y-221-E



## SERIES 21 2-JAW INTERNAL EXTRACTOR



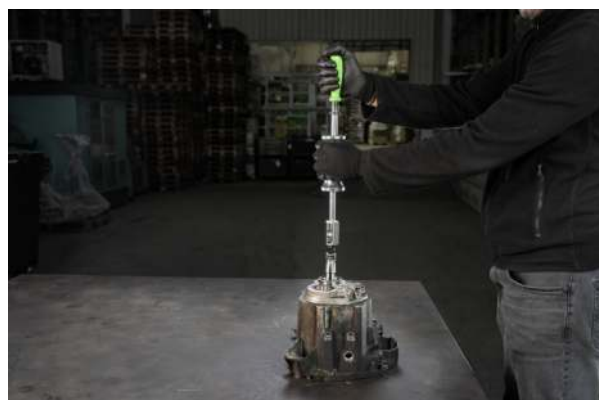
21-0      21-1      21-7      21-89  
 21-00    21-2      21-8      21-90  
 21-01    21-3      21-9  
 21-02    21-4  
           21-5  
           21-6

The internal extractors of series 21 are used to pull internal bearings, outer bearing rings and sockets in craft, workshop and industry. The multi-shell design of the internal extractors with their extra large gripping edges allows the safe pulling of internal parts. Series 21 convinces with its compatibility and range of applications. Depending on the application, there are numerous variants of the optionally 2- or 3-shell internal extractors. They are used either together with counter stays or with sliding hammers.



### BENEFITS

- The robust construction and built-in spindle stop not only ensure strong but also safe work.
- Due to the extraordinary clamping force and the mechanical spindle, even bearings that are closely seated on the back wall are securely and quickly removed.
- The design of bearings or inner rings that form a blind hole ensures a secure grip during mounting and turning out.
- The thread adapters for internal extractors are included with the counter stays and sliding hammers.



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  | Included in the set                                                             |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm                                                                                  | mm/inch                                                                             | kg/lb                                                                               |                                                                                       |                                                                                 |                                                                                       |
| 21-0  | -010408                                                                             | 5 - 8<br>3/16 - 5/16                                                                | 12<br>1/2                                                                           | 17<br>11/16                                                                         | M7                                                                                  | 13<br>1/2                                                                           | 0,115<br>0.254                                                                      | 22-0-05,<br>22-1                                                                      | -                                                                               | ✓                                                                                     |
| 21-00 | -010576                                                                             | 6 - 10<br>1/4 - 3/8                                                                 | 12<br>1/2                                                                           | 17<br>11/16                                                                         | M7                                                                                  | 13<br>1/2                                                                           | 0,12<br>0.265                                                                       | 22-0-05,<br>22-1                                                                      | 28-A, K-22-<br>A-C                                                              | ✓                                                                                     |
| 21-01 | -010651                                                                             | 8 - 12<br>5/16 - 1/2                                                                | 13<br>1/2                                                                           | 17<br>11/16                                                                         | M7                                                                                  | 13<br>1/2                                                                           | 0,115<br>0.254                                                                      | 22-0-05,<br>22-1                                                                      | 28-A, K-22-<br>A-M                                                              | ✓                                                                                     |
| 21-02 | -010736                                                                             | 10 - 14<br>3/8 - 9/16                                                               | 15<br>9/16                                                                          | 17<br>11/16                                                                         | M7                                                                                  | 13<br>1/2                                                                           | 0,115<br>0.254                                                                      | 22-0-05,<br>22-1                                                                      | 28-A, K-22-<br>A-C                                                              | ✓                                                                                     |
| 21-1  | -010811                                                                             | 12 - 16<br>1/2 - 5/8                                                                | 25<br>1                                                                             | 17<br>11/16                                                                         | M7                                                                                  | 13<br>1/2                                                                           | 0,11<br>0.243                                                                       | 22-0-05,<br>22-1                                                                      | 25-C, 26-B,<br>28-A, 28-B,<br>28-C, 28-D,<br>24-A, 24-B,<br>24-C, 25-A,<br>25-B | ✓                                                                                     |



## PRODUCT DETAILS



| #     |  |  |  |  |  |  |  |  | Included in the set                                                                                                       |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|       | GTIN                                                                              | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm                                                                                | mm/inch                                                                           | kg/lb                                                                             |                                                                                     |                                                                                                                           |                                                                                     |
| 21-2  | -010996                                                                           | 14 - 19<br>9/16 - 3/4                                                             | 27<br>1 1/16                                                                      | 30<br>1 3/16                                                                      | M7                                                                                | 13<br>1/2                                                                         | 0,12<br>0.265                                                                     | 22-0-05,<br>22-1                                                                    | 25-C, 26-B,<br>28-A, 28-B,<br>28-C, 28-D,<br>24-A, 24-B,<br>24-C, K-22-<br>A-M, K-22-<br>A-C, 25-A,<br>25-B               | ✓                                                                                   |
| 21-3  | -011153                                                                           | 18 - 23<br>1 1/16 - 7/8                                                           | 35<br>1 3/8                                                                       | 25<br>1                                                                           | M10                                                                               | 17<br>11/16                                                                       | 0,225<br>0.496                                                                    | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                  | 25-C, 26-B,<br>28-B, 28-C,<br>28-D, 24-A,<br>24-B, 24-C,<br>25-A, 25-B                                                    | ✓                                                                                   |
| 21-4  | -011238                                                                           | 20 - 30<br>13/16 - 1<br>3/16                                                      | 40<br>1 9/16                                                                      | 25<br>1                                                                           | M10                                                                               | 17<br>11/16                                                                       | 0,235<br>0.518                                                                    | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                  | 25-C, 26-B,<br>28-B, 28-C,<br>28-D, 24-A,<br>24-B, 24-C,<br>K-22-A-M,<br>K-22-A-C,<br>25-A, 25-B                          | ✓                                                                                   |
| 21-5  | -011498                                                                           | 28 - 40<br>1 1/8 - 1<br>9/16                                                      | 28<br>1 1/8                                                                       | 31<br>1 1/4                                                                       | M10                                                                               | 17<br>11/16                                                                       | 0,395<br>0.871                                                                    | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                  | 25-C, 26-B,<br>K-26-B, 28-<br>B, 28-C, 28-<br>D, 24-A, 24-<br>B, 24-C,<br>K-22-B,<br>K-22-A-M,<br>K-22-B-C,<br>25-A, 25-B | ✓                                                                                   |
| 21-6  | -011566                                                                           | 35 - 46<br>1 3/8 - 1<br>13/16                                                     | 48<br>1 7/8                                                                       | 37<br>1 7/16                                                                      | 15-16 G                                                                           | 22<br>7/8                                                                         | 0,68<br>1.499                                                                     | 22-0-17,<br>22-2, 22-3                                                              | 25-B, 25-C,<br>K-26-B, 28-<br>C, 28-D, 24-<br>A, 24-B, 24-<br>C, K-22-B,<br>K-22-B-C,<br>25-A                             | ✓                                                                                   |
| 21-7  | -011641                                                                           | 45 - 58<br>1 3/4 - 2<br>5/16                                                      | 100<br>3 15/16                                                                    | 45<br>1 3/4                                                                       | 15-16 G                                                                           | 32<br>1 1/4                                                                       | 1,23<br>2.712                                                                     | 22-0-17,<br>22-2, 22-3                                                              | 25-B, 25-C,<br>K-26-B, 28-<br>D, 24-B, 24-<br>C, K-22-B,<br>K-22-B-C                                                      | ✓                                                                                   |
| 21-8  | -011726                                                                           | 56 - 70<br>2 3/16 - 2<br>3/4                                                      | 100<br>3 15/16                                                                    | 45<br>1 3/4                                                                       | 15-16 G                                                                           | 32<br>1 1/4                                                                       | 1,43<br>3.153                                                                     | 22-0-17,<br>22-2, 22-3                                                              | 25-B, K-26-<br>B, 28-D, 24-<br>B, K-22-B,<br>K-22-B-C                                                                     | ✓                                                                                   |
| 21-89 | -011801                                                                           | 56 - 110<br>2 3/16 - 4<br>5/16                                                    | 120<br>4 3/4                                                                      | 70<br>2 3/4                                                                       | G 1/2                                                                             | 32<br>1 1/4                                                                       | 2,4<br>5.292                                                                      | 22-0-50,<br>22-4                                                                    | 25-C, 25-D,<br>24-C                                                                                                       | ✓                                                                                   |
| 21-9  | -011986                                                                           | 70 - 100<br>2 3/4 - 3<br>15/16                                                    | 130<br>5 1/8                                                                      | 58<br>2 5/16                                                                      | G1/2                                                                              | 32<br>1 1/4                                                                       | 2,9<br>6.395                                                                      | 22-0-17,<br>22-3                                                                    | -                                                                                                                         | ✓                                                                                   |
| 21-90 | -012068                                                                           | 100 - 200<br>3 15/16 - 7<br>7/8                                                   | 175<br>6 7/8                                                                      | 110<br>4 5/16                                                                     | G 3/4                                                                             | 41<br>1 1/4                                                                       | 6,58<br>14.509                                                                    | 22-0-50,<br>22-5                                                                    | -                                                                                                                         | ✓                                                                                   |

## SERIES 21-E SEGMENT INTERNAL EXTRACTOR



21-0-E      21-1-E      21-5-E  
21-00-E    21-2-E      21-6-E  
21-01-E    21-3-E      21-7-E  
21-4-E



The segment internal extractors of series 21-E are used for extracting flush-mounted bearings, bearing outer rings, sleeves, and seals in crafts, workshops, and industry. The segmented design with extra fine gripping edges allows for the safe extraction of flush-mounted parts. The 21 series impresses with its compatibility and application diversity. Depending on the application, there are numerous variants of the segment internal extractors. They are either used together with counter stays or with sliding hammers.

### BENEFITS

- Due to its segmentation and fine spindle design, the segment puller is ideal for precise and gentle work.
- The mechanical spindle extracts bearings that are tightly seated on the back wall safely and quickly.
- The shaping ensures a secure grip when seating and swiveling for bearings or inner rings that form a blind hole.
- The thread adapters for internal extractors are included in the delivery of the counter stays and sliding hammers.



### TECHNICAL ATTRIBUTES

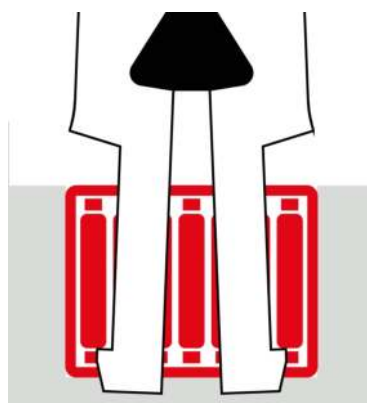
| #       |  |  |  |  |  |  |  |  | Included in the set                |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm                                                                                  | mm/inch                                                                             | kg/lb                                                                               |                                                                                       |                                    |                                                                                       |
| 21-0-E  | -909153                                                                             | 4,8 - 6,5<br>3/16 - 1/4                                                             | 30<br>1 3/16                                                                        | 15<br>9/16                                                                          | M10                                                                                 | 10<br>3/8                                                                           | 0,05<br>1.103                                                                       | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                    | 27-A, K-22-A-E, K-22-C-E           | ✓                                                                                     |
| 21-00-E | -909160                                                                             | 6,8 - 9,5<br>1/4 - 3/8                                                              | 30<br>1 3/16                                                                        | 15<br>9/16                                                                          | M10                                                                                 | 10<br>3/8                                                                           | 0,05<br>1.103                                                                       | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                    | K-22-A-E, K-22-C-E                 | ✓                                                                                     |
| 21-01-E | -909177                                                                             | 9,5 - 12,5<br>3/8 - 1/2                                                             | 30<br>1 3/16                                                                        | 15<br>9/16                                                                          | M10                                                                                 | 10<br>3/8                                                                           | 0,05<br>1.103                                                                       | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                    | K-22-A-E, K-22-C-E                 | ✓                                                                                     |
| 21-1-E  | -930003                                                                             | 12 - 16<br>1/2 - 5/8                                                                | 35<br>1 3/8                                                                         | 25<br>1                                                                             | M10                                                                                 | 14<br>9/16                                                                          | 0,17<br>0.375                                                                       | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                    | 27-A, K-22-A-E, K-22-B-E, K-22-C-E | ✓                                                                                     |
| 21-2-E  | -931000                                                                             | 14 - 19<br>9/16 - 3/4                                                               | 38<br>1 1/2                                                                         | 25<br>1                                                                             | M10                                                                                 | 14<br>9/16                                                                          | 0,175<br>0.386                                                                      | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                    | 27-A, K-22-B-E, K-22-C-E           | ✓                                                                                     |

## PRODUCT DETAILS



| #       |  |  |  |  |  |  |  |  | Included in the set              |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm                                                                                | mm/inch                                                                           | kg/lb                                                                             |                                                                                     |                                  |                                                                                     |
| 21-3-E  | -931109                                                                           | 18 - 23<br>11/16 - 7/8                                                            | 45<br>1 3/4                                                                       | 25<br>1                                                                           | M10                                                                               | 14<br>9/16                                                                        | 0,21<br>0.463                                                                     | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                  | 27-A, K-22-<br>B-E, K-22-C-<br>E | ✓                                                                                   |
| 21-4-E  | -909191                                                                           | 24 - 34<br>15/16 - 1<br>5/16                                                      | 55<br>2 3/16                                                                      | 25<br>1                                                                           | M10                                                                               | 17<br>11/16                                                                       | 0,25<br>0.551                                                                     | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                  | 27-A, K-22-<br>B-E, K-22-C-<br>E | ✓                                                                                   |
| 21-44-E | -039300                                                                           | 15 - 20<br>9/16 - 13/16                                                           | 45<br>1 3/4                                                                       | 25<br>1                                                                           | M10                                                                               | 14<br>9/16                                                                        | 0,2<br>0.441                                                                      | 22-0-05,<br>22-0-17,<br>22-1, 22-2                                                  | -                                | ✓                                                                                   |
| 21-5-E  | -924071                                                                           | 34 - 48<br>1 5/16 - 1<br>7/8                                                      | 73<br>2 7/8                                                                       | 26<br>1 1/32                                                                      | 15-16 Gang                                                                        | 19<br>3/4                                                                         | 0,215<br>0.474                                                                    | 22-0-17,<br>22-2                                                                    | 27-A                             | ✓                                                                                   |
| 21-6-E  | -924088                                                                           | 48 - 63<br>1 7/8 - 2 1/2                                                          | 80<br>3 1/8                                                                       | 35<br>1 3/8                                                                       | 15-16 Gang                                                                        | 24<br>15/16                                                                       | 0,71<br>1.566                                                                     | 22-0-17,<br>22-2                                                                    | -                                | ✓                                                                                   |
| 21-7-E  | -924095                                                                           | 63 - 78<br>2 1/2 - 3<br>1/16                                                      | 82<br>3 1/4                                                                       | 35<br>1 3/8                                                                       | 15-16 Gang                                                                        | 24<br>15/16                                                                       | 0,86<br>1.896                                                                     | 22-0-17,<br>22-2                                                                    | -                                | ✓                                                                                   |

## SERIES 21-4X NEEDLE BEARING PULLER



The 2-piece needle bearing pullers with extra-large gripping edges of the 21-4x series were specially developed for the safe and damage-free extraction of internal needle bearings. The two-piece design ensures even force distribution and enables easy handling even in confined spaces. Application is flexible, either with counter stay or with sliding hammer, allowing optimal adaptation to different application situations.

### BENEFITS

- Safe and damage-free internal extraction of needle bearings
- Optimal grip thanks to extra-large, precision-manufactured gripping edges
- Uniform force distribution thanks to double-shell construction
- Flexible application with counter stays or sliding hammers



### TECHNICAL ATTRIBUTES

| #         |  |  |  |  |  |  |  |  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|           | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm                                                                                  | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 21-40 New | -411526                                                                             | 9,6 - 18<br>3/8 - 11/16                                                             | 18<br>11/16                                                                         | 26<br>1 1/32                                                                        | M10                                                                                 | 17<br>11/16                                                                          | 0,215<br>0.474                                                                        | ✓                                                                                     |
| 21-41 New | -186066                                                                             | 11,5 - 19<br>7/16 - 3/4                                                             | 18<br>11/16                                                                         | 26<br>1 1/32                                                                        | M10                                                                                 | 17<br>11/16                                                                          | 0,2<br>0.441                                                                          | ✓                                                                                     |
| 21-42 New | -186141                                                                             | 12,5 - 21<br>1/2 - 13/16                                                            | 19<br>3/4                                                                           | 26<br>1 1/32                                                                        | M10                                                                                 | 17<br>11/16                                                                          | 0,22<br>0.485                                                                         | ✓                                                                                     |



SERIES 21-V  
EXTENSIONS FOR INTERNAL EXTRACTORS



The extensions for the internal extractors of series 21 are used for loosening and pulling out deeply seated bearings, bearing outer rings, and bushes in crafts, workshops, and industry. The extensions available in various lengths from 40 to 280 mm allow for a variable application of the internal extractors even in extreme cases.

BENEFITS

- Various extension sizes for different applications



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 21-V-040 | -909214                                                                                     | 40<br>1 9/16                                                                                   | M7                                                                                        | 14<br>9/16                                                                                     | 11<br>7/16                                                                                     | 0,08<br>1.764                                                                                  | ✓                                                                                     |
| 21-V-060 | -909221                                                                                     | 60<br>2 3/8                                                                                    | M7                                                                                        | 14<br>9/16                                                                                     | 11<br>7/16                                                                                     | 0,11<br>0.243                                                                                  | ✓                                                                                     |
| 21-V-080 | -909238                                                                                     | 80<br>3 1/8                                                                                    | M7                                                                                        | 14<br>9/16                                                                                     | 11<br>7/16                                                                                     | 0,14<br>0.309                                                                                  | ✓                                                                                     |
| 21-V-310 | -914386                                                                                     | 100<br>3 15/16                                                                                 | M10                                                                                       | 20<br>13/16                                                                                    | 17<br>11/16                                                                                    | 0,295<br>0.650                                                                                 | ✓                                                                                     |

SERIES 21-V-0  
INTERNAL EXTRACTOR EXTENSIONS



The set of extensions for internal extractors of series 21 is used for loosening and extracting deeply seated bearings, bearing outer rings, and bushings in craft, workshop, and industry. The extensions, available in various lengths, allow for versatile use of the internal extractors even in extreme cases. The set contains extensions in four different sizes from 40 - 280 mm for compatibility in every case.

BENEFITS

- Different extension sizes for various applications
- Practical assembly for universal use
- By storing it in the box, not only can one easily overview the completeness of the set, but the parts can also be safely stored in the special foam.



TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  | Consists of                            |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm                                                                                  | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                        |                                                                                       |
| 21-V-0 | -909207                                                                             | 40, 60, 80, 100<br>1 9/16; 2 3/8; 3 1/8; 3 15/16                                    | M7, M10                                                                             | 14, 20<br>9/16, 13/16                                                               | 11, 17<br>7/16, 11/16                                                               | 1,035<br>2.977                                                                        | 21-V-040, 21-V-060, 21-V-080, 21-V-310 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 21-V-E  
ACCESSORIES FOR INTERNAL EXTRACTION



The extension for internal extractors of series 21-V-E is used to loosen and pull out deeply seated bearings, outer bearing rings, and sockets in crafts, workshops, and industry. The extension allows the internal extractor to spread in tight or deep installation situations that would otherwise not be reachable.

BENEFITS

- Extension allows access to deep-seated bearings, bearing outer rings, and sockets.

TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 21-4-E-180 | -010866                                                                                     | 180<br>7 1/16                                                                                  | M10                                                                                       | 34<br>1 5/16                                                                                   | 17<br>11/16                                                                                    | 0,25<br>0.551                                                                                  | ✓                                                                                     |



KUKKO // *Pull forward*

SERIES 22-0

# SLIDING HAMMERS





# APPLICATION

The robust sliding hammers of series 22-0 are the perfect choice for contactless and material-preserving disassembly. No support surface is required for the pulling operation. This enables work in confined spaces or with limited environmental conditions. Thanks to the ergonomically shaped, solid sliding piece, the applied force can be optimally transmitted and a strong shock effect achieved. The sliding hammers differ in size and impact weight depending on the force required.

## Benefits

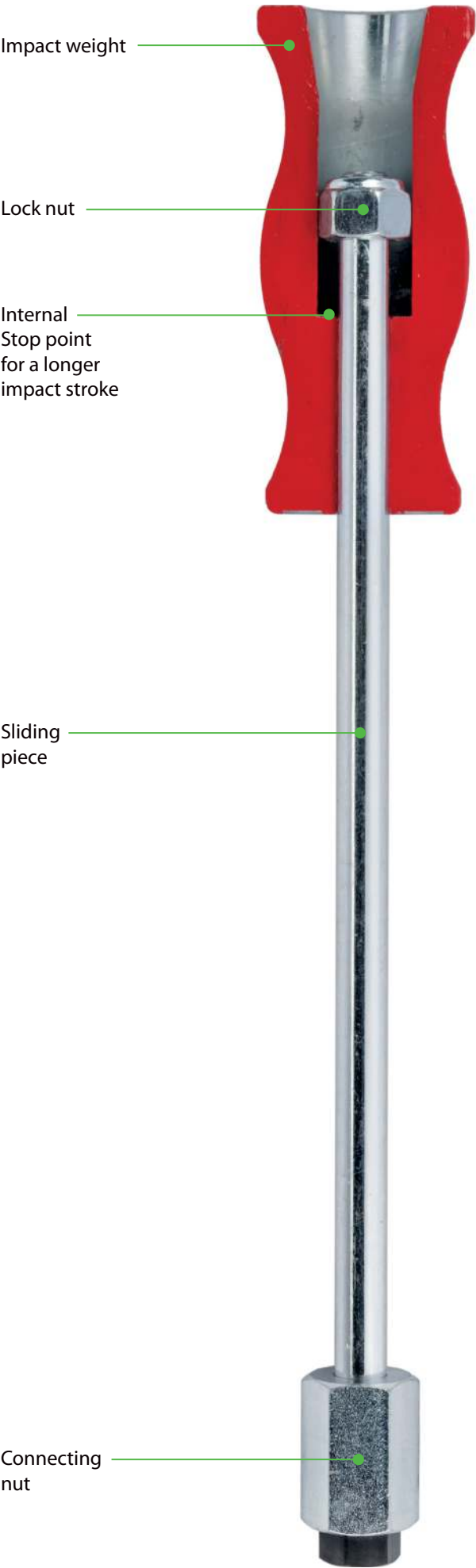
- High-quality workmanship and design for optimal handling
- Contactless and gentle extraction of internal bearings, gears, dowel pins etc.
- Reversible impact weight to extend the impact stroke for even more impact force
- Ergonomically shaped, solid sliding piece for ideal power transmission
- Internal stop point prevents pinching and ensures safe operation
- Particularly suitable for components installed at greater depth

## CHARACTERISTICS OF THE SERIES

The item numbers of the sliding hammers consist of the series designation and the respective impact weight 

| S                                                                                                                               | M                                                                                                                               | L                                                                                                                               | XL                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>0,5 kg</b><br>Art.Nr.<br><b>22-0-05</b> | <br><b>1,0 kg</b><br>Art.Nr.<br><b>22-0-10</b> | <br><b>1,7 kg</b><br>Art.Nr.<br><b>22-0-17</b> | <br><b>5,0 kg</b><br>Art.Nr.<br><b>22-0-50</b>                                                                                                                                                                                                                       |
| <br>Art.Nr.<br><b>22-0+05</b>                | <br>Art.Nr.<br><b>22-0+10</b>                | <br>Art.Nr.<br><b>22-0+17</b>                | <br><div><br/><b>60% MORE POWER</b><br/>The impact weight of the sliding hammer can optionally be increased by screwing in 3 kg weight extensions.<br/><b>22-0-2-100</b></div> |

# STRUCTURE AND CROSS-SECTION OF A SLIDING HAMMER



In confined spaces, the impact weight can be reversed to shorten the impact stroke.



The internal stop point prevents pinching of the thumb during the pulling operation.

## OVERVIEW OF THE RANGE

### Sliding hammer single



22-0-10

22-0+10

The sliding hammer can be purchased as a single product in four different sizes. Ideally suited for universal application for extracting internal components.

### Sliding hammer in set



KS-22-01



K-22-B

The sliding hammer is also available in portable, fully equipped set cases. These compact to-go solutions include internal extractors and thread adapters in various sizes and – depending on the model – a counter stay for even more precise and powerful extraction.

### Sliding hammer special applications



223-2

Whether exchanging a wheel hub, removing a seal ring or extracting dowel pins, the sliding hammer is the powerful drive for a wide range of pulling operations.

## OPTIONAL EXTENSIONS

### TIP:

For even better handling, use the 3-component handle **G-22**, which is compatible with all KUKKO sliding hammers. This ensures you always keep everything firmly in hand – before, during, and after the extraction process.



# COMBINATIONS

## Sliding hammer

22-0-05  
22-0-10  
22-0-17  
22-0-50

## SERIES 22-0



+

## Connecting nut

Connecting nuts are the coupling between sliding hammer and adapters and can be screwed onto any compatible external thread.

## SERIES VM



+

## Thread adapter

for adjusting the thread diameter

## SERIES GE



## SERIES GA



### TIP FOR THREAD ADJUSTMENT:

Thanks to the movable thread pin, by unscrewing it, adapters GA3 to GA12-10 can be used as both internal and external thread.

+

## Internal extractor

for extracting internal components

## SERIES 21



## SERIES 21-E



# APPLICATION EXAMPLES



Extracting a ball bearing with sliding hammer and an internal extractor of series 21



Pulling a ball bearing with a sliding hammer and the puller 220-2



## SERIES 22-0 SLIDING HAMMER DEVICE



The sliding hammer devices of the series 22-0 are used together with the internal extractors of the series 21. The use of a sliding hammer is recommended when there is no support surface available or it is too sensitive. The ergonomic sliding piece achieves a strong shock effect. Depending on the application, sliding hammers are available in various sizes and with impact weights from 500 g to 8 kg as well as with matching accessories.

### BENEFITS

- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.
- If there is not enough space, the impact weight can be turned over.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  | Included in the set                                                                                      |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm                                                                                  | mm                                                                                  | kg/lb                                                                                 |                                                                                                          |                                                                                       |
| 22-0-05 | -283697                                                                             | 325<br>12 13/16                                                                     | 200<br>7 7/8                                                                        | 0.5                                                                                 | M7                                                                                  | M10                                                                                 | 0,85<br>1.874                                                                         | K-22-A-E,<br>K-22-B-E                                                                                    | ✓                                                                                     |
| 22-0-10 | -385070                                                                             | 300<br>11 13/16                                                                     | 250<br>9 13/16                                                                      | 1                                                                                   | M10                                                                                 | 15-16 G                                                                             | 1,44<br>3.175                                                                         | -                                                                                                        | ✓                                                                                     |
| 22-0-17 | -385087                                                                             | 370<br>14 9/16                                                                      | 250<br>9 13/16                                                                      | 1.7                                                                                 | 15-16 G                                                                             | G 1/2                                                                               | 2,71<br>5.976                                                                         | 26-B, K-26-B,<br>28-A, 28-B,<br>K-22-C-E,<br>KS-22-01,<br>KS-22-01-<br>UNC,<br>KS-22-02,<br>223-G, 223-K | ✓                                                                                     |
| 22-0-50 | -385094                                                                             | 700<br>27 9/16                                                                      | 340<br>13 3/8                                                                       | 5                                                                                   | G 3/4                                                                               | G 1/2                                                                               | 8,83<br>19.470                                                                        | -                                                                                                        | ✓                                                                                     |

## SERIES 22-0+ SLIDING HAMMER DEVICE

The sliding hammer devices of series 22-0+ are used together with internal extractors of series 21 in crafts, industry, and workshops. The use of a sliding hammer is particularly recommended when there is no support surface available or this surface is too sensitive. The massive sliding piece allows for optimal force transfer and achieves a strong shock effect. This also ensures contactless and gentle extraction. The ergonomically shaped 2-component handle (PB Swiss) guarantees maximum power transmission even with wet and oily hands.



### BENEFITS

- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.
- The 2-component handle ensures maximum power transmission even with wet and oily hands.
- If there is not enough space available, the impact weight can be reversed.



22-0+05    22-0+10    22-0+17



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm                                                                                  | mm                                                                                  | kg                                                                                  | mm/inch                                                                              | mm/inch                                                                               | kg/lb                                                                                 |                                                                                       |
| 22-0+05 | -060847                                                                             | 395<br>12 13/16                                                                     | 40<br>1 9/16                                                                        | M10                                                                                 | M7                                                                                  | 0.5                                                                                 | 200<br>7 7/8                                                                         | 19<br>3/4                                                                             | 0,85<br>1.874                                                                         | ✓                                                                                     |
| 22-0+10 | -060854                                                                             | 395<br>11 13/16                                                                     | 50<br>1 15/16                                                                       | 15-16 G                                                                             | M10                                                                                 | 1                                                                                   | 250<br>9 13/16                                                                       | 24<br>15/16                                                                           | 1,635<br>3.175                                                                        | ✓                                                                                     |
| 22-0+17 | -060861                                                                             | 425<br>14 9/16                                                                      | 60<br>2 3/8                                                                         | G 1/2                                                                               | 15-16 G                                                                             | 1.7                                                                                 | 250<br>9 13/16                                                                       | 32<br>1 1/4                                                                           | 2,84<br>5.976                                                                         | ✓                                                                                     |

SERIES K-26  
BALL BEARING PULLER SETS WITH SLIDING  
HAMMER



The 6- and 7-piece ball bearing puller sets of the K-26 series are used for pulling internal bearings, bearing outer rings, and bushings in crafts, workshops, and industry. The two-jaw design of the internal extractors with their extra-large gripping edges allows for safe extraction of internal parts. The included sliding hammer is used together with the internal extractors. Depending on the size of the ball bearing and the extraction situation, the set is available in various designs.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with the sliding hammer, are capable of finding a suitable response in various pulling situations.
- The sliding hammer allows for optimal and safe extraction in varying applications depending on the existing conditions.

TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |  | Consists of                                                             |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm                                                                                  | mm                                                                                  | kg/lb                                                                                 |                                                                         |                                                                                       |
| K-26-A | -854378                                                                             | 5 - 28<br>3/16-1 1/8                                                                | 325<br>12 13/16                                                                     | 200<br>7 7/8                                                                        | 0.5                                                                                 | M7                                                                                  | M10                                                                                 | 2,83<br>6.240                                                                         | 22-0-05, G-22,<br>21-00, 21-02,<br>21-2, 21-4                           | ✓                                                                                     |
| K-26-B | -854392                                                                             | 28 - 70<br>1 1/8-2 3/4                                                              | 300<br>11 13/16                                                                     | 250<br>9 13/16                                                                      | 1                                                                                   | M10                                                                                 | 15-16G                                                                              | 8,435<br>18.599                                                                       | 22-0-10, 21-5,<br>21-6, 21-7,<br>21-8, G-22,<br>VM12-1516,<br>GA10-1516 | ✓                                                                                     |

## SERIES 28-A/B SLIDING HAMMER FOR PULLING BALL BEARINGS AND DOWEL PINS



The 19-piece sliding hammer sets of series 28-A/B are used for the non-contact removal of internal bearings, outer rings, and bushings, as well as components with threads. The set includes a sliding hammer and thread inserts for the application.

### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the sliding hammer and threaded inserts, are capable of finding an appropriate solution in a variety of extraction situations.
- The sliding hammer allows for optimal and safe extraction due to its design.
- The threaded inserts allow internal extraction even where concentric threaded holes would normally prevent internal extraction.



### TECHNICAL ATTRIBUTES

| #    | GTIN    | mm/inch            | mm/inch         | mm/inch        | kg |                                                            | mm | mm                 | kg/lb          | Consists of                                                                                                                                                                                               | MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|------|---------|--------------------|-----------------|----------------|----|------------------------------------------------------------|----|--------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 28-A | -507779 | 5 - 19<br>3/16-3/4 | 300<br>11 13/16 | 250<br>9 13/16 | 1  | M3, M4,<br>M5, M6,<br>M8, M10,<br>M12,<br>M14,<br>M16, M18 | -  | M7, M10,<br>15-16G | 3,395<br>7.486 | 21-00, 21-01,<br>21-02, 21-1,<br>21-2,<br>22-0-10,<br>GE4-10,<br>GE5-10,<br>GE6-10,<br>GE8-10,<br>GE10-10,<br>GE12-10,<br>VM12-1516,<br>VM12-10,<br>GE3-10,<br>GE14-10,<br>GE16-10,<br>GE18-10,<br>VM12-7 | ✓                                               |



PRODUCT DETAILS



| #    |  |  |  |  |  |  |  |  |  | Consists of                                                                                                                                                                                          |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg                                                                                |                                                                                   | mm                                                                                | mm                                                                                 | kg/lb                                                                               |                                                                                                                                                                                                      |                                                                                     |
| 28-B | -507786                                                                           | 12 - 38<br>1/2-1 1/2                                                              | 370<br>14 9/16                                                                    | 250<br>9 13/16                                                                    | 1.7                                                                               | M8, M10,<br>M12,<br>M14,<br>M16,<br>M18,<br>M20,<br>M22, M24                      | 15-16G,<br>M7,<br>M18x1,5,<br>M10                                                 | G1/2                                                                               | 6,145<br>13.550                                                                     | 22-0-17,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5,<br>GE14-1815,<br>GE16-1815,<br>GE18-1815,<br>GE20-1815,<br>GE22-1815,<br>GE24-1815,<br>GA7-10,<br>GA12-1815,<br>GE8-1815,<br>GE10-1815,<br>GE12-1815 | ✓                                                                                   |

### SERIES 27-A UNIVERSAL PULLER



The 22-piece universal puller set of series 27-A is used for pulling, separating, and internal extraction of bearings, gears, discs, etc. in crafts, workshops, and industry. The set is versatile for external extraction, internal extraction, and internal extraction with engagement in the ball bearing. Included in the set are the bearing puller "Cobra", various internal extractors, counter stays, and a sliding hammer, as well as thread inserts and a small part puller, ensuring a wide range of applications.



#### BENEFITS

- The "Cobra" separating claw ensures that the puller jaws are pressed particularly tightly against the part to be removed with the side clamping clamp.
- The internal extractors, together with the sliding hammer and thread inserts, are able to find an appropriate answer in versatile pulling situations.
- The sliding hammer allows for optimal and safe pulling due to its design.



#### TECHNICAL ATTRIBUTES

## PRODUCT DETAILS



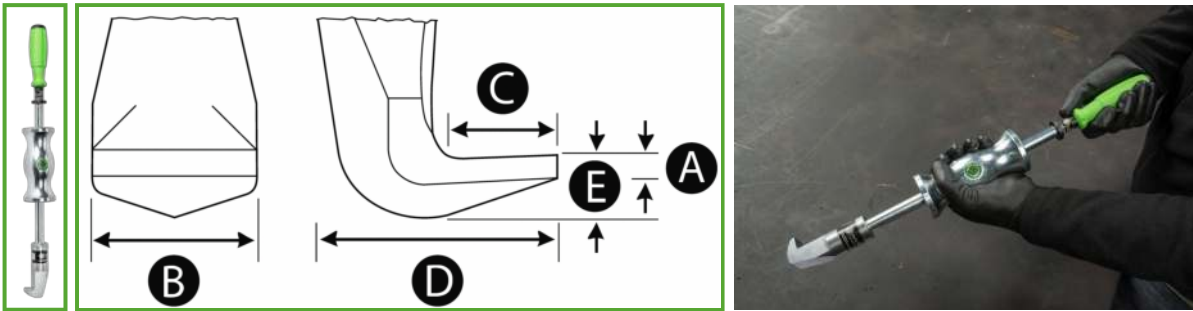
| #    |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |                                                                                                                |  | Consists<br>of                                                                                                                                                                                            |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       |                                                                                   | mm/<br>inch                                                                       | mm/<br>inch                                                                       | kN                       | t/US t.<br>sh.           | kg                                                                                  |                                                                                                                                                                                                   | kg/lb                                                                               |                                                                                                                                                                                                           |                                                                                     |
| 27-A | -951008                                                                           | 0 - 60<br>0 - 2<br>3/8                                                            | 0 - 70<br>0 - 2 3/4                                                               | 9 - 48<br>3/8 - 1<br>7/8                                                          | M3, M4,<br>M5, M6,<br>M8, M10                                                     | 20 - 110<br>13/16 -<br>4 5/16                                                     | 100<br>3 15/16                                                                    | 10                       | 1<br>1.10                | 1                                                                                   | 6004,<br>6005,<br>6006,<br>6007,<br>6008,<br>6009,<br>6010,<br>6011,<br>6012,<br>6013,<br>6201,<br>6202,<br>6203,<br>6204,<br>6205,<br>6206,<br>6300,<br>6301,<br>6302,<br>6303,<br>6304,<br>6305 | 7,255<br>15.997                                                                     | 204-0,<br>21-0-E,<br>21-01-E,<br>21-1-E,<br>21-2-E,<br>21-3-E,<br>21-4-E,<br>21-5-E,<br>43-0-1,<br>69-A2,<br>69-A3,<br>22-01-<br>G27-A,<br>GA12-3,<br>GA12-4,<br>GA12-5,<br>GA12-6,<br>GA12-8,<br>GA12-10 | ✓                                                                                   |

SERIES 224-0  
OIL HOOK

The oil hooks of the series 224-0 are used in conjunction with a sliding hammer for the removal of oil seals, shaft seals, and other seals in the automotive sector and mechanical engineering. The combination of oil hooks and sliding hammer allows for a felt or powerful striking or loosening of difficult-to-remove parts in vehicles and machines.

BENEFITS

- Enables the disassembly of seal rings when other pullers are not applicable.
- Available in different sizes depending on the seal diameter.



TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm                                                                                  | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | kg/lb                                                                                 |                                                                                       |                                                                                       |
| 224-0-05 | -009976                                                                             | 70<br>2 3/4                                                                         | M12                                                                                 | 12<br>1/2                                                                           | 3<br>1/8                                                                            | 8<br>5/16                                                                           | 4<br>3/16                                                                           | 1<br>1/32                                                                            | 0,3<br>0.662                                                                          | 22-0-05,<br>22-0-10                                                                   | ✓                                                                                     |
| 224-0-10 | -009983                                                                             | 100<br>3 15/16                                                                      | M16x1,5                                                                             | 46<br>1 13/16                                                                       | 14<br>9/16                                                                          | 24<br>15/16                                                                         | 14<br>9/16                                                                          | 4<br>3/16                                                                            | 0,3<br>0.662                                                                          | 22-0-17                                                                               | ✓                                                                                     |



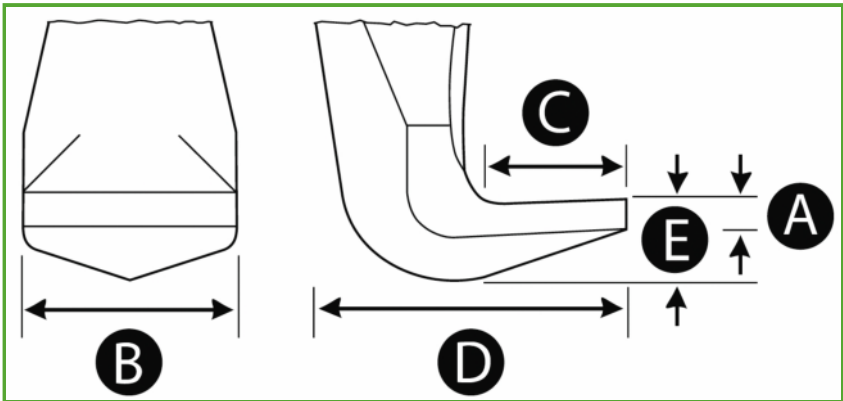
SERIES 229-01  
HOOK WITH TOGGLE JOINT



The specially profiled bracket hook with toggle joint of series 229-01 is a versatile tool for sliding hammer application. A typical area of use is the removal of control arms from the ball joint clamp. In addition to bodywork, the combination of bracket hook and sliding hammer is also suitable for the disassembly of bearing bushes as well as other disassembly work in the automotive and industrial sectors. The flexible toggle joint allows for safe use even in confined spaces. Without an adapter, the hook is directly compatible with sliding hammer 22-0-50 and can be used with other sliding hammer models when an adapter is used.

BENEFITS

- Specialized tool for safe and gentle disassembly



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 229-01 | -117329                                                                                     | 138<br>5 7/16                                                                                  | 25<br>1                                                                                        | 40<br>1 9/16                                                                                   | 85<br>3 3/8                                                                                    | 16<br>5/8                                                                                      | 3,21<br>7.078                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES G-22  
2-COMPONENT HANDLE FOR SLIDING  
HAMMERS



The 2-component handle as accessories for sliding hammers of series 22 serves better guidance during the extraction process when using sliding hammers in crafts, industry, and workshops. The ergonomic handle design provides good haptics and maximum power transmission even with wet and oily hands.

BENEFITS

- The risk of injury is reduced by using a handle.
- Ergonomically shaped grip



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>M12 | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| G-22 | -018442                                                                                     | M12                                                                                        | 155<br>6 1/8                                                                                   | 0,167<br>0.368                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 22-0-2-100  
3 KG WEIGHT EXTENSION FOR 22-0-50



The additional weights of the series 22-0-2-100 are used together with sliding hammers of the series 22-0-50 in crafts, industry, and workshops. Each additional weight module increases the impact weight of the sliding hammer by 3 kg, allowing even particularly stuck parts to be safely and gently pulled off.

BENEFITS

- Multiple weight extensions can be used together with a single sliding hammer, allowing the impact weight of the sliding hammer to be individually adjusted upwards.

TECHNICAL ATTRIBUTES

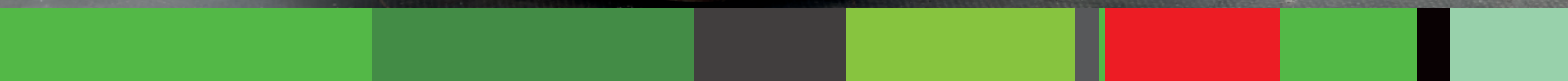
| #          | <br>GTIN | <br>mm/inch | <br>mm/inch |  | <br>kg/lb |  |
|------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 22-0-2-100 | -111211                                                                                   | 66<br>2 5/8                                                                                  | 95<br>3 3/4                                                                                  | M10                                                                               | 3,225<br>7.111                                                                               | ✓                                                                                   |

KUKKO // *Pull forward*



SERIES 22

# COUNTER STAYS





## APPLICATION

The counter stays of Series 22 are used together with internal extractors of Series 21 in trade, industry, and workshops. Counter stays, thanks to the knurled shape of the support feet, are especially well-suited for large cylinder sockets and ball bearings, etc., and ensure secure stability during extraction. In this way, the gentle extraction of internal components is improved. In contrast to a sliding hammer, a counter stay allows for more precise work with increased force.

### Benefits

- Determine the internal diameter of the ball bearing and choose the appropriate internal extractor
- Insert the internal extractor into the borehole and tighten the clamping nut
- Support the counter stay on the housing and screw it onto the internal extractor's wedge spindle
- Hold the counter stay handle and safely pull out the bearing by tightening the hexagon nut
- Retighten the clamping nut during extraction

## STRUCTURE OF A COUNTER STAY USING THE EXAMPLE 22-4



## SERIES 22 COUNTER STAY



22-1  
22-2  
22-3



22-4  
22-5

The supports of the series 22 are used together with the internal extractors of the series 21 in crafts, industry, and workshops. Supports are particularly well suited for large cylinder bushings and ball bearings, etc., thanks to the ribbed shape of the support feet, and ensure a firm stand during extraction. In this way, the gentle extraction of internal components is improved. Unlike a sliding hammer, a counter stay allows for more precise work with greater force.

### BENEFITS

- Sizes from 21-2 are particularly low-friction due to integrated pressure bearings in the form.
- The friction resistance of the counter nut is minimized by an integrated pressure bearing.



### TECHNICAL ATTRIBUTES

| #    |  |  |  |  |  |  | Max. tensile force | Max. tension force |  | Included in the set                                                                                                                                             |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/inch                                                                             | mm/<br>inch                                                                         | mm/inch                                                                             | mm                                                                                  | mm                                                                                  | kN                 | t/US t. sh.        | kg/lb                                                                                 |                                                                                                                                                                 |                                                                                       |
| 22-1 | -012228                                                                             | 15 - 60<br>9/16 - 2 3/8                                                             | 115<br>4 1/2                                                                        | 22<br>7/8                                                                           | M7,<br>M10                                                                          | M15x1,5                                                                             | 30                 | 3<br>3.31          | 0,69<br>1.521                                                                         | 25-B, 25-C,<br>28-C, 28-D,<br>24-A, 24-B,<br>24-C, K-22-<br>A-M, K-22-<br>A-C, K-22-<br>A-E, K-22-<br>B-E, K-22-<br>C-E, K-22-<br>A-E-C,<br>K-22-B-E-C,<br>25-A | ✓                                                                                     |
| 22-2 | -012303                                                                             | 25 - 100<br>1 - 3 15/16                                                             | 165<br>6 1/2                                                                        | 32<br>1 1/4                                                                         | 15-16<br>G, M10                                                                     | G 1/2                                                                               | 40                 | 4<br>4.41          | 1,873<br>4.130                                                                        | 25-B, 25-C,<br>28-C, 28-D,<br>24-A, 24-B,<br>24-C, K-22-<br>B, K-22-B-<br>C, 25-A                                                                               | ✓                                                                                     |
| 22-3 | -012488                                                                             | 0 - 180<br>0 - 7 1/16                                                               | 280<br>11 1/32                                                                      | 32<br>1 1/4                                                                         | G 1/2,<br>15-16<br>G                                                                | G 1/2                                                                               | 50                 | 5<br>5.51          | 4<br>8.820                                                                            | -                                                                                                                                                               | ✓                                                                                     |
| 22-4 | -112478                                                                             | 70 - 240<br>2 3/4 - 9 7/16                                                          | 200<br>7 7/8                                                                        | 32<br>1 1/4                                                                         | -                                                                                   | G 1/2                                                                               | 70                 | 7<br>7.72          | 4,01<br>9.041                                                                         | 25-D, 24-C                                                                                                                                                      | ✓                                                                                     |

## PRODUCT DETAILS



| #    |  |  |  |  |  |  | Max. tensile force | Max. tension force |  | Included in the set |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------|--------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm                                                                                | mm                                                                                | kN                 | t/US t. sh.        | kg/lb                                                                               |                     |                                                                                     |
| 22-5 | -012556                                                                           | 100 - 310<br>3 15/16 -<br>12 3/16                                                 | 260<br>10 1/4                                                                     | 46<br>1 13/16                                                                     | -                                                                                 | G 3/4                                                                             | 90                 | 9<br>9.92          | 7,76<br>17.111                                                                      | -                   | ✓                                                                                   |

### SERIES 25 BALL BEARING PULLER SETS WITH COUNTER STAYS



The puller sets of the series 25 are used for extracting internal bearings, bearing outer rings, and bushings in crafts, industry, and workshops. The set includes internal extractors and counter stays. The multi-shell design of the internal extractors with their extra large gripping edges allows for safe extraction of internal parts, and together with the counter stays, internal parts can be safely removed.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, together with the counter stays, are able to find a suitable answer in various extraction situations.
- The sets are designed for various application fields and widths, allowing a wide range of options for internal extraction.

## TECHNICAL ATTRIBUTES

| #    |  |  |  | Max. tensile force | Max. tension force |  | Consists of                                                                      |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kN                 | t/US t. sh.        | kg/lb                                                                                 |                                                                                  |                                                                                       |
| 25-K | -863899                                                                             | 5 - 19<br>3/16-3/4                                                                  | 0 - 60<br>0 - 2 3/8                                                                 | 30                 | 3<br>3.31          | 2,165<br>4.774                                                                        | 22-1, 21-00,<br>21-02, 21-2                                                      | ✓                                                                                     |
| 25-A | -013058                                                                             | 12 - 48<br>1/2-1 7/8                                                                | 0 - 100<br>0 - 3 15/16                                                              | 40                 | 4<br>4.41          | 6,5<br>14.333                                                                         | 22-1, 22-2,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6                          | ✓                                                                                     |
| 25-B | -013133                                                                             | 12 - 70<br>1/2-2 3/4                                                                | 0 - 100<br>0 - 3 15/16                                                              | 40                 | 4<br>4.41          | 9,94<br>21.918                                                                        | 22-1, 22-2,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6,<br>21-7, 21-8           | ✓                                                                                     |
| 25-C | -013218                                                                             | 12 - 110<br>1/2-4 5/16                                                              | 0 - 240<br>0 - 9 7/16                                                               | 70                 | 7<br>7.72          | 17,5<br>38.588                                                                        | 22-1, 22-2,<br>22-4, 21-1,<br>21-2, 21-3,<br>21-4, 21-5,<br>21-6, 21-7,<br>21-89 | ✓                                                                                     |
| 25-D | -158803                                                                             | 60 - 110<br>2 3/8-4 5/16                                                            | 70 - 240<br>2 3/4 - 9 7/16                                                          | 70                 | 7<br>7.72          | 9,275<br>20.451                                                                       | 22-4, 21-89                                                                      | ✓                                                                                     |

## SERIES 24 BALL BEARING REMOVAL AND INSTALLATION SETS



The puller and extractor sets of series 24 are used for removing bearings, gears, discs, as well as extracting internal bearings, bearing outer rings, and bushings during repairs and maintenance in the industry. The set includes internal extractors, counter stays, puller sleeves, and external pullers. The multi-shell design of the internal extractors with their extra-large gripping edges allows for the safe extraction of internal parts. When combined with the counter stays, internal parts can be safely removed.

### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The 2-jaw universal puller can loosen any component that is freely accessible from the outside and ensures a secure and precise extraction.
- The internal extractors, together with the counter stays, are capable of finding a suitable solution in a variety of extraction situations.



### TECHNICAL ATTRIBUTES

| #    | GTIN    |  mm/<br>inch |  mm/inch |  mm/inch |  mm/inch |  mm/<br>inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. |  kg/lb | Consists<br>of                                                                                              |  |
|------|---------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 24-A | -012716 | 0 - 90<br>0 - 3<br>9/16                                                                         | 0 - 100<br>0 - 3 15/16                                                                      | 12 - 48<br>1/2 - 1 7/8                                                                      | 0 - 100<br>0 - 3 15/16                                                                      | 165<br>6 1/2                                                                                    | 45                             | 4.5<br>4.96                             | 17,5<br>38.588                                                                              | 20-1, 43-1,<br>22-1, 22-2,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6,<br>23                               | ✓                                                                                     |
| 24-B | -012891 | 0 - 160<br>0 - 6<br>5/16                                                                        | 0 - 162<br>0 - 6 3/8                                                                        | 12 - 70<br>1/2 - 2 3/4                                                                      | 0 - 100<br>0 - 3 15/16                                                                      | 165<br>6 1/2                                                                                    | 60                             | 6<br>6.61                               | 18<br>39.690                                                                                | 20-1, 20-2,<br>22-1, 22-2,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6,<br>21-7, 21-8,<br>23, 43-1          | ✓                                                                                     |
| 24-C | -012976 | 0 - 160<br>0 - 6<br>5/16                                                                        | 0 - 162<br>0 - 6 3/8                                                                        | 12 - 110<br>1/2 - 4<br>5/16                                                                 | 0 - 240<br>0 - 9 7/16                                                                       | 200<br>7 7/8                                                                                    | 70                             | 7<br>7.72                               | 23,98<br>52.876                                                                             | 20-1, 20-2,<br>43-1, 22-1,<br>22-2, 22-4,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6,<br>21-7,<br>21-8, 23 | ✓                                                                                     |



KUKKO // *Pull forward*



# COMBINED SETS



## PRODUCT DETAILS

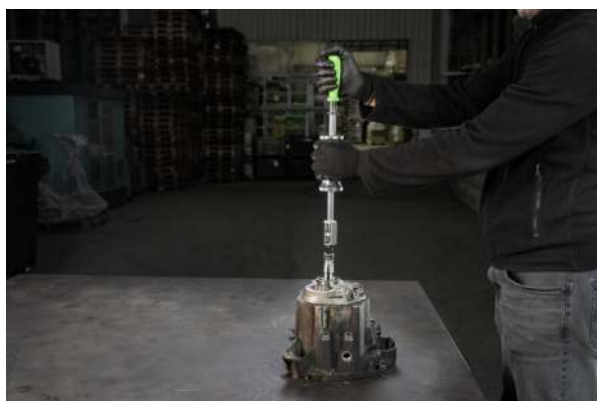
### SERIES K-22 PULLER SETS WITH COUNTER STAY AND SLIDING HAMMER



The 8-piece ball bearing puller sets with counter stays and sliding hammer are used for extracting internal bearings, bearing outer rings, and bushings. The multi-shell design of the internal extractors with their extra-large gripping edges allows for the safe extraction of internal parts.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with counter stays and the sliding hammer, are capable of finding an appropriate response in versatile extraction situations.
- Counter stays and sliding hammers enable optimal and safe extraction depending on the existing conditions with varying applications.
- The set includes accessories that sensibly complement its practical application.



#### TECHNICAL ATTRIBUTES

| #      | GTIN    |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  kg |  mm |  mm | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. |  kg/lb | Consists<br>of                                                  |  |
|--------|---------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-22-A | -039263 | 5 - 28<br>3/16-1<br>1/8                                                                         | 15 - 60<br>9/16-2<br>3/8                                                                        | 325<br>12 13/16                                                                                 | 200<br>7 7/8                                                                                    | 0.5                                                                                    | M7                                                                                     | M10                                                                                     | 30                             | 3<br>3.31                                  | 4,1<br>9.041                                                                                | 21-00,<br>21-02,<br>21-2,<br>21-4,<br>22-0-05,<br>G-22,<br>22-1 | ✓                                                                                     |
| K-22-B | -854385 | 28 - 70<br>1 1/8-2<br>3/4                                                                       | 25 - 100<br>1 - 3<br>15/16                                                                      | 300<br>11 13/16                                                                                 | 250<br>9 13/16                                                                                  | 1                                                                                      | M10                                                                                    | 15-16G                                                                                  | 40                             | 4<br>4.41                                  | 10,14<br>2.514                                                                              | 21-5,<br>21-6,<br>21-7,<br>21-8,<br>22-0-10,<br>22-2,<br>G-22   | ✓                                                                                     |

SERIES K-22-A-M  
BALL BEARING PULLER SET WITH COUNTER  
STAY AND SLIDING HAMMER



The 10-piece Ball Bearing Puller Set with Counter Stay and Sliding Hammer is used for extracting internal bearings, bearing outer rings, and bushings. The five different internal extractors are specifically designed for disassembling the common bearings, bearing outer rings, and bushings in the automotive sector.

BENEFITS

- Application-oriented assembly for universal use, especially in the automotive sector.
- The internal extractors, together with counter stays and the sliding hammer, are capable of finding a suitable solution in various extraction situations.
- Counter stays and sliding hammers enable an optimal and safe removal, depending on the existing conditions in varying applications.

TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                        |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | kg                                                                                  | mm                                                                                  | mm                                                                                  | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                                       |                                                                                       |
| K-22-A-M | -910180                                                                             | 8 - 40<br>5/16-1<br>9/16                                                            | 15 - 60<br>9/16 - 2<br>3/8                                                          | 300<br>11 13/16                                                                     | 250<br>9 13/16                                                                      | 1                                                                                   | M7                                                                                  | M10                                                                                 | 30                       | 3<br>3.31                | 4,1<br>9.041                                                                          | 22-0-10,<br>22-1,<br>21-01,<br>21-1,<br>21-2,<br>21-4,<br>21-5,<br>VM12-10,<br>VM12-7 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES K-22-E PULL-OUT TRAYS AND SETS FOR INTERNAL EXTRACTION



During internal extraction, components that sit in a recess and therefore cannot be gripped from the outside are dismantled without damage. To pull out internal parts, a sliding hammer or a counter stay is always required. With a sliding hammer, extraction can be performed in the tightest spaces without bracing, whereas a counter stay allows more precise work and the application of greater force.



## TECHNICAL ATTRIBUTES

| #        | GTIN    |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  kg |  mm |  mm | Max.<br>tensile<br>force | Max.<br>tension<br>force |  kg/lb | Consists<br>of                                                                                  |  |
|----------|---------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          |         |                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                        |                                                                                        |                                                                                        | kN                       | t/US t.<br>sh.           |                                                                                             |                                                                                                 |                                                                                       |
| K-22-A-E | -140471 | 5 - 15<br>3/16-9/16                                                                         | 15 - 60<br>9/16 - 2<br>3/8                                                                  | 325<br>12 13/16                                                                             | 200<br>7 7/8                                                                                | 0.5                                                                                    | M10                                                                                    | M12                                                                                    | 30                       | 3<br>{8328}              | 2,8<br>6.174                                                                                | 22-0-05,<br>22-1,<br>21-0-E,<br>21-00-E,<br>21-01-E,<br>21-1-E                                  | ✓                                                                                     |
| K-22-B-E | -039270 | 12 - 34<br>1/2-1<br>5/16                                                                    | 15 - 60<br>9/16 - 2<br>3/8                                                                  | 325<br>12 13/16                                                                             | 200<br>7 7/8                                                                                | 0.5                                                                                    | M10                                                                                    | M12                                                                                    | 30                       | 3<br>{8328}              | 3,255<br>7.177                                                                              | 22-0-05,<br>22-1,<br>21-1-E,<br>21-2-E,<br>21-3-E,<br>21-4-E                                    | ✓                                                                                     |
| K-22-C-E | -140402 | 5 - 34<br>3/16-1<br>5/16                                                                    | 15 - 60<br>9/16 - 2<br>3/8                                                                  | 325<br>12 13/16                                                                             | 200<br>7 7/8                                                                                | 0.5                                                                                    | M10                                                                                    | M12                                                                                    | 30                       | 3<br>{8328}              | 3,405<br>7.607                                                                              | 22-0-05,<br>22-1,<br>21-0-E,<br>21-00-E,<br>21-01-E,<br>21-1-E,<br>21-2-E,<br>21-3-E,<br>21-4-E | ✓                                                                                     |



SERIES 28-C/D  
SLIDING HAMMER AND COUNTER STAY SET  
FOR EXTRACTING BALL BEARINGS AND  
DOWEL PINS



The 22- and 24-piece sliding hammer sets of series 28-C/D are used for non-contact extraction of internal bearings, outer bearing rings, and bushings, as well as components with threads. For the application, counter stays, sliding hammer, and thread inserts are included in the set.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The internal extractors, along with counter stays, sliding hammers, and thread inserts, are capable of finding a suitable solution in a variety of puller situations.
- Counter stays and sliding hammers allow for optimal and safe removal depending on the existing conditions in changing applications.
- The threaded inserts allow internal extraction even where concentric threaded holes would normally prevent internal extraction.

TECHNICAL ATTRIBUTES

| #    |         |                      |                           |                 |                |    |                                                            |                    | Consists of      |                                                                                                                                                                                                    |
|------|---------|----------------------|---------------------------|-----------------|----------------|----|------------------------------------------------------------|--------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | GTIN    | mm/inch              | mm/inch                   | mm/inch         | mm/inch        | kg | mm                                                         | kg/lb              |                  |                                                                                                                                                                                                    |
| 28-C | -466762 | 12 - 48<br>1/2-1 7/8 | 0 - 100<br>0 - 3<br>15/16 | 300<br>11 13/16 | 250<br>9 13/16 | 1  | M3, M4,<br>M5, M6,<br>M8, M10,<br>M12,<br>M14,<br>M16, M18 | M7, M10,<br>15-16G | 11,995<br>26.449 | 21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6,<br>22-1, 22-2,<br>GE10-10,<br>GE12-10,<br>GE14-10,<br>GE16-10,<br>GE18-10,<br>GE3-10,<br>GE4-10,<br>GE5-10,<br>GE6-10,<br>GE8-10,<br>22-0-10,<br>VM12-10 |

PRODUCT DETAILS

| #    |  |  |  |  |  |  |  |  |  | Consists of                                                                                                                                                                               |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg                                                                                |                                                                                   | mm                                                                                 | kg/lb                                                                               |                                                                                                                                                                                           |                                                                                     |
| 28-D | -466779                                                                           | 12 - 70<br>1/2-2 3/4                                                              | 0 - 100<br>0 - 3<br>15/16                                                         | 300<br>11 13/16                                                                   | 250<br>9 13/16                                                                    | 1                                                                                 | M3, M4,<br>M5, M6,<br>M8, M10,<br>M12,<br>M14,<br>M16, M18                        | M7, M10,<br>15-16G                                                                 | 14,57<br>32.127                                                                     | VM12-7,<br>21-1, 21-2,<br>21-3, 21-4,<br>21-5, 21-6,<br>21-7, 21-8,<br>22-1, 22-2,<br>GE10-10,<br>GE12-10,<br>GE14-10,<br>GE16-10,<br>GE18-10,<br>GE3-10,<br>GE4-10,<br>GE5-10,<br>GE6-10 | ✓                                                                                   |



SERIES 221-G  
INTERNAL PULLER WITH SLIDING HAMMER



The internal extractors with sliding hammer of series 221 are used for pulling and extracting ball bearings, roller bearings, inner rings, and other flush-mounted components. The internal extractor is a purpose-oriented model with a large clamping range.

**BENEFITS**

- Especially suitable for tight spaces where counter stays or puller devices cannot be installed due to lack of space.
- The built-in sliding hammer means that no support surface is required for this internal extractor.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents pinching and ensures a safe working process.

TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  | Included in the set |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             | kg/lb                                                                                 |                     |                                                                                       |
| 221-G | -175824                                                                             | 30 - 180<br>1 3/16 - 7 1/16                                                         | 135<br>5 5/16                                                                       | 320<br>12 5/8                                                                       | 250<br>9 13/16                                                                      | 1.7                                                                                 | 17<br>11/16                                                                         | 4,4<br>9.702                                                                          | 224-677,<br>224-678 | ✓                                                                                     |

SERIES 224  
INTERNAL EXTRACTOR WITH SLIDING  
HAMMER



The internal extractors with sliding hammer of the series 224 are used for extracting small end and guide bearings, bearing rings, and similar parts in crafts, workshops, and industry. The internal extractor is a purpose-oriented model with a large clamping range that allows for contactless and gentle extraction of, for example, internal bearings due to its design. With the built-in sliding hammer, it is not only space-saving but also provides a strong impact force that can safely extract even stuck parts.



BENEFITS

- Especially suitable for tight spatial conditions and small storage, as the hooks can be precisely pressed behind the part to be pulled out.
- With the built-in sliding hammer, this internal extractor does not require a support surface.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stopping point prevents crushing and ensures a safe working process.

TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                   | kg/lb                                                                                 |                                                                                       |
| 224-1 | -325656                                                                             | 12 - 35<br>1/2 - 1 3/8                                                              | 38<br>1 1/2                                                                         | 290<br>11 7/16                                                                      | 250<br>9 13/16                                                                      | 1                                                                                    | 1,765<br>3.892                                                                        | ✓                                                                                     |
| 224-2 | -325571                                                                             | 15 - 50<br>9/16 - 1 15/16                                                           | 50<br>1 15/16                                                                       | 290<br>11 7/16                                                                      | 250<br>9 13/16                                                                      | 1                                                                                    | 1,96<br>4.322                                                                         | ✓                                                                                     |



SERIES 223  
PULLER FOR PARTS WITH THREADED HOLES



The pullers of series 223 are used for pulling parts with concentric threaded holes in crafts, industry, and workshops. The sliding hammer is capable of this together with the thread adapters. The ergonomically shaped, solid sliding piece allows the applied force to be optimally transmitted and a strong shock effect to be achieved. This also ensures a contactless and gentle extraction.

BENEFITS

- The thread adapters enable the careful and safe removal of parts with threaded holes.
- Using the dimensions laser-etched on the thread adapters, the thread can be uniquely identified.
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.



TECHNICAL ATTRIBUTES

| #   | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg | <br>mm | <br>kg/lb | Included in the set |  |   |
|-----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|---|
| 223 | -309083                                                                                     | 290<br>11 7/16                                                                                 | 250<br>9 13/16                                                                                 | 1                                                                                         | M3, M4, M5,<br>M6, M8,<br>M10, M12,<br>M14, M16,<br>M18                                   | M10                                                                                          | 1,635<br>3.605      | 28-A, 28-B,<br>28-C, 28-D                                                             | ✓ |

### SERIES 818-021 INTERNAL EXTRACTOR



The internal extractors of the series 818-021 are used together with a puller device with hydraulic spindle of the series 818-0 for extracting internal bearings, outer bearing rings, and bushings in crafts, workshops, and industry. The model series is based on a modular system and can therefore be expanded in a variety of ways. The internal extractors with tension spindle, spindle nut, U-washer, and threaded sleeve with smooth bore are fully operational in combination with the puller device and can be used in many ways.

#### BENEFITS

- Other pullers from the 800 series have the same hydraulic spindle and do not require additional accessories.
- For the 800 series, there are numerous easily exchangeable and combinable individual parts.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  | Included in<br>the set |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/<br>inch                                                                         | kN                       | t/US t. sh.              | mm/inch                                                                             | kg/lb                                                                               |                                                                                       |                        |                                                                                       |
| 818-021 | -757969                                                                             | 30 - 180<br>1 3/16 - 7<br>1/16                                                      | 135<br>5 5/16                                                                       | 100                      | 10<br>11.02              | 22<br>7/8                                                                           | 2,8<br>6.174                                                                        | 818-0                                                                                 | 818-215                | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-21-E INTERNAL EXTRACTOR



The internal extractors of the Y-21-E series are used for extracting particularly stubborn, internal bearings, bearing outer rings, and sockets in crafts, workshops, and industry. The hydraulic system enables the application of very high forces that cannot be achieved with mechanical tools. The internal extractors of the Y-21-E series are combined with the hydraulic pullers of the Y-180 series.

#### BENEFITS

- The hydraulic puller Y-180 required in combination with the internal extractor allows for easy and controlled removal of particularly stubborn parts.
- Reducing workload guarantees maximum time savings
- Gentle removal thanks to adjustable hydraulic system

## TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  | Included in<br>the set |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/<br>inch                                                                         | mm                                                                                  | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                       |                        |                                                                                       |
| Y-221-E | -040856                                                                             | 30 - 180<br>1 3/16 - 7 1/16                                                         | 135<br>5 5/16                                                                       | 1"-8 UNC                                                                            | 100                      | 10<br>11.02              | 2,8<br>6.174                                                                        | Y28-180                                                                               | Y28-200,<br>Y28-218    | ✓                                                                                     |
| Y-321-E | -042836                                                                             | 75 - 230<br>2 15/16 - 9 1/16                                                        | 140<br>5 1/2                                                                        | 1 1/4 - 7" UNC                                                                      | 220                      | 22<br>24.25              | 6,5<br>14.333                                                                       | Y38-180                                                                               | Y38-300,<br>Y38-318    | ✓                                                                                     |
| Y-521-E | -044656                                                                             | 75 - 230<br>2 15/16 - 9 1/16                                                        | 140<br>5 1/2                                                                        | 1 5/8" - 51 2UNS                                                                    | 275                      | 27.5<br>30.31            | 7,3<br>16.097                                                                       | Y58-180                                                                               | Y58-518,<br>Y58-500    | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 818-0 HYDRAULIC PULLER



The puller with hydraulic spindle is used for universal application with the pullers of the 818 series in trade, workshop and industry. The model range is designed as a modular system and is therefore versatile and expandable. This puller is the basic element of a system that, in combination with various accessories, such as internal extractor, jaws or pulling devices, allows universal application options.

#### BENEFITS

- Pullers of series 800 use the same hydraulic spindle and require no additional accessories.
- For the series 800, there are numerous easily interchangeable and frequently combinable individual parts and accessories.
- The hydraulics enable high pull-out performance with low manual effort.
- The axial working piston does not rotate with the hydraulic spindle.



## TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set          |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|
| 818-0 | -173196                                                                                     | 85 - 270<br>3 3/8 - 10<br>5/8                                                                  | 280<br>7 1/16                                                                                  | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             | 7,8<br>17.199                                                                                  | 818-100,<br>818-150,<br>818-215 | ✓                                                                                     |



## SERIES YX8-X18 HYDRAULIC PULLER SETS



The 13-piece hydraulic puller sets are used for separating and internally extracting particularly large and stuck bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for internal extraction and separation.

### BENEFITS

- Through the storage in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle extraction even for heavy-duty tasks
- The combination of hydraulics and the respective devices allows for the easy and controlled removal of particularly stubborn parts.

### TECHNICAL ATTRIBUTES

| #       | GTIN    | mm/inch                           | mm/inch         | mm/inch                         | mm/inch                         | bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | kg/lb          | Consists of                                                                                                                                       | MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|---------|---------|-----------------------------------|-----------------|---------------------------------|---------------------------------|-----|--------------------------------|--------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Y28-218 | -036651 | 135 - 300<br>5 5/16 - 11<br>13/16 | 1.000<br>39 3/8 | 30 - 180<br>1 3/16 - 7<br>1/16  | 25 - 155<br>1 - 6 1/8           | 394 | 150                            | 15<br>16.53                                | 60,3<br>13.230 | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y218-06-P,<br>Y218-08-P,<br>Y218-31-P,<br>Y218-33,<br>Y218-10,<br>Y218-11 | ✓                                               |
| Y38-318 | -037641 | 180 - 420<br>7 1/16 - 16<br>9/16  | 1.200<br>47 1/4 | 75 - 230<br>2 15/16 - 9<br>1/16 | 30 - 250<br>1 3/16 - 9<br>13/16 | 514 | 250                            | 25<br>27.56                                | 115<br>253.575 | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y318-36-P,<br>Y318-33,<br>Y318-38-P,<br>Y318-41-P,<br>Y318-10,<br>Y318-11 | ✓                                               |

PRODUCT DETAILS

| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                                                                                         |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                     |                                                                                     |
| Y58-518 | -038891                                                                           | 235 - 540<br>9 1/4 - 21<br>1/4                                                    | 1.500<br>59 1/16                                                                  | 75 - 230<br>2 15/16 - 9<br>1/16                                                   | 75 - 330<br>2 15/16 -<br>12 1                                                     | 348                                                                               | 350                      | 35<br>38.58              | 22<br>48.510                                                                        | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y518-08-P,<br>Y518-31-P,<br>Y518-33,<br>Y518-10,<br>Y518-11 | ✓                                                                                   |



### SERIES Y-180 HYDRAULIC PULL/ PRESS EXTRACTOR WITH HYDRAULIC HOLLOW PISTON CYLINDER



The hydraulic puller of the Y-180 series is used for pulling particularly large and tight-fitting bearings, gears, discs, etc. by using separating knives and internal extractors in the trades, workshop and industry. The Y-180 series is used together with the Y-15 pulling device or the Y-21-E internal extractor and can therefore be used in two different ways.

#### BENEFITS

- Low effort for high pulling performance
- The internal extractor required for the application, or the pulling device, together with the hydraulic puller enables the easy and controlled removal of particularly tightly seated parts



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>bar | <br>kg/lb | Included in<br>the set |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Y28-180 | -036408                                                                                     | 135 - 300<br>5 5/16 - 11<br>13/16                                                              | 470<br>18 1/2                                                                                  | 150                            | 15<br>16.53                             | 700                                                                                        | 2,81<br>6.196                                                                                  | Y28-200,<br>Y28-218    | ✓                                                                                     |
| Y38-180 | -037498                                                                                     | 180 - 420<br>7 1/16 - 16<br>9/16                                                               | 520<br>20 1/2                                                                                  | 250                            | 25<br>27.56                             | 700                                                                                        | 37,68<br>83.084                                                                                | Y38-318,<br>Y38-300    | ✓                                                                                     |
| Y58-180 | -038488                                                                                     | 235 - 540<br>9 1/4 - 21<br>1/4                                                                 | 660<br>25 63/64                                                                                | 350                            | 35<br>38.58                             | 700                                                                                        | 84<br>185.220                                                                                  | Y58-518,<br>Y58-500    | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y0-180 PULLER DEVICE (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)



The pullers of series Y-180 are used together with separating knives and internal extractors for Pulling particularly large and tight-fitting bearings, gears, discs, etc. in trade, industry, and workshops. The pullers are used with pulling devices of series Y-15 and internal extractors of series Y-21-E.

#### BENEFITS

- Ideal for the light and controlled removal of stuck parts
- Thanks to compatibility with other tools from the Y series, suitable for various applications



## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-180 | -036323                                                                                     | 470<br>18 1/2                                                                                  | 135 - 300<br>5 5/16 - 11<br>13/16                                                              | 150                            | 15<br>16.53                             | 9,885<br>21.796                                                                              | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y30-180 | -037313                                                                                     | 520<br>20 1/2                                                                                  | 180 - 420<br>7 1/16 - 16<br>9/16                                                               | 250                            | 25<br>27.56                             | 20,83<br>6.240                                                                               | YRH-302, HKSH-<br>Y30-117-178-65                                                      | ✓                                                                                     |
| Y50-180 | -038303                                                                                     | 660<br>25 1                                                                                    | 235 - 540<br>9 1/4 - 21 1/4                                                                    | 350                            | 35<br>38.58                             | 6<br>13.230                                                                                  | YRH-603, HKSH-<br>Y60-158-247-76                                                      | ✓                                                                                     |



## SERIES YX8-X00 HYDRAULIC UNIVERSAL PULLER SET



The 18-piece hydraulic universal puller sets of series YXB-X00 are used for pulling, separating, and internal extraction of particularly large and tightly seated bearings, gears, discs, etc. in industry and commercial vehicles. The set requires no additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers, separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for every situation.

### BENEFITS

- By storing it in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle removal even during heavy work
- The combination of hydraulics and the respective devices enables the easy and controlled removal of particularly stubborn parts.

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                                    |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                                                                                   |                                                                                     |
| Y28-200 | -870828                                                                           | 50 -<br>500<br>1<br>15/16 -<br>19<br>11/16                                        | 0 - 300<br>0 - 11<br>13/16                                                        | 30 - 180<br>1 3/16 -<br>7 1/16                                                    | 25 - 155<br>1 - 6 1/8                                                             | 135 -<br>300<br>5 5/16 -<br>11 13/16                                              | 1.000<br>39 3/8                                                                   | 700                                                                               | 200                      | 20<br>22.05              | 85<br>187.425                                                                       | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y20-206,<br>Y218-06-<br>P,<br>Y218-08-<br>P,<br>Y218-31-<br>P,<br>Y218-33,<br>Y205-20,<br>Y218-10,<br>Y218-11,<br>Y20-216 | ✓                                                                                   |
| Y38-300 | -870835                                                                           | 50 -<br>900<br>1<br>15/16 -<br>35<br>7/16                                         | 0 - 520<br>0 - 20<br>1/2                                                          | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 30 - 250<br>1 3/16 -<br>9 13/16                                                   | 180 -<br>420<br>7 1/16 -<br>16 9/16                                               | 1.200<br>47 1/4                                                                   | 700                                                                               | 300                      | 30<br>33.07              | 188<br>414.540                                                                      | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y30-206,<br>Y318-36-<br>P,<br>Y318-33,<br>Y318-38-<br>P,<br>Y318-41-<br>P,<br>Y305-20,<br>Y318-10,<br>Y318-11             | ✓                                                                                   |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                                                                 |                                                                                     |
| Y58-500 | -870842                                                                           | 460 -<br>1.200<br>18 1/8<br>- 47<br>1/4                                           | 0 - 700<br>0 - 27<br>9/16                                                         | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 75 - 330<br>2 15/16 -<br>12 1                                                     | 235 -<br>540<br>9 1/4 -<br>21 1/4                                                 | 1.500<br>59 1/16                                                                  | 498                                                                               | 500                      | 50<br>55.12              | 335<br>738.675                                                                      | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y50-206,<br>Y518-08-<br>P,<br>Y518-31-<br>P,<br>Y518-33,<br>Y505-20,<br>Y518-10,<br>Y518-11,<br>Y50-216 | ✓                                                                                   |



PRODUCT DETAILS

SERIES 818  
SIDE SCREW AND EXTENSIONS

The pull bolt extension serves to extend the pull bolts of a puller device during external extraction.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 818-250 | -173356                                                                                     | 250<br>9 13/16                                                                                 | 5/8"-18 UNF                                                                               | 22<br>7/8                                                                                      | 0,79<br>1.742                                                                                  | ✓                                                                                     |
| 818-280 | -173431                                                                                     | 250<br>9 13/16                                                                                 | 5/8"-18 UNF                                                                               | 22<br>7/8                                                                                      | 1,1<br>2.426                                                                                   | ✓                                                                                     |

PRODUCT DETAILS

SERIES 818-P  
SIDE SCREW AND EXTENSIONS

The pull rod extensions are used to extend the pull rods of a puller when separating.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm | <br>mm/inch | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 818-250-P | -385391                                                                                     | 250<br>9 13/16                                                                                 | 5/8"-18 UNF                                                                               | 22<br>7/8                                                                                      | 1,56<br>3.440                                                                                  | ✓                                                                                     |
| 818-280-P | -385544                                                                                     | 250<br>9 13/16                                                                                 | 5/8"-18 UNF                                                                               | 22<br>7/8                                                                                      | 2,16<br>4.763                                                                                  | ✓                                                                                     |



## SERIES Y-18-E



Y218-03  
Y318-03  
Y518-03



Y218-33  
Y318-33  
Y518-33



Y218-06-P  
Y318-07-P  
Y518-08-P  
Y318-36-P  
Y318-37-P  
Y318-38-P  
Y518-07-P  
Y518-08-P

The accessories for hydraulic pullers are used for the application with the pullers from the KUKKO hydraulic program in craftsmanship, industry, and workshop. The crossbars, fastening materials, tension bolts, support nuts, connectors for tension bolts, and quick adjustment nuts are designed for the pullers of the series Y20, Y28, Y30, Y38, Y50, and Y58.

## TECHNICAL ATTRIBUTES

| #         | <br>GTIN | Type of accessory/spare part                   | Max. tension force<br>t/US t. sh. | <br>kg/lb |  |
|-----------|-------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y218-03   | -039706                                                                                   | Cross-beam                                     | 15<br>16.53                       | 4,82<br>10.628                                                                               | ✓                                                                                   |
| Y218-04   | -529818                                                                                   | Fastening material for 1 pair of tension bolts | 15<br>16.53                       | 1,3<br>2.867                                                                                 | ✓                                                                                   |
| Y218-06-P | -056420                                                                                   | Pair of tension bolts                          | 15<br>16.53                       | 2,3<br>5.072                                                                                 | ✓                                                                                   |
| Y218-07-P | -056437                                                                                   | Pair of tension bolts                          | 15<br>16.53                       | 3,685<br>8.125                                                                               | ✓                                                                                   |
| Y218-08-P | -056444                                                                                   | Pair of tension bolts                          | 15<br>16.53                       | 3,685<br>8.125                                                                               | ✓                                                                                   |
| Y218-09-P | -218095                                                                                   | Pair of support nuts for tension bolts         | 15<br>16.53                       | 0,265<br>0.584                                                                               | ✓                                                                                   |
| Y218-12-P | -097157                                                                                   | Pair of tension bolts                          | 15<br>16.53                       | 1,34<br>2.955                                                                                | ✓                                                                                   |
| Y218-31-P | -218316                                                                                   | Pair of connectors for tension bolts           | 15<br>16.53                       | 0,32<br>0.706                                                                                | ✓                                                                                   |
| Y218-33   | -040771                                                                                   | Quick adjustment nut                           | 15<br>16.53                       | 1,105<br>2.536                                                                               | ✓                                                                                   |
| Y318-03   | -041686                                                                                   | Cross-beam                                     | 25<br>27.56                       | 11,4<br>25.137                                                                               | ✓                                                                                   |
| Y318-04   | -318047                                                                                   | Fastening material for 1 pair of tension bolts | 25<br>27.56                       | 6,92<br>15.259                                                                               | ✓                                                                                   |
| Y318-33   | -042188                                                                                   | Quick adjustment nut                           | 25<br>27.56                       | 1,854<br>4.088                                                                               | ✓                                                                                   |
| Y318-36-P | -056338                                                                                   | Pair of tension bolts                          | 25<br>27.56                       | 4,28<br>9.437                                                                                | ✓                                                                                   |
| Y318-37-P | -305863                                                                                   | Pair of tension bolts                          | 25<br>27.56                       | 6,93<br>15.281                                                                               | ✓                                                                                   |
| Y318-38-P | -056345                                                                                   | Pair of tension bolts                          | 25<br>27.56                       | 11,85<br>26.129                                                                              | ✓                                                                                   |
| Y318-39-P | -318399                                                                                   | Pair of support nuts for tension bolts         | 25<br>27.56                       | 0,82<br>1.808                                                                                | ✓                                                                                   |
| Y318-41-P | -318412                                                                                   | Pair of connectors for tension bolts           | 25<br>27.56                       | 0,6<br>1.323                                                                                 | ✓                                                                                   |

## PRODUCT DETAILS

| #         |  | Type of accessory/spare part                   | Max. tension force |  |  |
|-----------|-----------------------------------------------------------------------------------|------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | GTIN                                                                              |                                                | t/US t. sh.        | kg/lb                                                                               |                                                                                     |
| Y518-03   | -043826                                                                           | Cross-beam                                     | 35<br>38.58        | 3,91<br>8.622                                                                       | ✓                                                                                   |
| Y518-04   | -529825                                                                           | Fastening material for 1 pair of tension bolts | 35<br>38.58        | 0,3<br>0.662                                                                        | ✓                                                                                   |
| Y518-07-P | -056468                                                                           | Pair of tension bolts                          | 35<br>38.58        | 15,86<br>34.971                                                                     | ✓                                                                                   |
| Y518-08-P | -056475                                                                           | Pair of tension bolts                          | 35<br>38.58        | 21,28<br>46.922                                                                     | ✓                                                                                   |
| Y518-09-P | -518096                                                                           | Pair of support nuts for tension bolts         | 35<br>38.58        | 1,336<br>2.946                                                                      | ✓                                                                                   |
| Y518-31-P | -518317                                                                           | Pair of connectors for tension bolts           | 35<br>38.58        | 1,2<br>2.646                                                                        | ✓                                                                                   |
| Y518-33   | -044571                                                                           | Quick adjustment nut                           | 35<br>38.58        | 2,66<br>5.865                                                                       | ✓                                                                                   |



## SERIES YRH HOLLOW PISTON CYLINDER



The hydraulic hollow piston cylinders of the YRH series are used for application with the KUKKO hydraulic program in crafts, industry, and workshops. They can be used both as pressure and traction cylinders, enabling a force-saving and versatile operation even in challenging extraction situations or when a lot of force is needed.

### BENEFITS

- All models feature a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and mounting threads on the cylinder base allow for easy assembly.
- Tensioned retractable spring increases the insertion speed and thereby enhances the performance.
- The integrated scraper removes contaminants from the piston, thereby extending the life of the cylinder.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  | Max. tensile force | Max. tension force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     |                                                                                     |                                                                                     | mm/<br>inch                                                                         | bar                                                                                 | cm³                                                                                 | kN                 | t/US t.<br>sh.     | kg/lb                                                                                 |                                                                                       |
| YRH-132 | -854460                                                                             | 73<br>2 7/8                                                                         | 133<br>5 1/4                                                                        | 60<br>2 3/8                                                                         | 2<br>3/4"-12<br>UN                                                                  | 3/4"-16<br>UN                                                                       | -                                                                                   | 8<br>5/16                                                                           | 700                                                                                 | 0.00001<br>m³                                                                       | 130                | 13<br>14.33        | 2,04<br>5.292                                                                         | ✓                                                                                     |
| YRH-202 | -046711                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 162<br>6 3/8                                                                        | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 50<br>1 15/16                                                                       | 700                                                                                 | 0.000173<br>m³                                                                      | 200                | 20<br>22.05        | 7,575<br>16.703                                                                       | -                                                                                     |
| YRH-206 | -870934                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 306<br>12 1/16                                                                      | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 150<br>5 7/8                                                                        | 700                                                                                 | 0.000527<br>m³                                                                      | 200                | 20<br>22.05        | 14,185<br>31.278                                                                      | ✓                                                                                     |
| YRH-302 | -046896                                                                             | 117<br>4 5/8                                                                        | 177<br>6<br>15/16                                                                   | 178,5<br>7 1/32                                                                     | 4<br>1/2"-12<br>UN                                                                  | 1<br>7/8"-16<br>UN                                                                  | 1<br>1/4"-7<br>UNC                                                                  | 65<br>2 1/2                                                                         | 700                                                                                 | 0.00031<br>m³                                                                       | 300                | 30<br>33.07        | 10,7<br>3.749                                                                         | -                                                                                     |
| YRH-603 | -046971                                                                             | 159<br>6 1/4                                                                        | 219<br>8 5/8                                                                        | 247,5<br>9 3/4                                                                      | 6<br>1/4"-12<br>UN                                                                  | 2<br>3/4"-16<br>UN                                                                  | 1<br>5/8"-5<br>1/2<br>UNS                                                           | 75<br>2 15/16                                                                       | 700                                                                                 | 0.00068<br>m³                                                                       | 600                | 60<br>66.14        | 30,3<br>6.615                                                                         | -                                                                                     |

## PRODUCT DETAILS

### SERIES Y-10-11 ACCESSORIES FOR HYDRAULIC PULLING

The accessories for hollow piston cylinders are used for compatibility with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The hand cranks and center spindle are designed for the hollow piston cylinders of the YRH series.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y218-10 | -040368                                                                                     | 120<br>4 3/4                                                                                   | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,865<br>4.112                                                                               | YRH-202,<br>YRH-206                                                                   | ✓                                                                                     |
| Y218-11 | -040443                                                                                     | 514<br>20 1/4                                                                                  | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,69<br>3.726                                                                                | YRH-206,<br>YRH-202                                                                   | ✓                                                                                     |
| Y318-10 | -041761                                                                                     | 150<br>5 7/8                                                                                   | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 0,88<br>1.940                                                                                | YRH-302                                                                               | ✓                                                                                     |
| Y318-11 | -041846                                                                                     | 610<br>24 1/64                                                                                 | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 3,205<br>7.166                                                                               | YRH-302                                                                               | ✓                                                                                     |
| Y318-12 | -749865                                                                                     | 400<br>15 3/4                                                                                  | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 8<br>17.640                                                                                  | YRH-302                                                                               | ✓                                                                                     |
| Y518-10 | -044243                                                                                     | 240<br>9 7/16                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 2,1<br>4.631                                                                                 | YRH-603                                                                               | ✓                                                                                     |
| Y518-11 | -044328                                                                                     | 750<br>29 1/2                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 6,745<br>14.873                                                                              | YRH-603                                                                               | ✓                                                                                     |



## SERIES YHP ACCESSORIES FOR HYDRAULIC PULLING



YHP-326



YHP-320



YM-235



YF-200

The YHP series offers a versatile range of accessories for hydraulic pulling. The assortment includes hydraulic hand pumps, hydraulic hoses, pressure gauges, and adapters. All components are available both individually and in various combinations. The hydraulic hand pump is available in several versions - such as a standalone device (YHP-320), in combination with a hydraulic hose (YHP-321), with a pressure gauge (YHP-324), with hose and pressure gauge (YHP-325), as well as a complete set with hose, pressure gauge, and metal case. Furthermore, the hand pump is available in two different variants, each with varying usable oil volumes depending on the application area.

### BENEFITS

- The entire series is equipped with numerous safety features that ensure reliable performance while guaranteeing high occupational safety.
- Compatible with common hydraulic puller devices and systems

### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>cm <sup>3</sup> | <br>bar | Max. tension force<br>t/US t. sh. | <br>kg/lb | Consists of                          |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------|
| YHP-320 | -045721                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 7,28<br>16.052                                                                               | YHP-320                              | ✓                                                                                     |
| YHP-321 | -111198                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 8,375<br>18.467                                                                              | YHP-320, YF-200                      | ✓                                                                                     |
| YHP-324 | -045806                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 9,605<br>21.278                                                                              | YHP-320,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-325 | -045981                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 10,05<br>3.308                                                                               | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-326 | -046483                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 16,13<br>35.567                                                                              | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-420 | -609688                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420                              | ✓                                                                                     |
| YHP-421 | -022968                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 4,5<br>0.662                                                                                 | YHP-420, YF-200                      | ✓                                                                                     |
| YHP-424 | -103988                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-425 | -103995                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 9,65<br>21.278                                                                               | YHP-420,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YF-200  | -045646                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,06<br>3.528                                                                                | YF-200                               | ✓                                                                                     |
| YM-235  | -157769                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,605<br>3.638                                                                               | YM-235                               | ✓                                                                                     |
| YGA-2   | -458644                                                                                     | -                                                                                                      | -                                                                                          | 75<br>82.67                       | 0,21<br>0.463                                                                                | YGA-2                                | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-17 PRESSURE PIECE FOR AXLE BORES



The pressure pieces for axle bores are used for pulling bearings and gears in craft, industry, and workshops that are mounted on hollow shafts or in housings. The spindle pressure piece serves as a counter-axis to the puller, transferring the force onto the pressure piece through the spindle.

#### BENEFITS

- Broader application possibilities for various extraction situations
- The set is available in both 12-piece and 6-piece versions, and if needed, the pressure pieces are also available individually.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-01-17 | -233173                                                                                   | 20 - 23<br>13/16-7/8                                                                         | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-02-17 | -233258                                                                                   | 23 - 26<br>7/8-1 1/32                                                                        | 1               | 0,4<br>0.882                                                                                 | ✓                                                                                   |
| Y-03-17 | -233333                                                                                   | 26 - 30<br>1 1/32-1 3/16                                                                     | 1               | 0,5<br>1.103                                                                                 | ✓                                                                                   |
| Y-04-17 | -233418                                                                                   | 29 - 33<br>1 1/8-1 5/16                                                                      | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-05-17 | -233586                                                                                   | 33 - 39<br>1 5/16-1 9/16                                                                     | 1               | 0,165<br>0.364                                                                               | ✓                                                                                   |
| Y-06-17 | -233661                                                                                   | 36 - 42<br>1 7/16-1 5/8                                                                      | 1               | 0,2<br>0.441                                                                                 | ✓                                                                                   |
| Y-07-17 | -233746                                                                                   | 39 - 46<br>1 9/16-1 13/16                                                                    | 1               | 0,22<br>0.485                                                                                | ✓                                                                                   |
| Y-08-17 | -233821                                                                                   | 42 - 48<br>1 5/8-1 7/8                                                                       | 1               | 0,288<br>0.635                                                                               | ✓                                                                                   |
| Y-09-17 | -233906                                                                                   | 45 - 52<br>1 3/4-2 1/16                                                                      | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-10-17 | -234163                                                                                   | 49 - 58<br>1 15/16-2 5/16                                                                    | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-11-17 | -234248                                                                                   | 51 - 62<br>2 1/64-2 7/16                                                                     | 1               | 0,52<br>1.147                                                                                | ✓                                                                                   |
| Y-12-17 | -234408                                                                                   | 55 - 65<br>2 3/16-2 9/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-13-17 | -234576                                                                                   | 58 - 68<br>2 5/16-2 11/16                                                                    | 1               | 0,65<br>1.433                                                                                | ✓                                                                                   |
| Y-14-17 | -234651                                                                                   | 61 - 71<br>2 3/8-2 13/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-15-17 | -234736                                                                                   | 65 - 74<br>2 9/16-2 15/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-16-17 | -234811                                                                                   | 71 - 81<br>2 13/16-3 3/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-17-17 | -234996                                                                                   | 77 - 88<br>3 1/32-3 7/16                                                                     | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |

PRODUCT DETAILS



| #           | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|-------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-18-17     | -235078                                                                                   | 20 - 62<br>13/16-2 7/16                                                                      | 11              | 2,235<br>4.928                                                                               | ✓                                                                                   |
| Y-19-17     | -235153                                                                                   | 33 - 81<br>1 5/16-3 3/16                                                                     | 12              | 5,7<br>12.569                                                                                | ✓                                                                                   |
| Y-20-17     | -235238                                                                                   | 55 - 88<br>2 3/16-3 7/16                                                                     | 6               | 4,9<br>10.805                                                                                | ✓                                                                                   |
| Y-60-100-17 | -120466                                                                                   | 64 - 70<br>2 1/2-2 3/4                                                                       | 3               | 4,455<br>9.823                                                                               | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES YD PRESSURE PIECE FOR HOLLOW PISTON CYLINDER



The pressure pieces for hollow piston cylinders are screwed into the internal thread of the piston rod of the hollow piston cylinder. The center spindle can be inserted directly into the threaded piece or secured and adjusted using a quick adjustment nut when using a pressure piece with a smooth bore. When using the closed pressure piece, the cylinders can be used as lifting jacks.

#### BENEFITS

- Pressure pieces enable the versatile application of the hollow piston cylinder from KUKKO as a pressure or pull cylinder.



## TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Max. tension force |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             |                                                                                     |                                                                                     | t/US t. sh.        |                                                                                      | kg/lb                                                                                 |                                                                                       |
| YDB-33E | -400308                                                                             | 58<br>2 5/16                                                                        | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07        | YRH-302                                                                              | 0,21<br>0.463                                                                         | ✓                                                                                     |
| YDB-55E | -400483                                                                             | 85<br>3 3/8                                                                         | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12        | YRH-603                                                                              | 0,5<br>1.103                                                                          | ✓                                                                                     |
| YDG-20E | -399091                                                                             | 50<br>1 15/16                                                                       | 1"-8 UNC                                                                            | 1 9/16"-16 UN                                                                       | 20<br>22.05        | YRH-202,<br>YRH-206                                                                  | 0,18<br>0.397                                                                         | ✓                                                                                     |
| YDG-30E | -399176                                                                             | 60<br>2 3/8                                                                         | 1 1/4"-7<br>UNC                                                                     | 1 7/8"-16 UN                                                                        | 30<br>33.07        | YRH-302                                                                              | 0,285<br>0.628                                                                        | ✓                                                                                     |
| YDG-50E | -399251                                                                             | 85<br>3 3/8                                                                         | 1 5/8"-5<br>1/2 UNS                                                                 | 2 3/4"-16 UN                                                                        | 50<br>55.12        | YRH-603                                                                              | 0,85<br>1.874                                                                         | ✓                                                                                     |
| YDM-20E | -414183                                                                             | 50<br>1 15/16                                                                       | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05        | YRH-202,<br>YRH-206                                                                  | 0,28<br>0.617                                                                         | ✓                                                                                     |
| YDM-30E | -414268                                                                             | 58<br>2 5/16                                                                        | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07        | YRH-302                                                                              | 0,38<br>0.838                                                                         | ✓                                                                                     |
| YDM-50E | -414343                                                                             | 85<br>3 3/8                                                                         | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12        | YRH-603                                                                              | 1,6<br>3.528                                                                          | ✓                                                                                     |
| YDB-27E | -400223                                                                             | 50<br>1 15/16                                                                       | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05        | YRH-202,<br>YRH-206                                                                  | 0,17<br>0.375                                                                         | ✓                                                                                     |



KUKKO // *Pull forward*



**WORLD FIRST AT KUKKO**

SERIES WFF | WMF | WMM

# THREAD ADAPTERS

CONFIGURE YOURSELF



**CONFIGURE YOUR  
INDIVIDUAL  
THREAD ADAPTERS**



## APPLICATION:

Thread adapters are used to connect components with different threads. These serve as connectors between two different thread sizes. In addition to their function as adapters, they are also ideally suited for pulling components with threaded holes. When combined with an extractor device, a counter stay, or a sliding hammer, they enable safe and efficient disassembly. Choosing the right adapter can be a challenge due to the multitude of thread types. KUKKO therefore offers customized solutions: Individual, precisely fitting thread adapters are manufactured according to customer specifications.

## CONSTRUCTION OF A THREAD ADAPTER USING THE EXAMPLE WMF-M12x1,75-M14x2 (EXTERNAL & INTERNAL THREAD):



## EXAMPLES OF FURTHER ADAPTERS:

Adapter with two external threads (male)



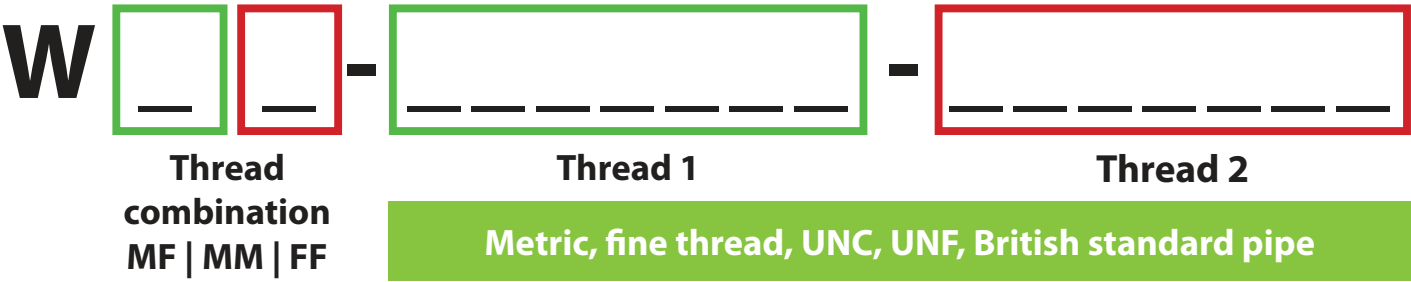
**WMM-M12x1,75-M14x2**

Adapter with two internal threads (female)



**WFF-G1/2x14-M30x3,5**

# EXPLANATION OF ITEM NUMBERS:



## APPLICATION EXAMPLES



By combining a thread adapter with a sliding hammer (series 22-0+), a component with an internal thread can be pulled out particularly gently using high tensile force.



A thread adapter is combined with a counter stay (series 22) to disassemble a bolt with an external thread.



The thread adapter was used to connect two threaded rods to each other. This creates a stable and durable connection that withstands high tensile and compressive forces.



TRY THE UNIQUE CONFIGURATOR  
FOR THREAD ADAPTERS FROM KUKKO:

# GEWINDEADAPTER.COM



Scan QR  
code &  
start im-  
mediately

- create a custom adapter in just a few clicks
- 5 different blanks - 5 price categories
- all common thread types and sizes
- over 20,000 different adapter combinations

MF MM FF

< >

Gewinde Kombination MF | MM | FF - Gewinde 1 Steigung/Anzahl Gänge 1 Gewinde 2 Steigung/Anzahl Gänge 2

W M M - 1/2" x 13 - 3/8" x 16

Adapter with two  
external threads  
(M)

M 1/2"x13 to  
M 3/8"x16

FF MF MM

< >

Gewinde Kombination MF | MM | FF - Gewinde 1 Steigung/Anzahl Gänge 1 Gewinde 2 Steigung/Anzahl Gänge 2

W M F - 3/4" x 10 - 7/16" x 14

Adapter with one  
external thread  
(M) and one inter-  
nal thread (F)

M 3/4"x10 to  
F 7/16"x14

MM FF MF

< >

Gewinde Kombination MF | MM | FF - Gewinde 1 Steigung/Anzahl Gänge 1 Gewinde 2 Steigung/Anzahl Gänge 2

W F F - 1/4" x 20 - 1/2" x 13

Adapter with two  
external threads  
(M)

F 1/4"x20 to  
F 1/2"x13





# THREAD ADAPTER



# APPLICATION

The thread adapters of the GA series (male/external thread) and GE series (female/internal thread) are suitable for extracting components with centered threaded holes and can be connected to an extractor device, a counter stay or a sliding hammer. Depending on the application, the adapters can be used to enlarge or reduce the thread diameter. The connecting nuts of the VM series allow the combination of two external threads.

Connecting nut  
**SERIES VM**



Thread adapter  
**SERIES GE**



Thread adapter  
**SERIES GA**



## BENEFITS

- Thread adapter allows both an enlargement and a reduction of the thread diameter
- Connecting nut serves as a coupling between spindle or sliding hammer rod and adapter
- Screwing together the thread adapter and connecting nut offers numerous combination options

## COMBINATION OPTIONS

**SERIES 18**



**SERIES VM**



**SERIES GA or GE**



Extractor device  
+ connecting nut  
+ thread adapter

**SERIES 22**



**SERIES GA**



Internal thread of the spindle

Counter stay  
+ thread adapter

**SERIES 22-0**



**SERIES GA**



Internal thread of the thread adapter

Sliding hammer  
+ connecting nut  
+ thread adapter



## THREAD ADJUSTMENT

The items GA-3 to GA12-10 are equipped with a movable thread pin for screwing out. The adapters can therefore be used as both external and internal thread. The length of the thread pins can be freely adjusted using an internal hexagon.

Due to the modular design of the adapters with a movable pin, they can be inexpensively replaced with a standard part in the event of breakage.



## APPLICATION EXAMPLES



Extracting a ball bearing using a sliding hammer, connecting nut and thread adapter



Extracting a ball bearing using a counter stay and thread adapter



Extracting a dowel pin using a sliding hammer and thread adapter

### TIP:

If a component cannot be gripped with a puller, the thread adapters can help. Simply drill a hole in the component and cut a thread. Then screw in the adapter and extract with a sliding hammer or a counter stay.

# SETS

The thread adapters are part of various individually compiled sets. Depending on the application area and environmental conditions, the sets contain, in addition to the adapters, internal extractors, a sliding hammer and/or a counter stay. The thread adapters are available in different sizes.



The 10-piece sliding hammer set KS-22 includes a sliding hammer, six thread adapters and three connecting nuts in different sizes. The compact, portable set is suitable for extracting sockets and components with threads such as dowel pins, keys, bolts, etc., and is therefore multifunctional for craft, workshop and industry.

| Art.-No.                                                                                                 | <br>mm | <br>kg |  |  | <br>AG<br>↑IG        |  |                                                                                                            |              |  |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <br><b>KS-22-01</b>     | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | IG: M12<br>AG: M3, M4, M5, M6,<br>M8, M10                                                             | —                                                                                 | 22-0-10; GA12-3; GA12-4; GA12-5; GA12-6; GA12-8; GA12-10;<br>VM12-7; VM12-10                                                                                                                | 21-0 – 21-8;<br>21-0-E – 21-7-E                                                               |                                                                                    |
| <br><b>KS-22-02</b>     | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | IG: M12<br>AG: M6, M8x1, M10, M10x1,<br>M12x1, M15x1,5                                                | —                                                                                 | 22-0-10; GA12-6; GA12-81; GA12-10;<br>GA12-101; GA12-121; GA12-1515; VM12-7; VM12-10                                                                                                        | 21-0 – 21-8;<br>21-0-E – 21-7-E                                                               |                                                                                    |
| <br><b>KS-22-01-UNC</b> | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | IG: M12; AG: 1/4" - 20 UNC  <br>5/16" - 18 UNC  <br>3/8" - 16 UNC   7/16" -<br>14 UNC   1/2" - 13 UNC | —                                                                                 | 22-0-10; GA12-1/2; GA12-1/4; GA12-3/8;<br>GA12-5/16; GA12-7/16; VM12-7; VM12-10; VM12-1516                                                                                                  | 21-0 – 21-8;<br>21-0-E – 21-7-E                                                               |                                                                                    |
| <br><b>223-K</b>       | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | —                                                                                                     | AD: M10<br>GS: M3; M4; M5; M6; M8;<br>M10; M12; M14; M16; M18                     | 22-0-10; GE3-10; GE4-10; GE5-10; GE6-10; GE8-10; GE10-10;<br>GE12-10; GE14-10; GE16-10; GE18-10; VM12-10; VM12-7                                                                            | 21-0 – 21-8;<br>21-0-E – 21-7-E                                                               |                                                                                    |
| <br><b>223-G</b>      | 320                                                                                     | 1,7                                                                                     | M16 x 1,5                                                                         | M16x1,5 -<br>G1/2"                                                                | AG: G1/2" - IG: 15-16G; AG:<br>15-16G - IG: M10<br>AG: G1/2" - IG: M18x1,5                            | AD: M18x1,5<br>GS: M8; M10; M12; M14;<br>M16; M18; M20; M22; M24                  | 22-0-17; GA12-1815; GA10-1516; GE8-1815; GE10-1815; GE12-1815;<br>GE14-1815; GE16-1815; GE18-1815; GE20-1815; GE22-1815; GE24-1815                                                          | 21-3** – 21-5**;<br>21-6** – 21-8**;<br>21-9**<br>21-0-E** – 21-4-E**;<br>21-5-E** – 21-7-E** |                                                                                    |
| <br><b>K-22-A</b>     | 290                                                                                     | 0,5                                                                                     | M12                                                                               | M12 - M10                                                                         | AG: M10 - IG: M7                                                                                      | —                                                                                 | 22-0-05; 22-1; 21-00; 21-02; 21-2; 21-4; G-22                                                                                                                                               | 21-0** – 21-01**;<br>21-1**;<br>21-3; 21-5<br>21-0-E** – 21-4-E**                             |                                                                                    |
| <br><b>K-22-B</b>     | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - 15-16G                                                                      | AG: 15-16G - IG: M10                                                                                  | —                                                                                 | 22-0-10; 22-2; 21-5; 21-6; 21-7; 21-8; G-22                                                                                                                                                 | 21-3** – 21-4**;<br>21-0-E** – 21-4-E**;<br>21-5-E** – 21-7-E**                               |                                                                                    |
| <br><b>K-22-A-E</b>   | 290                                                                                     | 0,5                                                                                     | M12                                                                               | M12 - M10                                                                         | AG: M10 - IG: M7                                                                                      | —                                                                                 | 22-1; 22-0-05; 21-0-E; 21-00-E; 21-01-E; 21-1-E                                                                                                                                             | 21-0** – 21-2**;<br>21-3-E** – 21-4-E**<br>21-3** – 21-5**                                    |                                                                                    |
| <br><b>K-22-B-E</b>   | 290                                                                                     | 0,5                                                                                     | M12                                                                               | M12 - M10                                                                         | AG: M10 - IG: M7                                                                                      | —                                                                                 | 22-1; 22-0-05; 21-1-E; 21-2-E; 21-3-E; 21-4-E                                                                                                                                               | 21-0** – 21-2**;<br>21-0-E** – 21-01-E**<br>21-3** – 21-5**                                   |                                                                                    |
| <br><b>K-22-C-E</b>   | 290                                                                                     | 0,5                                                                                     | M12                                                                               | M12 - M10                                                                         | AG: M10 - IG: M7                                                                                      | —                                                                                 | 22-1; 22-0-05; 21-0-E; 21-00-E; 21-01-E; 21-1-E; 21-2-E; 21-3-E; 21-4-E                                                                                                                     | 21-0** – 21-2**;<br>21-3** – 21-5**                                                           |                                                                                    |
| <br><b>K-26-A</b>     | 290                                                                                     | 0,5                                                                                     | M12                                                                               | M12 - M10                                                                         | AG: M10 - IG: M7                                                                                      | —                                                                                 | 22-0-05; 21-00; 21-02; 21-2; 21-4; G-22; GA7-10 in 22-0-05                                                                                                                                  | 21-0** – 21-01**;<br>21-1**;<br>21-3; 21-5<br>21-0-E** – 21-4-E**                             |                                                                                    |
| <br><b>K-26-B</b>     | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - 15-16G                                                                      | AG: 15-16G - IG: M10                                                                                  | —                                                                                 | 22-0-10; 21-5; 21-6; 21-7; 21-8; G-22; GA10-1516 in 22-0-10 enthalten                                                                                                                       | 21-3** – 21-4**;<br>21-0-E** – 21-4-E**;<br>21-5-E** – 21-7-E**                               |                                                                                    |
| <br><b>28-A</b>       | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | —                                                                                                     | AD: M10<br>GS: M3; M4; M5; M6; M8;<br>M10; M12; M14; M16; M18                     | 22-0-10; 21-00; 21-01; 21-02; 21-1; 21-2; VM12-7; VM12-10;<br>VM12-1516; GE3-10; GE4-10; GE5-10; GE6-10; GE8-10; GE10-10;<br>GE12-10; GE14-10; GE16-10; GE18-10                             | 21-0; 21-3 – 21-8;<br>21-0-E – 21-7-E                                                         |                                                                                    |
| <br><b>28-B</b>       | 320                                                                                     | 1,7                                                                                     | M16 x 1,5                                                                         | M16x1,5 -<br>G1/2"                                                                | AG: 1/2" - IG: 15-16G; AG:<br>M10 - IG: M7<br>AG: 1/2" - IG: M18x1,5; AG:<br>15-16G - IG: M10         | AD: M18x1,5<br>GS: M8; M10; M12; M14;<br>M16; M18; M20; M22; M24                  | 22-0-17; 21-1; 21-2; 21-3; 21-4; 21-5; GA10-1516; GA12-1815; GA7-10;<br>GE8-1815; GE10-1815; GE12-1815; GE14-1815; GE16-1815; GE18-1815;<br>GE20-1815; GE22-1815; GE24-1815                 | 21-6** – 21-8**;<br>21-9**<br>21-0-E** – 21-4-E**;<br>21-5-E** – 21-7-E**                     |                                                                                    |
| <br><b>28-C</b>       | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | —                                                                                                     | AD: M10<br>GS: M3; M4; M5; M6; M8;<br>M10; M12; M14; M16; M18                     | 25-A; 22-0-10; GE3-10; GE4-10; GE5-10; GE6-10; GE8-10; GE10-10;<br>GE12-10; GE14-10; GE16-10; GE18-10; VM12-10; VM12-7;<br>VM12-15-16G in 22-0-10 enthalten                                 | 21-7 – 21-8;<br>21-0-E – 21-7-E                                                               |                                                                                    |
| <br><b>28-D</b>       | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - M7;<br>M12 - M10<br>M12 - 15-16G                                            | —                                                                                                     | AD: M10<br>GS: M3; M4; M5; M6; M8;<br>M10; M12; M14; M16; M18                     | 25-B; 22-0-10; GE3-10; GE4-10; GE5-10; GE6-10; GE8-10;<br>GE10-10; GE12-10; GE14-10; GE16-10; GE18-10; VM12-10; VM12-7;<br>VM12-15-16G in 22-0-10 enthalten                                 | 21-0-E – 21-7-E                                                                               |                                                                                    |
| <br><b>27-A</b>       | 290                                                                                     | 1,0                                                                                     | M12                                                                               | M12 - 1516-G<br>M12 - M10                                                         | —                                                                                                     | —                                                                                 | 22-0-10; 21-01-E; 21-1-E; 21-2-E; 21-3-E; 21-4-E; 21-5-E; 43-001; 204-0;<br>69-1; 69-A2; 69-A3; GA12-3; GA12-4; GA12-5; GA12-6; GA12-8; GA12-10;<br>VM12-10; VM12-1516 in 22-0-10 enthalten | 21-3 – 21-5; 21-6 – 21-8;<br>21-0-E – 21-00-E;<br>21-6-E – 21-7-E                             |                                                                                    |



## PRODUCT DETAILS

### SERIES GA THREAD ADAPTER, SPINDLE INSERTS, CONNECTING NUT

Thread adapters are spare parts that allow flexible connections between different threads, thereby providing more flexible application possibilities.



#### TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>kg/lb |  |  |
|-----------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| GA7-10    | -221002                                                                                     | 0,02<br>0.441                                                                                | 224-676, 28-B, 26-B                                                                  | ✓                                                                                     |
| GA10-1516 | -225161                                                                                     | 0,025<br>0.551                                                                               | 22-0-10, K-26-B, 22-0-17, 26-B                                                       | ✓                                                                                     |
| GA12-1/2  | -181771                                                                                     | 0,55<br>1.213                                                                                | K-22-01-UNC, KS-22-01-UNC                                                            | ✓                                                                                     |
| GA12-1/4  | -181788                                                                                     | 0,3<br>0.662                                                                                 | K-22-01-UNC, KS-22-01-UNC                                                            | ✓                                                                                     |
| GA12-3/8  | -181795                                                                                     | 0,3<br>0.662                                                                                 | K-22-01-UNC, KS-22-01-UNC                                                            | ✓                                                                                     |
| GA12-3    | -223112                                                                                     | 0,045<br>0.992                                                                               | KS-22-01, 27-A                                                                       | ✓                                                                                     |
| GA12-4    | -223129                                                                                     | 0,045<br>0.992                                                                               | KS-22-01, 27-A                                                                       | ✓                                                                                     |
| GA12-5/16 | -181801                                                                                     | 0,3<br>0.662                                                                                 | K-22-01-UNC, KS-22-01-UNC                                                            | ✓                                                                                     |
| GA12-5    | -223136                                                                                     | 0,05<br>1.103                                                                                | KS-22-01, 27-A                                                                       | ✓                                                                                     |
| GA12-6    | -223143                                                                                     | 0,05<br>1.103                                                                                | KS-22-01, KS-22-02, 27-A                                                             | ✓                                                                                     |

## PRODUCT DETAILS

| #         |  |  |  |  |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | GTIN                                                                              | kg/lb                                                                             |                                                                                    |                                                                                     |
| GA12-7/16 | -181818                                                                           | 0,3<br>0.662                                                                      | K-22-01-UNC, KS-22-01-UNC                                                          | ✓                                                                                   |
| GA12-8    | -223150                                                                           | 0,05<br>1.103                                                                     | KS-22-01, 27-A                                                                     | ✓                                                                                   |
| GA12-10   | -223167                                                                           | 0,055<br>1.213                                                                    | KS-22-01, KS-22-02, 27-A                                                           | ✓                                                                                   |
| GA12-34   | -774430                                                                           | 0,42<br>0.926                                                                     | 229-1, 21-90                                                                       | ✓                                                                                   |
| GA12-81   | -231056                                                                           | 0,5<br>1.103                                                                      | KS-22-02                                                                           | ✓                                                                                   |
| GA12-101  | -221125                                                                           | 0,55<br>1.213                                                                     | KS-22-02                                                                           | ✓                                                                                   |
| GA12-121  | -221132                                                                           | 0,06<br>1.323                                                                     | KS-22-02                                                                           | ✓                                                                                   |
| GA12-1515 | -221149                                                                           | 0,065<br>1.433                                                                    | KS-22-02                                                                           | ✓                                                                                   |
| GA12-1815 | -507588                                                                           | 0,155<br>0.342                                                                    | 28-B, 223-G                                                                        | ✓                                                                                   |
| GA1415-12 | -220678                                                                           | 0,22<br>0.485                                                                     | K-486-1-22                                                                         | ✓                                                                                   |
| GA1516-12 | -300219                                                                           | 0,035<br>0.772                                                                    | 22-0-17, 26-B                                                                      | ✓                                                                                   |
| GA1615-21 | -009778                                                                           | 0,27<br>0.595                                                                     | -                                                                                  | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES GE SPINDLE INSERT



With the threaded inserts, internal threads for screw connections are created. The inserts in various sizes expand the application in craft, industry, and workshop.

### TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>kg/lb |  |  |
|-----------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| GE3-10    | -183386                                                                                     | 0,02<br>0.441                                                                                | 223-K, 18-003A, 28-A, 28-C, 223, 28-D                                                | ✓                                                                                     |
| GE4-10    | -184383                                                                                     | 0,02<br>0.441                                                                                | 223-K, 18-0-AS, 18-003A, 18-004A, 28-A, 22-1-AS, 28-C, 223, 28-D                     | ✓                                                                                     |
| GE5-5     | -018541                                                                                     | 0,2<br>0.441                                                                                 | K-222-1/7, 222-S                                                                     | ✓                                                                                     |
| GE5-10    | -185380                                                                                     | 0,02<br>0.441                                                                                | 223-K, 18-0-AS, 18-005A, 28-A, 22-1-AS, 28-C, 223, 28-D                              | ✓                                                                                     |
| GE6-10    | -186387                                                                                     | 0,025<br>0.551                                                                               | 223-K, 18-0-AS, 18-006A, 28-A, 22-1-AS, 28-C, 223, 28-D                              | ✓                                                                                     |
| GE8-10    | -188428                                                                                     | 0,02<br>0.441                                                                                | 223-K, 18-0-AS, 18-008A, 28-A, 22-1-AS, 28-C, 223                                    | ✓                                                                                     |
| GE8-1415  | -188435                                                                                     | 0,4<br>0.882                                                                                 | 18-2-AS, 18-208A                                                                     | ✓                                                                                     |
| GE8-1815  | -188442                                                                                     | 0,095<br>2.095                                                                               | 28-B, 223-G                                                                          | ✓                                                                                     |
| GE10-10   | -180460                                                                                     | 0,035<br>0.772                                                                               | 223-K, 22-1-AS, 18-0-AS, 18-010A, 28-A, 28-C, 223, 28-D                              | ✓                                                                                     |
| GE10-1415 | -101458                                                                                     | 0,5<br>1.103                                                                                 | 18-2-AS, 18-210A                                                                     | ✓                                                                                     |
| GE10-1815 | -181443                                                                                     | 0,105<br>0.331                                                                               | 28-B, 223-G                                                                          | ✓                                                                                     |

| #           |  |  |  |  |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             | GTIN                                                                              | kg/lb                                                                             |                                                                                    |                                                                                     |
| GE12-10     | -182488                                                                           | 0,04<br>0.882                                                                     | 223-K, 18-0-AS, 18-012A,<br>28-A, 22-1-AS, 28-C, 223,<br>28-D                      | ✓                                                                                   |
| GE12-1415   | -121456                                                                           | 0,06<br>1.323                                                                     | 18-2-AS, 18-212A                                                                   | ✓                                                                                   |
| GE12-1815   | -182440                                                                           | 0,12<br>0.265                                                                     | 28-B, 223-G                                                                        | ✓                                                                                   |
| GE14-10     | -184468                                                                           | 0,06<br>1.323                                                                     | 223-K, 28-A, 28-C, 223,<br>28-D                                                    | ✓                                                                                   |
| GE14-1415   | -184482                                                                           | 0,7<br>1.544                                                                      | 18-2-AS, 18-214A                                                                   | ✓                                                                                   |
| GE14-1815   | -184444                                                                           | 0,11<br>0.243                                                                     | 18-3-AS, 18-314A, 28-B,<br>223-G                                                   | ✓                                                                                   |
| GE16-10     | -184857                                                                           | 0,025<br>0.551                                                                    | 223-K, 18-016A, 28-A, 28-<br>C, 223, 28-D                                          | ✓                                                                                   |
| GE16-1415   | -186509                                                                           | 0,8<br>1.764                                                                      | 18-2-AS, 18-216A                                                                   | ✓                                                                                   |
| GE16-1815   | -186462                                                                           | 0,14<br>0.309                                                                     | 18-3-AS, 18-316A, 28-B,<br>223-G                                                   | ✓                                                                                   |
| GE18-10     | -188480                                                                           | 0,7<br>1.544                                                                      | 223-K, 28-A, 28-C, 223,<br>28-D                                                    | ✓                                                                                   |
| GE18-1415   | -180521                                                                           | 0,1<br>0.221                                                                      | 18-2-AS, 18-218A                                                                   | ✓                                                                                   |
| GE18-1815   | -180637                                                                           | 0,14<br>0.309                                                                     | 18-3-AS, 18-318A, 28-B,<br>223-G                                                   | ✓                                                                                   |
| GE20-1815   | -182068                                                                           | 0,16<br>0.353                                                                     | 18-3-AS, 18-320A, 28-B,<br>223-G                                                   | ✓                                                                                   |
| GE22-1815   | -182655                                                                           | 0,19<br>0.419                                                                     | 18-3-AS, 18-322A, 28-B,<br>223-G                                                   | ✓                                                                                   |
| GE24-1815   | -182419                                                                           | 0,21<br>0.463                                                                     | 18-3-AS, 18-324A, 28-B,<br>223-G                                                   | ✓                                                                                   |
| GE81-1615   | -181559                                                                           | 0,65<br>1.433                                                                     | 225                                                                                | ✓                                                                                   |
| GE101-1615  | -181597                                                                           | 0,07<br>1.544                                                                     | 225                                                                                | ✓                                                                                   |
| GE142-1615  | -182631                                                                           | 0,85<br>1.874                                                                     | 225                                                                                | ✓                                                                                   |
| GE162-1615  | -180675                                                                           | 0,85<br>1.874                                                                     | 225                                                                                | ✓                                                                                   |
| GE1415-1615 | -185632                                                                           | 0,1<br>0.221                                                                      | 225                                                                                | ✓                                                                                   |
| GE1615-1615 | -185670                                                                           | 0,1<br>0.221                                                                      | 225                                                                                | ✓                                                                                   |
| GE2015-1615 | -181573                                                                           | 0,15<br>0.331                                                                     | 225                                                                                | ✓                                                                                   |
| GE2215-1815 | -181214                                                                           | 0,28<br>0.617                                                                     | WT-031                                                                             | ✓                                                                                   |





## PRODUCT DETAILS

### SERIES 18-A THREAD ADAPTER (PAIR)



The thread adapters of series 18-A are used together with the pullers of series 18 for removing and pulling components with threads, such as dowel pins, keyways, or bolts, in crafts, industry, and workshops. The separation-puller process is capable of first gently separating those parts before they can be pulled out from the outside.

#### BENEFITS

- The thread adapters allow for the careful and secure removal of parts with threaded holes.

## TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm                                                                                  |                                                                                     | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 18-003A | -788406                                                                             | 52<br>2 1/16                                                                        | M10                                                                                 | M3                                                                                  | 12<br>1/2                                                                           | 14<br>9/16                                                                           | 0,085<br>0.187                                                                        | ✓                                                                                     |
| 18-004A | -337383                                                                             | 52<br>2 1/16                                                                        | M10                                                                                 | M4                                                                                  | 12<br>1/2                                                                           | 14<br>9/16                                                                           | 0,085<br>0.187                                                                        | ✓                                                                                     |
| 18-005A | -337468                                                                             | 55<br>2 3/16                                                                        | M10                                                                                 | M5                                                                                  | 15<br>9/16                                                                          | 14<br>9/16                                                                           | 0,04<br>0.088                                                                         | ✓                                                                                     |
| 18-006A | -337536                                                                             | 58<br>2 5/16                                                                        | M10                                                                                 | M6                                                                                  | 18<br>1 1/16                                                                        | 14<br>9/16                                                                           | 0,09<br>0.198                                                                         | ✓                                                                                     |
| 18-008A | -337611                                                                             | 60<br>2 3/8                                                                         | M10                                                                                 | M8                                                                                  | 20<br>1 3/16                                                                        | 14<br>9/16                                                                           | 0,095<br>0.209                                                                        | ✓                                                                                     |
| 18-010A | -337796                                                                             | 65<br>2 9/16                                                                        | M10                                                                                 | M10                                                                                 | 25<br>1                                                                             | 14<br>9/16                                                                           | 0,105<br>0.232                                                                        | ✓                                                                                     |
| 18-012A | -337871                                                                             | 68<br>2 11/16                                                                       | M10                                                                                 | M12                                                                                 | 28<br>1 1/8                                                                         | 14<br>9/16                                                                           | 0,125<br>0.276                                                                        | ✓                                                                                     |
| 18-016A | -788574                                                                             | 69<br>2 11/16                                                                       | M10                                                                                 | M16                                                                                 | 25<br>1                                                                             | 14<br>9/16                                                                           | 0,175<br>0.386                                                                        | ✓                                                                                     |
| 18-208A | -337956                                                                             | 70<br>2 3/4                                                                         | M14x1,5                                                                             | M8                                                                                  | 20<br>1 3/16                                                                        | 22<br>7/8                                                                            | 0,255<br>0.562                                                                        | ✓                                                                                     |
| 18-210A | -338113                                                                             | 75<br>2 15/16                                                                       | M14x1,5                                                                             | M10                                                                                 | 25<br>1                                                                             | 22<br>7/8                                                                            | 0,27<br>0.595                                                                         | ✓                                                                                     |
| 18-212A | -338298                                                                             | 78<br>3 1/16                                                                        | M14x1,5                                                                             | M12                                                                                 | 28<br>1 1/8                                                                         | 22<br>7/8                                                                            | 0,285<br>0.628                                                                        | ✓                                                                                     |
| 18-214A | -338373                                                                             | 79<br>3 1/8                                                                         | M14x1,5                                                                             | M14                                                                                 | 29<br>1 1/8                                                                         | 22<br>7/8                                                                            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 18-216A | -338458                                                                             | 82<br>3 1/4                                                                         | M14x1,5                                                                             | M16                                                                                 | 32<br>1 1/4                                                                         | 22<br>7/8                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm                                                                                |                                                                                   | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 18-218A | -338526                                                                           | 84<br>3 5/16                                                                      | M14x1,5                                                                           | M18                                                                               | 34<br>1 5/16                                                                      | 22<br>7/8                                                                          | 0,38<br>0.838                                                                       | ✓                                                                                   |
| 18-314A | -338601                                                                           | 94<br>3 11/16                                                                     | M18x1,5                                                                           | M14                                                                               | 29<br>1 1/8                                                                       | 27<br>1 1/16                                                                       | 0,545<br>1.202                                                                      | ✓                                                                                   |
| 18-316A | -338786                                                                           | 97<br>3 13/16                                                                     | M18x1,5                                                                           | M16                                                                               | 32<br>1 1/4                                                                       | 27<br>1 1/16                                                                       | 0,575<br>1.268                                                                      | ✓                                                                                   |
| 18-318A | -338861                                                                           | 99<br>3 7/8                                                                       | M18x1,5                                                                           | M18x1,5                                                                           | 34<br>1 5/16                                                                      | 27<br>1 1/16                                                                       | 0,6<br>1.323                                                                        | ✓                                                                                   |
| 18-320A | -338946                                                                           | 100<br>3 15/16                                                                    | M18x1,5                                                                           | M20                                                                               | 35<br>1 3/8                                                                       | 27<br>1 1/16                                                                       | 0,635<br>1.400                                                                      | ✓                                                                                   |
| 18-322A | -339028                                                                           | 102<br>4 1/64                                                                     | M18x1,5                                                                           | M22                                                                               | 37<br>1 7/16                                                                      | 27<br>1 1/16                                                                       | 0,68<br>1.499                                                                       | ✓                                                                                   |
| 18-324A | -339103                                                                           | 102<br>4 1/64                                                                     | M18x1,5                                                                           | M24                                                                               | 37<br>1 7/16                                                                      | 27<br>1 1/16                                                                       | 0,71<br>1.566                                                                       | ✓                                                                                   |

## SERIES 18-AS THREAD ADAPTER SETS



The thread adapter set of model series 18-AS is used together with the pullers of model series 18 for removing and pulling components with threads, such as dowel pins, keyways or bolts, in crafts, industry and workshops. The separation-pulling process is capable of gently separating those parts first before they can be externally pulled off.

### BENEFITS

- The thread adapters enable the careful and safe removal of parts with threaded holes.
- Universal assembly for optimal practical application
- Depending on the sentence, the thread adapters are available in different standard sizes, allowing for an appropriate approach to the task.

## TECHNICAL ATTRIBUTES

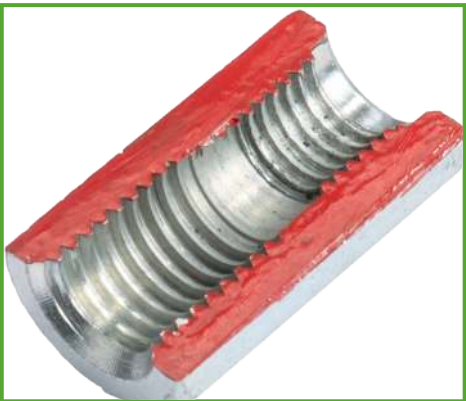
| #       |  |  |  |  | Consists of                                                                              |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm                                                                                  |                                                                                     | kg/lb                                                                               |                                                                                          |                                                                                       |
| 18-0-AS | -337048                                                                             | M10                                                                                 | M4-M5-M6-M8-M10-M12                                                                 | 0,375<br>0.827                                                                      | 18-003A,<br>18-004A,<br>18-005A,<br>18-006A,<br>18-008A,<br>18-010A,<br>18-012A, 18-016A | ✓                                                                                     |
| 18-2-AS | -337123                                                                             | M14x1,5                                                                             | M8-M10-M12-M14-M16-M18                                                              | 0,98<br>2.161                                                                       | 18-208A,<br>18-210A,<br>18-212A,<br>18-214A,<br>18-216A, 18-218A                         | ✓                                                                                     |
| 18-3-AS | -337208                                                                             | M18x1,5                                                                             | M14-M16-M18-M20-M22-M24                                                             | 2,32<br>5.116                                                                       | 18-314A,<br>18-316A,<br>18-318A,<br>18-320A,<br>18-322A, 18-324A                         | ✓                                                                                     |

PRODUCT DETAILS

SERIES VM  
CONNECTING NUT FOR THREAD INSERTS



The connecting nuts can be used as spacers or as a connecting piece for threaded rods. They are available in both connecting and reducing versions.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>kg/lb |         |  |
|-----------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| VM10-10   | -529498                                                                                     | 0,25<br>0.551                                                                                | 18-0-AS, 18-003A,<br>18-004A, 18-005A,<br>18-006A, 18-008A,<br>18-010A, 18-012A,<br>18-016A | ✓                                                                                     |
| VM10-12   | -529504                                                                                     | 0,235<br>0.518                                                                               | -                                                                                           | ✓                                                                                     |
| VM12-7    | -529559                                                                                     | 0,07<br>1.544                                                                                | 223-K, K-22-A-M, KS-22-01,<br>KS-22-01-UNC, KS-22-02,<br>28-A, 28-D                         | ✓                                                                                     |
| VM12-10   | -529528                                                                                     | 0,06<br>1.323                                                                                | 223-K, K-22-A-M, KS-22-01,<br>KS-22-01-UNC, KS-22-02,<br>28-A, 28-C, 223                    | ✓                                                                                     |
| VM12-1516 | -529542                                                                                     | 0,1<br>0.221                                                                                 | 223-K, KS-22-01, KS-22-01-<br>UNC, KS-22-02, K-26-B,<br>22-0-10, 28-A                       | ✓                                                                                     |

## PRODUCT DETAILS

| #           |  |  |  |  |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             | GTIN                                                                              | kg/lb                                                                             |                                                                                    |                                                                                     |
| VM14-12     | -529566                                                                           | 0,25<br>0.551                                                                     | -                                                                                  | ✓                                                                                   |
| VM112-12    | -529511                                                                           | 0,205<br>0.551                                                                    | 21-89                                                                              | ✓                                                                                   |
| VM1415-1415 | -529573                                                                           | 0,85<br>1.874                                                                     | 18-2-AS, 18-208A,<br>18-210A, 18-212A,<br>18-214A, 18-216A,<br>18-218A             | ✓                                                                                   |
| VM1615-12   | -161513                                                                           | 0,3<br>0.662                                                                      | 26-B                                                                               | ✓                                                                                   |
| VM1815-58   | -529641                                                                           | 0,6<br>1.323                                                                      | 226-4/11, K-226-4/12                                                               | ✓                                                                                   |
| VM1815-1815 | -529634                                                                           | 0,155<br>0.342                                                                    | 18-3-AS, 18-314A,<br>18-316A, 18-318A,<br>18-320A, 18-322A,<br>18-324A             | ✓                                                                                   |
| VM2015-58   | -529665                                                                           | 0,575<br>1.268                                                                    | 226-4/11, K-226-4/12                                                               | ✓                                                                                   |
| VM2215-58   | -529672                                                                           | 0,555<br>1.224                                                                    | WT-031, 226-4/11,<br>K-226-4/12                                                    | ✓                                                                                   |

## SERIES 22-1-AS SPINDLE INSERT SET

The thread insert set for sliding hammer or counter stays of series 22 is used to pull out parts with central threaded holes in crafts, industry, and workshops. The set includes six different threads for various situations and sizes.

### BENEFITS

- The standardized size of the spindle inserts allows for flexible use with various sliding hammers and counter stays.



## TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Consists of                                                         |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm                                                                                  |                                                                                     | kg/lb                                                                               |                                                                     |                                                                                       |
| 22-1-AS | -339288                                                                             | 33 - 49<br>1 5/16-1 15/16                                                           | M10                                                                                 | M4, M5, M6,<br>M8, M10, M12                                                         | 0,18<br>0.397                                                                       | 18-004A,<br>18-005A,<br>18-006A,<br>18-008A,<br>18-010A,<br>18-012A | ✓                                                                                     |



SERIES K-22-UNC  
SLIDING HAMMER REPLACEMENT IN CASE



The 12-piece sliding hammer replacement in the case of the K-22-UNC series is used for removing parts with threaded holes (dowel pins, keyways, etc.) with American thread sizes. The threads included in the set can be screwed in using the corresponding Allen key that is also included, allowing for effective work with American thread sizes. The accompanying sliding hammer is used together with internal extractors.

BENEFITS

- Practical combination with common US thread sizes for universal use
- The sliding hammer replacement has been specifically developed for American thread standards.
- The sliding hammer can be used not only in conjunction with UNC threads but also generally for the internal extraction of internal bearings.
- Included in the set are accessories that complement the practical application sensibly.

TECHNICAL ATTRIBUTES

| #           |  |  |  |  |   | Consists of   |                                                         |   |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------|---|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | kg/lb                                                                                |               |                                                                                                                                              |   |
| K-22-01-UNC | -039614                                                                             | 300<br>11 13/16                                                                     | 250<br>9 13/16                                                                      | 1                                                                                   | 1/4"- 20 UNC,<br>5/16"-18<br>UNC, 3/8"-16<br>UNC,<br>7/16"-14<br>UNC, 1/2"-13<br>UNC | 2,98<br>6.571 | 22-0-10, G-22,<br>238-318,<br>238-397,<br>238-476,<br>238-556,<br>238-635,<br>GA12-1/4,<br>GA12-5/16,<br>GA12-3/8,<br>GA12-7/16,<br>GA12-1/2 | ✓ |

SERIES KS-22  
SLIDING HAMMERS IN THE CASE



The 9- or 10-piece sliding hammer sets in the KS-22 series case are used for pulling sleeves and components with threads (dowel pins, key stock, bolts, etc.). The use of a sliding hammer is especially recommended when there is no support surface available or when it is too sensitive.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the case, the completeness of the set can be easily surveyed.
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified.
- The included thread adapters can be used for various thread types and sizes.



TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  | Consists of                                                                                                     |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  |                                                                                     | mm                                                                                  | kg/lb                                                                                 |                                                                                                                 |                                                                                       |
| KS-22-01 | -924569                                                                             | 300<br>11 13/16                                                                     | 250<br>9 13/16                                                                      | 1                                                                                   | M3, M4, M5,<br>M6, M8,<br>M10                                                       | M7, M10,<br>15-16G                                                                  | 2,12<br>4.675                                                                         | 22-0-10,<br>GA12-3,<br>GA12-4,<br>GA12-5,<br>GA12-6,<br>GA12-8,<br>GA12-10,<br>VM12-1516,<br>VM12-10,<br>VM12-7 | ✓                                                                                     |

PRODUCT DETAILS



| #                |  |  |  |  |             |  |  | Consists of                                                                                                             |  |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                  | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg                                                                                |                                                                                              | mm                                                                                | kg/lb                                                                               |                                                                                                                         |                                                                                     |
| KS-22-02         | -951121                                                                           | 300<br>11 13/16                                                                   | 250<br>9 13/16                                                                    | 1                                                                                 | M6, M8x1,<br>M10,<br>M10x1,<br>M12x1,<br>M15x1,5                                             | M7, M10,<br>15-16G                                                                | 2<br>4.410                                                                          | 22-0-10,<br>GA12-6,<br>GA12-10,<br>GA12-81,<br>GA12-101,<br>GA12-121,<br>GA12-1515,<br>VM12-1516,<br>VM12-10,<br>VM12-7 | ✓                                                                                   |
| KS-22-01-<br>UNC | -079900                                                                           | 300<br>11 13/16                                                                   | 250<br>9 13/16                                                                    | 1                                                                                 | 1/4"-20<br>UNC,<br>5/16"-18<br>UNC,<br>3/8"-16<br>UNC,<br>7/16"-14<br>UNC,<br>1/2"-13<br>UNC | M7, M10,<br>15-16G                                                                | 2,17<br>4.785                                                                       | 22-0-10,<br>VM12-1516,<br>VM12-10,<br>VM12-7,<br>GA12-1/2,<br>GA12-1/4,<br>GA12-3/8,<br>GA12-5/16,<br>GA12-7/16         | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES 223-K PULL-OUT TRAYS AND SETS FOR INTERNAL EXTRACTION



The 14-piece key and dowel pin puller sets are used to extract sockets as well as components with threads (dowel pins, keys, bolts, etc.) in crafts, industry, and workshops. In addition to a sliding hammer device, various spindle inserts are included to extract parts in different sizes.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- With the help of the dimensions laser-engraved on the thread adapters, the thread can be uniquely identified.



## TECHNICAL ATTRIBUTES

| #     | GTIN    | mm/inch         | mm/inch        | kg  |                                                              | mm                         | mm                 | Max.<br>tension<br>force<br>t/US t.<br>sh. | kg/lb           | Consists of                                                                                                                                                     | MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|-------|---------|-----------------|----------------|-----|--------------------------------------------------------------|----------------------------|--------------------|--------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 223-K | -784859 | 300<br>11 13/16 | 250<br>9 13/16 | 1   | M3, M4,<br>M5, M6,<br>M8, M10,<br>M12,<br>M14,<br>M16, M18   | -                          | M7, M10,<br>15-16G | {8328}                                     | 2,94<br>6.483   | 22-0-10,<br>GE4-10,<br>GE5-10,<br>GE6-10,<br>GE8-10,<br>GE10-10,<br>GE12-10,<br>VM12-1516,<br>VM12-10,<br>GE3-10,<br>GE14-10,<br>GE16-10,<br>GE18-10,<br>VM12-7 | ✓                                               |
| 223-G | -984181 | 370<br>14 9/16  | 250<br>9 13/16 | 1.7 | M8, M10,<br>M12,<br>M14,<br>M16,<br>M18,<br>M20,<br>M22, M24 | 15-16G,<br>M10,<br>M18x1,5 | G1/2               | {8328}                                     | 5,085<br>12.899 | 22-0-17,<br>GE14-1815,<br>GE16-1815,<br>GE18-1815,<br>GE20-1815,<br>GE22-1815,<br>GE24-1815,<br>GA12-1815,<br>GE8-1815,<br>GE10-1815,<br>GE12-1815              | ✓                                               |









# SEPERATOR

Separation is recommended for components that are seated flush. During separation pulling, the sharp, wedge-shaped cutting edges of the pulling device are pressed behind the part to be removed. The cutting edges slide between the bearing and seat. With the aid of a puller that is screwed into the pulling device, the component can be removed gently and without damage thanks to the large contact surface of the pulling device.



KUKKO // *Pull forward*



SERIES 15 | 17 | 18 | Y-15 | Y-180

# SEPERATORS & PULLERS



# APPLICATION

The seperators of series 15 and 17 are used together with the pullers of series 18 for pulling components with flush surfaces where there is not enough space for jaws. In the first step, the part to be removed is gently separated. Afterwards, it can be pulled off externally without damage.

## Benefits

- Sharp edges of the seperator grip under components with flush surfaces
- To enlarge the support surface for even gentler pulling, simply screw the seperator jaws into the puller in reverse
- The combination of seperator and puller ensures maximum stability during pulling
- Multi-crossbar with scale as an adjustment aid for the side bolts

## FEATURES OF THE SERIES

### SERIES 15

#### Seperator



15-0

The seperators of series 15 are used together with the pullers of series 18 for removing ball bearings, roller bearings, inner rings, and other parts with flush surfaces.

### SERIES 17

#### Seperator with quick-clamping pressure spindle



17-0

Compared to series 15, series 17 is especially handy because the seperator jaws can be quickly and centrally clamped using a pressure spindle.

### SERIES 18

#### Puller



18-0

The pullers of series 18 are used together with the seperators of series 15 and 17 for pulling flush-mounted or thin-walled parts.

### SERIES Y-15

#### Seperator for hydraulic pullers



Y-15

Depending on the application, there are several versions of series Y-15. The seperators require the hydraulic TENSILE/COMPRESSIVE puller of series Y-180.

### SERIES Y-180

#### Hydraulic TENSILE/COMPRESSIVE puller with hydraulic hollow piston cylinder



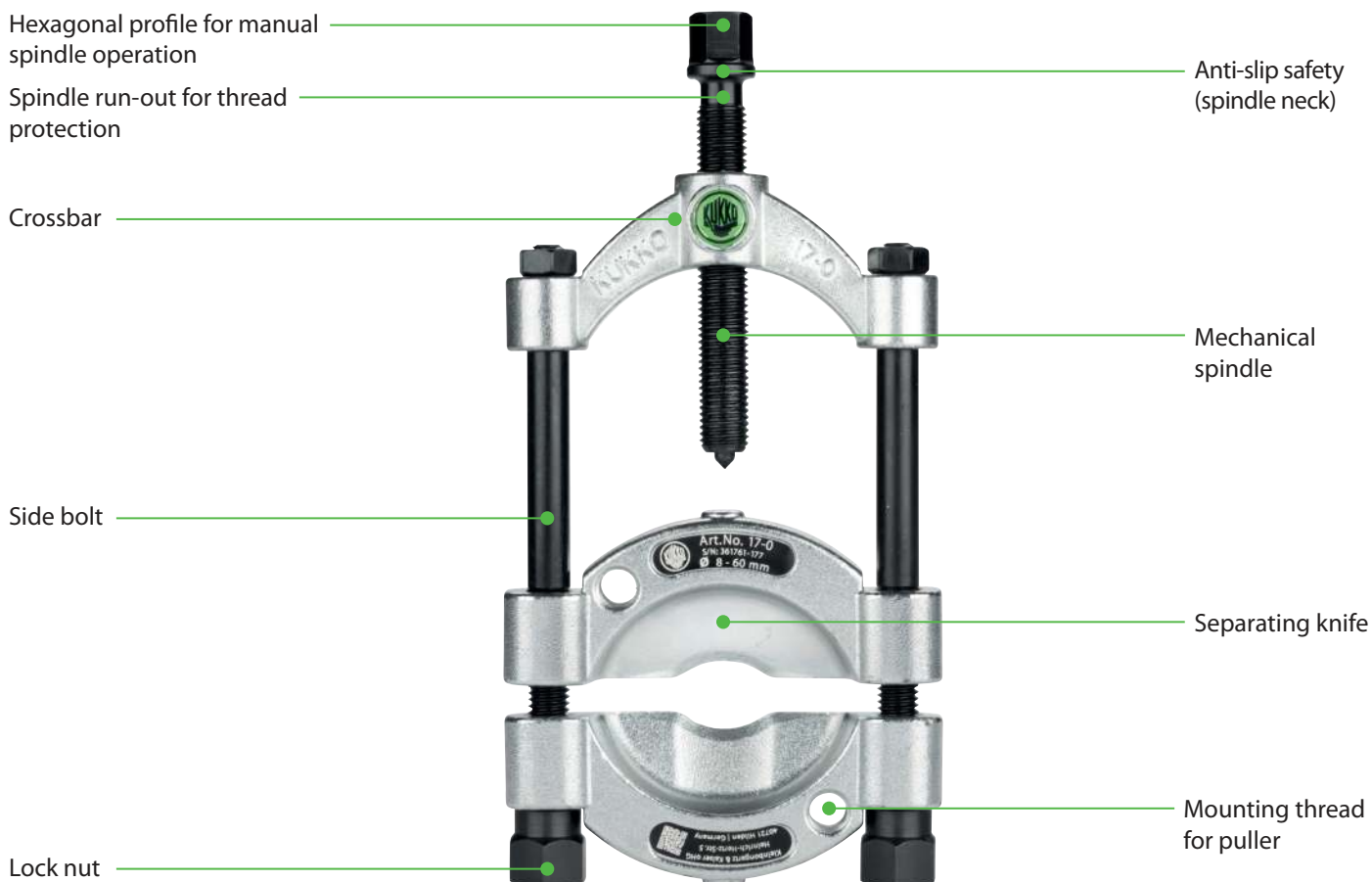
Y-180

Series Y-180 is used together with the seperator Y-15 or the internal extractor Y-21-E and can therefore be used in two different ways.



## DESIGN OF A SEPERATOR OF SERIES 17

---



## DESIGN OF A PULLER OF SERIES 18

---



## SETS

The pullers and separators are also available in practical Set cases. Tailored to application and industry, the sets impress with their universal use in separating and pulling.



15-A



17-A



17-B



K-68-B

## OPTIONAL EXTENSION: REACH EXTENSION

The extensions for pullers are used together with the pullers of series 18 to increase the reach of the puller. The extensions are available in various lengths in pairs.



## APPLICATION EXAMPLES



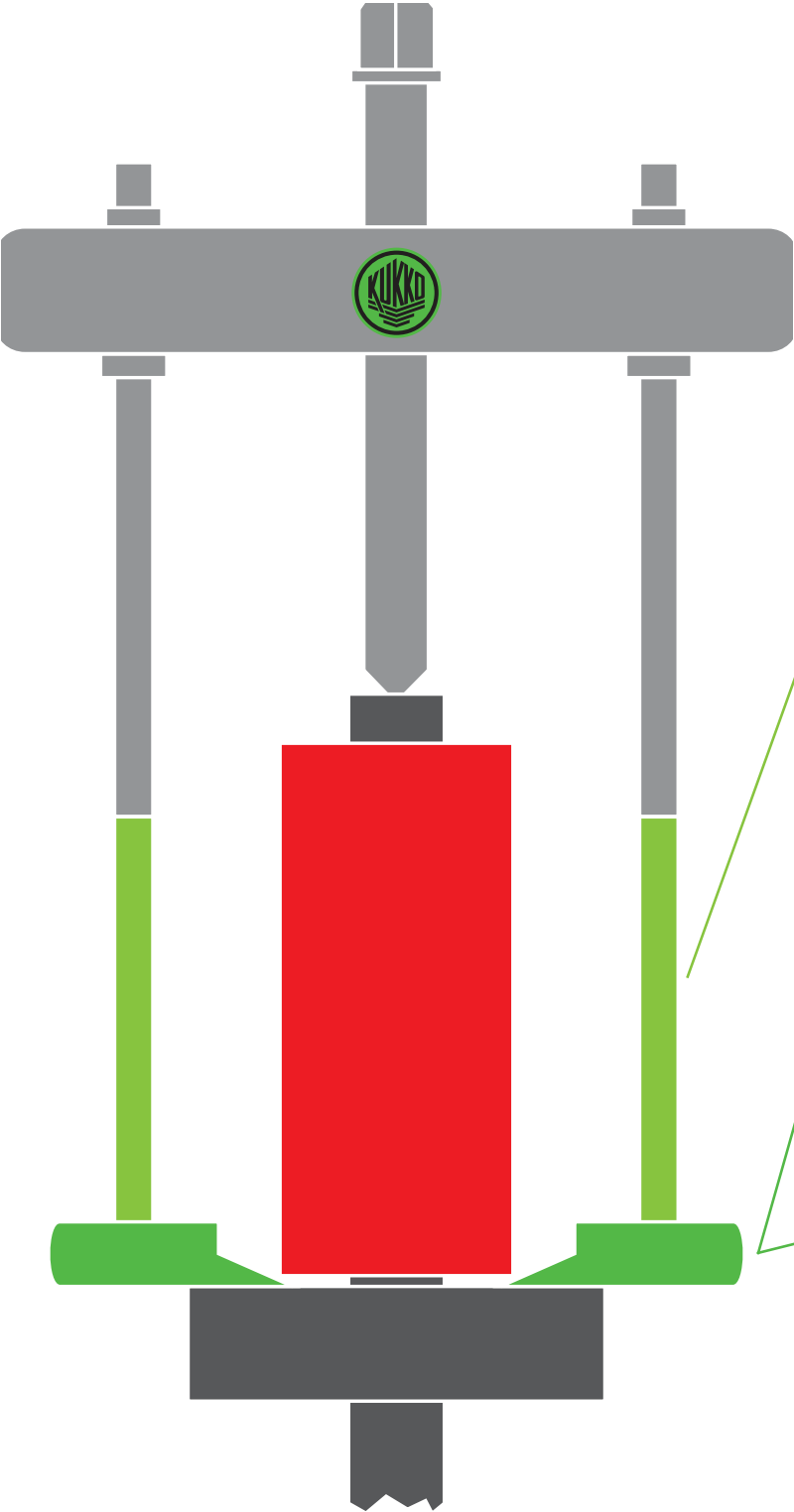
Pulling a bearing from a transmission shaft



Pulling a transmission gear

### TIP:

For an enlarged support surface, the separator jaws of the separators (series 15 and 17) can be screwed into the puller in reverse. This increases the support area and allows for gentler pulling. This approach is recommended, for example, with rusted or brittle parts.



**Puller | SERIES 18**

| Art. No. | mm      | mm  |
|----------|---------|-----|
| 18-0     | 50-110  | 150 |
| 18-1     | 60-150  | 200 |
| 18-2     | 60-200  | 250 |
| 18-3     | 80-300  | 300 |
| 18-4     | 120-380 | 350 |
| 18-5     | 150-440 | 400 |
| 18-6     |         |     |
| 18-7     |         |     |

**Extensions | SERIES 19**

| Art. No. | L mm | für für    |
|----------|------|------------|
| 19-1     | 100  | 18-0; 18-1 |
| 19-2     | 100  | 18-2       |
| 19-3     | 100  | 18-3       |
| 19-4     | 200  | 18-4       |
| 19-5     | 200  | 18-5       |
| 19-6     |      |            |
| 19-7     |      |            |

**Separating knife | SERIES 15**

| Art. No. | mm     | mm  |
|----------|--------|-----|
| 15-0     | 5- 60  | 60  |
| 15-1     | 12- 75 | 75  |
| 15-2     | 22-115 | 115 |
| 15-3     | 25-155 | 155 |
| 15-4     | 30-200 | 200 |
| 15-5     | 30-250 | 250 |
| 15-6     | 75-330 |     |
| 15-7     | 30-250 |     |

**Separating knife | SERIES 17**

| Art. No. | mm     | mm  |
|----------|--------|-----|
| 17-0     | 5- 60  | 60  |
| 17-1     | 12- 75 | 75  |
| 17-2     | 22-115 | 115 |
| 17-3     | 25-155 | 155 |

**Sets**

| Set (Art.No.) | Content (Art.No.) |      |      |  |
|---------------|-------------------|------|------|--|
| 15-K          | 15-0              | 18-0 | 19-1 |  |
| 15-A          | 15-1              | 18-1 | 19-1 |  |
| 15-B          | 15-2              | 18-2 | 19-2 |  |
| 15-C          | 15-3              | 18-3 | 19-3 |  |
| 15-D          | 15-4              | 18-4 | 19-4 |  |
| 15-E          | 15-5              | 18-5 | 19-5 |  |

**Sets**

| Set (Art.No.) | Content (Art.No.) |      |      |  |
|---------------|-------------------|------|------|--|
| 17-K          | 17-0              | 18-0 | 19-1 |  |
| 17-A          | 17-1              | 18-1 | 19-1 |  |
| 17-B          | 17-2              | 18-2 | 18-3 |  |
| 17-C          | 17-3              | 18-3 | 19-3 |  |

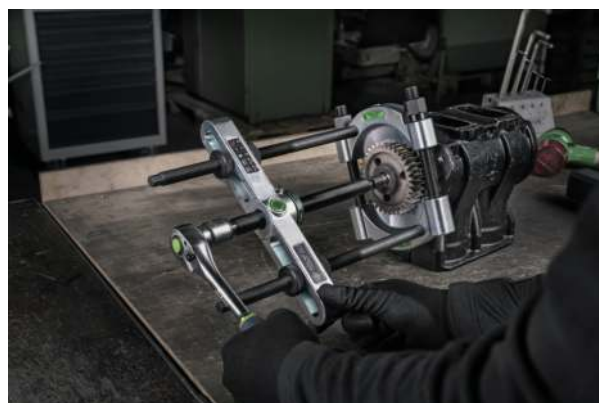
## SERIES 15 PULLING DEVICE



The pulling devices of series 15 are used together with the pullers of series 18 for pulling ball bearings, roller bearings, inner rings, and other flat-seated parts in trades, industry, and workshops when there is not enough space for jaws. The separation-pulling process is able to first separate those parts gently before they can be pulled from the outside.

### BENEFITS

- The sharp edges allow for extraction where other extraction methods are not applicable.
- By screwing together the separation and pulling device, the highest stability during pulling is ensured.
- If the separating jaws are screwed into the pulling device the other way around, the support area is enlarged and removed more gently.



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  |  |  |  |  |  | Included<br>in the<br>set    |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm                                                                                  | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | mm/<br>inch                                                                           | mm/<br>inch                                                                           | kg/lb                                                                                 |                              |                                                                                       |
| 15-00 | -101854                                                                             | 6 - 40<br>1/4 - 1<br>13/16                                                          | 72,5<br>2 7/8                                                                       | 15,5<br>5/8                                                                         | 105<br>4 1/8                                                                        | M6                                                                                  | 24,5<br>15/16                                                                       | 0,2<br>1/64                                                                         | 3,3<br>1/8                                                                           | 12,5<br>1/2                                                                           | 10<br>3/8                                                                             | 0,23<br>0.507                                                                         | 18-00,<br>68-0                                                                        | 29-A-69                      | ✓                                                                                     |
| 15-0  | -006951                                                                             | 8 - 60<br>5/16 - 2<br>3/8                                                           | 100<br>3 15/16                                                                      | 19,5<br>3/4                                                                         | 130,5<br>5 1/8                                                                      | M10                                                                                 | 39,5<br>1<br>9/16                                                                   | 0,3<br>1/64                                                                         | 5,5<br>3/16                                                                          | 21<br>13/16                                                                           | 17<br>11/16                                                                           | 0,695<br>1.532                                                                        | 18-0                                                                                  | 15-K                         | ✓                                                                                     |
| 15-1  | -007033                                                                             | 12 - 75<br>5/16 - 2<br>15/16                                                        | 116<br>4 9/16                                                                       | 24<br>15/16                                                                         | 142<br>5 9/16                                                                       | M10                                                                                 | 43<br>1<br>11/16                                                                    | 0,5<br>1/64                                                                         | 6,4<br>1/4                                                                           | 25<br>1                                                                               | 19<br>3/4                                                                             | 1,105<br>2.536                                                                        | 18-1                                                                                  | 15-A,<br>224-678             | ✓                                                                                     |
| 15-2  | -007118                                                                             | 22 - 115<br>7/8 - 4<br>1/2                                                          | 167<br>6 9/16                                                                       | 29,5<br>1 3/16                                                                      | 210<br>8 1/4                                                                        | M14x1,5                                                                             | 67<br>2 5/8                                                                         | 0,5<br>1/64                                                                         | 9,1<br>3/8                                                                           | 41<br>1 5/8                                                                           | 24<br>15/16                                                                           | 2,9<br>6.395                                                                          | 18-2,<br>18-2-B                                                                       | 15-B,<br>224-678,<br>K-20-15 | ✓                                                                                     |
| 15-3  | -007293                                                                             | 30 - 150<br>1 3/16 -<br>5 7/8                                                       | 210<br>8 1/4                                                                        | 36<br>1 7/16                                                                        | 255<br>10 1/32                                                                      | M18x1,5                                                                             | 78<br>3<br>1/16                                                                     | 0,5<br>1/64                                                                         | 11,2<br>7/16                                                                         | 50<br>1<br>15/16                                                                      | 32<br>1 1/4                                                                           | 5,3<br>11.687                                                                         | 18-3,<br>18-3-B                                                                       | 15-C                         | ✓                                                                                     |



PRODUCT DETAILS



| #    |  |  |  |  |  |  |  |  |  |  |  |  |  | Included<br>in the<br>set |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm                                                                                | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                        | mm/<br>inch                                                                         | kg/lb                                                                               |                                                                                     |                           |                                                                                     |
| 15-4 | -007378                                                                           | 30 - 200<br>1 3/16 -<br>7 7/8                                                     | 280<br>11 1/32                                                                    | 42<br>1 5/8                                                                       | 390<br>15 3/8                                                                     | G5/8                                                                              | 103<br>4 1/16                                                                     | 2<br>1/16                                                                         | 15,6<br>5/8                                                                       | 65<br>2 9/16                                                                       | 41<br>1 5/8                                                                         | 11,8<br>26.019                                                                      | 18-4,<br>18-4-B                                                                     | 15-D                      | ✓                                                                                   |
| 15-5 | -007453                                                                           | 30 - 250<br>1 3/16 -<br>9 13/16                                                   | 338<br>13 5/16                                                                    | 52<br>2 1/16                                                                      | 440<br>17 5/16                                                                    | G3/4-14                                                                           | 116<br>4 9/16                                                                     | 2<br>1/16                                                                         | 14<br>9/16                                                                        | 70<br>2 3/4                                                                        | 46<br>1 13/16                                                                       | 18,05<br>40.793                                                                     | 18-5,<br>18-5-B                                                                     | 15-E                      | ✓                                                                                   |

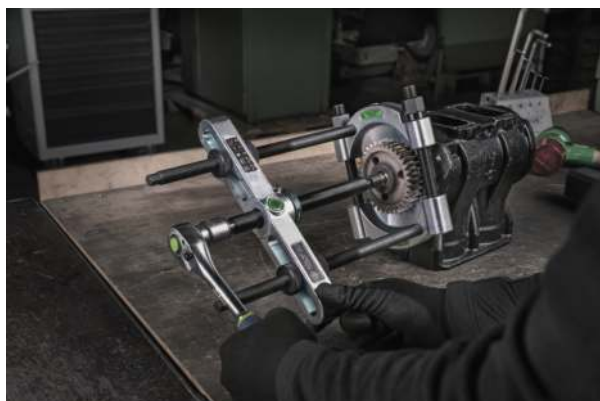
## SERIES K-15 PULLING DEVICE SETS



The 4- and 7-piece pulling device sets of the K-15 series are used for Pulling ball bearings, roller bearings, inner rings, and other flat-seated parts in crafts, industry, and workshops when there is not enough space for jaws. This separation-pulling process is capable of first gently separating those parts before they can be pulled off from the outside. This 4-piece set includes one pulling device and one puller, as well as a pair of extensions, ensuring the full range of applications.

### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The sharp edges enable peeling where other peeling methods are not applicable.
- By screwing together the separating and pulling device, the highest stability during pulling is ensured.
- If the separators are screwed into the puller device the other way around, the supporting surface is enlarged and removed more gently.



### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of           |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|
| 15-K | -007941                                                                                     | 250<br>9 13/16                                                                                 | 50 - 110<br>1 15/16 - 4 5/16                                                                   | 8 - 60<br>5/16 - 2 3/8                                                                         | 13<br>1 1/2                                                                                    | 30                             | 3<br>3.31                               | 2,86<br>6.306                                                                                  | 15-0, 18-0,<br>19-1-P | ✓                                                                                     |
| 15-A | -007521                                                                                     | 300<br>11 13/16                                                                                | 58 - 150<br>2 5/16 - 5 7/8                                                                     | 8 - 75<br>5/16 - 2 15/16                                                                       | 19<br>3/4                                                                                      | 50                             | 5<br>5.51                               | 4,4<br>9.702                                                                                   | 15-1, 18-1,<br>19-1-P | ✓                                                                                     |
| 15-B | -007606                                                                                     | 350<br>13 3/4                                                                                  | 60 - 200<br>2 3/8 - 7 7/8                                                                      | 22 - 115<br>7/8 - 4 1/2                                                                        | 22<br>7/8                                                                                      | 70                             | 7<br>7.72                               | 9,5<br>20.948                                                                                  | 15-2, 18-2,<br>19-2-P | ✓                                                                                     |
| 15-C | -007781                                                                                     | 400<br>15 3/4                                                                                  | 75 - 310<br>2 15/16 - 12 3/16                                                                  | 30 - 150<br>1 3/16 - 5 7/8                                                                     | 27<br>1 1/16                                                                                   | 100                            | 10<br>11.02                             | 16,99<br>37.463                                                                                | 15-3, 18-3,<br>19-3-P | ✓                                                                                     |
| 15-D | -007866                                                                                     | 550<br>21 5/8                                                                                  | 120 - 380<br>4 3/4 - 14 15/16                                                                  | 30 - 200<br>1 3/16 - 7 7/8                                                                     | 36<br>1 7/16                                                                                   | 150                            | 15<br>16.53                             | 32,18<br>70.957                                                                                | 15-4, 18-4,<br>19-4-P | ✓                                                                                     |
| 15-E | -308826                                                                                     | 600<br>23 5/8                                                                                  | 150 - 440<br>5 7/8 - 17 5/16                                                                   | 30 - 250<br>1 3/16 - 9 13/16                                                                   | 41<br>1 5/8                                                                                    | 200                            | 20<br>22.05                             | 49<br>108.045                                                                                  | 15-5, 18-5,<br>19-5-P | ✓                                                                                     |

SERIES K-20-15  
UNIVERSAL PULLER AND PULLING DEVICE  
SET



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                   |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                                  |                                                                                       |
| K-20-15 | -367311                                                                             | 9 - 160<br>3/8 - 6<br>5/16                                                          | 0 - 312<br>0 - 12<br>5/16                                                           | 100 - 220<br>3 15/16 -<br>8 11/16                                                   | 68 - 244<br>2 11/16 -<br>9 5/8                                                      | 260<br>10 1/4                                                                       | 22 - 115<br>7/8 - 4<br>1/2                                                          | 100                      | 10<br>11.02              | 21,61<br>47.650                                                                       | 600-17,<br>8-0-621,<br>15-2,<br>18-2,<br>20-1+,<br>20-2+,<br>1-192-P,<br>2-302-P | ✓                                                                                     |

The 12-piece universal puller and pulling device set of series K-20-15 is used for hydraulic Pulling and Separation of ball bearings, roller bearings, inner rings, and other flush-seated parts in trade, industry, and workshop. The kit enables the assembly of 7 different Puller models by combining jaws and extensions. Together with the pulling devices of series 15 and the hydraulic spindle, this results in numerous combination options for optimal use in changing Pulling situations.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Depending on the existing extraction situation, it can be easily adjusted and configured for a variety of applications.
- The hydraulic spindle enables gentle and safe extraction.
- The sharp edges of the series 15 enable a pulling action where other pulling methods are inapplicable.

## SERIES 17 PULLING DEVICE WITH QUICK CLAMPING PRESSURE SPINDLE



The pulling devices of series 17 are used together with the puller of series 18 for pulling ball bearing, roller bearings, inner rings and other flat-lying parts in trades, industry and workshops when there is not enough space for jaws. The separation-pulling process is able to first separate those parts gently before they can be pulled off from the outside. Compared to series 15, series 17 is particularly handy because the separating jaws are quickly and centrally clamped by a pressure spindle.

### BENEFITS

- A simple and safe handling is made possible by the quick-release clamp spindle.
- The sharp blades allow for extraction where other types of pullers are unsuitable.
- By screwing the separating and pulling device together, the highest stability during pulling is ensured.
- If the separation jaws are screwed into the tightening device in reverse, the support surface is enlarged and is pulled off more gently.



### TECHNICAL ATTRIBUTES

| #    | GTIN    |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  mm/<br>inch |  mm |  mm |  mm |  mm |  mm |  mm/<br>inch |  kg/lb |  |  |
|------|---------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 17-0 | -008108 | 8 - 60<br>5/16 - 2<br>3/8                                                                       | 100<br>3 15/16                                                                                  | 19,5<br>3/4                                                                                     | 205<br>8 1/16                                                                                   | M10                                                                                    | 39,5<br>1<br>9/16                                                                      | 0,3<br>1/64                                                                            | 5,5<br>3/16                                                                            | 21<br>13/16                                                                             | 17<br>11/16                                                                                       | 0,95<br>2.095                                                                               | 18-0                                                                                  | ✓                                                                                     |
| 17-1 | -008283 | 8 - 75<br>5/16 - 2<br>15/16                                                                     | 116<br>4 9/16                                                                                   | 24<br>15/16                                                                                     | 235<br>9 1/4                                                                                    | M10                                                                                    | 43<br>1<br>11/16                                                                       | 0,5<br>1/64                                                                            | 6,4<br>1/4                                                                             | 25<br>1                                                                                 | 19<br>3/4                                                                                         | 1,465<br>3.230                                                                              | 18-1                                                                                  | ✓                                                                                     |
| 17-2 | -008368 | 22 - 115<br>7/8 - 4<br>1/2                                                                      | 167<br>6 9/16                                                                                   | 29,5<br>1 3/16                                                                                  | 315<br>12 3/8                                                                                   | M14x1,5                                                                                | 67<br>2 5/8                                                                            | 0,5<br>1/64                                                                            | 9,1<br>3/8                                                                             | 41<br>1 5/8                                                                             | 24<br>15/16                                                                                       | 3,72<br>8.203                                                                               | 18-2,<br>18-2-B                                                                       | ✓                                                                                     |
| 17-3 | -008443 | 30 - 150<br>1 3/16 -<br>5 7/8                                                                   | 210<br>8 1/4                                                                                    | 36<br>1 7/16                                                                                    | 430<br>16 15/16                                                                                 | M18x1,5                                                                                | 78<br>3<br>1 1/16                                                                      | 0,5<br>1/64                                                                            | 11,2<br>7/16                                                                           | 50<br>1<br>15/16                                                                        | 32<br>1 1/4                                                                                       | 6,9<br>15.733                                                                               | 18-3,<br>18-3-B                                                                       | ✓                                                                                     |



## SERIES K-17 PULLING DEVICE SETS WITH QUICK- CLAMPING PRESSURE SPINDLE



The 4-piece pulling device sets are used for Pulling ball bearings, roller bearings, inner rings, and other flush-fitting parts when there is not enough space available for jaws. The Separation and Pulling process is capable of gently separating those parts prior to external extraction.

### BENEFITS

- A simple and safe handling is made possible by the quick clamping pressure spindle.
- The sharp edges allow for extraction where other types of extraction are not applicable.
- By screwing the separator and puller device together, the highest stability during pulling is ensured.



### TECHNICAL ATTRIBUTES

| #    |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of           |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                       |                                                                                       |
| 17-K | -008856                                                                             | 150<br>5 7/8                                                                        | 50 - 110<br>1 15/16 - 4 5/16                                                        | 8 - 60<br>5/16 - 2 3/8                                                              | 13<br>1/2                                                                           | 30                       | 3<br>3.31                | 3,11<br>6.858                                                                         | 17-0, 18-0,<br>19-1-P | ✓                                                                                     |
| 17-A | -008511                                                                             | 300<br>11 13/16                                                                     | 60 - 150<br>2 3/8 - 5 7/8                                                           | 12 - 75<br>1/2 - 2 15/16                                                            | 19<br>3/4                                                                           | 50                       | 5<br>5.51                | 4,83<br>10.650                                                                        | 17-1, 18-1,<br>19-1-P | ✓                                                                                     |
| 17-B | -008696                                                                             | 350<br>13 3/4                                                                       | 60 - 200<br>2 3/8 - 7 7/8                                                           | 22 - 115<br>7/8 - 4 1/2                                                             | 22<br>7/8                                                                           | 70                       | 7<br>7.72                | 10,395<br>22.921                                                                      | 17-2, 18-2,<br>19-2-P | ✓                                                                                     |
| 17-C | -008771                                                                             | 400<br>15 3/4                                                                       | 80 - 310<br>3 1/8 - 5 1/8                                                           | 25 - 155<br>1 - 6 1/8                                                               | 27<br>1 1/16                                                                        | 100                      | 10<br>11.02              | 19<br>41.895                                                                          | 17-3, 18-3,<br>19-3-P | ✓                                                                                     |

## SERIES Y-15 PULLING DEVICE FOR HYDRAULIC TENSILE/ COMPRESSIVE PULLERS



The pulling devices in the Y-15 series are used for pulling off ball bearings, roller bearings, inner rings and other flush-mounted parts when there is not enough space for jaws and these first have to be separated. They are available in different sizes.

### BENEFITS

- The hydraulic puller required in combination with the pulling device enables the easy and controlled removal of particularly tight-seated parts
- The sharp edges allow for a pulling action where other types of pullers are unusable.
- By screwing the separating and pulling device, the highest stability during pulling is ensured.
- If the separator jaws are screwed in the opposite direction into the puller device, the supporting surface is enlarged and is removed more gently.
- Due to its simple design, special pulling devices can also be easily made for the Y-15 series for your own use.



### TECHNICAL ATTRIBUTES

| #       | GTIN    |  |  |  |  |  |  |  |  |  |  |  |  | Included in the set                                                 |  |
|---------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         |         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm                                                                                  | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                           | kg/lb                                                                                 |                                                                                       |                                                                     |                                                                                       |
| Y-215-2 | -172106 | 22 - 115<br>7/8 - 4 1/2                                                             | 167<br>6 9/16                                                                       | 29,5<br>1 3/16                                                                      | 220<br>8 11/16                                                                      | 5/8"-18<br>UNF                                                                      | 67<br>2 5/8                                                                         | 0,5<br>1/64                                                                         | 9,1<br>3/8                                                                          | 41<br>1 5/8                                                                         | 24<br>15/16                                                                           | 2,86<br>6.306                                                                         | Y28-180                                                                               | 818-100,<br>818-215                                                 | ✓                                                                                     |
| Y-215-3 | -039546 | 25 - 155<br>1 - 6 1/8                                                               | 210<br>8 1/4                                                                        | 36<br>1 7/16                                                                        | 255<br>10 1/32                                                                      | 5/8"-18<br>UNF                                                                      | 78<br>3 1/16                                                                        | 0,5<br>1/64                                                                         | 11,2<br>7/16                                                                        | 50<br>1 15/16                                                                       | 32<br>1 1/4                                                                           | 2,88<br>6.350                                                                         | Y28-180                                                                               | 818-150,<br>818-215,<br>845-855,<br>845-858,<br>Y28-200,<br>Y28-218 | ✓                                                                                     |
| Y-315-4 | -398186 | 30 - 200<br>1 3/16 - 7 7/8                                                          | 280<br>11 1/32                                                                      | 42<br>1 5/8                                                                         | 390<br>15 3/8                                                                       | 1"-14<br>UNS                                                                        | 103<br>4 1/16                                                                       | 2<br>1/16                                                                           | 15,6<br>5/8                                                                         | 65<br>2 9/16                                                                        | 41<br>1 5/8                                                                           | 11,865<br>26.162                                                                      | Y38-180                                                                               | Y38-300                                                             | ✓                                                                                     |
| Y-215-4 | -385629 | 30 - 200<br>1 3/16 - 7 7/8                                                          | 280<br>11 1/32                                                                      | 42<br>1 5/8                                                                         | 390<br>15 3/8                                                                       | 5/8"-18<br>UNF                                                                      | 103<br>4 1/16                                                                       | 2<br>1/16                                                                           | 15,6<br>5/8                                                                         | 65<br>2 9/16                                                                        | 41<br>1 5/8                                                                           | 11,8<br>26.019                                                                        | Y28-180                                                                               | -                                                                   | ✓                                                                                     |
| Y-315-5 | -041501 | 30 - 250<br>1 3/16 - 9 13/16                                                        | 338<br>13 5/16                                                                      | 52<br>2 1/16                                                                        | 440<br>17 5/16                                                                      | 1"-14<br>UNS                                                                        | 116<br>4 9/16                                                                       | 2<br>1/16                                                                           | 14<br>9/16                                                                          | 70<br>2 3/4                                                                         | 46<br>1 13/16                                                                         | 2,11<br>4.653                                                                         | Y38-180                                                                               | Y38-318                                                             | ✓                                                                                     |
| Y-515-5 | -400063 | 30 - 250<br>1 3/16 - 9 13/16                                                        | 338<br>13 5/16                                                                      | 52<br>2 1/16                                                                        | 440<br>17 5/16                                                                      | 1<br>1/4"-12<br>UNF                                                                 | 116<br>4 9/16                                                                       | 2<br>1/16                                                                           | 14<br>9/16                                                                          | 70<br>2 3/4                                                                         | 46<br>1 13/16                                                                         | 19<br>41.895                                                                          | Y58-180                                                                               | -                                                                   | ✓                                                                                     |
| Y-515-6 | -043581 | 75 - 330<br>2 15/16 - 12 1                                                          | 430<br>16 15/16                                                                     | 60<br>2 3/8                                                                         | 595<br>23 7/16                                                                      | 1<br>1/4"-12<br>UNF                                                                 | 130<br>5 1/8                                                                        | 2<br>1/16                                                                           | 16<br>5/8                                                                           | 70<br>2 3/4                                                                         | 55<br>2 3/16                                                                          | 39<br>85.995                                                                          | Y58-180                                                                               | Y58-518,<br>Y58-500                                                 | ✓                                                                                     |
| Y-515-7 | -172281 | 80 - 420<br>3 1/8 - 16 9/16                                                         | 545<br>21 7/16                                                                      | 60<br>2 3/8                                                                         | 670<br>26 3/8                                                                       | 1<br>1/4"-12<br>UNF                                                                 | 130<br>5 1/8                                                                        | 2<br>1/16                                                                           | 16<br>5/8                                                                           | 70<br>2 3/4                                                                         | 55<br>2 3/16                                                                          | 45<br>99.225                                                                          | Y58-180                                                                               | -                                                                   | ✓                                                                                     |

## SERIES 18 PULLER



The pullers of series 18 are used together with the pulling devices of series 15 and 17 for pulling off flush-mounted or thin-walled parts in crafts, industry and workshops when there is not enough space for jaws. The separation-pulling process is able to first separate those parts gently before they can be pulled off from the outside. For precise adjustment assistance, there is a scale with numerical values above the crossbar. At the bottom of the side screw there is a wrench flat for securely connecting or loosening connections or components.

### BENEFITS

- By screwing the separator and puller device, the highest stability when pulling is ensured.
- If the separating jaws are screwed into the clamping device the other way around, the support surface is enlarged and pulled off more gently.
- Due to its simple design, special pulling devices for series 18 can also be easily created in-house
- Crossbar with numerical scale for uniform adjustment of the side screw



### TECHNICAL ATTRIBUTES

| #     | GTIN    | mm/inch                       | mm/inch      | mm/inch   | Nm/ft lb    | Max. tensile force<br>kN | Max. tension force<br>t/US t. sh. | kg/lb          | Included in the set                                                                                                               |   |
|-------|---------|-------------------------------|--------------|-----------|-------------|--------------------------|-----------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------|---|
| 18-00 | -101939 | 20 - 110<br>13/16 - 4<br>5/16 | 61<br>2 3/8  | 12<br>1/2 | 40<br>29.50 | 15                       | 1.5<br>1.65                       | 0.82<br>1.808  | 15-00,<br>19-00-P                                                                                                                 | ✓ |
| 18-0  | -075599 | 32 - 114<br>1 1/4 - 4<br>1/2  | 150<br>5 7/8 | 13<br>1/2 | 40<br>29.50 | 30                       | 3<br>3.31                         | 0,825<br>1.819 | 15-0, 17-0,<br>19-1-P,<br>18-003A,<br>18-004A,<br>18-005A,<br>18-006A,<br>18-008A,<br>18-010A,<br>18-012A,<br>18-016A,<br>18-0-AS | ✓ |
| 18-1  | -075674 | 58 - 150<br>2 5/16 - 5<br>7/8 | 200<br>7 7/8 | 19<br>3/4 | 70<br>51.63 | 50                       | 5<br>5.51                         | 2<br>4.410     | 15-1, 17-1,<br>19-1-P,<br>18-003A,<br>18-004A,<br>18-005A,<br>18-006A,<br>18-008A,<br>18-010A,<br>18-012A,<br>18-016A,<br>18-0-AS | ✓ |

## PRODUCT DETAILS

| #    |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |                                             | Included in<br>the set          |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                              |                                                                                                                                |                                 |                                                                                     |
| 18-2 | -075759                                                                           | 68 - 244<br>2 11/16 -<br>9 5/8                                                    | 260<br>10 1/4                                                                     | 22<br>7/8                                                                         | 120<br>88.51                                                                      | 70                       | 7<br>7.72                | 3,245<br>7.155                                                                     | 8-0-621,<br>15-2, 17-2,<br>8-01,<br>19-2-P,<br>18-208A,<br>18-210A,<br>18-212A,<br>18-214A,<br>18-216A,<br>18-218A,<br>18-2-AS | 15-B,<br>224-678,<br>K-20-15    | ✓                                                                                   |
| 18-3 | -005961                                                                           | 75 - 310<br>2 15/16 -<br>12 3/16                                                  | 300<br>11 13/16                                                                   | 27<br>1 1/16                                                                      | 280<br>206.53                                                                     | 100                      | 10<br>11.02              | 6,375<br>14.057                                                                    | 15-3, 8-02,<br>17-3,<br>19-3-P,<br>18-314A,<br>18-316A,<br>18-318A,<br>18-320A,<br>18-322A,<br>18-324A,<br>18-3-AS,<br>8-0-626 | 15-C                            | ✓                                                                                   |
| 18-4 | -006043                                                                           | 116 - 380<br>4 9/16 -<br>14 15/16                                                 | 335<br>13 3/16                                                                    | 36<br>1 7/16                                                                      | 450<br>331.92                                                                     | 150                      | 15<br>16.53              | 14,3<br>31.532                                                                     | 15-4, 8-1-<br>B, 19-4-P                                                                                                        | 15-D,<br>K-226-4/12,<br>18-4SAF | ✓                                                                                   |
| 18-5 | -075834                                                                           | 142 - 440<br>5 9/16 -<br>17 5/16                                                  | 380<br>14 15/16                                                                   | 41<br>1 5/8                                                                       | 500<br>368.80                                                                     | 200                      | 20<br>22.05              | 24,19<br>53.339                                                                    | 15-5, 8-2-<br>M, 19-5-P                                                                                                        | 15-E                            | ✓                                                                                   |





## SERIES 18-B HYDRAULIC PULLER WITH MECHANICAL SPINDLE



The pullers of the series 18 are used together with the pulling device of the series 15 and 17 for pulling flat-lying or thin-walled parts in trade, industry and workshop applications when there is not enough space for jaws. The separation-pulling process is able to first separate those parts gently before they can be pulled from the outside. The series 18-B is additionally equipped with a hydraulic spindle, which achieves an average tension force of a maximum of 20 t and thus enables force-saving and efficient separation pulling.

### BENEFITS

- Through the bolting of the separator and puller, the highest stability during extraction is ensured.
- If the separating jaws are screwed into the tensioning device the other way around, the contact surface is increased and is removed more gently.
- Due to its simple design, special pulling devices can also be easily made for series 18 for in-house use.
- Hydraulics ensures a power-saving and fast extraction

### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 18-2-B | -885723                                                                                     | 68 - 244<br>2 11/16 - 9<br>5/8                                                                 | 260<br>10 1/4                                                                                  | 15<br>11.06                                                                                     | 100                            | 10<br>11.02                             | 4,745<br>10.463                                                                                | 17-2, 15-2                                                                            | ✓                                                                                     |
| 18-3-B | -885730                                                                                     | 75 - 310<br>2 15/16 - 12<br>3/16                                                               | 300<br>11 13/16                                                                                | 20<br>14.75                                                                                     | 120                            | 12<br>13.23                             | 8,405<br>18.632                                                                                | 17-3, 19-3-P,<br>15-3                                                                 | ✓                                                                                     |
| 18-4-B | -885747                                                                                     | 116 - 380<br>4 9/16 - 14<br>15/16                                                              | 335<br>13 3/16                                                                                 | 45<br>33.19                                                                                     | 150                            | 15<br>16.53                             | 21,11<br>46.548                                                                                | 19-4-P, 15-4                                                                          | ✓                                                                                     |
| 18-5-B | -885754                                                                                     | 142 - 440<br>5 9/16 - 17<br>5/16                                                               | 380<br>14 15/16                                                                                | 30<br>22.13                                                                                     | 200                            | 20<br>22.05                             | 37<br>81.585                                                                                   | 19-5-P, 15-5                                                                          | ✓                                                                                     |

SERIES 818-100  
HYDRAULIC BEARING PULLER SET



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br><br>kN | Max.<br>tension<br>force<br><br>t/US t. sh. | <br>kg/lb | Consists of                                                                             |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 818-100 | -717611                                                                                     | 85 - 270<br>3 3/8 - 10<br>5/8                                                                  | 530<br>20 7/8                                                                                  | 22 - 115<br>7/8 - 4 1/2                                                                        | 100                                | 10<br>11.02                                 | 14,99<br>33.053                                                                                | 800-050,<br>800-100,<br>800-150,<br>800,<br>Y-215-2,<br>818-250,<br>818-820,<br>818-279 | ✓                                                                                     |

The 10-piece hydraulic bearing puller set of the 818-100 series is used for pulling ball bearings, roller bearings, inner rings, and other flush-mounted parts in craft, industry, and workshops when there is not enough space for puller jaws. As a set from the modular system-built 800 series, it allows for a variety of hydraulic pulling possibilities while maintaining modularity. In addition to the required pulling device and supplementary side screw extensions, the set also includes matching modules for 2-jaw pulling and separating pulling.

BENEFITS

- Pullers of series 800 use the same hydraulic spindle and do not require any additional accessories.
- For the series 800, there are numerous easily interchangeable and combinable individual parts and enhancements.
- The hydraulic system enables high pulling performance with low effort.



SERIES 818-150  
HYDRAULIC BEARING PULLER SET



TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                                             |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                         |                                                                                       |
| 818-150 | -717796                                                                             | 85 - 270<br>3 3/8 - 10<br>5/8                                                       | 780<br>30 11/16                                                                     | 25 - 155<br>1 - 6 1/8                                                               | 100                      | 10<br>11.02              | 19,39<br>42.755                                                                       | 800,<br>Y-215-3,<br>800-050,<br>800-100,<br>800-150,<br>818-820,<br>818-250,<br>818-279 | ✓                                                                                     |

The 12-part hydraulic bearing puller set of the series 818-150 is used for pulling ball bearings, roller bearings, inner rings, and other flush-mounted parts in crafts, industry, and workshops when there is not enough space for puller jaws. As a set of the modular series 800, it allows for various hydraulic pulling options while maintaining modularity. In addition to the required pulling device and supplementary tension bolts, the set also includes the corresponding modules for 2-jaw pulling and separating pulling.

BENEFITS

- Application-oriented assembly for universal use
- Pullers of series 800 use the same hydraulic spindle and do not require any additional accessories.
- For the series 800, there are numerous easily interchangeable and combinable individual parts and enhancements.
- The hydraulics enable high pulling performance with low effort.

## SERIES YX8-X18 HYDRAULIC PULLER SETS



The 13-piece hydraulic puller sets are used for separating and internally extracting particularly large and stuck bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for internal extraction and separation.

### BENEFITS

- Through the storage in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle extraction even for heavy-duty tasks
- The combination of hydraulics and the respective devices allows for the easy and controlled removal of particularly stubborn parts.



### TECHNICAL ATTRIBUTES

| #       | GTIN    | mm/inch                           | mm/inch         | mm/inch                         | mm/inch                         | bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | kg/lb          | Consists of                                                                                                                                       | MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|---------|---------|-----------------------------------|-----------------|---------------------------------|---------------------------------|-----|--------------------------------|--------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Y28-218 | -036651 | 135 - 300<br>5 5/16 - 11<br>13/16 | 1.000<br>39 3/8 | 30 - 180<br>1 3/16 - 7<br>1/16  | 25 - 155<br>1 - 6 1/8           | 394 | 150                            | 15<br>16.53                                | 60,3<br>13.230 | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y218-06-P,<br>Y218-08-P,<br>Y218-31-P,<br>Y218-33,<br>Y218-10,<br>Y218-11 | ✓                                               |
| Y38-318 | -037641 | 180 - 420<br>7 1/16 - 16<br>9/16  | 1.200<br>47 1/4 | 75 - 230<br>2 15/16 - 9<br>1/16 | 30 - 250<br>1 3/16 - 9<br>13/16 | 514 | 250                            | 25<br>27.56                                | 115<br>253.575 | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y318-36-P,<br>Y318-33,<br>Y318-38-P,<br>Y318-41-P,<br>Y318-10,<br>Y318-11 | ✓                                               |



PRODUCT DETAILS



| #       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                                                                                         |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                     |                                                                                     |
| Y58-518 | -038891                                                                           | 235 - 540<br>9 1/4 - 21<br>1/4                                                    | 1.500<br>59 1/16                                                                  | 75 - 230<br>2 15/16 - 9<br>1/16                                                   | 75 - 330<br>2 15/16 -<br>12 1                                                     | 348                                                                               | 350                      | 35<br>38.58              | 22<br>48.510                                                                        | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y518-08-P,<br>Y518-31-P,<br>Y518-33,<br>Y518-10,<br>Y518-11 | ✓                                                                                   |

## SERIES YX8-X00 HYDRAULIC UNIVERSAL PULLER SET



The 18-piece hydraulic universal puller sets of series YXB-X00 are used for pulling, separating, and internal extraction of particularly large and tightly seated bearings, gears, discs, etc. in industry and commercial vehicles. The set requires no additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers, separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for every situation.

### BENEFITS

- By storing it in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle removal even during heavy work
- The combination of hydraulics and the respective devices enables the easy and controlled removal of particularly stubborn parts.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                                    |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                              |                                                                                                                                                                                                   |                                                                                     |
| Y28-200 | -870828                                                                           | 50 -<br>500<br>1<br>15/16 -<br>19<br>11/16                                        | 0 - 300<br>0 - 11<br>13/16                                                        | 30 - 180<br>1 3/16 -<br>7 1/16                                                    | 25 - 155<br>1 - 6 1/8                                                             | 135 -<br>300<br>5 5/16 -<br>11 13/16                                              | 1.000<br>39 3/8                                                                   | 700                                                                               | 200                      | 20<br>22.05              | 85<br>187.425                                                                      | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y20-206,<br>Y218-06-<br>P,<br>Y218-08-<br>P,<br>Y218-31-<br>P,<br>Y218-33,<br>Y205-20,<br>Y218-10,<br>Y218-11,<br>Y20-216 | ✓                                                                                   |
| Y38-300 | -870835                                                                           | 50 -<br>900<br>1<br>15/16 -<br>35<br>7/16                                         | 0 - 520<br>0 - 20<br>1/2                                                          | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 30 - 250<br>1 3/16 -<br>9 13/16                                                   | 180 -<br>420<br>7 1/16 -<br>16 9/16                                               | 1.200<br>47 1/4                                                                   | 700                                                                               | 300                      | 30<br>33.07              | 188<br>414.540                                                                     | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y30-206,<br>Y318-36-<br>P,<br>Y318-33,<br>Y318-38-<br>P,<br>Y318-41-<br>P,<br>Y305-20,<br>Y318-10,<br>Y318-11             | ✓                                                                                   |

PRODUCT DETAILS



| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                                                                 |                                                                                     |
| Y58-500 | -870842                                                                           | 460 -<br>1.200<br>18 1/8<br>- 47<br>1/4                                           | 0 - 700<br>0 - 27<br>9/16                                                         | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 75 - 330<br>2 15/16 -<br>12 1                                                     | 235 -<br>540<br>9 1/4 -<br>21 1/4                                                 | 1.500<br>59 1/16                                                                  | 498                                                                               | 500                      | 50<br>55.12              | 335<br>738.675                                                                      | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y50-206,<br>Y518-08-<br>P,<br>Y518-31-<br>P,<br>Y518-33,<br>Y505-20,<br>Y518-10,<br>Y518-11,<br>Y50-216 | ✓                                                                                   |

### SERIES GOLIATH-218 MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH



Separation is recommended for components that are seated flush. During separation pulling, the sharp, wedge-shaped cutting edges of the pulling device are pressed behind the part to be removed. The cutting edges slide between the bearing and seat. With the aid of a puller that is screwed into the pulling device, the component can be removed gently and without damage thanks to the large contact surface of the pulling device.

#### BENEFITS

- Enables tremendous pulling forces of up to 50 t
- Hydraulic height adjustment and mechanical fine adjustment ensure precise work.
- The application of the pull-off force is achieved through a two-stage electric hydraulic pump.
- Simple and convenient attachment of the puller via Y-shaped, movable frame with 4 smooth rolling rollers.



#### TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | bar                                                                                 | V                                                                                   | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| Goliath-218 | -102707                                                                             | 300<br>11 13/16                                                                     | 25 - 155<br>1 - 6 1/8                                                               | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 200                      | 20<br>22.05              | 213<br>469.665                                                                        | ✓                                                                                     |
| Goliath-318 | -102745                                                                             | 520<br>20 1/2                                                                       | 30 - 250<br>1 3/16 - 9<br>13/16                                                     | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 300                      | 30<br>33.07              | 299<br>659.295                                                                        | ✓                                                                                     |
| Goliath-518 | -102776                                                                             | 520<br>20 1/2                                                                       | 80 - 420<br>3 1/8 - 16<br>9/16                                                      | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 500                      | 50<br>55.12              | 361<br>796.005                                                                        | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES GOLIATH-200 MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH



The mobile, hydraulic pulling device "GOLIATH" is used for Removing large bearings, gears and similar components in heavy industry, in railways and power plants, as well as other applications. With a pulling force of up to 50 t, the "GOLIATH" is the solution for truly large pulling operations.

#### BENEFITS

- Enables tremendous pulling forces of up to 50 t
- Hydraulic height adjustment and mechanical fine adjustment ensure precise work.
- The application of the pulling force is carried out by a two-stage electro-hydraulic pump.
- Simple and comfortable mounting of the puller through Y-shaped, movable support frame with the 4 smooth rolling rollers.

#### TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | bar                                                                               | V                                                                                 | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                     |
| Goliath-200 | -102691                                                                           | 0 - 500<br>0 - 19<br>11/16                                                        | 300<br>11 13/16                                                                   | 25 - 155<br>1 - 6 1/8                                                             | 400 - 1000<br>15 3/4-39<br>3/8                                                    | 700                                                                               | 230 V                                                                             | 200                      | 20<br>22.05              | 263<br>579.915                                                                      | ✓                                                                                   |
| Goliath-300 | -102738                                                                           | 0 - 900<br>0 - 35<br>7/16                                                         | 520<br>20 1/2                                                                     | 30 - 250<br>1 3/16 - 9<br>13/16                                                   | 400 - 1000<br>15 3/4-39<br>3/8                                                    | 700                                                                               | 230 V                                                                             | 300                      | 30<br>33.07              | 335<br>738.675                                                                      | ✓                                                                                   |
| Goliath-500 | -102769                                                                           | 0 - 1.200<br>0 - 47<br>1/4                                                        | 700<br>27 9/16                                                                    | 80 - 420<br>3 1/8 - 16<br>9/16                                                    | 400 - 1000<br>15 3/4-39<br>3/8                                                    | 700                                                                               | 230 V                                                                             | 500                      | 50<br>55.12              | 0,3<br>0.662                                                                        | ✓                                                                                   |

SERIES Y-X00  
MOUNTING FOR HYDRAULIC CYLINDER



The recordings of hydraulic cylinders from the series Y-X00 are used to secure tools in the hydraulic program of KUKKO in crafts, industry, and workshops. The adapters in various sizes secure heavy equipment to the respective hydraulic device and are suitable for the GOLIATH series, among others.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  |                                     |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y200-00 | -507724                                                                                     | 3 7/8"-12 UN                                                                        | Y28-180, Y28-205, Y28-206,<br>Y28-200, Y28-218, Y28-256,<br>Goliath-200, Goliath-218,<br>Goliath-256, YRH-202, YRH-206 | ✓                                                                                     |
| Y300-00 | -507748                                                                                     | 4 1/2"-12 UN                                                                        | Y38-180, Y38-205, Y38-206,<br>Y38-300, Y38-318, Y38-356,<br>Goliath-300, Goliath-318,<br>Goliath-356, YRH-302          | ✓                                                                                     |
| Y500-00 | -507755                                                                                     | 6 1/4"-12 UN                                                                        | Y58-180, Y58-205, Y58-206,<br>Y58-500, Y58-518, Y58-556,<br>Goliath-500, Goliath-518,<br>Goliath-556, YRH-603          | ✓                                                                                     |

PRODUCT DETAILS

SERIES 19-P  
2 EXTENSIONS FOR PULLERS



The extensions for pullers are used together with the pullers of series 18 in craft, industry, and workshop to increase the reach of the puller. The extensions are available in various lengths in pairs.

BENEFITS

- The extensions are combinable with each other, allowing for optimal adjustment to the required reach.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 19-00-P | -120510                                                                                     | M6                                                                                        | 10<br>3/8                                                                                      | 95<br>3 3/4                                                                                    | 8<br>5/16                                                                                      | 0,115<br>0.254                                                                                 | ✓                                                                                     |
| 19-1-P  | -169984                                                                                     | M10                                                                                       | 14<br>9/16                                                                                     | 100<br>3 15/16                                                                                 | 12<br>1/2                                                                                      | 0,23<br>0.507                                                                                  | ✓                                                                                     |
| 19-2-P  | -170041                                                                                     | M14x1,5                                                                                   | 22<br>7/8                                                                                      | 100<br>3 15/16                                                                                 | 19<br>3/4                                                                                      | 0,555<br>1.224                                                                                 | ✓                                                                                     |
| 19-3-P  | -170126                                                                                     | M18x1,5                                                                                   | 24<br>15/16                                                                                    | 100<br>3 15/16                                                                                 | 19<br>3/4                                                                                      | 0,655<br>1.444                                                                                 | ✓                                                                                     |
| 19-4-P  | -168321                                                                                     | G5/8                                                                                      | 23<br>7/8                                                                                      | 200<br>7 7/8                                                                                   | 32<br>1 1/4                                                                                    | 0,23<br>0.507                                                                                  | ✓                                                                                     |
| 19-5-P  | -152306                                                                                     | G3/4                                                                                      | 26,3<br>1 1/32                                                                                 | 200<br>7 7/8                                                                                   | 36<br>1 7/16                                                                                   | 2,94<br>6.483                                                                                  | ✓                                                                                     |
| 19-7-P  | -041181                                                                                     | M10                                                                                       | 22<br>7/8                                                                                      | 100<br>3 15/16                                                                                 | 17<br>11/16                                                                                    | 0,596<br>1.314                                                                                 | ✓                                                                                     |

## SERIES YHP ACCESSORIES FOR HYDRAULIC PULLING



YHP-326



YHP-320



YM-235



YF-200

The YHP series offers a versatile range of accessories for hydraulic pulling. The assortment includes hydraulic hand pumps, hydraulic hoses, pressure gauges, and adapters. All components are available both individually and in various combinations. The hydraulic hand pump is available in several versions - such as a standalone device (YHP-320), in combination with a hydraulic hose (YHP-321), with a pressure gauge (YHP-324), with hose and pressure gauge (YHP-325), as well as a complete set with hose, pressure gauge, and metal case. Furthermore, the hand pump is available in two different variants, each with varying usable oil volumes depending on the application area.

### BENEFITS

- The entire series is equipped with numerous safety features that ensure reliable performance while guaranteeing high occupational safety.
- Compatible with common hydraulic puller devices and systems



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>cm <sup>3</sup> | <br>bar | Max. tension force<br>t/US t. sh. | <br>kg/lb | Consists of                          |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------|
| YHP-320 | -045721                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 7,28<br>16.052                                                                               | YHP-320                              | ✓                                                                                     |
| YHP-321 | -111198                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 8,375<br>18.467                                                                              | YHP-320, YF-200                      | ✓                                                                                     |
| YHP-324 | -045806                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 9,605<br>21.278                                                                              | YHP-320,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-325 | -045981                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 10,05<br>3.308                                                                               | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-326 | -046483                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 16,13<br>35.567                                                                              | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-420 | -609688                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420                              | ✓                                                                                     |
| YHP-421 | -022968                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 4,5<br>0.662                                                                                 | YHP-420, YF-200                      | ✓                                                                                     |
| YHP-424 | -103988                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-425 | -103995                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 9,65<br>21.278                                                                               | YHP-420,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YF-200  | -045646                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,06<br>3.528                                                                                | YF-200                               | ✓                                                                                     |
| YM-235  | -157769                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,605<br>3.638                                                                               | YM-235                               | ✓                                                                                     |
| YGA-2   | -458644                                                                                     | -                                                                                                      | -                                                                                          | 75<br>82.67                       | 0,21<br>0.463                                                                                | YGA-2                                | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES YD PRESSURE PIECE FOR HOLLOW PISTON CYLINDER



The pressure pieces for hollow piston cylinders are screwed into the internal thread of the piston rod of the hollow piston cylinder. The center spindle can be inserted directly into the threaded piece or secured and adjusted using a quick adjustment nut when using a pressure piece with a smooth bore. When using the closed pressure piece, the cylinders can be used as lifting jacks.

#### BENEFITS

- Pressure pieces enable the versatile application of the hollow piston cylinder from KUKKO as a pressure or pull cylinder.

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  |  | Max. tension<br>force<br><br>t/US t. sh. | <br>YRH-302 | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YDB-33E | -400308                                                                                     | 58<br>2 5/16                                                                                   | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                                         | 0,21<br>0.463                                                                                  | ✓                                                                                     |
| YDB-55E | -400483                                                                                     | 85<br>3 3/8                                                                                    | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                                         | 0,5<br>1.103                                                                                   | ✓                                                                                     |
| YDG-20E | -399091                                                                                     | 50<br>1 15/16                                                                                  | 1"-8 UNC                                                                            | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                             | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| YDG-30E | -399176                                                                                     | 60<br>2 3/8                                                                                    | 1 1/4"-7<br>UNC                                                                     | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                                         | 0,285<br>0.628                                                                                 | ✓                                                                                     |
| YDG-50E | -399251                                                                                     | 85<br>3 3/8                                                                                    | 1 5/8"-5<br>1/2 UNS                                                                 | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                                         | 0,85<br>1.874                                                                                  | ✓                                                                                     |
| YDM-20E | -414183                                                                                     | 50<br>1 15/16                                                                                  | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                             | 0,28<br>0.617                                                                                  | ✓                                                                                     |
| YDM-30E | -414268                                                                                     | 58<br>2 5/16                                                                                   | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                                         | 0,38<br>0.838                                                                                  | ✓                                                                                     |
| YDM-50E | -414343                                                                                     | 85<br>3 3/8                                                                                    | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                                         | 1,6<br>3.528                                                                                   | ✓                                                                                     |
| YDB-27E | -400223                                                                                     | 50<br>1 15/16                                                                                  | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                             | 0,17<br>0.375                                                                                  | ✓                                                                                     |

## SERIES YRH HOLLOW PISTON CYLINDER

The hydraulic hollow piston cylinders of the YRH series are used for application with the KUKKO hydraulic program in crafts, industry, and workshops. They can be used both as pressure and traction cylinders, enabling a force-saving and versatile operation even in challenging extraction situations or when a lot of force is needed.

### BENEFITS

- All models feature a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and mounting threads on the cylinder base allow for easy assembly.
- Tensioned retractable spring increases the insertion speed and thereby enhances the performance.
- The integrated scraper removes contaminants from the piston, thereby extending the life of the cylinder.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  | Max. tensile force | Max. tension force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     |                                                                                     |                                                                                     | mm/<br>inch                                                                         | bar                                                                                 | cm³                                                                                 | kN                 | t/US t.<br>sh.     | kg/lb                                                                               |                                                                                       |
| YRH-132 | -854460                                                                             | 73<br>2 7/8                                                                         | 133<br>5 1/4                                                                        | 60<br>2 3/8                                                                         | 2<br>3/4"-12<br>UN                                                                  | 3/4"-16<br>UN                                                                       | -                                                                                   | 8<br>5/16                                                                           | 700                                                                                 | 0.00001<br>m³                                                                       | 130                | 13<br>14.33        | 2,04<br>5.292                                                                       | ✓                                                                                     |
| YRH-202 | -046711                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 162<br>6 3/8                                                                        | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 50<br>1 15/16                                                                       | 700                                                                                 | 0.000173<br>m³                                                                      | 200                | 20<br>22.05        | 7,575<br>16.703                                                                     | -                                                                                     |
| YRH-206 | -870934                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 306<br>12 1/16                                                                      | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 150<br>5 7/8                                                                        | 700                                                                                 | 0.000527<br>m³                                                                      | 200                | 20<br>22.05        | 14,185<br>31.278                                                                    | ✓                                                                                     |
| YRH-302 | -046896                                                                             | 117<br>4 5/8                                                                        | 177<br>6<br>15/16                                                                   | 178,5<br>7 1/32                                                                     | 4<br>1/2"-12<br>UN                                                                  | 1<br>7/8"-16<br>UN                                                                  | 1<br>1/4"-7<br>UNC                                                                  | 65<br>2 1/2                                                                         | 700                                                                                 | 0.00031<br>m³                                                                       | 300                | 30<br>33.07        | 10,7<br>3.749                                                                       | -                                                                                     |
| YRH-603 | -046971                                                                             | 159<br>6 1/4                                                                        | 219<br>8 5/8                                                                        | 247,5<br>9 3/4                                                                      | 6<br>1/4"-12<br>UN                                                                  | 2<br>3/4"-16<br>UN                                                                  | 1<br>5/8"-5<br>1/2<br>UNS                                                           | 75<br>2 15/16                                                                       | 700                                                                                 | 0.00068<br>m³                                                                       | 600                | 60<br>66.14        | 30,3<br>6.615                                                                       | -                                                                                     |

## PRODUCT DETAILS

### SERIES Y-10-11 ACCESSORIES FOR HYDRAULIC PULLING



The accessories for hollow piston cylinders are used for compatibility with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The hand cranks and center spindle are designed for the hollow piston cylinders of the YRH series.

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y218-10 | -040368                                                                                     | 120<br>4 3/4                                                                                   | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,865<br>4.112                                                                               | YRH-202,<br>YRH-206                                                                   | ✓                                                                                     |
| Y218-11 | -040443                                                                                     | 514<br>20 1/4                                                                                  | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,69<br>3.726                                                                                | YRH-206,<br>YRH-202                                                                   | ✓                                                                                     |
| Y318-10 | -041761                                                                                     | 150<br>5 7/8                                                                                   | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 0,88<br>1.940                                                                                | YRH-302                                                                               | ✓                                                                                     |
| Y318-11 | -041846                                                                                     | 610<br>24 1/64                                                                                 | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 3,205<br>7.166                                                                               | YRH-302                                                                               | ✓                                                                                     |
| Y318-12 | -749865                                                                                     | 400<br>15 3/4                                                                                  | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 8<br>17.640                                                                                  | YRH-302                                                                               | ✓                                                                                     |
| Y518-10 | -044243                                                                                     | 240<br>9 7/16                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 2,1<br>4.631                                                                                 | YRH-603                                                                               | ✓                                                                                     |
| Y518-11 | -044328                                                                                     | 750<br>29 1/2                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 6,745<br>14.873                                                                              | YRH-603                                                                               | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-17 PRESSURE PIECE FOR AXLE BORES



The pressure pieces for axle bores are used for pulling bearings and gears in craft, industry, and workshops that are mounted on hollow shafts or in housings. The spindle pressure piece serves as a counter-axis to the puller, transferring the force onto the pressure piece through the spindle.

#### BENEFITS

- Broader application possibilities for various extraction situations
- The set is available in both 12-piece and 6-piece versions, and if needed, the pressure pieces are also available individually.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-01-17 | -233173                                                                                   | 20 - 23<br>13/16-7/8                                                                         | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-02-17 | -233258                                                                                   | 23 - 26<br>7/8-1 1/32                                                                        | 1               | 0,4<br>0.882                                                                                 | ✓                                                                                   |
| Y-03-17 | -233333                                                                                   | 26 - 30<br>1 1/32-1 3/16                                                                     | 1               | 0,5<br>1.103                                                                                 | ✓                                                                                   |
| Y-04-17 | -233418                                                                                   | 29 - 33<br>1 1/8-1 5/16                                                                      | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-05-17 | -233586                                                                                   | 33 - 39<br>1 5/16-1 9/16                                                                     | 1               | 0,165<br>0.364                                                                               | ✓                                                                                   |
| Y-06-17 | -233661                                                                                   | 36 - 42<br>1 7/16-1 5/8                                                                      | 1               | 0,2<br>0.441                                                                                 | ✓                                                                                   |
| Y-07-17 | -233746                                                                                   | 39 - 46<br>1 9/16-1 13/16                                                                    | 1               | 0,22<br>0.485                                                                                | ✓                                                                                   |
| Y-08-17 | -233821                                                                                   | 42 - 48<br>1 5/8-1 7/8                                                                       | 1               | 0,288<br>0.635                                                                               | ✓                                                                                   |
| Y-09-17 | -233906                                                                                   | 45 - 52<br>1 3/4-2 1/16                                                                      | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-10-17 | -234163                                                                                   | 49 - 58<br>1 15/16-2 5/16                                                                    | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-11-17 | -234248                                                                                   | 51 - 62<br>2 1/64-2 7/16                                                                     | 1               | 0,52<br>1.147                                                                                | ✓                                                                                   |
| Y-12-17 | -234408                                                                                   | 55 - 65<br>2 3/16-2 9/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-13-17 | -234576                                                                                   | 58 - 68<br>2 5/16-2 11/16                                                                    | 1               | 0,65<br>1.433                                                                                | ✓                                                                                   |
| Y-14-17 | -234651                                                                                   | 61 - 71<br>2 3/8-2 13/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-15-17 | -234736                                                                                   | 65 - 74<br>2 9/16-2 15/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-16-17 | -234811                                                                                   | 71 - 81<br>2 13/16-3 3/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-17-17 | -234996                                                                                   | 77 - 88<br>3 1/32-3 7/16                                                                     | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |



PRODUCT DETAILS



| #           | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|-------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-18-17     | -235078                                                                                   | 20 - 62<br>13/16-2 7/16                                                                      | 11              | 2,235<br>4.928                                                                               | ✓                                                                                   |
| Y-19-17     | -235153                                                                                   | 33 - 81<br>1 5/16-3 3/16                                                                     | 12              | 5,7<br>12.569                                                                                | ✓                                                                                   |
| Y-20-17     | -235238                                                                                   | 55 - 88<br>2 3/16-3 7/16                                                                     | 6               | 4,9<br>10.805                                                                                | ✓                                                                                   |
| Y-60-100-17 | -120466                                                                                   | 64 - 70<br>2 1/2-2 3/4                                                                       | 3               | 4,455<br>9.823                                                                               | ✓                                                                                   |

KUKKO // Pull forward



SERIES 670000

# POWER NUT



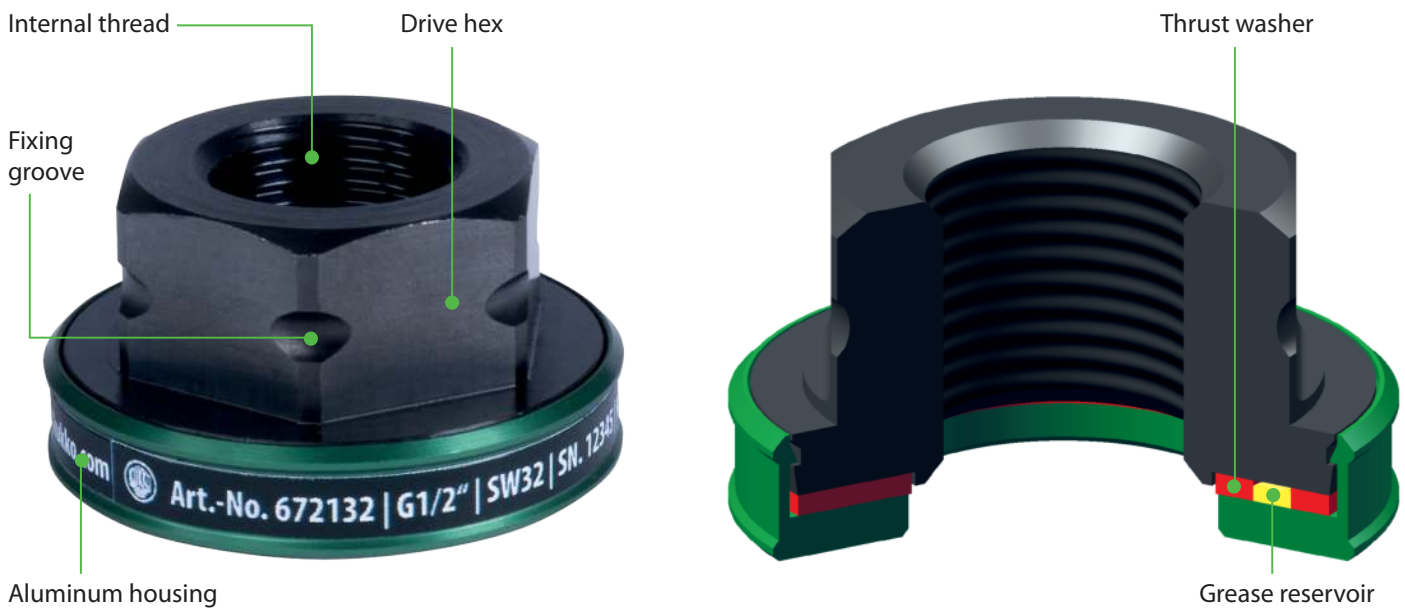
## APPLICATION

The power nut is a true powerhouse! It can deliver forces that would otherwise only be possible with hydraulics. KUKKO developed the power nut for easier clamping of tools and workpieces as well as driving with minimal friction loss. The power nut can be used as a lead screw and is suitable for use in fixture construction as well as assembly and clamping technology. The nut is also useful as an aid for pressing-in or as a clamping aid to generate higher clamping forces.

### Benefits

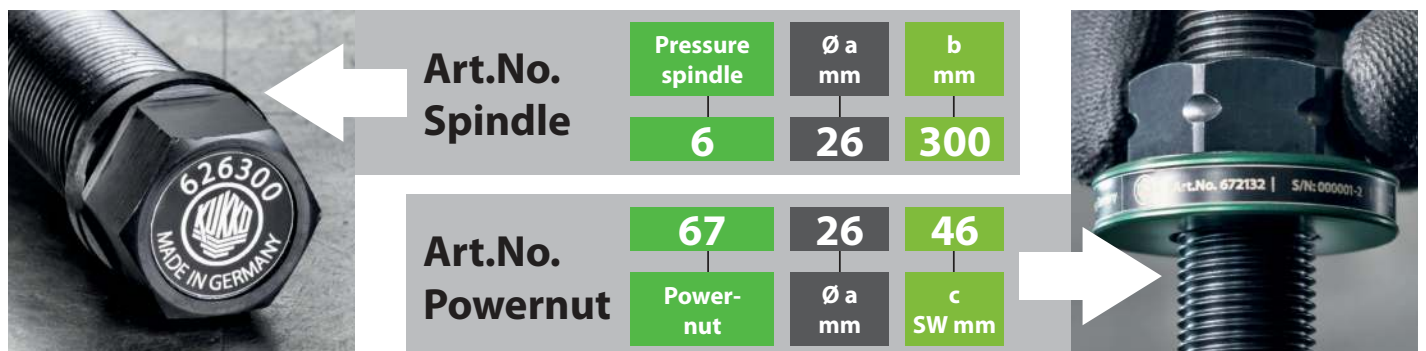
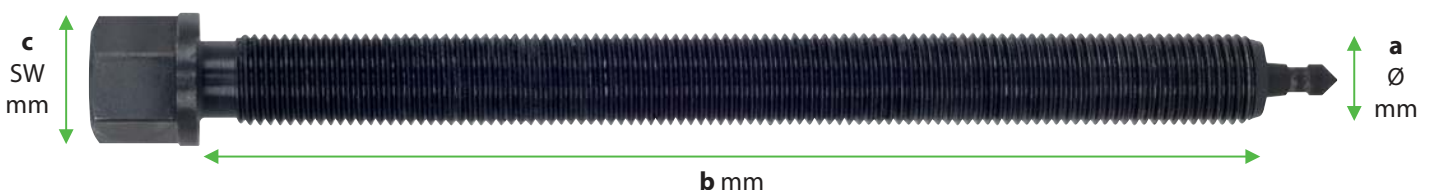
- Low overall height enables application in confined spaces
- Increased force generation with minimal friction
- Long service life without maintenance due to robust design
- Can be used above or below the crossbar to increase tensile or compressive force

## STRUCTURE OF THE POWER NUT



## ARTICLE NUMBER SYSTEMATICS

All KUKKO pressure spindles as well as power nuts have a descriptive item number. Both item numbers include the diameter of the thread, making it easy to quickly match the appropriate power nut to the respective spindle.



- a Thread diameter
- b Thread length
- c Hex size

## SPECIAL FEATURES OF THE SERIES

| Tension force                                                                                   | Art. No. Spindle | Art. No. Power Nut                    |
|-------------------------------------------------------------------------------------------------|------------------|---------------------------------------|
| <b>2 t</b><br> | <b>608...</b>    | <b>670817</b>   Ø30   M8 - SW17       |
|                                                                                                 | <b>610...</b>    | <b>671017</b>   Ø30   M10 - SW17      |
| <b>4 t</b><br> | <b>612...</b>    | <b>671217</b>   Ø30   M12x1,75 - SW17 |
|                                                                                                 | <b>612...</b>    | <b>671224</b>   Ø36   M12x1,5 - SW24  |
|                                                                                                 | <b>612...</b>    | <b>671317</b>   Ø30   M12x1,5 - SW17  |
| <b>6 t</b><br> | <b>615...</b>    | <b>671519</b>   Ø30   M15x1,5 - SW19  |
|                                                                                                 | <b>616...</b>    | <b>671624</b>   Ø36   M16x2 - SW24    |
|                                                                                                 | -                | <b>671827</b>   Ø46   M18x2,5 - SW27  |
|                                                                                                 | <b>618...</b>    | <b>671924</b>   Ø36   M18x1,5 - SW24  |
| <b>8 t</b><br> | -                | <b>672032</b>   Ø46   M20 - SW32      |
|                                                                                                 | <b>621...</b>    | <b>672132</b>   Ø46   G1/2 - SW32     |
|                                                                                                 | -                | <b>672432</b>   Ø46   M24 - SW32      |
|                                                                                                 | <b>626...</b>    | <b>672646</b>   Ø67   G3/4 - SW46     |
|                                                                                                 | -                | <b>673046</b>   Ø67   M30 - SW46      |
|                                                                                                 | -                | <b>673655</b>   Ø67   M36 - SW55      |



Depending on the spindle diameter, the power nut – to match the KUKKO spindles – is available in various sizes.

## FUNCTIONALITY

### INCREASED TENSION FORCE



The power nut is located above the crossbar. By turning the power nut, the spindle is pulled upward with increased force until the cylinder bush is pulled out.

### INCREASED COMPRESSIVE FORCE



The power nut is located below the crossbar. By actuating the hex, the spindle is pressed downward. The power nut multiplies the applied force by several times.

## APPLICATION EXAMPLES



The power nut is screwed onto the spindle



The power nut reduces the force required when actuating the spindle



## PRODUCT DETAILS

### SERIES 670000 POWER NUT



For more efficient clamping of tools and workpieces, as well as driving without significant friction loss, KUKKO has developed the Power Nut. The Power Nut can be used as a motion thread and is employed in fixture construction as well as in assembly and clamping technology. The nut also serves as a tool for pressing in or clamping aids to generate higher clamping forces.

## TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|        | GTIN                                                                              | mm/inch                                                                           |                                                                                   | mm/inch                                                                           | mm/inch                                                                           | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                     |
| 670817 | -080203                                                                           | 30<br>1 3/16                                                                      | M8                                                                                | 19,5<br>3/4                                                                       | 17<br>11/16                                                                       | 10                       | 1<br>1.10                | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 671017 | -283345                                                                           | 30<br>1 3/16                                                                      | M10                                                                               | 19,5<br>3/4                                                                       | 17<br>11/16                                                                       | 20                       | 2<br>2.20                | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 671217 | -283352                                                                           | 30<br>1 3/16                                                                      | M12                                                                               | 19,5<br>3/4                                                                       | 17<br>11/16                                                                       | 20                       | 2<br>2.20                | 0,035<br>0.772                                                                      | ✓                                                                                   |
| 671224 | -060823                                                                           | 36<br>1 7/16                                                                      | M12                                                                               | 21,5<br>7/8                                                                       | 24<br>15/16                                                                       | 20                       | 2<br>2.20                | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 671317 | -024115                                                                           | 30<br>1 3/16                                                                      | M 12x1,5                                                                          | 19,5<br>3/4                                                                       | 17<br>11/16                                                                       | 30                       | 3<br>3.31                | 0,035<br>0.077                                                                      | ✓                                                                                   |
| 671519 | -344459                                                                           | 30<br>1 3/16                                                                      | M15                                                                               | 19,5<br>3/4                                                                       | 19<br>3/4                                                                         | 40                       | 4<br>4.41                | 0,07<br>0.221                                                                       | ✓                                                                                   |
| 671624 | -283369                                                                           | 36<br>1 7/16                                                                      | M16                                                                               | 21,5<br>7/8                                                                       | 24<br>15/16                                                                       | 40                       | 4<br>4.41                | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 671827 | -283376                                                                           | 36<br>1 7/16                                                                      | M18                                                                               | 23<br>7/8                                                                         | 24<br>15/16                                                                       | 40                       | 4<br>4.41                | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 671924 | -009938                                                                           | 36<br>1 7/16                                                                      | M 18x1,5                                                                          | 21,5<br>7/8                                                                       | 24<br>15/16                                                                       | 50                       | 5<br>5.51                | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 672032 | -283383                                                                           | 46<br>1 13/16                                                                     | M20                                                                               | 24<br>15/16                                                                       | 32<br>1 1/4                                                                       | 60                       | 6<br>6.61                | 0,2<br>0.441                                                                        | ✓                                                                                   |
| 672132 | -283390                                                                           | 46<br>1 13/16                                                                     | G 1/2"                                                                            | 24<br>15/16                                                                       | 32<br>1 1/4                                                                       | 60                       | 6<br>6.61                | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 672432 | -283413                                                                           | 46<br>1 13/16                                                                     | M24                                                                               | 26<br>1 1/32                                                                      | 32<br>1 1/4                                                                       | 60                       | 6<br>6.61                | 0,17<br>0.375                                                                       | ✓                                                                                   |
| 672646 | -182105                                                                           | 67<br>2 5/8                                                                       | G 3/4"                                                                            | 31,5<br>1 1/4                                                                     | 46<br>1 13/16                                                                     | 80                       | 8<br>8.82                | 0,17<br>0.375                                                                       | ✓                                                                                   |
| 673046 | -283420                                                                           | 67<br>2 5/8                                                                       | M30                                                                               | 31,5<br>1 1/4                                                                     | 46<br>1 13/16                                                                     | 80                       | 8<br>8.82                | 0,17<br>0.375                                                                       | ✓                                                                                   |
| 673655 | -283437                                                                           | 67<br>2 5/8                                                                       | M36                                                                               | 31,5<br>1 1/4                                                                     | 55<br>2 3/16                                                                      | 80                       | 8<br>8.82                | 0,21<br>0.463                                                                       | ✓                                                                                   |







# REMOVING

When disassembling ball bearings, it must first be decided whether the bearing may be destroyed or should be preserved. The ball bearing can sit on a shaft or in a housing. There are also applications where both installation situations apply.

When disassembling with the ball bearing puller sets of series 69, the cage of the bearing must be drilled so that the semicircular parts of the bearing adapter can be threaded in. The ball bearing pullers of series 70 are used for non-destructive disassembly from the bearings. The specially developed jaws grip precisely into the raceway of the ball bearing.





KUKKO // Pull forward



SERIES 69 | 70 | 71 | 71-17mm

# BALL BEARING REMOVAL AND INSTALLATION



## APPLICATION

Many ball bearings sit on a shaft, in a housing, or even both. To ensure proper removal, a special type of pullers is required. First, the ball bearing to be pulled and its dimensions should be determined. For choosing the right puller, it is important whether the bearing will be destroyed or reused. With series 69 and 70, KUKKO offers various tools for ball bearing removal, whereas the bearing installation tool set of series 71 enables easy installation of ball bearings.

### Benefits

- Versatile application without damaging the shaft (series 69)
- Fast and safe selection thanks to marking of the Bearing adapter (series 69)
- The special crossbar design allows safe, easy hooking and lever-assisted self-tightening of the jaws (PULLPO Technology)
- Even damaged bearings can be gripped by the adjustable jaws (series 70)
- By combining impact ring and impact tube, installation forces are never transmitted through the rolling elements of the bearing, thus protecting it (series 71)

## FEATURES OF THE SERIES

### SERIES 69



69-A

The ball bearing puller sets of series 69 are used for pulling ball bearings of all types that sit in a housing and/or on a shaft. With this type of removal, the ball bearing is destroyed.

### SERIES 70



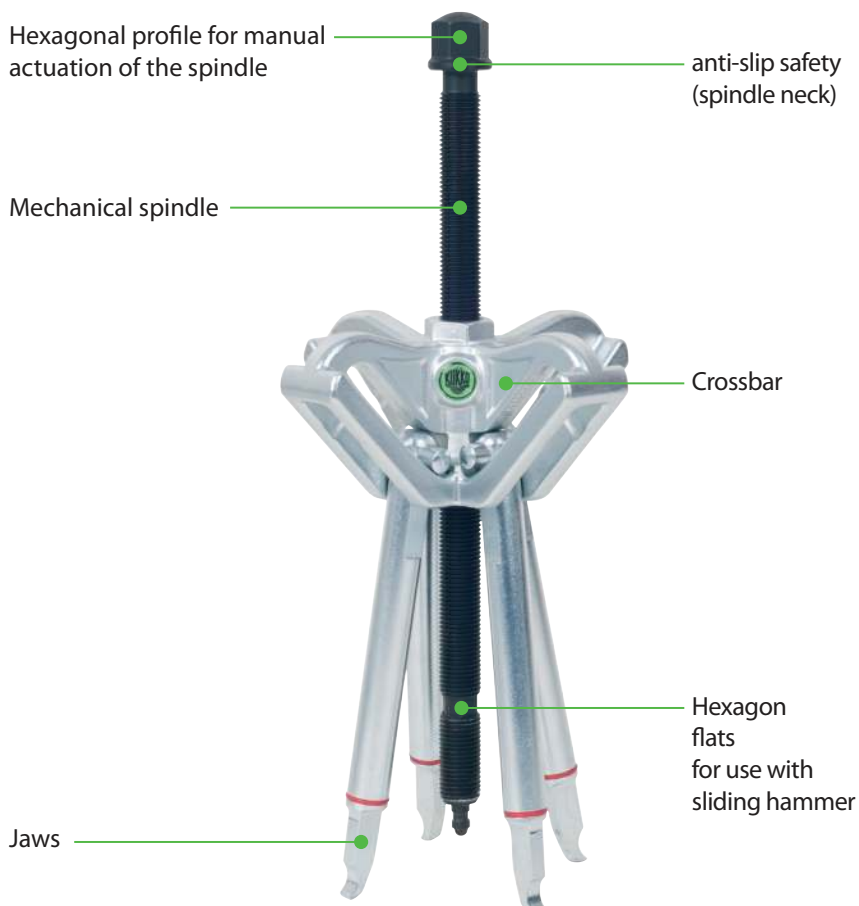
70-02

The ball bearing Puller of series 70 are used for non-destructive pulling of deep groove ball bearings without removing the shaft. With this type of removal, the ball bearing remains undamaged and can be reused.

## DESIGN OF SERIES 69



## DESIGN OF SERIES 70



### TIP:

For non-destructive extraction of roller bearings that sit in a housing where no shaft is available for support, the PULLPO can be connected to a sliding hammer. For this pulling operation, the spindle is reversed and screwed into the PULLPO from below so that the sliding hammer can be used.





# BEARING INSTALLATION WITH SERIES 71

The steel bearing installation tool set, as a lightweight external installation model of series 71, is used for fast, precise, and safe installation of bearings and seals in trades, industry, and workshops. The tool set enables damage-free installation of bearings without damaging axles, bearing housings, or seal rings.

## BENEFITS

- The required combination of impact ring and impact sleeve can be taken from the table in the case lid
- Impact ring and impact tube transmit the installation forces gently over the frame of the bearing
- The included SELECTHOR-Hammer can be used flexibly by swapping the supplied striking heads



## SETS

The pullers and pulling devices are also available as practical sets. Compiled to suit specific applications and industries, the sets impress with their universal applicability.



## APPLICATION EXAMPLES



Ball bearing removal with the 69-A



Ball bearing removal with the 70-0



Ball bearing installation with the K-71-L



## SERIES 69 UNIVERSAL BALL BEARING PULLER SET



The puller sets from series 69 are used to remove ball bearings of all types that are seated in a housing and/or on a shaft, in crafts, industry, and workshops. Although the affected ball bearing cannot be reused in this process, the application ensures safety and the integrity of the associated housing or shaft while also requiring minimal labor. The series 69 impresses with its variability; depending on the required ball bearing diameter, three different sets are available that allow for ideal and tailored use.

### BENEFITS

- Versatile application without damaging the spindle
- Application-oriented compilation for universal use
- Quick and secure selection by labeling the storage adapters
- By storing it in the box, the completeness of the set can be easily overviewed.

### TECHNICAL ATTRIBUTES

| #    | GTIN    | mm/inch                       | mm/inch        | SW          | mm/inch                             | ISO                                                                                                                                                                                                     | kg/lb          | MADE IN GERMANY<br>DEUTSCHES WERKZEUG<br>DFW |
|------|---------|-------------------------------|----------------|-------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------|
| 69-A | -781391 | 20 - 110<br>13/16 - 4<br>5/16 | 100<br>3 15/16 | 12<br>1/2   | 5,3, 5,8, 8<br>3/16;3/16;5/16       | 6004, 6005,<br>6006, 6007,<br>6008, 6009,<br>6010, 6011,<br>6012, 6013,<br>6201, 6202,<br>6203, 6204,<br>6205, 6206,<br>6300, 6301,<br>6302, 6303,<br>6304, 6305                                        | 1,085<br>4.079 | ✓                                            |
| 69-B | -781476 | 40 - 140<br>1 9/16 - 5<br>1/2 | 200<br>7 7/8   | 17<br>11/16 | 8, 9, 11, 12,5<br>5/16;3/8;7/16;1/2 | 6011, 6012,<br>6013, 6014,<br>6015, 6016,<br>6017, 6018,<br>6019, 6020,<br>6206, 6207,<br>6208, 6209,<br>6210,<br>6211, 6212,<br>6305, 6306,<br>6307, 6308,<br>6309, 6403,<br>6404, 6405,<br>6406, 6407 | 1,755<br>3.870 | ✓                                            |

PRODUCT DETAILS

| #    |  |  |  |  |  |                                                                                                                                                                                                                         |  |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |                                                                                                                                                                                                                                                                                                            | kg/lb                                                                               |                                                                                     |
| 69-C | -781544                                                                           | 60 - 240<br>2 3/8 - 9<br>7/16                                                     | 500<br>19 11/16                                                                   | 22<br>7/8                                                                         | 16, 19, 22, 25, 28, 32<br>5/8;3/4;7/8;1;1 1/8;1 1/4                               | 6021, 6022,<br>6024, 6026,<br>6028, 6030,<br>6032, 6213,<br>6214, 6215,<br>6216, 6217,<br>6218, 6219,<br>6220,<br>6221, 6222,<br>6224, 6226,<br>6228, 6230,<br>6310, 6311,<br>6312, 6313,<br>6314, 6315,<br>6316, 6317,<br>6318, 6319,<br>6320, 6321,<br>6406, 6407,<br>6408, 6409,<br>6410, 6411,<br>6412 | 11<br>24.255                                                                        | ✓                                                                                   |



SERIES 70  
BALL BEARING PULLER, WITHOUT HOOKS



The ball bearing pullers of series 70 are used for non-destructive removal of deep groove ball bearings without disassembling the shaft in crafts, industry, and workshops. With these pullers, bearings that are seated simultaneously in a housing and on a shaft can be removed easily and quickly, and can be reused if they are not already damaged. The series 70 impresses with its specifically developed jaws for precise installation in the bearing raceways. Various jaw sets are available for each puller size.

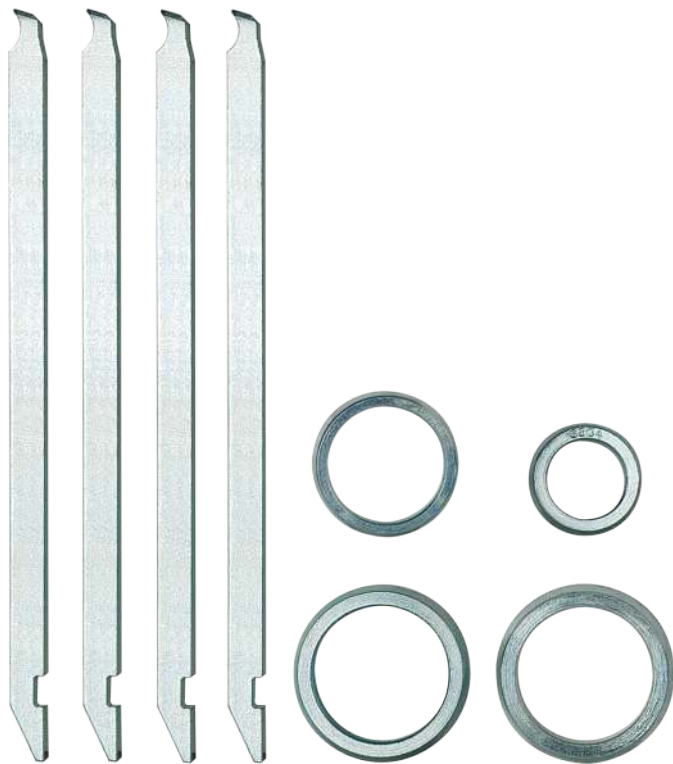
BENEFITS

- Suitable for a variety of groove diameters through infinitely adjustable hooks and internationally applicable.
- Self-damaged bearings can be grasped by the adjustable hooks.
- The claw shape ensures a secure grip, allowing for high pulling forces to be developed.
- The puller is also suitable for removing sealed bearings from housing bores.
- Quick and secure selection by marking the storage adapter

TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>kg/lb |  | Included in the set |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 70-1 | -021138                                                                                     | 17<br>11/16                                                                                    | 0,38<br>0.838                                                                                | 70-711, 70-712,<br>70-713                                                           | KS-70-A-K           | ✓                                                                                     |
| 70-2 | -021213                                                                                     | 17<br>11/16                                                                                    | 0,67<br>1.477                                                                                | 70-721, 70-722                                                                      | KS-70-A-K           | ✓                                                                                     |
| 70-3 | -021398                                                                                     | 24<br>15/16                                                                                    | 1,38<br>3.043                                                                                | 70-731, 70-732                                                                      | -                   | ✓                                                                                     |
| 70-4 | -316418                                                                                     | 22<br>7/8                                                                                      | 2,315<br>5.105                                                                               | 70-4730, 70-4731,<br>70-4733, 70-4734                                               | -                   | ✓                                                                                     |

## SERIES 70-4S PULLING JAW SET



The pulling jaw sets of series 70-S are suitable for bearing pullers of series 70 and are used for non-destructive removal of deep groove ball bearings without dismantling the shaft. In addition to the jaws, the sets also include anti-slip safety rings as spare parts.



## TECHNICAL ATTRIBUTES

| #       |  GTIN |  mm/inch |                            |  kg/lb |  |  |
|---------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 70-711  | -021473                                                                                  | 150<br>5 7/8                                                                                | 6000, 6001, 6002,<br>6003, 6200                                                                               | 0,3<br>0.662                                                                              | 70-1                                                                                  | ✓                                                                                     |
| 70-712  | -021541                                                                                  | 150<br>5 7/8                                                                                | 6004, 6005, 6006,<br>6201, 6202, 6203,<br>6300                                                                | 0,29<br>0.639                                                                             | 70-1                                                                                  | ✓                                                                                     |
| 70-713  | -021626                                                                                  | 170<br>6 11/16                                                                              | 6204, 6205, 6301,<br>6302, 6303                                                                               | 0,32<br>0.706                                                                             | 70-1                                                                                  | ✓                                                                                     |
| 70-721  | -021701                                                                                  | 180<br>7 1/16                                                                               | 6007, 6008, 6009,<br>6010, 6011, 6012,<br>6013                                                                | 1,75<br>3.859                                                                             | 70-2                                                                                  | ✓                                                                                     |
| 70-722  | -021886                                                                                  | 180<br>7 1/16                                                                               | 6011, 6012, 6206,<br>6207, 6304, 6005,<br>6306                                                                | 0,58<br>1.279                                                                             | 70-2                                                                                  | ✓                                                                                     |
| 70-731  | -021961                                                                                  | 217<br>8 9/16                                                                               | 6208, 6209, 6210,<br>6307, 6403, 6407                                                                         | 1,16<br>2.558                                                                             | 70-3                                                                                  | ✓                                                                                     |
| 70-732  | -022043                                                                                  | 217<br>8 9/16                                                                               | 6211, 6212, 6308,<br>6309, 6310, 6311,<br>6404, 6405, 6406,<br>6407, 6408                                     | 1,915<br>4.223                                                                            | 70-3                                                                                  | ✓                                                                                     |
| 70-4730 | -320453                                                                                  | 217<br>8 9/16                                                                               | 6014, 6015, 6016,<br>6017                                                                                     | 1,265<br>2.789                                                                            | 70-4                                                                                  | ✓                                                                                     |
| 70-4731 | -320521                                                                                  | 217<br>8 9/16                                                                               | 6018, 6019, 6020,<br>6213                                                                                     | 2,22<br>4.895                                                                             | 70-4                                                                                  | ✓                                                                                     |
| 70-4733 | -320781                                                                                  | 290<br>11 7/16                                                                              | 6216, 6217, 6218,<br>6219, 6220, 6221,<br>6222, 6312, 6313,<br>6314, 6315, 6316,<br>6317, 6410, 6411,<br>6412 | 8,78<br>19.360                                                                            | 70-4                                                                                  | ✓                                                                                     |



PRODUCT DETAILS



| #       | GTIN    | mm/inch        |            | kg/lb         |      |   |
|---------|---------|----------------|------------|---------------|------|---|
| 70-4734 | -320606 | 290<br>11 7/16 | 6021, 6409 | 1,36<br>2.999 | 70-4 | ✓ |

## PRODUCT DETAILS

### SERIES 70-K PULLER SETS FOR BALL BEARINGS



The bearing puller sets are used for non-destructive removal of deep groove ball bearings without disassembling the shaft. With these pullers, bearings that are simultaneously installed in a housing and on a shaft can be removed easily and quickly and can be reused.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- Quick and secure selection by labeling the storage adapters
- In the sentence, in addition to the pullers, there are also the corresponding puller sets and extractor rings, ensuring optimal application at all times.
- Suitable for a variety of groove diameters through infinitely adjustable hooks and applicable internationally.



#### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 70-K | -786754                                                                                     | 150 - 180<br>5 7/8 - 7 1/16                                                                    | 6000-6013,<br>6200-6207,<br>6300-6306                                                          | 10 - 65<br>3/8-2 9/16                                                                          | 26 - 100<br>1 1/32-3<br>15/16                                                                  | 6,165<br>13.594                                                                               | 70-1, 70-711,<br>70-712,<br>70-713, 70-2,<br>70-721,<br>70-722                             | ✓                                                                                     |
| 70-A | -022128                                                                                     | 150 - 217<br>5 7/8 - 8 9/16                                                                    | 6000-6013,<br>6200-6212,<br>6300-6311,<br>6403-6408                                            | 10 - 60<br>3/8-2 3/8                                                                           | 26 - 120<br>1 1/32-4<br>3/4                                                                    | 10,025<br>2.756                                                                               | 70-1, 70-711,<br>70-712,<br>70-713, 70-2,<br>70-721,<br>70-722, 70-3,<br>70-731,<br>70-732 | ✓                                                                                     |
| 70-B | -320866                                                                                     | 217 - 290<br>8 9/16 - 11<br>7/16                                                               | 6014-6021,<br>6213-6222,<br>6312-6317,<br>6409-6415                                            | 45 - 110<br>1 3/4-4 5/16                                                                       | 110 - 200<br>4 5/16-7<br>7/8                                                                   | 19,44<br>42.865                                                                               | 70-4, 70-4730,<br>70-4731,<br>70-4733,<br>70-4734                                          | ✓                                                                                     |

SERIES 70-0  
BALL BEARING PULLER "PULLPO"



The ball bearing puller "PULLPO" of series 70 is used for completely non-destructive removal of deep groove ball bearings without removing the shaft. Even without the possibility of support, the PULLPO can safely pull otherwise inaccessible bearings, thus ensuring the reuse of the components.

BENEFITS

- The special crossbar design allows for safe, easy hanging and the lever-amplified self-tensioning of the jaws (PULLPO Technology)
- Through the collar on the spindle neck, the torque wrench cannot slip during application, allowing for a mark-free removal.
- Four magnets for easy holding of the counter pressure ring



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>kg/lb | Included in the set         |  |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 70-01 | -908972                                                                                     | 13<br>1/2                                                                                      | 0,4<br>0.882                                                                                 | K-70-A, K-70-C,<br>K-70-A-C | 70-011, 70-012,<br>70-011-S, 70-012-S                                                 | ✓                                                                                     |
| 70-02 | -909580                                                                                     | 17<br>11/16                                                                                    | 1,3<br>2.867                                                                                 | K-70-B, K-70-C,<br>K-70-B-C | 70-021, 70-022,<br>70-021-S, 70-022-S                                                 | ✓                                                                                     |

SERIES 70-0-S  
PULLING JAW SET

The pulling jaw sets of the 70-0-S series are suitable for ball bearing pullers of the 70-0 series and are used for non-destructive removal of deep groove ball bearings without disassembling the shaft. In addition to the jaws, the sets also include stop rings as spare parts.



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>ISO | <br>kg/lb |  |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 70-011-S | -181306                                                                                     | 70<br>2 3/4                                                                                    | 6000, 6001, 6002,<br>6003, 6004, 6200,<br>6201, 6202, 6301                                 | 0,125<br>0.276                                                                               | 70-01                                                                                 | ✓                                                                                     |
| 70-012-S | -181313                                                                                     | 70<br>2 3/4                                                                                    | 6005, 6006, 6203,<br>6204, 6205, 6300,<br>6302, 6303, 6304                                 | 0,175<br>0.386                                                                               | 70-01                                                                                 | ✓                                                                                     |
| 70-021-S | -181344                                                                                     | 156<br>6 1/8                                                                                   | 6007, 6008, 6009,<br>6010, 6011, 6012,<br>6013, 6206, 6210,<br>6211, 6306, 6307            | 0,935<br>2.062                                                                               | 70-02                                                                                 | ✓                                                                                     |



PRODUCT DETAILS

|  | #       |  |                                                                        |  |  |  |  |
|--------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                | GTIN    | mm/inch                                                                           |                                                                                                                                                         |                                                                                   | kg/lb                                                                             |                                                                                     |                                                                                     |
| 70-022-S                                                                       | -181368 | 156<br>6 1/8                                                                      | 6014, 6015, 6016,<br>6017, 6018, 6019,<br>6020, 6207, 6208,<br>6209, 6212, 6305,<br>6308, 6309, 6310,<br>6311, 6403, 6404,<br>6405, 6406, 6407,<br>6408 | 1,16<br>2.558                                                                     | 70-02                                                                             | ✓                                                                                   |                                                                                     |

SERIES K-70  
BALL BEARING PULLER SETS "PULLPO"



The PULLPO bearing puller sets are used for completely non-destructive removal of deep groove ball bearings without disassembly of the shaft. Even without the possibility of support, the PULLPO can securely remove otherwise inaccessible bearings, thus ensuring the reuse of the affected parts.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The special crossbar design enables secure and easy suspension and the lever-amplifying self-tensioning of the jaws (PULLPO Technology).
- Four magnets for easy holding of the counter pressure ring



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                  |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-70-A | -058851                                                                                     | 70<br>2 3/4                                                                                    | 6000-6006,<br>6200-6205,<br>6300-6304                                                          | 10 - 30<br>3/8-1 3/16                                                                          | 26 - 55<br>1 1/32-2 1/16                                                                       | 1,91<br>4.212                                                                                  | 70-01-T,<br>70-01-T,<br>70-011,<br>70-012,<br>610120,<br>70-01-R,<br>700117  | ✓                                                                                     |
| K-70-B | -058868                                                                                     | 156<br>6 1/8                                                                                   | 6007-6020,<br>6206-6212,<br>6305-6311,<br>6403-6408                                            | 17 - 100<br>11/16-3 15/16                                                                      | 62 - 150<br>2 7/16-5 7/8                                                                       | 4,365<br>9.625                                                                                 | 70-02-T,<br>70-021,<br>70-022,<br>614242,<br>70-02-R,<br>700217,<br>70-021-S | ✓                                                                                     |

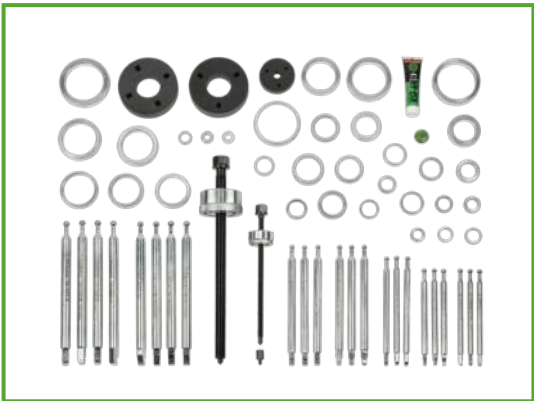
PRODUCT DETAILS



| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                      |  |
|--------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| K-70-C | -019999                                                                                   | 70 - 156<br>2 3/4 - 6 1/8                                                                    | 6000-6020,<br>6200-6212,<br>6300-6311,<br>6403-6408                                          | 10 - 100<br>3/8-3 15/16                                                                      | 26 - 150<br>1 1/32-5 7/8                                                                     | 7,125<br>15.711                                                                              | 70-01-T,<br>70-02-T,<br>70-011,<br>70-012,<br>70-021,<br>70-022,<br>610120,<br>614242,<br>70-01-R,<br>70-02-R,<br>700117,<br>700217,<br>70-021-S | ✓                                                                                   |

PRODUCT DETAILS

SERIES KS-70-A-K  
BALL BEARING PULLER SET



The 60-piece ball bearing puller set of the KS-70-A-K series is used for non-destructive removal of ball bearings without disassembling the shaft. With these pullers, bearings that are simultaneously seated in a housing and on a shaft can be easily and quickly removed and can be reused.

BENEFITS

- In the sentence, in addition to the pullers, there are also the corresponding puller sets and extractor rings, ensuring optimal application at all times.
- Self-damaged bearings can be grasped by the adjustable hooks.



TECHNICAL ATTRIBUTES

| #         |  |  |  |  |  |  | Consists of              |  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------|
|           | GTIN                                                                                | mm/inch                                                                             |                                                                                     | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                          |                                                                                       |
| KS-70-A-K | -956362                                                                             | 156 - 233<br>6 1/8 - 9 3/16                                                         | 6000–6013,<br>6200–6212,<br>6300–6311,<br>6403–6408                                 | 10 - 100<br>3/8-3 15/16                                                             | 26 - 150<br>1 1/32-5 7/8                                                            | 9,875<br>21.774                                                                       | 70-A-K-36,<br>70-1, 70-2 | ✓                                                                                     |



KUKKO // Pull forward



SERIES 13

# DISMOUNTING DEVICE FOR BALL BEARINGS



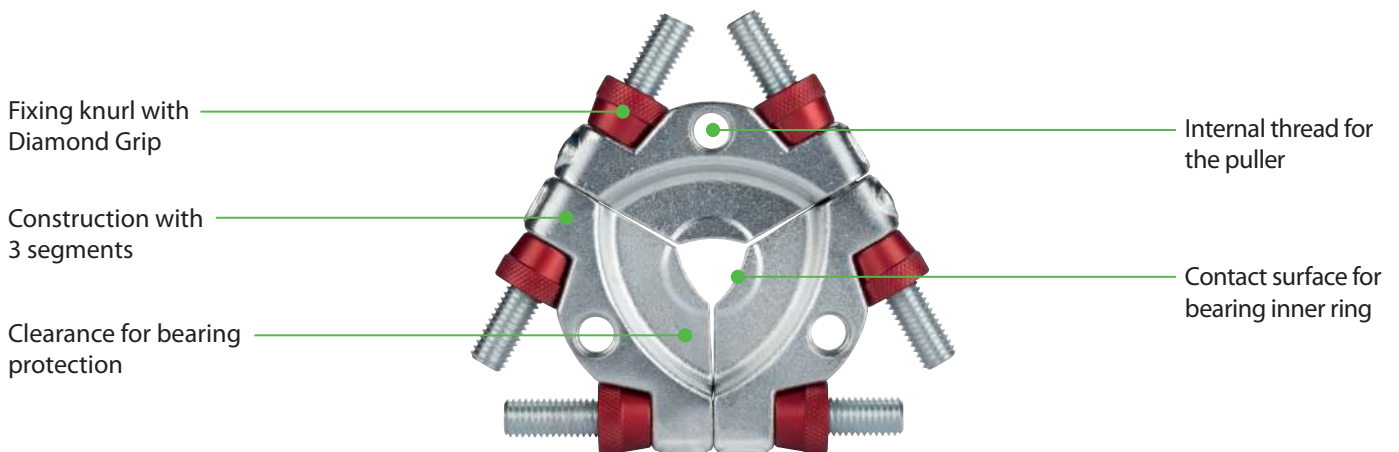
# APPLICATION

The 3-piece dismantling device TRI-PULL of series 13 is used for gentle removal of spherical and tapered roller bearings in drive technology. The segments are placed behind the bearing on the inner ring, ensuring an even transmission of force to the entire bearing. The form-fit positioning of the separating pieces on the inner ring protects the bearing from damage during removal. The even distribution of force around the inner ring circumference prevents tilting or misalignment of the bearing ring during dismantling.

## Benefits

- The form-fit positioning of the separating pieces on the inner ring protects the bearing from damage during dismantling
- The even distribution of force around the inner ring circumference prevents tilting or misalignment of the bearing ring during dismantling
- The sharp cutting edges allow non-destructive removal even where other pullers cannot be used

# DESIGN OF THE 3-PIECE DISMOUNTING DEVICE TRI-PULL

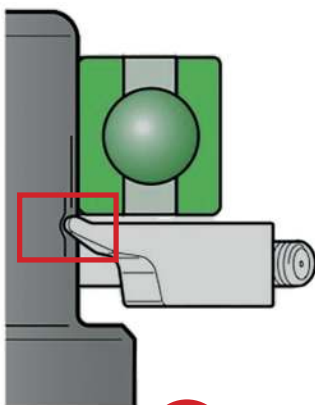


# PRINCIPLE AND APPLICATION

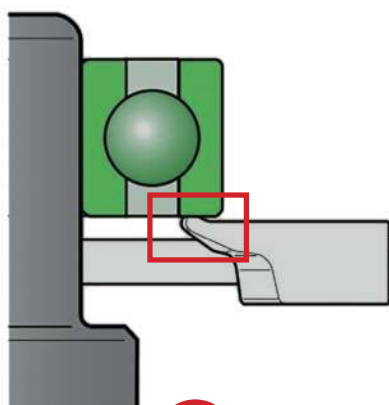
The lip of the separator TRI-PULL (series 13) rests solely on the bearing inner ring, so the component is subjected to minimal stress during dismantling.



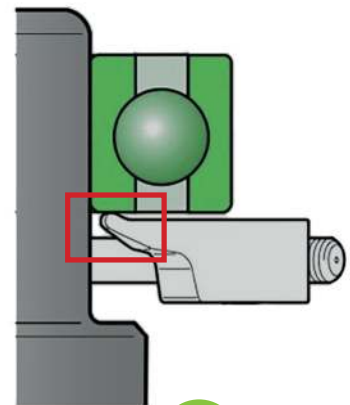
**WRONG!**

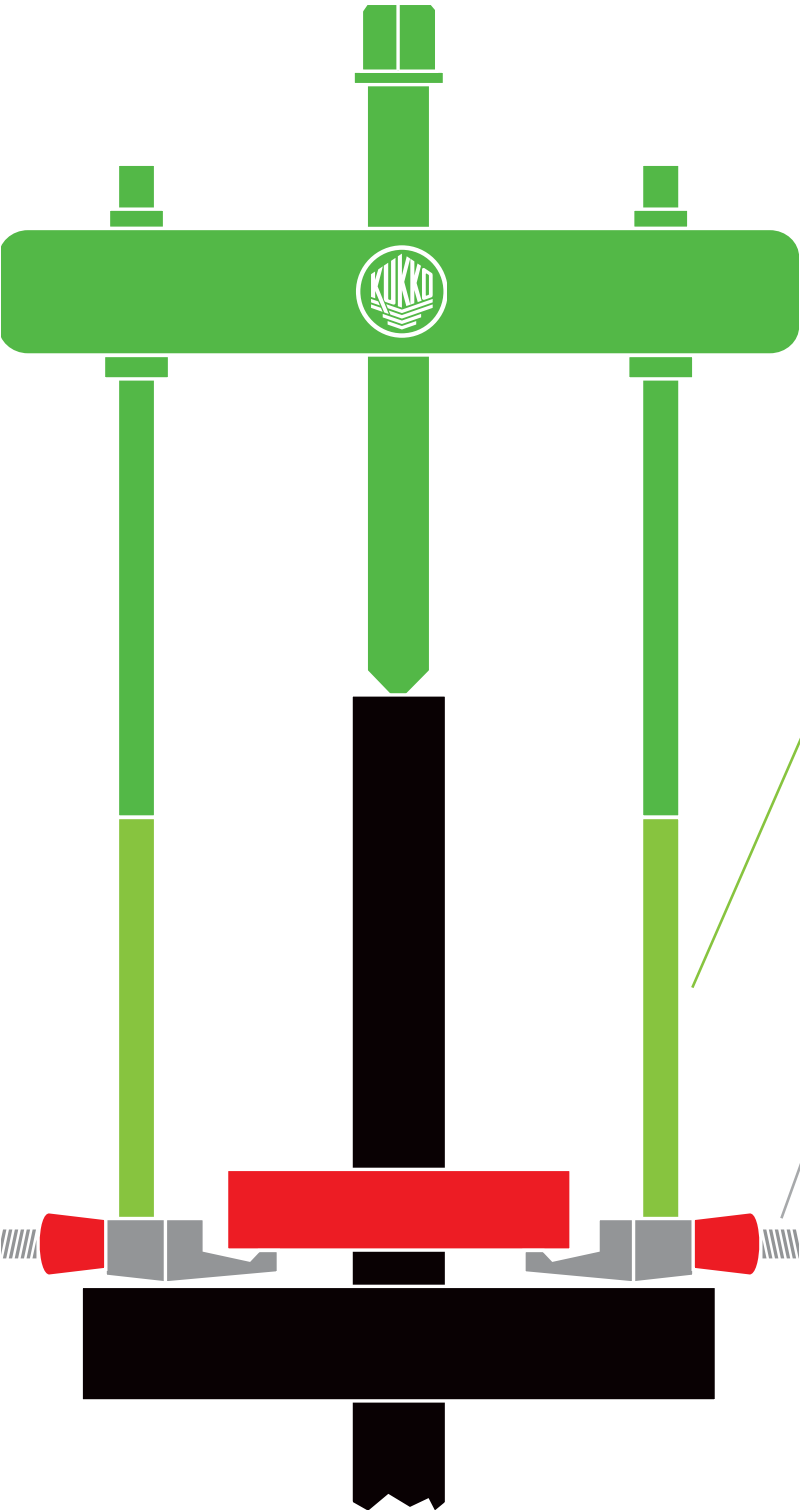


**WRONG!**



**CORRECT!**





Pullers | SERIES 68

| Art. No. |        |     |
|----------|--------|-----|
| 68-1     | 50-110 | 150 |
| 68-2     | 60-150 | 200 |
| 68-3     | 60-200 | 250 |
|          |        |     |



Extensions | SERIES 19

| Art. No. | ↓<br>mm | für<br>for |
|----------|---------|------------|
| 19-1-S   | 100     | 68-1       |
| 19-2-S   | 100     | 68-2       |
| 19-3-S   | 100     | 68-3       |
|          |         |            |



Dismounting device | SERIES 13

| Art. No. | <br>mm | <br>mm |
|----------|--------|--------|
| 13-1     | 5- 60  | 60     |
| 13-2     | 12- 75 | 75     |
| 13-3     | 22-115 | 115    |
|          |        |        |



Sets

| Set<br>(Art.No.) | Content<br>(Art.No.) |      |        |  |
|------------------|----------------------|------|--------|--|
| 13-A             | 13-1                 | 68-1 | 19-1-S |  |
| 13-B             | 13-2                 | 68-2 | 19-2-S |  |
| 13-C             | 13-3                 | 68-3 | 19-3-S |  |
|                  |                      |      |        |  |



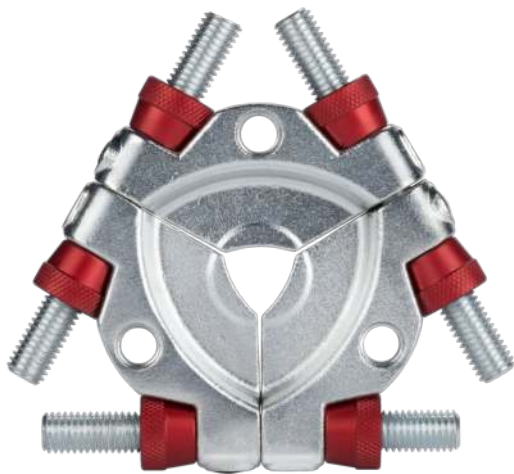
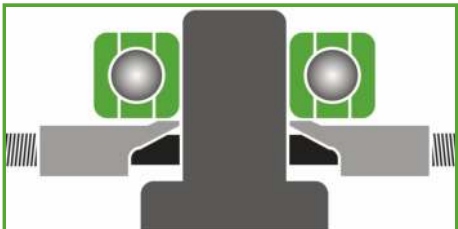


SERIES 13  
TRI-PULL WITH 3 SEGMENTS

The 3-part TRI-PULL removing device of series 13 is used in drive technology for the gentle removal of spherical roller bearings and tapered roller bearings. The segments are positioned behind the bearing on the inner ring and thus ensure uniform force transmission across the complete bearing.

BENEFITS

- The interference-fit installation of the separators on the inner ring protects the bearing from damage during disassembly.
- The uniform force distribution on the inner ring circumference prevents tilting or misalignment of the bearing ring during disassembly.
- The sharp edges also enable non-destructive disassembly where other Pullers are inapplicable.



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>kg/lb |  | Included in<br>the set |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 13-1 | -041228                                                                                     | 12 - 50<br>1/2 - 1<br>15/16                                                                    | M10                                                                                       | 34<br>1 5/16                                                                                       | 4<br>3/16                                                                                          | 9<br>3/8                                                                                           | 13,5<br>9/16                                                                                       | 0,6<br>1.323                                                                                 | 68-1                                                                                  | 13-A                   | ✓                                                                                     |
| 13-2 | -169724                                                                                     | 25 - 100<br>1 - 3 15/16                                                                        | M14x1,5                                                                                   | 63<br>2 1/2                                                                                        | 5,7<br>1/4                                                                                         | 16<br>5/8                                                                                          | 28<br>1 1/8                                                                                        | 3,61<br>7.960                                                                                | 68-2                                                                                  | 13-B                   | ✓                                                                                     |
| 13-3 | -041235                                                                                     | 50 - 160<br>1 15/16 - 6<br>5/16                                                                | M18x1,5                                                                                   | 87<br>3 7/16                                                                                       | 7<br>1/4                                                                                           | 18<br>11/16                                                                                        | 35<br>1 3/8                                                                                        | 7,325<br>16.152                                                                              | 68-3                                                                                  | 13-C                   | ✓                                                                                     |



### SERIES K-13 CASES AND SETS FOR ASSEMBLY AND DISASSEMBLY



The 9-piece disassembly device sets of the K-13 series are used for the disassembly of spherical and tapered roller bearings in craft, industry, and workshop when there is not enough space for jaws. The segments of the TRI-PULL are placed behind the bearing on the inner ring, ensuring a uniform force transmission over the entire bearing.

#### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.



#### TECHNICAL ATTRIBUTES

| #    |  GTIN |  mm/inch |  mm/inch |  mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. |  kg/lb | Consists of           |  |
|------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|
| 13-A | -060786                                                                                  | 260<br>10 1/4                                                                               | 12 - 50<br>1/2 - 1 15/16                                                                    | 13<br>1/2                                                                                   | 50                             | 5<br>5.51                               | 9<br>0.662                                                                                  | 68-1, 13-1,<br>19-1-S | ✓                                                                                     |
| 13-B | -060793                                                                                  | 380<br>14 15/16                                                                             | 25 - 100<br>1 - 3 15/16                                                                     | 22<br>7/8                                                                                   | 70                             | 7<br>7.72                               | 0,3<br>0.662                                                                                | 68-2, 13-2,<br>19-2-S | ✓                                                                                     |
| 13-C | -060809                                                                                  | 430<br>16 15/16                                                                             | 50 - 160<br>1 15/16 - 6<br>5/16                                                             | 27<br>1 1/16                                                                                | 100                            | 10<br>11.02                             | 0,3<br>0.662                                                                                | 68-3, 13-3,<br>19-3-S | ✓                                                                                     |

SERIES 222  
SEAL RING DISASSEMBLY TOOLS



The seal ring removal tools of series 222 are used for extracting radial shaft seals, axial shaft seals, sealing sleeves, and other bearing seals in crafts, industry, and workshops. Depending on the available space, the pulling process can be carried out either with the extractor lever 222-U or the sliding hammer device with handle 222-S.

BENEFITS

- The Slide hammers with 2-component Powergrip ensure safe and comfortable working
- The ejector lever can be used universally in situations where the necessary space is available



TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  | Included in the set   |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------|
|       | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg                                                                                | kg/lb                                                                              |                       |                                                                                     |
| 222-U | -777790                                                                           | 300<br>11 13/16                                                                   |                                                                                   |                                                                                   | -                                                                                 | 0,565<br>1.246                                                                     | -                     | ✓                                                                                   |
| 222-S | -018497                                                                           | 650<br>25 9/16                                                                    | 400<br>15 3/4                                                                     | 240<br>9 7/16                                                                     | 0.5                                                                               | 1,265<br>2.789                                                                     | K-222-1/7,<br>K-222-A | ✓                                                                                   |
| 222-1 | -035722                                                                           | 430<br>16 15/16                                                                   | 400<br>15 3/4                                                                     | 240<br>9 7/16                                                                     | 0.5                                                                               | 0,82<br>1.808                                                                      | -                     | ✓                                                                                   |

SERIES K-222  
SEAL RING PULLER SET (SIMMERRINGE®) IN CASE



The 11-piece seal ring puller set from the K-222 series is ideal for removing Simmerringe®, radial shaft seals, sealing sleeves, seals, as well as bearing and shaft seals. The set includes a seal ring extraction tool with a sliding hammer, a universal extractor lever, five picks and hooks in various shapes, a special screw set, two different extensions, and a replacement blade.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the case, the completeness of the set can be easily surveyed.
- Ergonomically contoured 2K comfort handle (PB Swiss) offers optimal grip and enables sensitive as well as powerful work



TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  |  | Consists of                                                                                                      |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | kg/lb                                                                                |                                                                                                                  |                                                                                       |
| K-222-A New | -024450                                                                             | 300<br>11 13/16                                                                     | 400<br>15 3/4                                                                       | 240<br>9 7/16                                                                       | 0.5                                                                                 | 4,765<br>6.383                                                                       | 222-1, 222-U,<br>222-S, 177-1,<br>177-2, 177-3,<br>177-4, 177-5,<br>222-1-100,<br>222-1-250,<br>222-1-50S, 222-E | ✓                                                                                     |

## THE PULLER OF SERIES 68



### MULTI-TRAVERSE WITH POWER NUT

The new multi-cross beam of series 68 provides space for up to four stud bolts. This guarantees a larger contact surface and thus a more even force distribution.

There are three small magnets attached beneath the cross beam, which are used to align and fix the power nut.

The power nut from KUKKO guarantees more force-saving clamping of tools and workpieces as well as driving without significant friction loss.

### INCREASED TENSION FORCE



The power nut is located above the cross beam. By turning the power nut, the spindle is pulled upwards with increased force until the cylinder bushing is pulled out.

### INCREASED PRESSURE FORCE



The power nut is located below the cross beam. By operating the hexagon, the spindle is pressed downwards. The power nut increases the applied force many times over.



## SERIES 68 2-JAW PULLER



The combination pullers of series 68 can be combined with removing devices of series 13, internal extractors of series 21, ball bearing puller sets of series 69 and other parts. Thanks to the different positioning options of the power nut, the devices are suitable both for pressing off and pulling off (Push & Pull) components.

### BENEFITS

- By screwing the separator and puller device, the highest stability when pulling is ensured.
- The foot bolts ensure a particularly firm standing when pulling off.
- Multi-Traversal with scale as adjustment aid for the foot bolts
- Due to its simple design, special pulling devices for series 68 can also be easily produced for in-house use



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  | Included<br>in the set |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           | kg/lb                                                                                |                                                                                       |                        |                                                                                       |
| 68-0  | -446641                                                                             | 20 - 110<br>13/16 - 4<br>5/16                                                       | 75<br>2 15/16                                                                       | 13<br>1/2                                                                           | 40<br>29.50                                                                         | 15                       | 1.5<br>1.65              | 0,3<br>0.662                                                                         | 15-00                                                                                 | -                      | ✓                                                                                     |
| 68-10 | -009440                                                                             | 55 - 150<br>2 3/16 - 5<br>7/8                                                       | 230<br>9 1/16                                                                       | 19<br>3/4                                                                           | 100<br>73.76                                                                        | 50                       | 5<br>5.51                | 0,3<br>0.662                                                                         | -                                                                                     | -                      | ✓                                                                                     |
| 68-1  | -007385                                                                             | 58 - 150<br>2 5/16 - 5<br>7/8                                                       | 160<br>6 5/16                                                                       | 13<br>1/2                                                                           | 70<br>51.63                                                                         | 50                       | 5<br>5.51                | 1,555<br>3.429                                                                       | 19-1-S,<br>13-1                                                                       | 13-A                   | ✓                                                                                     |
| 68-2  | -007392                                                                             | 68 - 244<br>2 11/16 - 9<br>5/8                                                      | 280<br>11 1/32                                                                      | 22<br>7/8                                                                           | 120<br>88.51                                                                        | 70                       | 7<br>7.72                | 5,025<br>11.576                                                                      | 19-2-S,<br>13-2                                                                       | 13-B                   | ✓                                                                                     |
| 68-3  | -007408                                                                             | 75 - 310<br>2 15/16 -<br>12 3/16                                                    | 330<br>12 1                                                                         | 27<br>1 1/16                                                                        | 280<br>206.53                                                                       | 100                      | 10<br>11.02              | 0,3<br>0.662                                                                         | 19-3-S,<br>13-3                                                                       | 13-C                   | ✓                                                                                     |

## SERIES K-68 MULTI-SIDE BOLT PULLER SET



The K-68 series multi-side bolt puller sets are used for pulling components with threaded holes. The pull and push sets impress with KUKKO Power Nut Technology integrated into the crossbar, which makes it possible to exert a level of force that would otherwise only be achievable using hydraulics. The position of the Power Nut can be changed instantly at the push of a button. When the Power Nut is positioned above the crossbar, increased tension force is achieved. When the Power Nut is positioned below the crossbar, the push load is increased.



### TECHNICAL ATTRIBUTES

| #      | GTIN    | mm/inch        | mm/inch                       | SW<br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. |                                                                                                          | kg/lb         | Consists of | MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>©FWI |
|--------|---------|----------------|-------------------------------|---------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------|---------------|-------------|--------------------------------------------------|
| K-68-A | -009136 | 100<br>3 15/16 | 20 - 110<br>13/16 - 4<br>5/16 | 13<br>1/2     | 15                             | 1.5<br>1.65                             | M4, M5,<br>M6, 1/4"-28<br>UNF                                                                            | 0,3<br>0.662  | 68-0        | ✓                                                |
| K-68-B | -009143 | 205<br>8 1/16  | 58 - 150<br>2 5/16 - 5<br>7/8 | 13<br>1/2     | 50                             | 5<br>5.51                               | M8, M10,<br>1/4"-28<br>UNF,<br>5/16"-24<br>UNF,<br>5/16"-18<br>UNC,<br>3/8"-16<br>UNC,<br>3/8"-24<br>UNF | 6,9<br>15.215 | 68-1        | ✓                                                |
| K-68-C | -009150 | 270<br>10 5/8  | 55 - 150<br>2 3/16 - 5<br>7/8 | 19<br>3/4     | 50                             | 5<br>5.51                               | M10, M12,<br>M14,<br>3/8"-16<br>UNC,<br>3/8"-24<br>UNF,<br>7/16"-14<br>UNC,<br>1/2"-13<br>UNC            | 8,79<br>0.662 | 68-10       | ✓                                                |

### SERIES 29-A-69 UNIVERSAL PULLER SET FOR SEPARATOR, REMOVAL, AND BALL BEARINGS



The 12-piece Universal Puller, Separator, and Ball Bearing Puller Set of the series 29-A-69 is used for easy removal of bearings, drums, discs, pole wheels, and similar parts on motorcycles and other small engines. The set is suitable for separation, pulling, and disassembly of ball bearings.

#### BENEFITS

- Application-oriented assembly for universal use
- The screw connection of the separator and puller device ensures the highest stability during extraction.
- Screwing the separator jaws the other way into the puller device increases the bearing surface and allows for a gentler extraction.



#### TECHNICAL ATTRIBUTES

## PRODUCT DETAILS

| #       |  |                                                                                                                  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of             |  |
|---------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              |                                                                                                                                                                                                   | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                            |                                                                                     |
| 29-A-69 | -101878                                                                           | 6004,<br>6005,<br>6006,<br>6007,<br>6008,<br>6009,<br>6010,<br>6011,<br>6012,<br>6013,<br>6201,<br>6202,<br>6203,<br>6204,<br>6205,<br>6206,<br>6300,<br>6301,<br>6302,<br>6303,<br>6304,<br>6305 | 200<br>7 7/8                                                                      | 20 - 110<br>13/16 - 4<br>5/16                                                     | 6 - 46<br>1/4 - 1<br>13/16                                                        | 20 -<br>100<br>13/16 -<br>3<br>15/16                                              | 200<br>7 7/8                                                                      | 12<br>1/2                                                                         | 15                       | 1.5<br>1.65              | 2,02<br>4.851                                                                       | 69-A,<br>225-150,<br>15-00 | ✓                                                                                   |





KUKKO // *Pull forward*



# REMOVING





## APPLICATION

Whether for extracting a stud bolt, removing a seal ring or pulling off a steering arm – KUKKO offers a variety of pullers for different applications, providing the perfect solution for even the biggest challenge.

## WEDGE EXTRACTOR PLIERS SERIES 139

### DESCRIPTION

The wedge extractor pliers for wedges in keyways are used for the easy and damage-free removal of stuck wedges from the keyways of shafts in craft, industry, and workshop settings. The pliers make it possible to loosen even tightly seated wedges from the keyways of drive shafts.

### BENEFITS

- The adjustable spread of the clamping jaws enables variable application depending on the size of the stuck wedge
- The hand knobs for adjustment make the use of external tools unnecessary



139-1



Extracting a wedge

## SEPARATING FORKS SERIES 135

### DESCRIPTION

The separating forks of series 135 are used for loosening ball stud joints stuck in a conical seat, when removing steering arms, for the dismantling of shock absorbers, and for other separating operations of all kinds in automotive and industry.

### BENEFITS

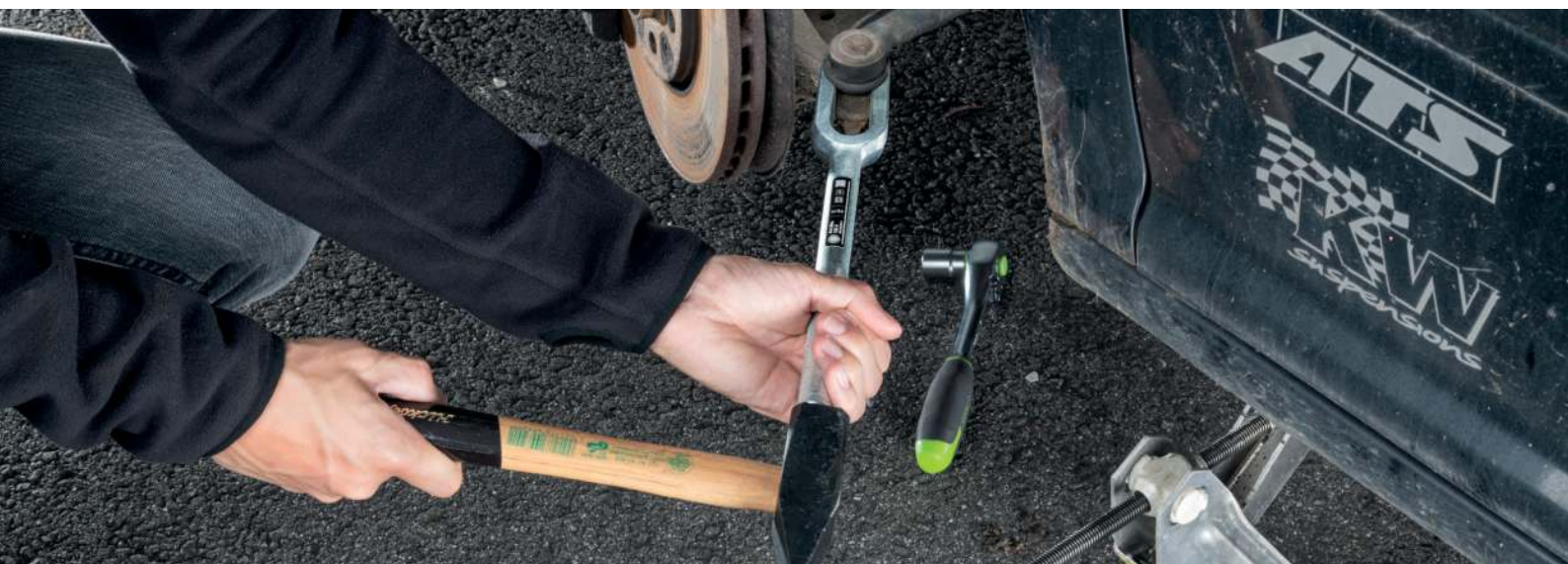
- The set includes sizes with different jaw openings for application in every case



135-1 | 135-3 | 135-5



Separating a control arm from the wheel suspension



## PICKS AND HOOKS SERIES 177

### DESCRIPTION

The picks with 2K comfort grip are used for removing stuck sealing washers, separating wires in a wiring harness, and other tasks in plumbing and automotive. The Picks & Hooks enable sensitive as well as powerful work thanks to their two-component handle and high-quality construction.

### BENEFITS

- Thanks to the rotary cap and quick-rotation zone, the two-component handle allows secure and comfortable operation even with one hand
- The slim handle makes it possible to work in tight and hard-to-reach places



## RETAINING RING PLIERS SERIES 728K

### DESCRIPTION

The retaining ring pliers for external circlips are used for installing and dismantling circlips on shafts in craft, industry, and workshops. The simple, yet robustly forged design allows safe and fast work in every application.

### BENEFITS

- The tips are stable and anti-slip; even in hard-to-reach places, the pliers allow comfortable working
- The pliers body and tips are oil-hardened and drop-forged from chrome-vanadium steel, delivering high durability and robustness



728K-A01



Removing a circlip

## SEAL RING DISSASSEMBLY TOOLS SERIES 222-U

### DESCRIPTION

The seal ring disassembly tools of series 222 are used for extracting radial shaft seals, axial shaft seals, sealing sleeves, and other bearing seals in craft, industry, and workshops. Depending on available space, the pulling operation is carried out either with the extractor lever 222-U or the sliding hammer device with handle 222-S.

### Benefits

- The sliding hammer with 2-component powergrip ensures safe and comfortable working
- The extractor lever is universally applicable in situations where there is enough space



222-U



222-S

## STEERING ARM PULLER SERIES 204-44

### DESCRIPTION

The mechanical universal steering arm puller of series 204-44 is used for pulling steering arms on medium and heavy commercial vehicles. Thanks to its solid and stable construction, it offers a variable solution for robust yet safe pulling of steering arms.

### Benefits

- With increasing spindle pressure, the jaws grip the part to be pulled with automatically increasing force
- The exceptional robustness makes the steering arm puller the ideal tool for truck work



204-44

## STUD EXTRACTOR SERIES 50

### DESCRIPTION

Stud extractors are used to remove stud bolts or broken components in automotive and industry. KUKKO stud extractors are available in various diameters and designs.

### Benefits

- During extraction, the stud bolt is within the area of the key and cannot break off
- The specially profiled knurled nut provides a surface for a secure grip
- Thanks to the grooved knurled nut, the stud bolt is firmly pressed against the internal teeth



50-1

## DISASSEMBLY OF SPRING PINS AND GROOVED PINS - SERIES 223-0

### DESCRIPTION

Dowel pin pullers of series 223-0 are used for the removal of spring pins and grooved pins. The three jaws mounted in the chuck can be adjusted to suit the specific application. The micro-serration further increases the holding force to ensure a secure grip. The ergonomically shaped, solid sliding weight allows optimal transfer of the applied force and achieves a strong impact effect.

### Benefits

- Universally adjustable clamping range
- Increased force build-up through fine ratcheting of the jaws
- The shape of the sliding weight enables a high impact mass of the slide hammer with easy operation



223-1



223-2



SERIES 23  
PULLER FOR GROOVE BALL BEARING INNER  
RINGS



The puller of series 23 is used for pulling shoulder bearing inner rings on alternators and electric motors in trades, workshops, and industry. Due to its design, this puller allows parts to be pulled that you can grip. Series 23 impresses with its stability and ease of use, ensuring safe pulling.

BENEFITS

- Crisis-proof tool perfect for the repair of various electric motors
- Ideal for removing deep bearings and shoulder bearing rings



TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |  |
|----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 23 | -012631                                                                                     | 5 - 32<br>3/16 - 1 1/4                                                                         | 17<br>11/16                                                                                    | 1,42<br>3.131                                                                                | 24-B, 24-C          | ✓                                                                                     |

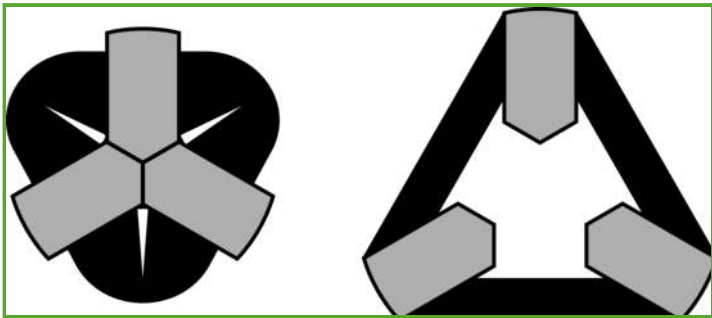
SERIES 223-0  
DOWEL PIN PULLER WITH SLIDING HAMMER



The three Dowel pin puller tools in the 223-0 series are used for Removing tension pins and grooved pins. Depending on the model, the three claws can be adjusted to the respective application within a range of 1–8 mm, 1–13 mm, or 5–20 mm. The ergonomically shaped, solid sliding piece ensures optimal force transmission and generates a strong shock effect. A key is included for effortless tensioning and opening.

BENEFITS

- Universally adjustable spread up to 20 mm
- Increased power development through fine notching of the jaws
- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents pinching and ensures a safe working process.
- If there is not enough space available, the impact weight can be reversed.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 223-1 New | -917721                                                                                     | 435<br>17 1/8                                                                                  | 1 - 8<br>1/32 - 5/16                                                                           | 395<br>12 13/16                                                                                | 200<br>7 7/8                                                                                   | 0.5                                                                                        | 1,05<br>2.205                                                                                  | ✓                                                                                     |
| 223-2 New | -007088                                                                                     | 395<br>15 9/16                                                                                 | 1 - 13<br>1/32 - 1/2                                                                           | 290<br>11 7/16                                                                                 | 250<br>9 13/16                                                                                 | 1                                                                                          | 2,13<br>4.697                                                                                  | ✓                                                                                     |
| 223-3 New | -024047                                                                                     | 540<br>21 1/4                                                                                  | 5 - 20<br>3/16 - 13/16                                                                         | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                        | 4,02<br>6.902                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES 139  
PULLING PLIERS FOR WEDGES IN GROOVES



The wedge extracting pliers in grooves is used for the easy and damage-free removal of stuck wedges from the key grooves of shafts in crafts, industry, and workshops. With the pliers, it is possible to loosen even strongly secured wedges from the key grooves of drive shafts. The series 139 impresses with its compactness and simple application method. Its construction is ideal for use on electric motors.

BENEFITS

- The adjustable span of the clamping jaws allows for variable application depending on the size of the stuck wedge.
- The handwheels for adjustment make the addition of external tools unnecessary.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 139-1 | -779176                                                                                     | 0 - 35<br>0 - 1 3/8                                                                            | 122<br>4 13/16                                                                                 | 4<br>3/16                                                                                      | 2,5<br>5.513                                                                                   | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES K-363 PULLER AND PRESS SET



The puller and press set of the K-363 series enables the safe pressing out and pressing in of rubber bearings, sockets, and joint connections, as well as the removal and installation of press fits on Ball joints and U-Joints, drive shafts, and brake anchor bolts. Equipped with a robust C press frame, a sleeve holder, and three sleeves in various diameters, the set offers maximum flexibility and precise, efficient work on a wide variety of vehicles.

#### BENEFITS

- Versatile for use with trucks, vans, SUVs and selected cars
- Sleeve holder with quick-release for rapid sleeve replacement
- Eye on the C-press frame for secure fastening during operation and storage
- Plastic flap under the C press frame for mounting an AirTag tracking device



#### TECHNICAL ATTRIBUTES

| #             |         |                   |                 |                                                                                                                                                         |             |                    |                   |                                    |                | Max. tension force | Number of parts |             | Consists of                                                         |   |
|---------------|---------|-------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------|-------------------|------------------------------------|----------------|--------------------|-----------------|-------------|---------------------------------------------------------------------|---|
|               | GTIN    | mm/<br>inch       | mm/<br>inch     | mm/<br>inch                                                                                                                                             | mm/<br>inch | mm/<br>inch        | mm                | Nm/ft lb                           | t/US t.<br>sh. |                    |                 | kg/lb       |                                                                     |   |
| K-363-2-S New | -041877 | 170<br>6<br>11/16 | 65<br>2<br>9/16 | 76 x 3 x<br>55,63 x<br>3 x 45,<br>51 x 2,6<br>x 45<br>2 63/64<br>x 1/8 x<br>2 11/64,<br>2 31/64<br>x 1/8 x<br>1 49/64,<br>2 1/64 x<br>3/32 x 1<br>49/64 | 25<br>1     | 45,7<br>1<br>13/16 | G<br>5/8" /<br>14 | W<br>1.1/2"-16<br>(55°,<br>16Gang) | 250<br>184.40  | 10<br>11.02        | 6               | 9<br>19.845 | 36-2, 71-SR-14,<br>036305227,<br>03629503,<br>03629504,<br>03629505 | ✓ |



SERIES 135  
SEPARATOR



The fork separators of series 135 are used for loosening ball pivot joints that are wedged in the cone seat, for loosening steering levers, for disassembling shock absorbers, and for other separation work of all kinds in automotive and industry. Their universal applicability makes the fork separators an important companion for disassembly and separation tasks.

BENEFITS

- The set includes sizes with various jaw openings for use in every case.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 135-1 | -024856                                                                                     | 310<br>12 3/16                                                                                 | 18<br>11/16                                                                                    | 0,74<br>1.632                                                                                  | ✓                                                                                     |
| 135-2 | -024931                                                                                     | 316<br>12 7/16                                                                                 | 23<br>7/8                                                                                      | 0,8<br>1.764                                                                                   | ✓                                                                                     |
| 135-3 | -025013                                                                                     | 319<br>12 9/16                                                                                 | 29<br>1 1/8                                                                                    | 0,815<br>1.797                                                                                 | ✓                                                                                     |
| 135-4 | -025198                                                                                     | 335<br>13 3/16                                                                                 | 39<br>1 9/16                                                                                   | 1,465<br>3.230                                                                                 | ✓                                                                                     |
| 135-5 | -220531                                                                                     | 340<br>13 3/8                                                                                  | 45<br>1 3/4                                                                                    | 1,28<br>2.822                                                                                  | ✓                                                                                     |

## SERIES 177-0 PICKS AND HOOKS



The Picks & Hooks of the 177-0 series are suitable for loosening stuck sealing washers, removing oil seals, Separation of cables in wiring harnesses, and work in plumbing and automotive applications. Their ergonomically contoured 2K comfort handle provides optimal grip and enables both delicate and powerful work. The series includes various Picks & Hooks whose shapes are tailored to the specific application. All versions are available as individual items within the series.

### BENEFITS

- Thanks to the rotating cap and quick-turn zone, the two-component handle allows for safe and comfortable one-handed operation.
- The narrow grip also allows work in tight and hard-to-reach places.
- The 2-component handle ensures maximum power transmission even with wet and oily hands.



### TECHNICAL ATTRIBUTES

| #                |  | Form       |  |  |  |  |  |
|------------------|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                |            | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| <b>177-1 New</b> | -854743                                                                             | elbow      | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,052<br>0.662                                                                        | ✓                                                                                     |
| <b>177-2 New</b> | -854767                                                                             | Tip        | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,05<br>0.662                                                                         | ✓                                                                                     |
| <b>177-3 New</b> | -854781                                                                             | curved tip | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,05<br>0.662                                                                         | ✓                                                                                     |
| <b>177-4 New</b> | -854811                                                                             | L-tip      | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,05<br>0.662                                                                         | ✓                                                                                     |
| <b>177-5 New</b> | -854835                                                                             | Round hook | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,3<br>0.662                                                                          | -                                                                                     |

PRODUCT DETAILS

SERIES 177/10  
PICKS AND HOOKS



The Picks & Hooks of series 177/10 in a set of 10 are ideal for loosening stuck sealing washers, removing shaft seals, separating wires in wire harnesses, as well as for other tasks in plumbing and automotive. Their ergonomically contoured 2K comfort handle (PB Swiss) provides optimal grip and enables both delicate and powerful work. The high-quality workmanship ensures durability and precision. The series includes various Picks & Hooks, with shapes tailored to the specific application. Each set contains ten units of the same item.

BENEFITS

- Thanks to the rotating cap and quick-turn zone, the two-component handle allows for safe and comfortable one-handed operation.
- The narrow grip also allows work in tight and hard-to-reach places.
- The 2-component handle ensures maximum power transmission even with wet and oily hands.

TECHNICAL ATTRIBUTES

| #            |  | Form       |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                |            | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 177-1/10 New | -854750                                                                             | elbow      | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 177-2/10 New | -854774                                                                             | Tip        | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,3<br>0.662                                                                          | -                                                                                     |
| 177-3/10 New | -854798                                                                             | bent tip   | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,3<br>0.662                                                                          | -                                                                                     |
| 177-4/10 New | -854828                                                                             | L-tip      | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,3<br>0.662                                                                          | -                                                                                     |
| 177-5/10 New | -854842                                                                             | round jaws | 152<br>5 1                                                                          | 3,5<br>1/8                                                                          | 75<br>2 15/16                                                                       | 0,3<br>0.662                                                                          | -                                                                                     |

SERIES 177-A  
PICKS AND HOOKS



The 5-piece Picks & Hooks set of series 177-A is ideal for loosening seized sealing washers, removing shaft seals (Simmerringe), separating cables in wiring harnesses, and other tasks in plumbing and automotive. Its ergonomically contoured 2K comfort handle (PB Swiss) provides a secure hold and allows both delicate and powerful work. The high-quality workmanship also ensures durability and precision in application. The set includes five Picks & Hooks in different shapes for versatile applications.



BENEFITS

- Thanks to the rotating cap and quick-turn zone, the two-component handle allows for safe and comfortable one-handed operation.
- The narrow grip also allows work in tight and hard-to-reach places.
- The 2-component handle ensures maximum power transmission even with wet and oily hands.

TECHNICAL ATTRIBUTES

| #                      | <br>GTIN | Form                                    | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 177-A <span>New</span> | -012815                                                                                     | Elbow, tip, bent tip, L-tip, round hook | 152<br>5 1                                                                                     | 3,5<br>1/8                                                                                     | 75<br>2 15/16                                                                                  | 0,015<br>0.662                                                                                 | ✓                                                                                     |



SERIES 728-A  
RETAINING RING PLIERS FOR ASSEMBLY AND  
REMOVAL ON SHAFTS



The retaining ring pliers for external rings are used to install and remove circlips on shafts. The simple yet robust forged design enables safe and fast work in every application. The retaining ring pliers are available in various sizes.

BENEFITS

- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The plier body and the tips are oil-hardened and made of chrome-vanadium steel, offering high durability and resilience.
- The shape provides an unobstructed view of the work peaks.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------|
| 728K-A0 | -004346                                                                                     | 135<br>5 5/16                                                                                  | 3-10<br>1/8-3/8                                                                                | 0,1<br>0.221                                                                                   | -                   |
| 728K-A1 | -004384                                                                                     | 135<br>5 5/16                                                                                  | 10-25<br>3/8-1                                                                                 | 0,095<br>2.095                                                                                 | 728K-729            |
| 728K-A2 | -004421                                                                                     | 180<br>7 1/16                                                                                  | 19 - 60<br>3/4-2 3/8                                                                           | 0,18<br>0.397                                                                                  | 728K-729            |
| 728K-A3 | -004469                                                                                     | 225<br>8 7/8                                                                                   | 40 - 100<br>1 9/16-3 15/16                                                                     | 0,315<br>0.695                                                                                 | -                   |

SERIES 728-A-1  
RETAINING RING PLIERS FOR EXTERNAL  
RINGS, BENT



Retaining ring pliers for external circlips are used for assembling and removing circlips on shafts in crafts, industry, and workshops. The simple, yet powerfully forged design enables safe and fast work in every application. The 728 series impresses with its variability. Depending on the diameter of the external circlip, the retaining ring pliers are available in various sizes and thus allow an application-specific approach.

BENEFITS

- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The form provides an unobstructed view of the work peaks.



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------|
| 728K-A01 | -004360                                                                                     | 135<br>5 5/16                                                                                  | 3-10<br>1/8-3/8                                                                                | 0,095<br>2.095                                                                                 | -                   |
| 728K-A11 | -004407                                                                                     | 135<br>5 5/16                                                                                  | 10-25<br>3/8-1                                                                                 | 0,1<br>0.221                                                                                   | 728K-729            |
| 728K-A21 | -004445                                                                                     | 180<br>7 1/16                                                                                  | 19 - 60<br>3/4-2 3/8                                                                           | 0,19<br>0.419                                                                                  | -                   |
| 728K-A31 | -004490                                                                                     | 225<br>8 7/8                                                                                   | 40 - 100<br>1 9/16-3 15/16                                                                     | 0,31<br>0.684                                                                                  | -                   |

SERIES 729-J  
RETAINING RING PLIERS FOR ASSEMBLY AND  
REMOVAL ON SHAFTS



The retaining ring pliers for internal rings are used to install and remove circlips in bores in trade, industry and workshops. The simple yet robust forged design enables safe and fast work in every application. The 729 series impresses with its versatility. Depending on the diameter of the internal ring, the retaining ring pliers are available in various sizes, allowing an application-specific approach.

BENEFITS

- The tips are stable and anti-slip; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The form provides an unobstructed view of the work peaks.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------|
| 729K-J0 | -004513                                                                                     | 135<br>5 5/16                                                                                  | 8-13<br>5/16-1/2                                                                               | 0,085<br>1.874                                                                                 | -                   |
| 729K-J1 | -004568                                                                                     | 135<br>5 5/16                                                                                  | 10-25<br>3/8-1                                                                                 | 0,085<br>1.874                                                                                 | 728K-729            |
| 729K-J2 | -004605                                                                                     | 180<br>7 1/16                                                                                  | 19 - 60<br>3/4-2 3/8                                                                           | 0,155<br>0.342                                                                                 | 728K-729            |
| 729K-J3 | -004650                                                                                     | 225<br>8 7/8                                                                                   | 40 - 100<br>1 9/16-3 15/16                                                                     | 0,3<br>0.662                                                                                   | -                   |

SERIES 729-J-1  
RETAINING RING PLIERS FOR ASSEMBLY AND  
REMOVAL ON SHAFTS



Retaining ring pliers for internal rings are used to install and remove circlips in bores in trade, industry and workshops. The simple yet robust forged design ensures safe and fast work in every application. The 729 series stands out for its versatility. Depending on the diameter of the internal ring, the retaining ring pliers are available in different sizes, allowing an application-specific approach.

BENEFITS

- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The form provides an unobstructed view of the work peaks.



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------|
| 729K-J01 | -004537                                                                                     | 135<br>5 5/16                                                                                  | 8-13<br>5/16-1/2                                                                               | 0,09<br>1.985                                                                                  | -                   |
| 729K-J11 | -004582                                                                                     | 135<br>5 5/16                                                                                  | 10-25<br>3/8-1                                                                                 | 0,085<br>1.874                                                                                 | 728K-729            |
| 729K-J21 | -004629                                                                                     | 180<br>7 1/16                                                                                  | 19 - 60<br>3/4-2 3/8                                                                           | 0,16<br>0.353                                                                                  | 728K-729            |
| 729K-J31 | -004674                                                                                     | 225<br>8 7/8                                                                                   | 40 - 100<br>1 9/16-3 15/16                                                                     | 0,31<br>0.684                                                                                  | -                   |



PRODUCT DETAILS

SERIES 728K-729  
RETAINING RING PLIERS SET



The 8-piece retaining ring pliers set is used for the assembly and disassembly of circlips on shafts and in bores in trades, industry and workshops. The simple yet robust forged design of the various retaining ring pliers enables safe and fast work in every application. Depending on the diameter and installation location of the circlip, the set includes various sizes and shapes, allowing the user to work in a case-oriented manner.

BENEFITS

- The tips are stable and slip-resistant; even in hard-to-reach places, you can work comfortably with the pliers.
- The pivot and the tips are oil-hardened, forged from chrome-vanadium steel, and possess high durability and toughness.
- The shape provides an unobstructed view of the work peaks.
- Application-oriented compilation for universal use
- By storing it in the set, the completeness of the set can be easily monitored.



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 728K-729 | -004322                                                                                     | 135 - 180<br>5 5/16-7 1/16                                                                     | 10 - 60<br>3/8-2 3/8                                                                           | 1,17<br>2.580                                                                                 | 728K-A1, 728K-A2, 728K-A11, 729K-J1, 729K-J2, 729K-J11, 729K-J21, 728K-A21 |

SERIES 730  
CIRCLIP TOOL



The Series 730 circlip tool is designed for the precise and controlled installation and removal of circlips. The tool features easy handling and quick tip changes. The tips are available in various diameters and can be easily replaced by loosening the knurled screws on the sides. The small and lightweight 730-1 version features an ergonomically shaped 2K comfort grip that is also used to adjust the spread. The large and heavy-duty 730-2 version is equipped with a knurled screw for precise spread adjustment.



BENEFITS

- Easy handling facilitates the installation and removal of the circlips and prevents slipping.
- The interchangeable tips, with different diameters, cover a wide range of circlip sizes. This eliminates the need for multiple retaining ring pliers, as would otherwise be the case.
- The spread adjustment enables precise and controlled operation to prevent overstretching the circlip.
- The 730-1 features two side storage boxes for the various tips.

TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 730-1 New | -384387                                                                                     | 270<br>10 5/8                                                                                  | 6 - 63<br>1/4-2 1/2                                                                            | 0,3<br>0.662                                                                                  | ✓                                                                                     |
| 730-2 New | -384394                                                                                     | 198<br>7 13/16                                                                                 | 31 - 300<br>1 1/4-11 13/16                                                                     | 0,3<br>0.662                                                                                  | ✓                                                                                     |

SERIES 50  
STUD EXTRACTOR WITH INTERNAL  
TOOTHING



Series 50 stud extractors with internal serration are used for screwing in and unscrewing stud bolts or broken components in automotive and industrial applications. Stud extractors from KUKKO are available in various diameters and designs. The 50 series stands out with its particularly proven and robust design, especially under high loads.

BENEFITS

- The knurled wheel with a groove presses the stud bolt securely against the internal gearing.
- The stud bolt is in the area of the key during the extraction and cannot break off.
- The extra profiled knurled wheel has a surface for a secure grip.



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 50-1 | -019258                                                                                     | 17<br>11/16                                                                                    | 5 - 10<br>3/16-3/8                                                                             | 0,115<br>0.254                                                                                 | ✓                                                                                     |
| 50-2 | -019333                                                                                     | 27<br>1 1/16                                                                                   | 8 - 19<br>5/16-3/4                                                                             | 0,43<br>0.948                                                                                  | ✓                                                                                     |
| 50-3 | -019418                                                                                     | 36<br>1 7/16                                                                                   | 18 - 25<br>11/16-1                                                                             | 0,585<br>1.290                                                                                 | ✓                                                                                     |

### SERIES 51 STUD EXTRACTOR WITH INTERNAL PROFILE



The stud extractor with internal toothing of series 51 is used for extracting studs or broken components in the automotive and industrial sectors. Kukko stud extractors are available in various diameters and designs. The series 51 impresses with its handy and cost-effective design.

#### BENEFITS

- The knurled wheel with a groove securely presses the stud bolt against the internal teeth.
- The stud bolt is in the area of the key during the extraction and cannot break off.
- The extra profiled knurled wheel has a surface for a firm grip.



#### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 51-1 | -019586                                                                                     | 19<br>3/4                                                                                      | 5 - 10<br>3/16-3/8                                                                             | 0,355<br>0.783                                                                                 | ✓                                                                                     |
| 51-2 | -019661                                                                                     | 19<br>3/4                                                                                      | 8 - 19<br>5/16-3/4                                                                             | 0,37<br>0.816                                                                                  | ✓                                                                                     |
| 51-3 | -019746                                                                                     | 19<br>3/4                                                                                      | 18 - 25<br>11/16-1                                                                             | 0,52<br>1.147                                                                                  | ✓                                                                                     |



PRODUCT DETAILS

SERIES 52  
STUD EXTRACTOR WITH LARGE CLAMPING  
RANGE



The stud extractor with internal gearing from series 52 is used for extracting stud bolts or broken components in automotive and industrial applications. Kukko stud extractors are available in various diameters and designs. The series 52 has an especially large clamping range and allows for the grasping of short stud bolt ends due to the deep arrangement of the knurled wheel.

BENEFITS

- The knurled wheel with a groove securely presses the stud bolt against the internal teeth.
- The stud bolt is in the area of the key during the extraction and cannot break off.
- The extra profiled knurled wheel has a surface for a firm grip.

TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 52 | -019821                                                                                    | 19<br>3/4                                                                                     | 5 - 19<br>3/16-3/4                                                                            | 0,525<br>1.158                                                                                | ✓                                                                                    |

## SERIES 53 STUD EXTRACTOR FOR TIGHT SPACES



Series 53 stud extractors with internal toothing are used for screwing in and unscrewing stud bolts or broken-off components in automotive and industrial applications. KUKKO stud extractors are available in various diameters and versions. Thanks to its design, series 53 can also be used in the tightest spaces and is operated using a box or socket wrench.

### BENEFITS

- Operable with 1/2 inch ratchet as well as open-end wrench
- During the extraction, the stud bolt is located in the area of the key and cannot break off.
- Three rollers with a wedge mechanism ensure that the stud bolt is gripped increasingly tightly when rotated in one direction



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  | Included in the set |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                     |                                                                                       |
| 53-5  | -137860                                                                             | 65<br>2 9/16                                                                        | 24<br>15/16                                                                         | 5<br>3/16                                                                           | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,15<br>0.331                                                                         | -                   | -                                                                                     |
| 53-6  | -342318                                                                             | 60<br>2 3/8                                                                         | 25<br>1                                                                             | 6<br>1/4                                                                            | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,15<br>0.331                                                                         | 53-A                | -                                                                                     |
| 53-7  | -866234                                                                             | 65<br>2 9/16                                                                        | 24<br>15/16                                                                         | 7<br>1/4                                                                            | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,155<br>0.342                                                                        | -                   | -                                                                                     |
| 53-8  | -342493                                                                             | 60<br>2 3/8                                                                         | 25<br>1                                                                             | 8<br>5/16                                                                           | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,155<br>0.342                                                                        | 53-A                | -                                                                                     |
| 53-10 | -342561                                                                             | 71<br>2 13/16                                                                       | 28<br>1 1/8                                                                         | 10<br>3/8                                                                           | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,22<br>0.485                                                                         | 53-A                | -                                                                                     |
| 53-12 | -342646                                                                             | 71<br>2 13/16                                                                       | 28<br>1 1/8                                                                         | 12<br>1/2                                                                           | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,083<br>1.830                                                                        | 53-A                | -                                                                                     |
| 53-14 | -984563                                                                             | 72<br>2 13/16                                                                       | 36<br>1 7/16                                                                        | 14<br>9/16                                                                          | 27<br>15/16                                                                         |                                                                                     | 0,34<br>0.750                                                                         | -                   | -                                                                                     |

## PRODUCT DETAILS

| #                                                                                    |  |  |  |  |  |  |  | Included in the set |  |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|                                                                                      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                     |                                                                                     |
|  53-16 | -388774                                                                           | 72<br>2 13/16                                                                     | 36<br>1 7/16                                                                      | 16<br>5/8                                                                         | 24<br>1 5/16                                                                      |                                                                                   | 0,31<br>0.684                                                                       | -                   | -                                                                                   |
| 53-18                                                                                | -137846                                                                           | 100<br>3 15/16                                                                    | 48<br>1 7/8                                                                       | 18<br>1 1/16                                                                      | 36<br>1 7/16                                                                      |                                                                                   | 0,835<br>1.841                                                                      | -                   | -                                                                                   |
| 53-20                                                                                | -745591                                                                           | 100<br>3 15/16                                                                    | 48<br>1 7/8                                                                       | 20<br>1 3/16                                                                      | 36<br>1 7/16                                                                      |                                                                                   | 0,82<br>1.808                                                                       | -                   | ✓                                                                                   |
| 53-22                                                                                | -971082                                                                           | 100<br>3 15/16                                                                    | 48<br>1 7/8                                                                       | 22<br>7/8                                                                         | 36<br>1 7/16                                                                      |                                                                                   | 0,73<br>1.610                                                                       | -                   | -                                                                                   |
| 53-24                                                                                | -966774                                                                           | 100<br>3 15/16                                                                    | 48<br>1 7/8                                                                       | 24<br>1 5/16                                                                      | 36<br>1 7/16                                                                      |                                                                                   | 0,795<br>1.753                                                                      | -                   | -                                                                                   |
| 53-30                                                                                | -966781                                                                           | 125<br>4 15/16                                                                    | 63<br>2 1/2                                                                       | 30<br>1 3/16                                                                      | 46<br>1 13/16                                                                     |                                                                                   | 1,66<br>3.660                                                                       | -                   | -                                                                                   |

SERIES 53-A  
STUD EXTRACTOR SET FOR TIGHT SPACES



The stud extractor set of series 53 is used for extracting stud bolts or broken components in automotive and industry applications. Kukko stud extractors are available in various diameters and designs. The series 53 can also be used in the tightest spaces due to its design and is operated with a ring or socket wrench. The set includes 4 different extractors with various diameters from 6 – 12 mm.

BENEFITS

- Application-oriented assembly for universal use
- The knurled wheel with a groove securely presses the stud bolt against the internal toothing.
- During extraction, the stud bolt is located in the area of the key and cannot break.



TECHNICAL ATTRIBUTES

| #    |  |  |  |  |  |  |  | Consists of                 |  |
|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|
|      | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                             |                                                                                       |
| 53-A | -222801                                                                             | 24-28<br>15/16-1 1/8                                                                | 65-75<br>2 9/16-2<br>15/16                                                          | 6, 8, 10,<br>12<br>1/4,<br>5/16,<br>3/8, 1/2                                        | 21<br>13/16                                                                         | 12,7<br>1/2                                                                         | 0,715<br>1.577                                                                        | 53-6, 53-8,<br>53-10, 53-12 | ✓                                                                                     |









# HYDRAULIC OIL

The hydraulic cylinders from KUKKO are capable of solving even extreme pulling problems. When manual, mechanical force reaches its limits, KUKKO offers various hydraulic solutions depending on the application, achieving pulling forces of up to 100 tons. The oil hydraulics guarantee maximum power transmission with minimal effort.

The hydraulic program includes, among others:

- Hollow piston cylinder
- Pressure cylinder
- Lifting cylinder
- Puller with Hydraulic cylinder
- Nut splitter
- Spreader



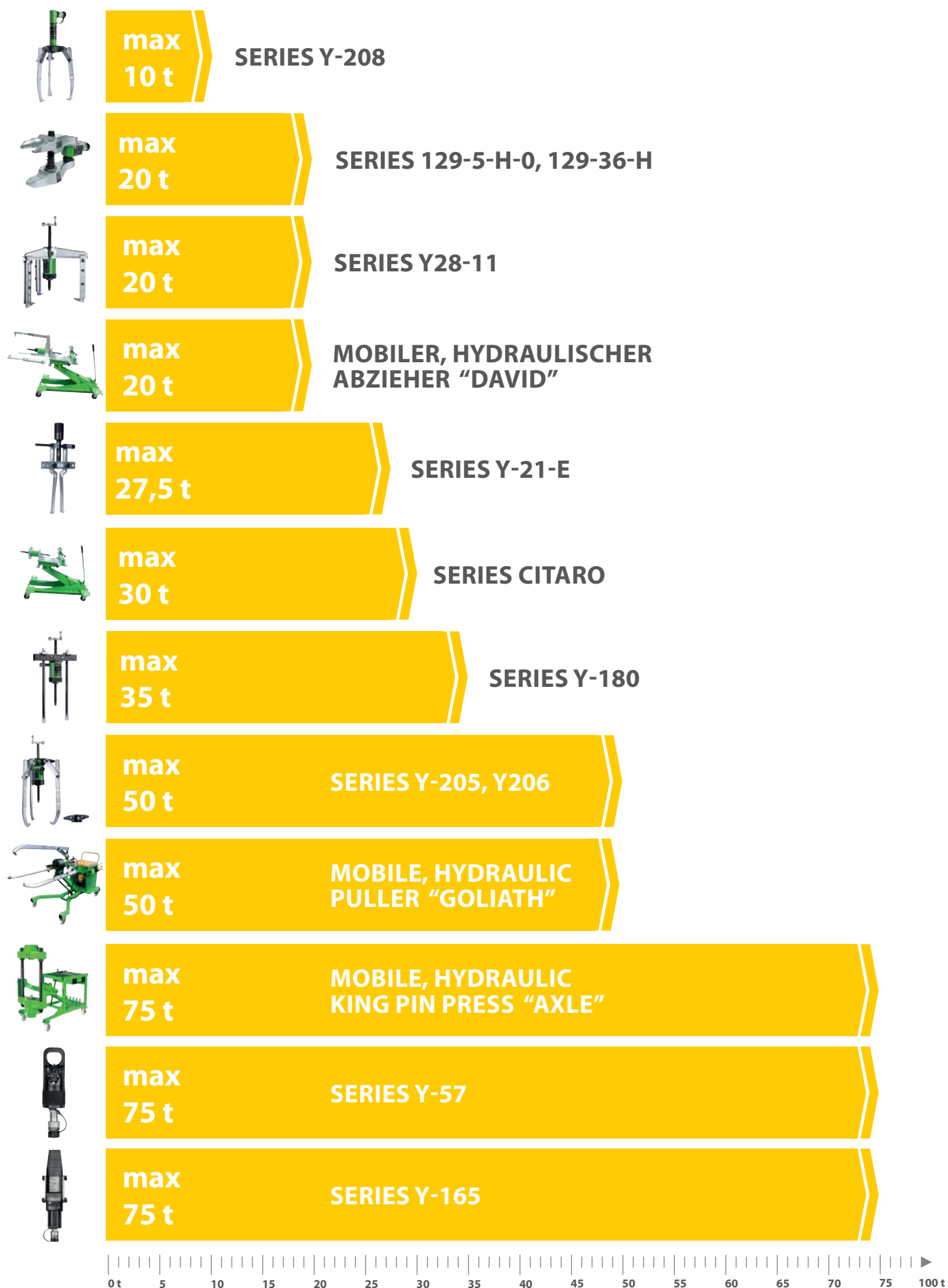


KUKKO // *Pull forward*

# OIL HYDRAULICS



# POWER OF OIL HYDRAULICS





# OPERATION OF OIL HYDRAULICS

10 t

30 t

100 t

## MECHANICAL HAND TOOL (EXAMPLES)

EXTERNAL EXTRACTION



11-1-AV

INTERNAL EXTRACTION



Y21-E

SEPERATOR



Y-215-3

DISASSEMBLY



129-5-50-H10



## HOLLOW PISTON CYLINDER

Hydraulic pressure cylinder  
with collar thread



SERIES YRE

Hydraulic hollow piston  
cylinder with collar thread



SERIES YRH

Lift cylinder



SERIES YSM



## HYDRAULIC PUMP WITH HOSE



YHP-320



## INTERACTION (IN APPLICATION)



Y28-11



Y28-205



Y28-180



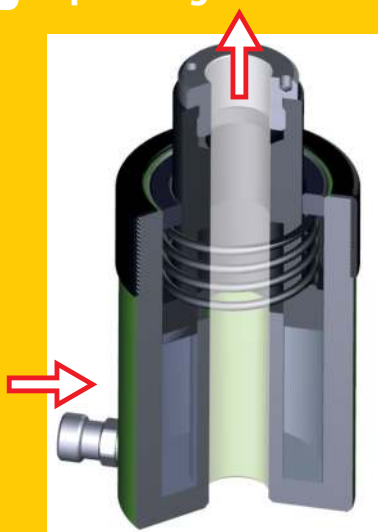
129-5-50-H10

# HOLLOW PISTON CYLINDER AS PRESSURE AND TENSION CYLINDER

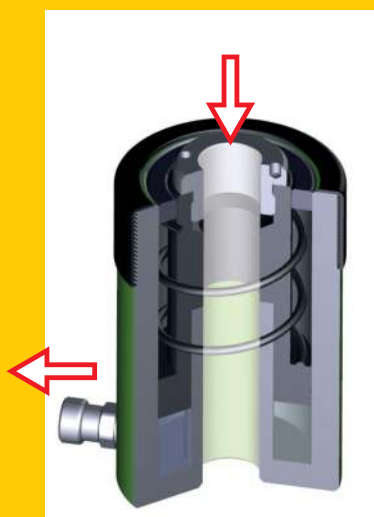
## 1 Rest state



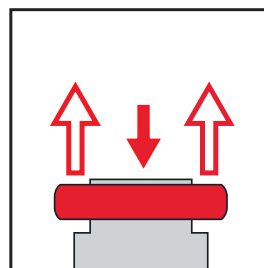
## 2 Operating state



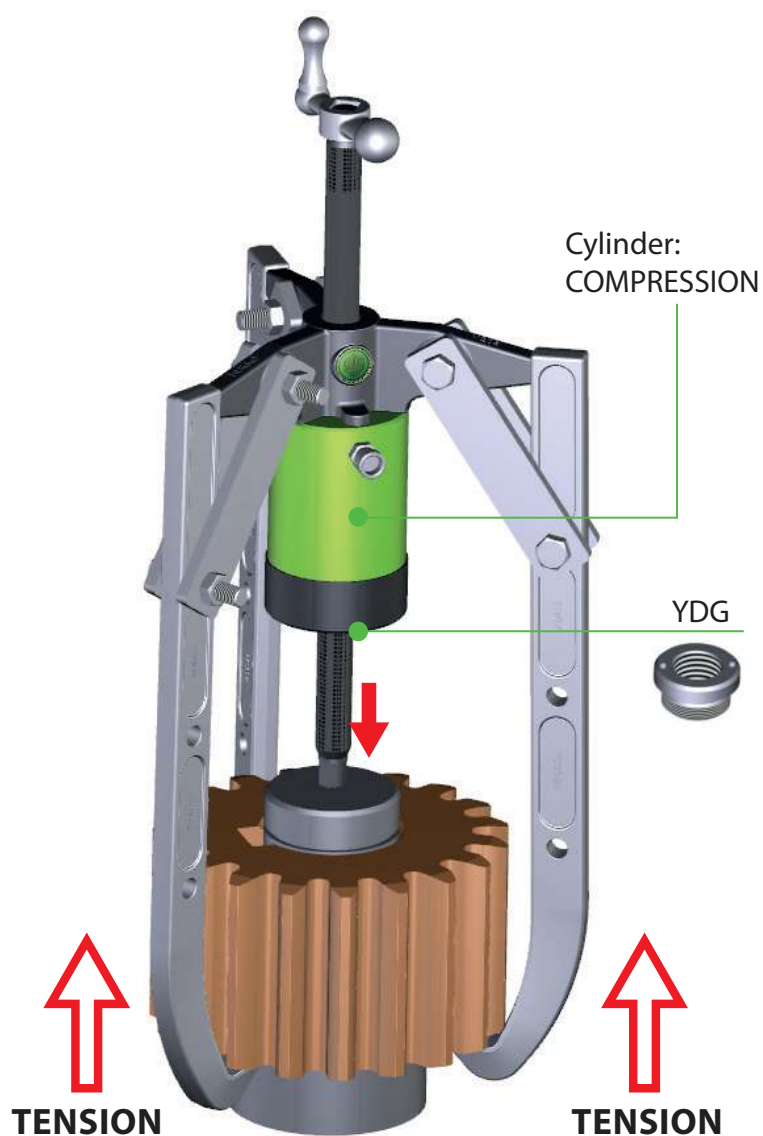
## 3 Spring return



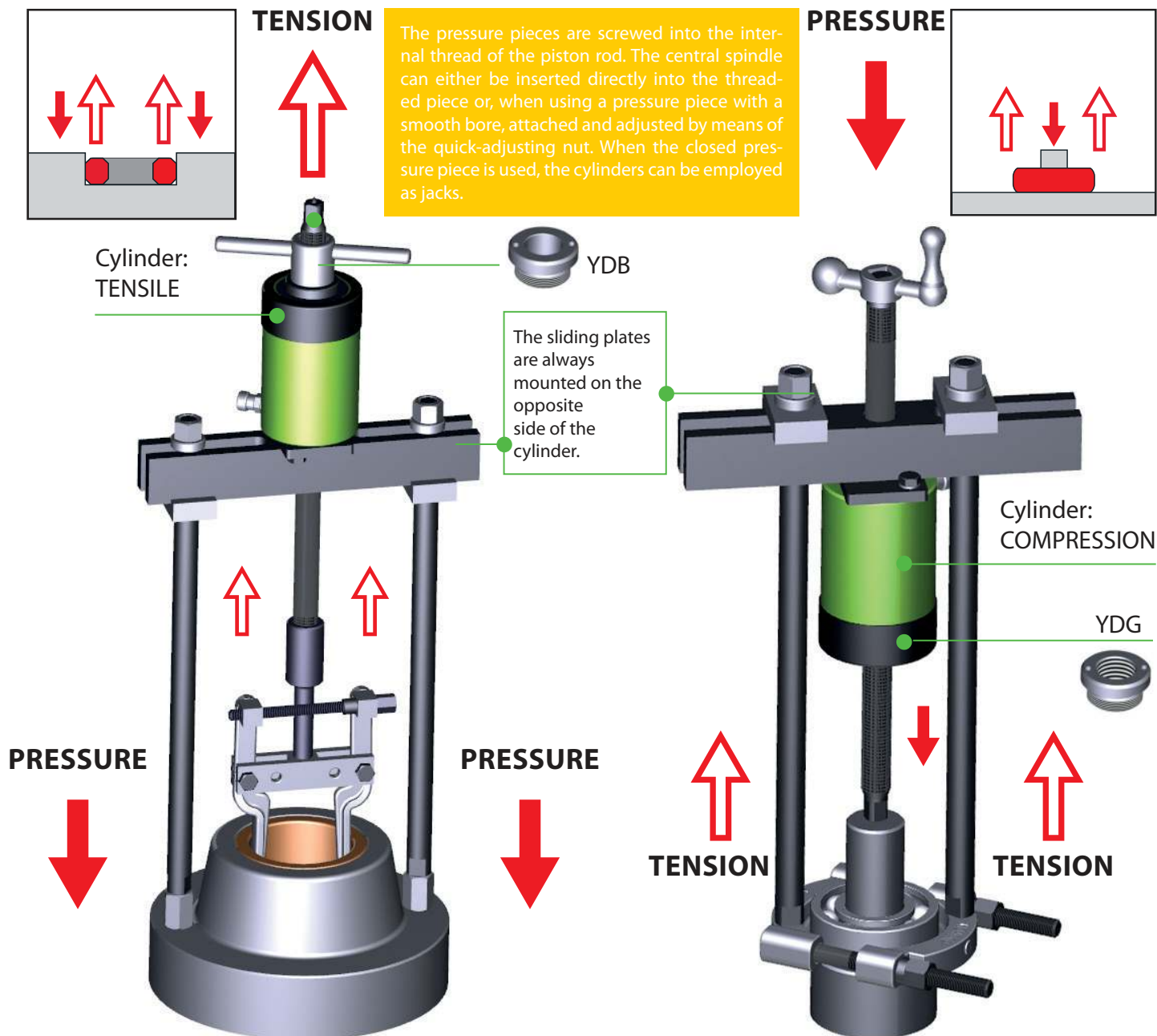
## WITH 2- AND 3-JAW PULLER



**PRESSURE**



# TENSION/COMPRESSION EXTRACTOR DEVICES: INTERNAL AND SEPARATION



Pressing: hollow piston cylinder under the crossbar



Bearing separator of a ball bearing from a heavy-duty wheel with puller Y28-180, separating knife Y-215-2 and hand pump YHP-325

Pulling: hollow piston cylinder above the crossbar



Disassembly of a cylindrical roller bearing with puller Y28-180, internal extractor Y-221-E and hand pump YHP-325



# PRESSURE CYLINDER YRE

The hydraulic pressure cylinders with collar thread of the YRE series are designed for use with the KUKKO hydraulic program for operation in any position in trade, industry, and workshop. The model with large stroke length allows for force-saving and versatile work even in difficult pulling situations or when high force is required.

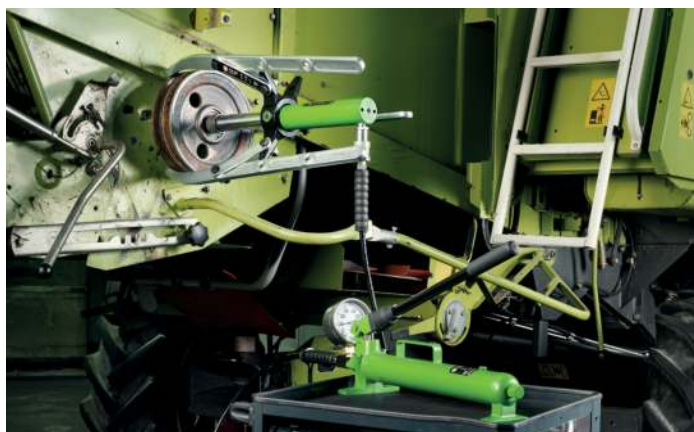
## Benefits

- External thread on the cylinder head, internal thread in the piston rod, and mounting thread on the cylinder base enable easy assembly
- The integrated wiper removes contaminants from the piston, thereby extending the service life of the cylinder
- Preloaded return spring increases the retraction speed and thus the performance
- All models have a CR-400 coupling with dust cap

## STRUCTURE OF A HYDRAULIC PRESSURE CYLINDER



## APPLICATION EXAMPLES



Pulling of a pulley from a combine harvester with the Y18-208



Pulling of a pulley from a combine harvester with the Y18-208



# HOLLOW PISTON CYLINDER YRH

The hydraulic hollow piston cylinders of the YRH series are designed for use with the KUKKO hydraulic program in trade, industry, and workshop. They can be used both as pressure and as tension cylinders and thus enable force-saving and versatile work even in difficult pulling situations or when high force is required.

## Benefits

- External thread on the cylinder head, internal thread in the piston rod, and mounting thread on the cylinder base enable easy assembly
- The integrated wiper removes contaminants from the piston, thereby extending the service life of the cylinder
- Preloaded return spring increases the retraction speed and thus the performance
- All models have a CR-400 coupling with dust cap

## STRUCTURE OF A HYDRAULIC HOLLOW PISTON CYLINDER



## APPLICATION EXAMPLES



Pulling a pulley from a combine harvester with the Y28-205



Pulling a pulley from a combine harvester with the Y28-205

# LIFT CYLINDER YSM

The lift cylinders of the YSM series are used with the KUKKO hydraulic program in trade, industry, and workshop when other cylinders are too large. Due to their small design, they can be used even in confined spaces and thus enable force-saving and versatile work even in difficult pulling situations or when high force is required.

## Benefits

- All models have a CR-400 coupling with dust cap
- Mounting holes enable easy assembly
- Grooved piston ends make pressure pieces superfluous
- Preloaded return spring increases retraction speed and thus performance

## STRUCTURE OF A HYDRAULIC LIFT CYLINDER



## APPLICATION EXAMPLES



The lift cylinder YSM-200 assists in removing a wheel bearing on a tractor



The lift cylinder YSM-200 assists in removing a wheel bearing on a tractor



## SCOPE OF DELIVERY



The hydraulic cylinder comes with a plastic box for protected storage.



The hydraulic cylinder is securely packed in the storage box and locked with a padlock.

## SAFETY INSTRUCTIONS



### Read the manual

Carefully read and follow the puller's manual to ensure proper handling.



### Perform regular maintenance

Check the tool regularly for wear or damage and perform maintenance to ensure safety.



### Safe storage

Properly store the puller tool in a dry and safe place to avoid damage.



### Monitor pressure application

Ensure not to exceed the load limits specified by the manufacturer to avoid damage and injury. Apply hydraulic pressure evenly and in a controlled manner.



### Wear personal protective equipment

Wear appropriate protective equipment, including safety glasses, gloves, and safety shoes, to avoid injury.



### Hydraulic oil

Make sure that hydraulic hoses and connections are in good condition to prevent leaks. In case of leaks, stop work immediately and replace defective parts.



### Safe workspace

Keep the work area clean and free of obstacles to avoid accidents. Ensure there is sufficient space for safe working.



### Use protective cover

The accident protection cover serves to protect against accidents during pulling and disassembly work. The transparency of the material allows you to observe the process at any time during pulling.

# HYDRAULIC PULLER “DAVID”

The hydraulic, mobile 3-jaw puller with adjustable reach “DAVID” is used for pulling large bearings, gears, and similar components in heavy industry, trade, and workshop. With a maximum load of 20 t, the puller offers a strong, hydraulic solution for otherwise difficult to handle pulling tasks for large parts.

## Benefits

- DAVID guarantees parallel extraction even under full load
- The lever actuation is rotatable 360° for ergonomic operation from within the working area
- The descent operation for gentle load lowering reduces the risk of accidents thanks to the easily accessible valve
- Mobile at various worksites thanks to four swivel casters
- The three jaws ensure even load distribution and thus particularly secure hold on the part being pulled

## STRUCTURE



## APPLICATION EXAMPLE



The mobile hydraulic puller “DAVID” in use



# HYDRAULIC PULLER “GOLIATH”

The mobile hydraulic puller “GOLIATH” is used for pulling large bearings, gears, and similar components in heavy industry, railways, power plants, and other applications. With a pulling force of up to 50 t, the hydraulic puller is the ideal solution for really large pulling operations. The puller can be used as both a 2-jaw and 3-jaw puller.

## Benefits

- Hydraulics ensure easy and controlled extraction of particularly large and seized parts with minimal effort
- Y-shaped mobile frame with 4 smooth rolling rollers (including locking mechanism) enables easy and convenient set-up of the puller and guarantees a secure stand
- Hydraulic height adjustment guarantees comfortable working
- Magnetic closure ensures a quick change of the spindle tip (series 140)

## STRUCTURE



## APPLICATION EXAMPLES



The mobile hydraulic puller “GOLIATH” Goliath-556 when extracting a seized wheel bearing from a harbour crane

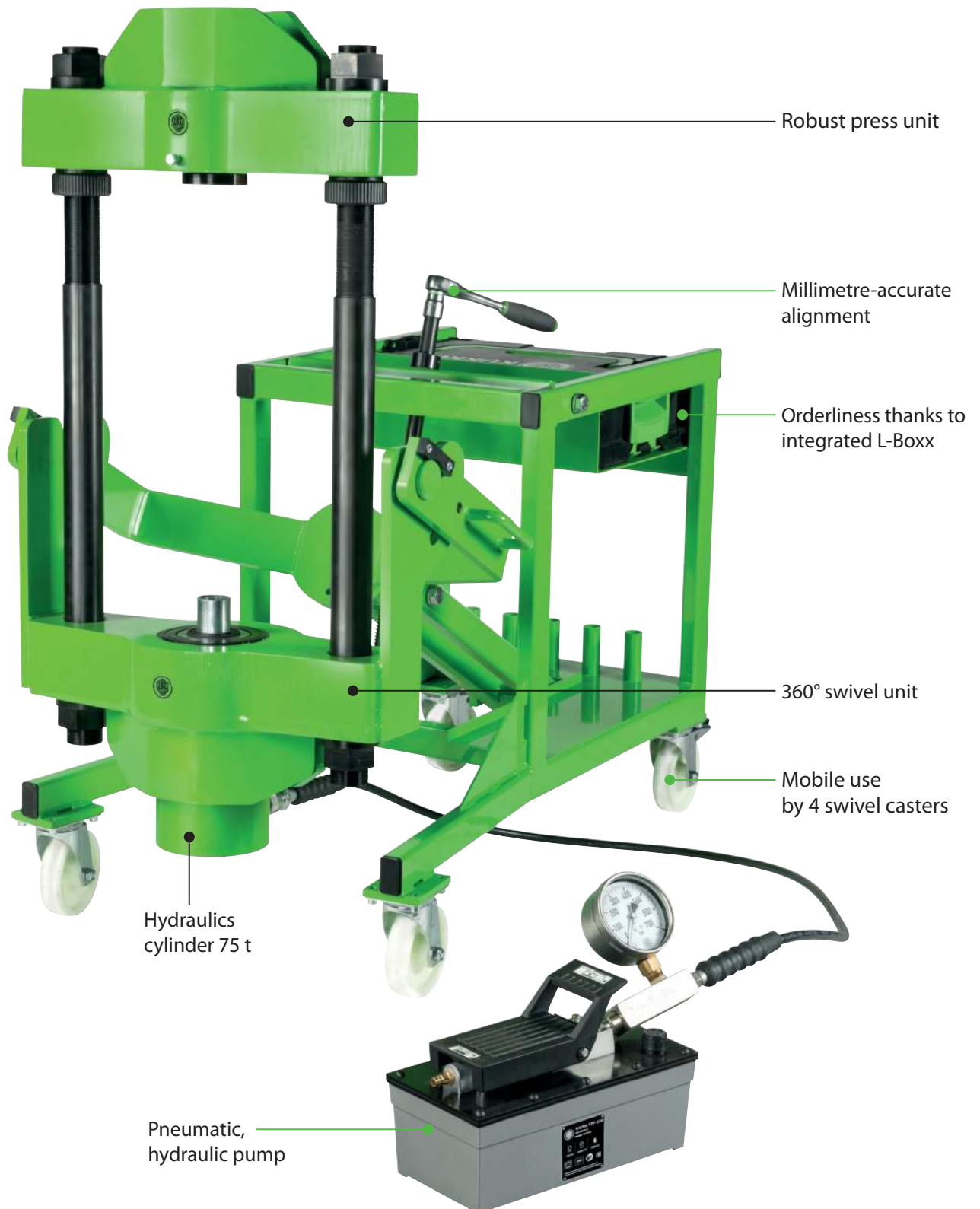
# KING PIN PRESS "AXLE"

The hydraulic king pin press is used for quick pressing in and out of all common king pins on commercial vehicle front axles. The work unit is swiveling and adjustable for positioning, and the flat design enables work even on low vehicles.

## Benefits

- The press can be used both when the axle is installed or removed
- The 360° swiveling lever actuation allows for ergonomic handling from within the workspace
- Thanks to mobile usability, flexibly positionable in the workshop

## STRUCTURE





## APPLICATION EXAMPLES



The hydraulic king pin press "AXLE"Y-AP-75 being positioned



The hydraulic king pin press "AXLE"Y-AP-75 is ready for use on a truck

# NUT SPLITTER Y-57 WITH OIL HYDRAULICS

The pump-operated hydraulic nut splitter of the Y-57 series is used for splitting seized, rusted, or over-torqued nuts of all strength classes. In this splitting process, the threaded stud remains undamaged. The special TiN coating of the chisel has particularly good friction properties, allowing high cutting performance with little effort. The hydraulic pump ensures enormous splitting force of up to 90 t.

## Benefits

- Splitting the nut without damaging the threaded bolt
- Enormous splitting force thanks to hydraulic pump
- TiN coating of the chisel guarantees higher cutting performance
- Also suitable for use in pipeline construction and other industries

## STRUCTURE OF A HYDRAULIC NUT SPLITTER



## DETAILS & OPERATION



The pump-operated hydraulic nut splitter additionally requires a hydraulic pump. This delivers the hydraulic oil into the splitter's inner cylinder. With increasing pressure, the piston is actuated. At the same time, the chisel is pressed against the nut to be split. The hydraulic force transmission results from the combination of hydraulic pump and nut splitter and guarantees maximum force transfer with minimal effort.



Detailed view of splitter chisel



Detailed view of hydraulic coupling

## APPLICATION EXAMPLES



The single-edged, pump-hydraulic nut splitter Y-57 splitting a nut on a vehicle



Detailed view during the splitting process



# SPREADER Y-165 WITH OIL HYDRAULICS

The hydraulic spreader of the Y-165 series is a technical device that creates expansion or spreading using hydraulic pressure. The hydraulic spreader consists of a cylinder in which a piston moves. Using hydraulic fluid, the piston is moved with high pressure, which opens the two arms of the spreader. The associated safety block ensures that the flanges are held in the spread position.

## Benefits

- Hydraulics make the application of targeted pressure very efficient and controllable
- Hydraulics ensure maximum leverage
- Flexible use for various application situations
- Ergonomic design for user-friendly operation

## STRUCTURE OF A HYDRAULIC SPREADER



## DETAILS & OPERATION



The pump-operated hydraulic spreader also requires a hydraulic pump. This delivers the hydraulic oil into the inner cylinder of the spreader. As the pressure increases, the spreader wedges are forced apart. The hydraulic force transmission results from the combination of hydraulic pump and spreader and guarantees maximum force transmission with minimal effort.



The special tothing ensures that the spreader wedge has a better hold during use. This prevents the wedge from slipping or moving unintentionally. The tothing can also help to guide the wedge more evenly and precisely into the gap or space. The teeth enable more controlled and even spreading, which leads to better force distribution.

## APPLICATION EXAMPLES



A hydraulic spreader of the Y-165 series with a safety block that holds the flanges in the spread position.



The hydraulic spreader of the Y-165 series with hydraulic hand pump when spreading a flange connection.

### SERIES Y-205 HYDRAULIC 2-JAW PULLER WITH ADJUSTABLE REACH AND HYDRAULIC HOLLOW PISTON CYLINDER



The hydraulic 2-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling particularly large and seized bearings, gears, and discs in all common sizes for trade, workshop, and industry. The hydraulic hollow piston cylinder achieves a high pulling force of up to 50 t. This allows for the loosening of any component that is mounted on a shaft and is freely accessible from the outside. The oscillating jaws adapt to any installation situation and can be universally used due to the adjustable reach.

#### BENEFITS

- A hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating puller jaws offer a variety of adjustment options.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>bar | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y28-205 | -036088                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 300<br>11 13/16                                                                                | 200                            | 20<br>22.05                          | 700                                                                                         | 21,5<br>47.408                                                                                 | ✓                                                                                     |
| Y28-215 | -833915                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 600<br>23 5/8                                                                                  | 200                            | 20<br>22.05                          | 700                                                                                         | 26<br>57.330                                                                                   | ✓                                                                                     |
| Y38-205 | -037078                                                                                     | 0 - 700<br>0 - 27 9/16                                                                         | 520<br>20 1/2                                                                                  | 300                            | 30<br>33.07                          | 700                                                                                         | 41<br>90.405                                                                                   | ✓                                                                                     |
| Y58-205 | -038068                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 700<br>27 9/16                                                                                 | 500                            | 50<br>55.12                          | 700                                                                                         | 9<br>19.845                                                                                    | ✓                                                                                     |
| Y58-215 | -854675                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 1.200<br>47 1/4                                                                                | 500                            | 50<br>55.12                          | 700                                                                                         | 0,3<br>0.662                                                                                   | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y0-205 2-JAW PULLER WITH SWIVELING EXTRACTOR JAWS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)

The 2-jaw pullers with swiveling jaws of the Y-205 series are used for pulling particularly large and stuck bearings, gears, discs, etc. in crafts, industry, and workshops. Due to their simple adjustability, the puller is also suitable for various pulling situations. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### BENEFITS

- Universally usable thanks to adjustable reach
- The greater the pulling force, the stronger the grip of the jaws on the workpiece being pulled.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-205 | -035906                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 300<br>11 13/16                                                                                | 200                            | 20<br>22.05                             | 11,425<br>25.192                                                                             | YRH-202, Y205-20,<br>Y206-30, HKSH-<br>Y20-98-162-51                                  | ✓                                                                                     |
| Y20-215 | -833892                                                                                     | 0 - 420<br>0 - 16 9/16                                                                         | 600<br>23 5/8                                                                                  | 200                            | 20<br>22.05                             | 0,3<br>0.662                                                                                 | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y30-205 | -036996                                                                                     | 0 - 700<br>0 - 27 9/16                                                                         | 520<br>20 1/2                                                                                  | 300                            | 30<br>33.07                             | 25<br>55.125                                                                                 | YRH-302, Y305-20,<br>Y306-30, HKSH-<br>Y30-117-178-65                                 | ✓                                                                                     |
| Y50-205 | -037986                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 700<br>27 9/16                                                                                 | 500                            | 50<br>55.12                             | 5<br>11.025                                                                                  | YRH-603, Y505-20,<br>Y506-30, HKSH-<br>Y60-158-247-76                                 | ✓                                                                                     |
| Y50-215 | -854651                                                                                     | 0 - 1.000<br>0 - 39 3/8                                                                        | 1.200<br>47 1/4                                                                                | 500                            | 50<br>55.12                             | 0,3<br>0.662                                                                                 | YRH-603, HKSH-<br>Y60-158-247-76                                                      | ✓                                                                                     |

## SERIES Y-206 HYDRAULIC 2-JAW AND 3-JAW PULLER WITH ADJUSTABLE REACH AND HYDRAULIC HOLLOW PISTON CYLINDER



The hydraulic 2-jaw and 3-jaw puller with adjustable reach and hydraulic hollow piston cylinder for pump drive is used for pulling off particularly large and stuck components. The hydraulic hollow piston cylinder achieves a high pulling force of up to 50 t. The oscillating jaws adapt to any installation situation and are universally applicable due to the adjustable reach.

### BENEFITS

- Hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating jaws offer a variety of adjustment options.
- 3-jaw ensures an even force distribution and allows for greater pulling forces.
- The mobile puller can be used as both a 2-jaw and a 3-jaw puller.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Included in<br>the set |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Y28-206 | -036248                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 300<br>11 13/16                                                                                | 700                                                                                        | 200                            | 20<br>22.05                             | 31,48<br>69.413                                                                                | Y28-256,<br>Y28-200    | ✓                                                                                     |
| Y38-206 | -037238                                                                                     | 0 - 900<br>0 - 35 7/16                                                                         | 520<br>20 1/2                                                                                  | 700                                                                                        | 300                            | 30<br>33.07                             | 54<br>119.070                                                                                  | Y38-356,<br>Y38-300    | ✓                                                                                     |
| Y58-206 | -038228                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 700<br>27 9/16                                                                                 | 700                                                                                        | 500                            | 50<br>55.12                             | 125<br>275.625                                                                                 | Y58-556,<br>Y58-500    | ✓                                                                                     |
| Y28-216 | -833922                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 600<br>23 5/8                                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 37<br>81.585                                                                                   | -                      | ✓                                                                                     |
| Y58-216 | -854682                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 1.200<br>47 1/4                                                                                | 700                                                                                        | 500                            | 50<br>55.12                             | 0,3<br>0.662                                                                                   | -                      | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES Y0-206 3-JAW PULLER WITH SWIVELING EXTRACTOR JAWS (WITHOUT HYDRAULIC HOLLOW PISTON CYLINDER FOR PUMP DRIVE)

The 3-jaw pullers with swiveling puller jaws of the Y-206 series are used for pulling particularly large and stuck bearings, gears, discs, etc., in crafts, industry, and workshops. Due to their easy adjustability, the puller is also suitable for various pulling situations. A hydraulic hollow piston cylinder of the YRH series is also required for use.

#### BENEFITS

- Universally applicable thanks to adjustable reach
- The larger the pulling force, the stronger the grip of the jaws on the workpiece being pulled.



## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-206 | -036163                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 300<br>11 13/16                                                                                | 200                            | 20<br>22.05                             | 16,44<br>36.250                                                                              | YRH-202, Y205-20,<br>Y206-30, HKSH-<br>Y20-98-162-51                                  | ✓                                                                                     |
| Y30-206 | -037153                                                                                     | 0 - 900<br>0 - 35 7/16                                                                         | 520<br>20 1/2                                                                                  | 300                            | 30<br>33.07                             | 4<br>8.820                                                                                   | YRH-302, Y305-20,<br>Y306-30, HKSH-<br>Y30-117-178-65                                 | ✓                                                                                     |
| Y50-206 | -038143                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 700<br>27 9/16                                                                                 | 500                            | 50<br>55.12                             | 80,3<br>17.640                                                                               | YRH-603, Y505-20,<br>Y506-30, HKSH-<br>Y60-158-247-76                                 | ✓                                                                                     |
| Y20-216 | -833908                                                                                     | 0 - 500<br>0 - 19<br>11/16                                                                     | 600<br>23 5/8                                                                                  | 200                            | 20<br>22.05                             | 0,3<br>0.662                                                                                 | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y50-216 | -854668                                                                                     | 0 - 1.200<br>0 - 47 1/4                                                                        | 1.200<br>47 1/4                                                                                | 500                            | 50<br>55.12                             | 0,3<br>0.662                                                                                 | YRH-603, HKSH-<br>Y60-158-247-76                                                      | ✓                                                                                     |

SERIES Y-208  
MOBILE, 2-JAW AND 3-JAW PULLERS WITH  
PUMP HYDRAULIC AND ADJUSTABLE REACH



The hydraulic 2-jaw and 3-jaw puller with adjustable reach, hydraulic pressure cylinder for pump drive, and combination crossbar is used to pull particularly large and firmly seated bearings, gears, and discs. The hydraulic pressure cylinder achieves a maximum tension force of 10 t. The oscillating jaws adapt to every installation situation and can be used universally thanks to the adjustable reach.

BENEFITS

- Hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- Oscillating jaws offer a variety of adjustment options.
- Thanks to the crossbar, the puller can be used for 2-jaw and 3-jaw pulling.
- 3-jaw ensures an even force distribution and allows for greater pulling forces



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y08-208 | -461774                                                                                     | 0 - 250<br>0 - 9 13/16                                                                         | 215<br>8 7/16                                                                                  | 625                                                                                        | 45                             | 4.5<br>4.96                          | 5,39<br>11.885                                                                                 | ✓                                                                                     |
| Y18-208 | -461699                                                                                     | 0 - 500<br>0 - 19 11/16                                                                        | 500<br>19 11/16                                                                                | 561                                                                                        | 100                            | 10<br>11.02                          | 17,41<br>38.389                                                                                | ✓                                                                                     |

PRODUCT DETAILS

SERIES Y0-208  
3-JAW PULLER WITH SWIVELING JAWS  
(WITHOUT HYDRAULIC PRESSURE CYLINDER  
FOR PUMP DRIVE)



The 3-jaw combination pullers with swiveling puller jaws from series Y-208 are used for pulling particularly large and tight-fitting bearings, gears, discs, etc. in craft, industry, and workshops. Combination pullers can be used both as 3-jaw and 2-jaw. A hydraulic pressure cylinder with collar thread from series YRE is also required for application.

BENEFITS

- Universally applicable thanks to adjustable reach and number of hooks
- The larger the pull force, the stronger the grip of the jaws on the workpiece being pulled.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y05-208 | -172366                                                                                     | 0 - 250<br>0 - 9 13/16                                                                         | 215<br>8 7/16                                                                                  | 45                             | 4.5<br>4.96                             | 3,29<br>7.254                                                                                | YRE-050, MZSS-<br>Y05-38-216-127                                                      | ✓                                                                                     |
| Y10-208 | -172441                                                                                     | 0 - 500<br>0 - 19 11/16                                                                        | 500<br>19 11/16                                                                                | 100                            | 10<br>11.02                             | 10,32<br>2.911                                                                               | YRE-101, MZSS-<br>Y10-57-350-255                                                      | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y28-11 HYDRAULIC, EXTRA POWERFUL, 3-JAW PULLER WITH ADJUSTABLE REACH AND HOLLOW PISTON CYLINDER



The hydraulic, extra-strong 3-jaw puller with adjustable reach depth and hydraulic hollow piston cylinder for pump drive is used to remove particularly stubborn components. The hydraulic hollow piston cylinder achieves a high pulling force of a maximum of 20 t. The robust construction of the puller adapts to any pulling situation with its individually adjustable spread and reach depth.

#### BENEFITS

- A hydraulic hollow piston cylinder ensures easy and controlled removal of particularly large and stuck parts with minimal effort.
- Adjustable puller jaws for individual adjustment of the reach due to multiple drilling in the puller jaws
- 3-jaw provides an even distribution of force and allows for greater pulling forces.



#### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y28-11-0 | -469725                                                                                     | 0 - 375<br>0 - 14 3/4                                                                          | 500<br>19 11/16                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 32,9<br>63.945                                                                                 | ✓                                                                                     |
| Y28-11-1 | -711640                                                                                     | 0 - 520<br>0 - 20 1/2                                                                          | 500<br>19 11/16                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 33<br>72.765                                                                                   | ✓                                                                                     |
| Y28-11-2 | -711657                                                                                     | 0 - 650<br>0 - 25 9/16                                                                         | 500<br>19 11/16                                                                                | 290 - 740<br>11 7/16 - 29 1/8                                                                  | 700                                                                                        | 200                            | 20<br>22.05                             | 38<br>83.790                                                                                   | ✓                                                                                     |



SERIES Y20-11  
2- AND 3-JAW PULLERS (WITHOUT  
HYDRAULIC HOLLOW PISTON CYLINDER)



The 3-jaw pullers with adjustable reach of the Y20-11 series are used for pulling particularly large and stuck bearings, gears, discs, etc. in crafts, industry, and workshops. The extra-strong design is capable, thanks to parallel jaws, of safely and efficiently pulling components in any position and under full load. A hydraulic hollow piston cylinder of the YRH series is also required for use.

BENEFITS

- Three-jaw design ensures an even load distribution and thus a particularly secure grip on the part being pulled.
- The pulling hooks can be moved on the crossbar, adjusted in length, and used as external and internal pullers in various pulling situations by turning them around.
- Suitable for removing asymmetrical workpieces due to adjustable hook positioning.
- Thanks to the adjustable length of the jaws, the puller can be adapted to different reaches

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. |  |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-11-0 | -469718                                                                                     | 375<br>19 11/16                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 200                         | 20<br>22.05                          | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y20-11-1 | -711626                                                                                     | 500<br>19 11/16                                                                                | 280 - 600<br>11 1/32 - 23 5/8                                                                  | 200                         | 20<br>22.05                          | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |
| Y20-11-2 | -711633                                                                                     | 650<br>19 11/16                                                                                | 290 - 740<br>11 7/16 - 29 1/8                                                                  | 200                         | 20<br>22.05                          | YRH-202, HKSH-<br>Y20-98-162-51                                                       | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-180 HYDRAULIC PULL/ PRESS EXTRACTOR WITH HYDRAULIC HOLLOW PISTON CYLINDER



The hydraulic puller of the Y-180 series is used for pulling particularly large and tight-fitting bearings, gears, discs, etc. by using separating knives and internal extractors in the trades, workshop and industry. The Y-180 series is used together with the Y-15 pulling device or the Y-21-E internal extractor and can therefore be used in two different ways.

#### BENEFITS

- Low effort for high pulling performance
- The internal extractor required for the application, or the pulling device, together with the hydraulic puller enables the easy and controlled removal of particularly tightly seated parts



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>bar | <br>kg/lb | Included in<br>the set |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Y28-180 | -036408                                                                                     | 135 - 300<br>5 5/16 - 11<br>13/16                                                              | 470<br>18 1/2                                                                                  | 150                            | 15<br>16.53                             | 700                                                                                        | 2,81<br>6.196                                                                                  | Y28-200,<br>Y28-218    | ✓                                                                                     |
| Y38-180 | -037498                                                                                     | 180 - 420<br>7 1/16 - 16<br>9/16                                                               | 520<br>20 1/2                                                                                  | 250                            | 25<br>27.56                             | 700                                                                                        | 37,68<br>83.084                                                                                | Y38-318,<br>Y38-300    | ✓                                                                                     |
| Y58-180 | -038488                                                                                     | 235 - 540<br>9 1/4 - 21<br>1/4                                                                 | 660<br>25 63/64                                                                                | 350                            | 35<br>38.58                             | 700                                                                                        | 84<br>185.220                                                                                  | Y58-518,<br>Y58-500    | ✓                                                                                     |

SERIES Y0-180  
PULLER DEVICE (WITHOUT HYDRAULIC  
HOLLOW PISTON CYLINDER FOR PUMP  
DRIVE)



The pullers of series Y-180 are used together with separating knives and internal extractors for Pulling particularly large and tight-fitting bearings, gears, discs, etc. in trade, industry, and workshops. The pullers are used with pulling devices of series Y-15 and internal extractors of series Y-21-E.

BENEFITS

- Ideal for the light and controlled removal of stuck parts
- Thanks to compatibility with other tools from the Y series, suitable for various applications

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y20-180 | -036323                                                                                     | 470<br>18 1/2                                                                                  | 135 - 300<br>5 5/16 - 11 13/16                                                                 | 150                            | 15<br>16.53                             | 9,885<br>21.796                                                                              | YRH-202, HKSH-Y20-98-162-51                                                           | ✓                                                                                     |
| Y30-180 | -037313                                                                                     | 520<br>20 1/2                                                                                  | 180 - 420<br>7 1/16 - 16 9/16                                                                  | 250                            | 25<br>27.56                             | 20,83<br>6.240                                                                               | YRH-302, HKSH-Y30-117-178-65                                                          | ✓                                                                                     |
| Y50-180 | -038303                                                                                     | 660<br>25 1                                                                                    | 235 - 540<br>9 1/4 - 21 1/4                                                                    | 350                            | 35<br>38.58                             | 6<br>13.230                                                                                  | YRH-603, HKSH-Y60-158-247-76                                                          | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-21-E INTERNAL EXTRACTOR



The internal extractors of the Y-21-E series are used for extracting particularly stubborn, internal bearings, bearing outer rings, and sockets in crafts, workshops, and industry. The hydraulic system enables the application of very high forces that cannot be achieved with mechanical tools. The internal extractors of the Y-21-E series are combined with the hydraulic pullers of the Y-180 series.

#### BENEFITS

- The hydraulic puller Y-180 required in combination with the internal extractor allows for easy and controlled removal of particularly stubborn parts.
- Reducing workload guarantees maximum time savings
- Gentle removal thanks to adjustable hydraulic system



## TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  | Included in<br>the set |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/<br>inch                                                                         | mm                                                                                  | kN                       | t/US t. sh.              | kg/lb                                                                               |                                                                                       |                        |                                                                                       |
| Y-221-E | -040856                                                                             | 30 - 180<br>1 3/16 - 7 1/16                                                         | 135<br>5 5/16                                                                       | 1"-8 UNC                                                                            | 100                      | 10<br>11.02              | 2,8<br>6.174                                                                        | Y28-180                                                                               | Y28-200,<br>Y28-218    | ✓                                                                                     |
| Y-321-E | -042836                                                                             | 75 - 230<br>2 15/16 - 9 1/16                                                        | 140<br>5 1/2                                                                        | 1 1/4 - 7" UNC                                                                      | 220                      | 22<br>24.25              | 6,5<br>14.333                                                                       | Y38-180                                                                               | Y38-300,<br>Y38-318    | ✓                                                                                     |
| Y-521-E | -044656                                                                             | 75 - 230<br>2 15/16 - 9 1/16                                                        | 140<br>5 1/2                                                                        | 1 5/8" - 51 2UNS                                                                    | 275                      | 27.5<br>30.31            | 7,3<br>16.097                                                                       | Y58-180                                                                               | Y58-518,<br>Y58-500    | ✓                                                                                     |



## SERIES Y-15 PULLING DEVICE FOR HYDRAULIC TENSILE/ COMPRESSIVE PULLERS



The pulling devices in the Y-15 series are used for pulling off ball bearings, roller bearings, inner rings and other flush-mounted parts when there is not enough space for jaws and these first have to be separated. They are available in different sizes.

### BENEFITS

- The hydraulic puller required in combination with the pulling device enables the easy and controlled removal of particularly tight-seated parts
- The sharp edges allow for a pulling action where other types of pullers are unusable.
- By screwing the separating and pulling device, the highest stability during pulling is ensured.
- If the separator jaws are screwed in the opposite direction into the puller device, the supporting surface is enlarged and is removed more gently.
- Due to its simple design, special pulling devices can also be easily made for the Y-15 series for your own use.

### TECHNICAL ATTRIBUTES

| #       | GTIN    | mm/<br>inch                     | mm/<br>inch     | mm/<br>inch    | mm/<br>inch    | mm                  | mm/<br>inch   | mm/<br>inch | mm/<br>inch  | mm/<br>inch   | SW<br>mm      | kg/lb            | Included<br>in the<br>set | 818-100,<br>818-215                                                 | ✓ |
|---------|---------|---------------------------------|-----------------|----------------|----------------|---------------------|---------------|-------------|--------------|---------------|---------------|------------------|---------------------------|---------------------------------------------------------------------|---|
| Y-215-2 | -172106 | 22 - 115<br>7/8 - 4<br>1/2      | 167<br>6 9/16   | 29,5<br>1 3/16 | 220<br>8 11/16 | 5/8"-18<br>UNF      | 67<br>2 5/8   | 0,5<br>1/64 | 9,1<br>3/8   | 41<br>1 5/8   | 24<br>15/16   | 2,86<br>6.306    | Y28-180                   | 818-100,<br>818-215                                                 | ✓ |
| Y-215-3 | -039546 | 25 - 155<br>1 - 6 1/8           | 210<br>8 1/4    | 36<br>1 7/16   | 255<br>10 1/32 | 5/8"-18<br>UNF      | 78<br>3 1/16  | 0,5<br>1/64 | 11,2<br>7/16 | 50<br>1 15/16 | 32<br>1 1/4   | 2,88<br>6.350    | Y28-180                   | 818-150,<br>818-215,<br>845-855,<br>845-858,<br>Y28-200,<br>Y28-218 | ✓ |
| Y-315-4 | -398186 | 30 - 200<br>1 3/16 -<br>7 7/8   | 280<br>11 1/32  | 42<br>1 5/8    | 390<br>15 3/8  | 1"-14<br>UNS        | 103<br>4 1/16 | 2<br>1/16   | 15,6<br>5/8  | 65<br>2 9/16  | 41<br>1 5/8   | 11,865<br>26.162 | Y38-180                   | Y38-300                                                             | ✓ |
| Y-215-4 | -385629 | 30 - 200<br>1 3/16 -<br>7 7/8   | 280<br>11 1/32  | 42<br>1 5/8    | 390<br>15 3/8  | 5/8"-18<br>UNF      | 103<br>4 1/16 | 2<br>1/16   | 15,6<br>5/8  | 65<br>2 9/16  | 41<br>1 5/8   | 11,8<br>26.019   | Y28-180                   | -                                                                   | ✓ |
| Y-315-5 | -041501 | 30 - 250<br>1 3/16 -<br>9 13/16 | 338<br>13 5/16  | 52<br>2 1/16   | 440<br>17 5/16 | 1"-14<br>UNS        | 116<br>4 9/16 | 2<br>1/16   | 14<br>9/16   | 70<br>2 3/4   | 46<br>1 13/16 | 2,11<br>4.653    | Y38-180                   | Y38-318                                                             | ✓ |
| Y-515-5 | -400063 | 30 - 250<br>1 3/16 -<br>9 13/16 | 338<br>13 5/16  | 52<br>2 1/16   | 440<br>17 5/16 | 1<br>1/4"-12<br>UNF | 116<br>4 9/16 | 2<br>1/16   | 14<br>9/16   | 70<br>2 3/4   | 46<br>1 13/16 | 19<br>41.895     | Y58-180                   | -                                                                   | ✓ |
| Y-515-6 | -043581 | 75 - 330<br>2 15/16 -<br>12 1   | 430<br>16 15/16 | 60<br>2 3/8    | 595<br>23 7/16 | 1<br>1/4"-12<br>UNF | 130<br>5 1/8  | 2<br>1/16   | 16<br>5/8    | 70<br>2 3/4   | 55<br>2 3/16  | 39<br>85.995     | Y58-180                   | Y58-518,<br>Y58-500                                                 | ✓ |
| Y-515-7 | -172281 | 80 - 420<br>3 1/8 -<br>16 9/16  | 545<br>21 7/16  | 60<br>2 3/8    | 670<br>26 3/8  | 1<br>1/4"-12<br>UNF | 130<br>5 1/8  | 2<br>1/16   | 16<br>5/8    | 70<br>2 3/4   | 55<br>2 3/16  | 45<br>99.225     | Y58-180                   | -                                                                   | ✓ |

## SERIES YX8-X00 HYDRAULIC UNIVERSAL PULLER SET



The 18-piece hydraulic universal puller sets of series YXB-X00 are used for pulling, separating, and internal extraction of particularly large and tightly seated bearings, gears, discs, etc. in industry and commercial vehicles. The set requires no additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers, separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for every situation.

### BENEFITS

- By storing it in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle removal even during heavy work
- The combination of hydraulics and the respective devices enables the easy and controlled removal of particularly stubborn parts.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                                                    |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | mm/<br>inch                                                                       | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                              |                                                                                                                                                                                                   |                                                                                     |
| Y28-200 | -870828                                                                           | 50 -<br>500<br>1<br>15/16 -<br>19<br>11/16                                        | 0 - 300<br>0 - 11<br>13/16                                                        | 30 - 180<br>1 3/16 -<br>7 1/16                                                    | 25 - 155<br>1 - 6 1/8                                                             | 135 -<br>300<br>5 5/16 -<br>11 13/16                                              | 1.000<br>39 3/8                                                                   | 700                                                                               | 200                      | 20<br>22.05              | 85<br>187.425                                                                      | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y20-206,<br>Y218-06-<br>P,<br>Y218-08-<br>P,<br>Y218-31-<br>P,<br>Y218-33,<br>Y205-20,<br>Y218-10,<br>Y218-11,<br>Y20-216 | ✓                                                                                   |
| Y38-300 | -870835                                                                           | 50 -<br>900<br>1<br>15/16 -<br>35<br>7/16                                         | 0 - 520<br>0 - 20<br>1/2                                                          | 75 - 230<br>2 15/16 -<br>9 1/16                                                   | 30 - 250<br>1 3/16 -<br>9 13/16                                                   | 180 -<br>420<br>7 1/16 -<br>16 9/16                                               | 1.200<br>47 1/4                                                                   | 700                                                                               | 300                      | 30<br>33.07              | 188<br>414.540                                                                     | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y30-206,<br>Y318-36-<br>P,<br>Y318-33,<br>Y318-38-<br>P,<br>Y318-41-<br>P,<br>Y305-20,<br>Y318-10,<br>Y318-11             | ✓                                                                                   |

PRODUCT DETAILS

| #                                                                                       | <br>GTIN | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>mm/<br>inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | <br>kg/lb | Consists<br>of                                                                                                                                                                  |  |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  Y58-500 | -870842                                                                                   | 460 -<br>1.200<br>18 1/8<br>- 47<br>1/4                                                          | 0 - 700<br>0 - 27<br>9/16                                                                        | 75 - 230<br>2 15/16 -<br>9 1/16                                                                  | 75 - 330<br>2 15/16 -<br>12 1                                                                    | 235 -<br>540<br>9 1/4 -<br>21 1/4                                                                | 1.500<br>59 1/16                                                                                 | 498                                                                                      | 500                            | 50<br>55.12                                | 335<br>738.675                                                                               | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y50-206,<br>Y518-08-<br>P,<br>Y518-31-<br>P,<br>Y518-33,<br>Y505-20,<br>Y518-10,<br>Y518-11,<br>Y50-216 | ✓                                                                                   |

## SERIES YX8-X18 HYDRAULIC PULLER SETS



The 13-piece hydraulic puller sets are used for separating and internally extracting particularly large and stuck bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for application. In addition to a hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes separating knives, internal extractors, counter stays, and extensions to ensure a universal solution for internal extraction and separation.

### BENEFITS

- Through the storage in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle extraction even for heavy-duty tasks
- The combination of hydraulics and the respective devices allows for the easy and controlled removal of particularly stubborn parts.



### TECHNICAL ATTRIBUTES

| #       | GTIN    | mm/inch                           | mm/inch         | mm/inch                         | mm/inch                         | bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t.<br>sh. | kg/lb          | Consists of                                                                                                                                       | MADE IN GERMANY<br>DEUTSCHES<br>WERKZEUG<br>FWI |
|---------|---------|-----------------------------------|-----------------|---------------------------------|---------------------------------|-----|--------------------------------|--------------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Y28-218 | -036651 | 135 - 300<br>5 5/16 - 11<br>13/16 | 1.000<br>39 3/8 | 30 - 180<br>1 3/16 - 7<br>1/16  | 25 - 155<br>1 - 6 1/8           | 394 | 150                            | 15<br>16.53                                | 60,3<br>13.230 | Y-221-E,<br>YHP-325,<br>Y-215-3,<br>YDB-27E,<br>YRH-202,<br>Y20-180,<br>Y218-06-P,<br>Y218-08-P,<br>Y218-31-P,<br>Y218-33,<br>Y218-10,<br>Y218-11 | ✓                                               |
| Y38-318 | -037641 | 180 - 420<br>7 1/16 - 16<br>9/16  | 1.200<br>47 1/4 | 75 - 230<br>2 15/16 - 9<br>1/16 | 30 - 250<br>1 3/16 - 9<br>13/16 | 514 | 250                            | 25<br>27.56                                | 115<br>253.575 | Y-321-E,<br>YHP-325,<br>Y-315-5,<br>YDB-33E,<br>YRH-302,<br>Y30-180,<br>Y318-36-P,<br>Y318-33,<br>Y318-38-P,<br>Y318-41-P,<br>Y318-10,<br>Y318-11 | ✓                                               |



PRODUCT DETAILS

| #                                                                                       |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of                                                                                                                         |  |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | bar                                                                               | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                                                                     |                                                                                     |
|  Y58-518 | -038891                                                                           | 235 - 540<br>9 1/4 - 21<br>1/4                                                    | 1.500<br>59 1/16                                                                  | 75 - 230<br>2 15/16 - 9<br>1/16                                                   | 75 - 330<br>2 15/16 -<br>12 1                                                     | 348                                                                               | 350                      | 35<br>38.58              | 22<br>48.510                                                                        | Y-521-E,<br>YHP-325,<br>Y-515-6,<br>YDB-55E,<br>YRH-603,<br>Y50-180,<br>Y518-08-P,<br>Y518-31-P,<br>Y518-33,<br>Y518-10,<br>Y518-11 | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES YX8-X56 HYDRAULIC EXTERNAL PULLER SETS



The 9- and 15-piece hydraulic puller sets are used for extracting particularly large and stubborn bearings, gears, discs, etc. in industry and commercial vehicles. The set does not require any additional accessories for use. In addition to a hydraulic hollow piston cylinder with hand pump, pressure gauge, and hose, the set includes 2-jaw and 3-jaw pullers to provide a solution for various situations during external extraction.

#### BENEFITS

- Application-oriented assembly for universal use
- Through the storage in the metal box, the completeness of the set can be easily overviewed.
- Energy-saving and gentle extraction even for heavy-duty tasks
- The combination of hydraulics and the respective devices enables the easy and controlled removal of particularly stubborn parts.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                                                                     |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y28-256 | -036811                                                                                   | 50 - 500<br>1 15/16 -<br>19 11/16                                                            | 0 - 300<br>0 - 11 13/16                                                                      | 700                                                                                      | 200                            | 20<br>22.05                             | 68<br>149.940                                                                                | YHP-325,<br>YRH-202,<br>Y20-206,<br>Y205-20,<br>Y218-10,<br>Y218-11,<br>Y20-216 | ✓                                                                                   |
| Y38-356 | -037801                                                                                   | 50 - 900<br>1 15/16 -<br>35 7/16                                                             | 0 - 520<br>0 - 20 1/2                                                                        | 700                                                                                      | 300                            | 30<br>33.07                             | 93,42<br>205.991                                                                             | YHP-325,<br>YRH-302,<br>Y30-206,<br>Y305-20,<br>Y318-10,<br>Y318-11             | ✓                                                                                   |
| Y58-556 | -038631                                                                                   | 100 -<br>1.200<br>3 15/16 -<br>47 1/4                                                        | 0 - 700<br>0 - 27 9/16                                                                       | 498                                                                                      | 500                            | 50<br>55.12                             | 175<br>385.875                                                                               | YHP-325,<br>YRH-603,<br>Y50-206,<br>Y505-20,<br>Y518-10,<br>Y518-11,<br>Y50-216 | ✓                                                                                   |

## SERIES GOLIATH MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH



The mobile hydraulic puller "GOLIATH" is used for pulling off large bearings, gears, and similar components in the heavy industry, railway, power plants, and other applications. With a pulling force of up to 50 tons, the hydraulic puller is the ideal solution for truly large pulling processes. The application of the pulling force on the pressure cylinder equipped with a central pressure spindle is performed by a two-stage electric-hydraulic pump, which is operated via remote control. The puller can be used as both a 2-jaw and a 3-jaw puller.

### BENEFITS

- Hydraulics ensure easy and controlled removal of particularly large and seized parts with minimal effort.
- Hydraulic height adjustment guarantees comfortable working
- The Y-shaped, mobile supporting frame with the 4 smooth rolling rollers (including locking capability) allows for easy and comfortable attachment of the puller and guarantees a secure stance.
- The hydraulic puller can be used as both a 2-jaw and a 3-jaw tool.



### TECHNICAL ATTRIBUTES

| #           | GTIN    |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             |         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | bar                                                                                 | V                                                                                   | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| Goliath-256 | -102714 | 0 - 500<br>0 - 19<br>11/16                                                          | 300<br>11 13/16                                                                     | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 200                      | 20<br>22.05              | 225<br>496.125                                                                        | ✓                                                                                     |
| Goliath-356 | -102752 | 0 - 900<br>0 - 35<br>7/16                                                           | 520<br>20 1/2                                                                       | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 300                      | 30<br>33.07              | 330,3<br>566.685                                                                      | ✓                                                                                     |
| Goliath-556 | -102783 | 0 - 1.200<br>0 - 47 1/4                                                             | 700<br>27 9/16                                                                      | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 500                      | 50<br>55.12              | 328<br>723.240                                                                        | ✓                                                                                     |

## SERIES GOLIATH-218 MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH



The hydraulic cylinders from KUKKO are capable of solving even extreme pulling problems. When manual, mechanical force reaches its limits, KUKKO offers various hydraulic solutions depending on the application, achieving pulling forces of up to 100 tons. The oil hydraulics guarantee maximum power transmission with minimal effort.

The hydraulic program includes, among others:

- Hollow piston cylinder
- Pressure cylinder
- Lifting cylinder
- Puller with Hydraulic cylinder
- Nut splitter
- Spreader

### BENEFITS

- Enables tremendous pulling forces of up to 50 t
- Hydraulic height adjustment and mechanical fine adjustment ensure precise work.
- The application of the pull-off force is achieved through a two-stage electric hydraulic pump.
- Simple and convenient attachment of the puller via Y-shaped, movable frame with 4 smooth rolling rollers.



## TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | bar                                                                                 | V                                                                                   | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| Goliath-218 | -102707                                                                             | 300<br>11 13/16                                                                     | 25 - 155<br>1 - 6 1/8                                                               | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 200                      | 20<br>22.05              | 213<br>469.665                                                                        | ✓                                                                                     |
| Goliath-318 | -102745                                                                             | 520<br>20 1/2                                                                       | 30 - 250<br>1 3/16 - 9<br>13/16                                                     | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 300                      | 30<br>33.07              | 299<br>659.295                                                                        | ✓                                                                                     |
| Goliath-518 | -102776                                                                             | 520<br>20 1/2                                                                       | 80 - 420<br>3 1/8 - 16<br>9/16                                                      | 400 - 1000<br>15 3/4-39<br>3/8                                                      | 700                                                                                 | 230 V                                                                               | 500                      | 50<br>55.12              | 361<br>796.005                                                                        | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES GOLIATH-200 MOBILE HYDRAULIC PULLER "GOLIATH" WITH ADJUSTABLE REACH



The mobile, hydraulic pulling device "GOLIATH" is used for Removing large bearings, gears and similar components in heavy industry, in railways and power plants, as well as other applications. With a pulling force of up to 50 t, the "GOLIATH" is the solution for truly large pulling operations.

#### BENEFITS

- Enables tremendous pulling forces of up to 50 t
- Hydraulic height adjustment and mechanical fine adjustment ensure precise work.
- The application of the pulling force is carried out by a two-stage electro-hydraulic pump.
- Simple and comfortable mounting of the puller through Y-shaped, movable support frame with the 4 smooth rolling rollers.

#### TECHNICAL ATTRIBUTES

| #           |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             | GTIN                                                                              | mm/<br>inch                                                                       | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | bar                                                                               | V                                                                                 | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                                                                                     |
| Goliath-200 | -102691                                                                           | 0 - 500<br>0 - 19<br>11/16                                                        | 300<br>11 13/16                                                                   | 25 - 155<br>1 - 6 1/8                                                             | 400 - 1000<br>15 3/4-39<br>3/8                                                    | 700                                                                               | 230 V                                                                             | 200                      | 20<br>22.05              | 263<br>579.915                                                                      | ✓                                                                                   |
| Goliath-300 | -102738                                                                           | 0 - 900<br>0 - 35<br>7/16                                                         | 520<br>20 1/2                                                                     | 30 - 250<br>1 3/16 - 9<br>13/16                                                   | 400 - 1000<br>15 3/4-39<br>3/8                                                    | 700                                                                               | 230 V                                                                             | 300                      | 30<br>33.07              | 335<br>738.675                                                                      | ✓                                                                                   |
| Goliath-500 | -102769                                                                           | 0 - 1.200<br>0 - 47<br>1/4                                                        | 700<br>27 9/16                                                                    | 80 - 420<br>3 1/8 - 16<br>9/16                                                    | 400 - 1000<br>15 3/4-39<br>3/8                                                    | 700                                                                               | 230 V                                                                             | 500                      | 50<br>55.12              | 0,3<br>0.662                                                                        | ✓                                                                                   |

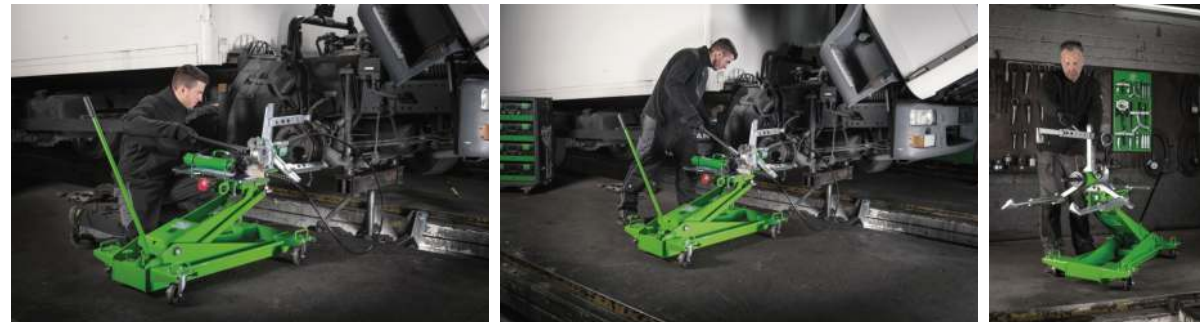
SERIES DAVID  
MOBILE 3-JAW HYDRAULIC PULLER "DAVID"  
WITH ADJUSTABLE REACH

The hydraulic, mobile 3-jaw puller with adjustable reach "DAVID" is used for pulling large bearings, gears, and similar components in heavy industry, trade, and workshops. With a maximum load capacity of 20 tons, the puller provides a strong, hydraulic solution for otherwise difficult tasks in pulling large parts. The jaws are adjustable in length and can be adapted to the required reach.



BENEFITS

- Even under full load, the DAVID ensures parallel pulling.
- The three-jaw design guarantees even load distribution and thereby a particularly secure hold on the part to be pulled off.
- The lever actuation is rotatable by 360° for ergonomic operation from the work area.
- The lowering device for controlled load lowering reduces the risk of accidents thanks to the easily accessible valve.
- Through the four swivel casters, it can be used mobile at different workplaces.



TECHNICAL ATTRIBUTES

| #                  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | bar                                                                                 | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| YHU-S-<br>Y28-11-1 | -060144                                                                             | 0 - 520<br>0 - 20 1/2                                                               | 500<br>19 11/16                                                                     | 165 - 890<br>6 1/2-35<br>1/32                                                       | 700                                                                                 | 200                      | 20<br>22.05              | 204<br>52.920                                                                         | ✓                                                                                     |

SERIES AXLE  
MOBILE HYDRAULIC AXLE PIN PRESS "AXLE"



The hydraulic king pin press "AXLE" of the Y-AP-75 series was developed specifically for the fast and safe pressing in and out of all common king pins on commercial vehicle front axles. The press frame is of heavy-duty design. The press is freely rotatable and lockable. The extended scope of delivery includes a pneumatic-hydraulic pump with pressure gauge, hose and coupling (YPP-525) as well as an 8-piece pressure bolt set (Y-AP-371). This makes the king pin press ready for immediate use. Optionally, two additional bolt and socket sets for MAN (Y-AP-372) and Daimler Truck (Y-AP-373) are available.

BENEFITS

- The press can be used both in the assembled and disassembled state of the axle.
- The 360° swiveling lever actuation enables ergonomic operation from within the work area
- The drain actuation is easily accessible through a well-accessible rotary valve and can be dosed to effectively prevent accidents.
- Flexible positioning in the workshop due to mobile application capability
- Wide working height range

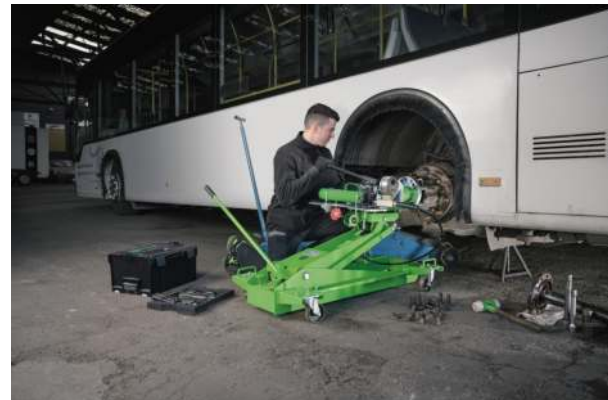
| Druckbolzen   Pressure Bolts |                |
|------------------------------|----------------|
| Durchmesser   Diameter       | Länge   Length |
| 21,5 mm                      | 150 mm         |
| 24,5 mm                      | 150 mm         |
| 29 mm                        | 120 mm         |
| 35 mm                        | 120 mm         |
| 29 mm                        | 220 mm         |
| 35 mm                        | 220 mm         |
| 39 mm                        | 120 mm         |
| 39 mm                        | 220 mm         |



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  | Max. pressing force  |  | Consists of          |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | bar                                                                                 | °                                                                                   | t/US t. sh.          | kg/lb                                                                                 |                      |                                                                                       |
| Y-AP-75 | -691157                                                                             | 370<br>14<br>9/16                                                                   | 615<br>24 3/16                                                                      | 1.100<br>43 5/16                                                                    | 155<br>6 1/8                                                                        | 700                                                                                 | 360                                                                                 | 75<br>82.67 tn<br>sh | 286<br>630.630                                                                        | YPP-525,<br>Y-AP-371 | ✓                                                                                     |

SERIES CITARO  
MOBILE HYDRAULIC HUB PULLER "CITARO"



The hydraulic hub puller "Citaro" is used for pulling wheel hubs in the automotive industry. It allows for the perfect loosening of very stuck, difficult-to-remove wheel hubs. The 30 t pressure cylinder enables a time-saving and versatile application, even with stubborn parts.

BENEFITS

- For quick and easy positioning on the vehicle, the work unit is pivotable and pre-adjustable.
- The lever actuation allows ergonomic operation from the work area thanks to 360° swivel capability.
- The overload protection and the lowering device with easily accessible rotary valve reduces the risk of injury.
- Thanks to the 4 swivel casters and easy adjustability, it can be used mobily at any time.
- The flat design allows working on low-lying vehicles.



TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>bar | <br>M16x1,5,<br>M18x1,5,<br>M20x1,5 | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | Usage                                                         | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YHU-S-Citaro | -060137                                                                                     | 700                                                                                        | M16x1,5,<br>M18x1,5,<br>M20x1,5                                                                                        | 300                            | 30<br>33.07                          | ZF axle A, B<br>and C (type<br>AV132) RL<br>75 E, RL 75<br>EC | 2<br>4.410                                                                                     | ✓                                                                                     |



SERIES Y-60-000  
HYDRAULIC HUB PULLER



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>bar |  | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-60-100 | -356780                                                                                     | 168, 184, 190<br>6 5/8, 7 1/4, 7 1/2                                                           | 700                                                                                        | M16x1,5,<br>M18x1,5,<br>M20x1,5                                                     | 300                            | 30<br>33.07                             | 37<br>81.585                                                                                   | ✓                                                                                     |
| Y-60-200 | -104060                                                                                     | 225, 275, 335<br>8 7/8, 10 13/16, 13 3/16                                                      | 700                                                                                        | M22 x 1,5                                                                           | 300                            | 30<br>33.07                             | 37<br>81.585                                                                                   | ✓                                                                                     |

The hydraulic hub puller for commercial vehicles and low-floor buses is used for the safe and quick disassembly of the wheel hub in commercial vehicles and buses in the automotive industry. The bolt circle plate and the 30 t pressure cylinder are capable of loosening very tight and difficult-to-remove wheel hubs.

BENEFITS

- The hole circle disc with various radii and drill diameters allows for use with a variety of models.
- By storing it in the box, the completeness of the set can be easily overviewed.
- The pulling process protects the hub bearings and removes them quickly and without damage.

## PRODUCT DETAILS

### SERIES 129-5-H-0 2-JAW AND 3-JAW PULLER WITH HYDRAULIC LIFTING CYLINDER



The 129 series puller with hydraulic lift cylinder is used to hydraulically press out the ball pins when removing ball joints on tie rods and steering rods specifically for trucks and low-floor buses. A hydraulic pump is required for operation.

#### BENEFITS

- The hydraulic presses are powered by a hydraulic cylinder, allowing for controlled and safe operation.
- The extra powerful version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- With the center spindle, the press can be adjusted and pre-tensioned.
- Suitable for the following vehicle types: Mercedes Benz: ACTROS, ATEGO from 18 tons, SKO 405, -N, -GN (low-floor buses), MAN: F2000, TG, A 23 (low-floor articulated buses), Scania: series 3 and 4, Icarus.
- Depending on the space requirements, the mechanical drive spindle can be operated by conversion from above or below.



#### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | bar                                                                                   | kg/lb                                                                                 |                                                                                       |
| 129-5-45-H10 | -333361                                                                             | 28,5<br>1 1/8                                                                       | 45<br>1 3/4                                                                         | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 100                      | 10<br>11.02              | 700                                                                                   | 8,28<br>18.257                                                                        | ✓                                                                                     |
| 129-5-45-H20 | -333422                                                                             | 28,5<br>1 1/8                                                                       | 45<br>1 3/4                                                                         | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 200                      | 20<br>22.05              | 700                                                                                   | 9,57<br>21.102                                                                        | ✓                                                                                     |
| 129-5-50-H10 | -000317                                                                             | 28,5<br>1 1/8                                                                       | 55<br>2 3/16                                                                        | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 100                      | 10<br>11.02              | 700                                                                                   | 7,65<br>16.868                                                                        | ✓                                                                                     |
| 129-5-50-H20 | -000324                                                                             | 28,5<br>1 1/8                                                                       | 55<br>2 3/16                                                                        | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 200                      | 20<br>22.05              | 700                                                                                   | 9,2<br>20.286                                                                         | ✓                                                                                     |

## SERIES YRH HOLLOW PISTON CYLINDER

The hydraulic hollow piston cylinders of the YRH series are used for application with the KUKKO hydraulic program in crafts, industry, and workshops. They can be used both as pressure and traction cylinders, enabling a force-saving and versatile operation even in challenging extraction situations or when a lot of force is needed.

### BENEFITS

- All models feature a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and mounting threads on the cylinder base allow for easy assembly.
- Tensioned retractable spring increases the insertion speed and thereby enhances the performance.
- The integrated scraper removes contaminants from the piston, thereby extending the life of the cylinder.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     |                                                                                     |                                                                                     | mm/<br>inch                                                                         | bar                                                                                 | cm³                                                                                  | kN                       | t/US t.<br>sh.           | kg/lb                                                                                 |                                                                                       |
| YRH-132 | -854460                                                                             | 73<br>2 7/8                                                                         | 133<br>5 1/4                                                                        | 60<br>2 3/8                                                                         | 2<br>3/4"-12<br>UN                                                                  | 3/4"-16<br>UN                                                                       | -                                                                                   | 8<br>5/16                                                                           | 700                                                                                 | 0.00001<br>m³                                                                        | 130                      | 13<br>14.33              | 2,04<br>5.292                                                                         | ✓                                                                                     |
| YRH-202 | -046711                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 162<br>6 3/8                                                                        | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 50<br>1 15/16                                                                       | 700                                                                                 | 0.000173<br>m³                                                                       | 200                      | 20<br>22.05              | 7,575<br>16.703                                                                       | -                                                                                     |
| YRH-206 | -870934                                                                             | 99<br>3 7/8                                                                         | 160<br>6<br>5/16                                                                    | 306<br>12 1/16                                                                      | 3<br>7/8"-12<br>UN                                                                  | 1<br>9/16"-16<br>UN                                                                 | 1"-8<br>UNC                                                                         | 150<br>5 7/8                                                                        | 700                                                                                 | 0.000527<br>m³                                                                       | 200                      | 20<br>22.05              | 14,185<br>31.278                                                                      | ✓                                                                                     |
| YRH-302 | -046896                                                                             | 117<br>4 5/8                                                                        | 177<br>6<br>15/16                                                                   | 178,5<br>7 1/32                                                                     | 4<br>1/2"-12<br>UN                                                                  | 1<br>7/8"-16<br>UN                                                                  | 1<br>1/4"-7<br>UNC                                                                  | 65<br>2 1/2                                                                         | 700                                                                                 | 0.00031<br>m³                                                                        | 300                      | 30<br>33.07              | 10,7<br>3.749                                                                         | -                                                                                     |
| YRH-603 | -046971                                                                             | 159<br>6 1/4                                                                        | 219<br>8 5/8                                                                        | 247,5<br>9 3/4                                                                      | 6<br>1/4"-12<br>UN                                                                  | 2<br>3/4"-16<br>UN                                                                  | 1<br>5/8"-5<br>1/2<br>UNS                                                           | 75<br>2 15/16                                                                       | 700                                                                                 | 0.00068<br>m³                                                                        | 600                      | 60<br>66.14              | 30,3<br>66.812                                                                        | -                                                                                     |

## PRODUCT DETAILS

### SERIES YRE HYDRAULIC PRESSURE CYLINDERS WITH COLLAR THREAD

The hydraulic pressure cylinders with collar threads of the YRE series are used with the KUKKO hydraulic program for application in all situations in crafts, industry, and workshops. The model with a large stroke length allows for energy-saving and versatile work even in difficult pulling situations or when a lot of force is required.

#### BENEFITS

- All models have a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and fastening threads on the cylinder bottom enable easy assembly.
- The prestressed retractable spring increases the retraction speed and thus boosts performance.
- The integrated wiper removes contaminants from the piston and thereby extends the lifespan of the cylinder.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     | mm/inch                                                                             | bar                                                                                 | oil<br>cm³                                                                          | Max.<br>tensile<br>force<br>kN                                                       | Max.<br>tension<br>force<br>t/US t.<br>sh.                                            | kg/lb                                                                                 |                                                                                       |                                                                                       |
| YRE-050 | -046551                                                                             | 38<br>1 1/2                                                                         | 98<br>3 7/8                                                                         | 216<br>8 1/2                                                                        | 25<br>1                                                                             | 1 1/2"-16<br>UN                                                                     | 125<br>4 15/16                                                                      | 700                                                                                 | 0.0001<br>m³                                                                        | 50                                                                                   | 5<br>5.51                                                                             | 2,2<br>4.851                                                                          | ✓                                                                                     |                                                                                       |
| YRE-101 | -870927                                                                             | 57<br>2 1/4                                                                         | 117<br>4 5/8                                                                        | 250<br>13 3/4                                                                       | 40<br>1 9/16                                                                        | 2.1/4"-14<br>UNS                                                                    | 250<br>9 13/16                                                                      | 700                                                                                 | 0.000406<br>m³                                                                      | 100                                                                                  | 10<br>11.02                                                                           | 6,4<br>14.112                                                                         | ✓                                                                                     |                                                                                       |
| YRE-106 | -879401                                                                             | 57<br>2 1/4                                                                         | 117<br>4 5/8                                                                        | 247<br>9 3/4                                                                        | 40<br>1 9/16                                                                        | 2.1/4"-14<br>UNS                                                                    | 155<br>6 1/8                                                                        | 700                                                                                 | 0.000242<br>m³                                                                      | 100                                                                                  | 10<br>11.02                                                                           | 4,375<br>9.647                                                                        | -                                                                                     |                                                                                       |
| YRE-701 | -021251                                                                             | 152<br>5 1                                                                          | 212<br>8 3/8                                                                        | 285<br>11 1/4                                                                       | 70<br>2 3/4                                                                         | 5.3/4"-12<br>UN                                                                     | 155<br>6 1/8                                                                        | 700                                                                                 | 0.001752<br>m³                                                                      | 750                                                                                  | 75<br>82.67                                                                           | 32<br>70.560                                                                          | ✓                                                                                     |                                                                                       |



PRODUCT DETAILS

SERIES YSM  
HUB CYLINDER



The YSM series of hub cylinders are used with the KUKKO hydraulic program in crafts, industry, and workshops when other cylinders are too large. Due to their compact design, they can also be used in tight spaces, allowing for a force-saving and versatile operation even in difficult pulling situations or when a lot of force is required.

BENEFITS

- All models have a CR-400 coupling sleeve with dust cap.
- Mounting holes enable easy installation
- Grooved piston ends make pressure pieces unnecessary.
- The pre-tensioned retractable spring increases the entry speed and thereby boosts performance.
- The integrated scraper removes contaminants from the piston, thereby extending the life of the cylinder.



TECHNICAL ATTRIBUTES

| #       |         |              |             |               |            |     |                          | Max. tensile force | Max. tension force |                |   |
|---------|---------|--------------|-------------|---------------|------------|-----|--------------------------|--------------------|--------------------|----------------|---|
|         | GTIN    | mm/inch      | mm/inch     | mm/inch       | mm/inch    | bar | cm <sup>3</sup>          | kN                 | t/US t. sh.        | kg/lb          |   |
| YSM-100 | -101007 | 55<br>2 3/16 | 82<br>3 1/4 | 43<br>1 11/16 | 12<br>1/2  | 700 | 0.0000<br>m <sup>3</sup> | 100                | 10<br>11.02        | 1,735<br>3.826 | ✓ |
| YSM-200 | -102004 | 76<br>2 1    | 101<br>3 1  | 51<br>2 1/4   | 11<br>7/16 | 700 | 0.0000<br>m <sup>3</sup> | 200                | 20<br>22.05        | 2,795<br>6.163 | ✓ |

## SERIES Y-57 4-PIECE HYDRAULIC NUT SPLITTER SET



The 4-part, pump-hydraulic nut splitter sets are used for splitting irreversibly stuck, rusted, or overtightened nuts of all quality classes. The TiN coating of the chisel has particularly good friction properties, which allows for high cutting performance.

### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the L-Boxx, the completeness of the set can be easily overviewed.
- Splitting the mother is possible without damaging the threaded bolt.
- Enormous explosive power thanks to pump hydraulics
- Also suitable for use in pipeline construction and other industries.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  | <br>mm/inch | <br>bar | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-57-10 | -123559                                                                                     | 10 - 19<br>3/8 - 3/4                                                                           | 12                                                                                  | 17<br>11/16                                                                                    | 700                                                                                        | 2,26<br>4.983                                                                                  | ✓                                                                                     |
| Y-57-19 | -123566                                                                                     | 19 - 24<br>3/4 - 15/16                                                                         | 12                                                                                  | 25<br>1                                                                                        | 700                                                                                        | 3,24<br>7.144                                                                                  | ✓                                                                                     |
| Y-57-24 | -870675                                                                                     | 24 - 32<br>15/16 - 1<br>1/4                                                                    | 12                                                                                  | 30<br>1 3/16                                                                                   | 700                                                                                        | 5,4<br>11.907                                                                                  | ✓                                                                                     |
| Y-57-32 | -870682                                                                                     | 32 - 41<br>1 1/4 - 1 5/8                                                                       | 12                                                                                  | 32<br>1 1/4                                                                                    | 700                                                                                        | 8,53<br>18.809                                                                                 | ✓                                                                                     |
| Y-57-41 | -870699                                                                                     | 41 - 50<br>1 5/8 - 1<br>15/16                                                                  | 12                                                                                  | 45<br>1 3/4                                                                                    | 700                                                                                        | 13,44<br>29.635                                                                                | ✓                                                                                     |
| Y-57-50 | -870705                                                                                     | 50 - 60<br>1 15/16 - 2<br>3/8                                                                  | 12                                                                                  | 48<br>1 7/8                                                                                    | 700                                                                                        | 25,8<br>56.889                                                                                 | ✓                                                                                     |
| Y-57-60 | -870712                                                                                     | 60 - 75<br>2 3/8 - 2<br>15/16                                                                  | 12                                                                                  | 70<br>2 3/4                                                                                    | 700                                                                                        | 34,1<br>75.191                                                                                 | ✓                                                                                     |

## SERIES YHP ACCESSORIES FOR HYDRAULIC PULLING



YHP-326



YHP-320



YM-235



YF-200

The YHP series offers a versatile range of accessories for hydraulic pulling. The assortment includes hydraulic hand pumps, hydraulic hoses, pressure gauges, and adapters. All components are available both individually and in various combinations. The hydraulic hand pump is available in several versions - such as a standalone device (YHP-320), in combination with a hydraulic hose (YHP-321), with a pressure gauge (YHP-324), with hose and pressure gauge (YHP-325), as well as a complete set with hose, pressure gauge, and metal case. Furthermore, the hand pump is available in two different variants, each with varying usable oil volumes depending on the application area.

### BENEFITS

- The entire series is equipped with numerous safety features that ensure reliable performance while guaranteeing high occupational safety.
- Compatible with common hydraulic puller devices and systems

### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>cm <sup>3</sup> | <br>bar | Max. tension force<br>t/US t. sh. | <br>kg/lb | Consists of                          |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------|
| YHP-320 | -045721                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 7,28<br>16.052                                                                               | YHP-320                              | ✓                                                                                     |
| YHP-321 | -111198                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 8,375<br>18.467                                                                              | YHP-320, YF-200                      | ✓                                                                                     |
| YHP-324 | -045806                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 9,605<br>21.278                                                                              | YHP-320,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-325 | -045981                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 10,05<br>3.308                                                                               | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-326 | -046483                                                                                     | 0.0006 m <sup>3</sup>                                                                                  | 700                                                                                        | 50<br>55.12                       | 16,13<br>35.567                                                                              | YHP-320,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YHP-420 | -609688                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420                              | ✓                                                                                     |
| YHP-421 | -022968                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 4,5<br>0.662                                                                                 | YHP-420, YF-200                      | ✓                                                                                     |
| YHP-424 | -103988                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 13,6<br>29.988                                                                               | YHP-420,<br>YM-235, YGA-2            | ✓                                                                                     |
| YHP-425 | -103995                                                                                     | 0.002 m <sup>3</sup>                                                                                   | 700                                                                                        | 75<br>82.67                       | 9,65<br>21.278                                                                               | YHP-420,<br>YF-200, YM-235,<br>YGA-2 | ✓                                                                                     |
| YF-200  | -045646                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,06<br>3.528                                                                                | YF-200                               | ✓                                                                                     |
| YM-235  | -157769                                                                                     | -                                                                                                      | 700                                                                                        | 75<br>82.67                       | 1,605<br>3.638                                                                               | YM-235                               | ✓                                                                                     |
| YGA-2   | -458644                                                                                     | -                                                                                                      | -                                                                                          | 75<br>82.67                       | 0,21<br>0.463                                                                                | YGA-2                                | ✓                                                                                     |

SERIES YPP  
PNEUMATIC, HYDRAULIC PUMP



The pneumatic and hydraulic pumps are used for application with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The compressed air-operated hydraulic pump can be used via foot or hand operation and is optionally available individually or together with hose and pressure gauge.

BENEFITS

- Safety valve as overload protection ensures safe working.
- With 2-stage drain valve for easier application
- Applicable for simply acting press cylinders



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>bar | <br>cm <sup>3</sup> | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YPP-520 | -141577                                                                                     | 700                                                                                        | 0.003 m <sup>3</sup>                                                                                   | 75<br>82.67                          | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| YPP-525 | -469732                                                                                     | 700                                                                                        | 0.003 m <sup>3</sup>                                                                                   | 75<br>82.67                          | 12,93<br>28.511                                                                                | ✓                                                                                     |



SERIES Y-AP-3XX  
ACCESSORIES FOR “AXLE” Y-AP-75



The bolt and socket sets of series Y-AP-3XX are custom-fit accessories for the “AXLE” Y-AP-75 and enable fast and safe pressing-out and pressing-in of kingpins on Trucks. They are characterized by high load capacity and precise manufacturing, ensuring reliable, professional use in workshops and industry. Item Y-AP-372 was developed specifically for MAN vehicles, while Y-AP-373 is optimally matched to Daimler Trucks. Delivered in KUKKO L-BOXX for safe storage.

| Y-AP-371 Druckbolzen   Pressure Bolts |                | Y-AP-372 Druckbolzen   Pressure Bolts - für/for MAN |                | Y-AP-373 Druckbolzen   Pressure Bolts - für/for Daimler Truck |                |
|---------------------------------------|----------------|-----------------------------------------------------|----------------|---------------------------------------------------------------|----------------|
| Durchmesser   Diameter                | Länge   Length | Durchmesser   Diameter                              | Länge   Length | Durchmesser   Diameter                                        | Länge   Length |
| 21,5 mm                               | 150 mm         | 45 mm                                               | 33 mm          | 22 mm                                                         | 180 mm         |
| 24,5 mm                               | 150 mm         | 48 mm                                               | 100 mm         | 26 mm                                                         | 100 mm         |
| 29 mm                                 | 120 mm         | 50 mm                                               | 27 mm          | 31 mm                                                         | 120 mm         |
| 35 mm                                 | 120 mm         | 50 mm                                               | 35 mm          | 31 mm                                                         | 220 mm         |
| 29 mm                                 | 220 mm         | 56 mm                                               | 65 mm          | 37 mm                                                         | 24 mm          |
| 35 mm                                 | 220 mm         | 62 mm                                               | 115 mm         | 37 mm                                                         | 115 mm         |
| 39 mm                                 | 120 mm         | 62 mm                                               | 125 mm         | 37 mm                                                         | 120 mm         |
| 39 mm                                 | 220 mm         | 65 mm                                               | 135 mm         | 39 mm                                                         | 23 mm          |
|                                       |                | 66 mm                                               | 55 mm          | 42 mm                                                         | 23 mm          |
|                                       |                | 66 mm                                               | 100 mm         | 42 mm                                                         | 90 mm          |
|                                       |                | 70 mm                                               | 145 mm         | 45 mm                                                         | 23 mm          |
|                                       |                | 72 mm                                               | 105 mm         | 55 mm                                                         | 140 mm         |

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-AP-371 | -060076                                                                                     | 21,5 - 39<br>13/16-1 9/16                                                                      | 120 - 220<br>4 3/4-8 11/16                                                                     | 10,7<br>33.075                                                                               | Y-AP-75                                                                               | ✓                                                                                     |
| Y-AP-372 | -060083                                                                                     | 50 - 66<br>1 15/16-2 5/8                                                                       | 35 - 100<br>1 3/8-3 15/16                                                                      | 19<br>41.895                                                                                 | Y-AP-75                                                                               | ✓                                                                                     |
| Y-AP-373 | -060090                                                                                     | 22 - 37<br>7/8-1 7/16                                                                          | 70 - 220<br>2 3/4-8 11/16                                                                      | 19,1<br>42.116                                                                               | Y-AP-75                                                                               | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y-10-11 ACCESSORIES FOR HYDRAULIC PULLING

The accessories for hollow piston cylinders are used for compatibility with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The hand cranks and center spindle are designed for the hollow piston cylinders of the YRH series.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y218-10 | -040368                                                                                     | 120<br>4 3/4                                                                                   | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,865<br>4.112                                                                               | YRH-202,<br>YRH-206                                                                   | ✓                                                                                     |
| Y218-11 | -040443                                                                                     | 514<br>20 1/4                                                                                  | 17,5<br>11/16                                                                                  | 20<br>22.05                          | 1,69<br>3.726                                                                                | YRH-206,<br>YRH-202                                                                   | ✓                                                                                     |
| Y318-10 | -041761                                                                                     | 150<br>5 7/8                                                                                   | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 0,88<br>1.940                                                                                | YRH-302                                                                               | ✓                                                                                     |
| Y318-11 | -041846                                                                                     | 610<br>24 1/64                                                                                 | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 3,205<br>7.166                                                                               | YRH-302                                                                               | ✓                                                                                     |
| Y318-12 | -749865                                                                                     | 400<br>15 3/4                                                                                  | 20,5<br>13/16                                                                                  | 30<br>33.07                          | 8<br>17.640                                                                                  | YRH-302                                                                               | ✓                                                                                     |
| Y518-10 | -044243                                                                                     | 240<br>9 7/16                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 2,1<br>4.631                                                                                 | YRH-603                                                                               | ✓                                                                                     |
| Y518-11 | -044328                                                                                     | 750<br>29 1/2                                                                                  | 25,4<br>1                                                                                      | 50<br>55.12                          | 6,745<br>14.873                                                                              | YRH-603                                                                               | ✓                                                                                     |

PRODUCT DETAILS

SERIES YC  
QUICK COUPLING

The quick coupling of the YC series is used together with the hydraulic cylinders of the YRH and YRE series. The complete coupling consists of the coupling connector (YCH-604) and the coupling sleeve (YCR-400) with a protective cap.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  | <br>bar | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| YCR-400 | -201318                                                                                   | 3/8" NPT                                                                          | 700                                                                                      | 0,225<br>0.496                                                                               | ✓                                                                                   |
| YCH-604 | -440731                                                                                   | 3/8" NPT                                                                          | 700                                                                                      | 0,225<br>0.496                                                                               | ✓                                                                                   |

SERIES Y-X00  
MOUNTING FOR HYDRAULIC CYLINDER



The recordings of hydraulic cylinders from the series Y-X00 are used to secure tools in the hydraulic program of KUKKO in crafts, industry, and workshops. The adapters in various sizes secure heavy equipment to the respective hydraulic device and are suitable for the GOLIATH series, among others.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  |                                     |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y200-00 | -507724                                                                                     | 3 7/8"-12 UN                                                                        | Y28-180, Y28-205, Y28-206,<br>Y28-200, Y28-218, Y28-256,<br>Goliath-200, Goliath-218,<br>Goliath-256, YRH-202, YRH-206 | ✓                                                                                     |
| Y300-00 | -507748                                                                                     | 4 1/2"-12 UN                                                                        | Y38-180, Y38-205, Y38-206,<br>Y38-300, Y38-318, Y38-356,<br>Goliath-300, Goliath-318,<br>Goliath-356, YRH-302          | ✓                                                                                     |
| Y500-00 | -507755                                                                                     | 6 1/4"-12 UN                                                                        | Y58-180, Y58-205, Y58-206,<br>Y58-500, Y58-518, Y58-556,<br>Goliath-500, Goliath-518,<br>Goliath-556, YRH-603          | ✓                                                                                     |



PRODUCT DETAILS

SERIES Y205  
PULLER WITH TABS, SCREWS, AND NUTS



The puller with tabs, screws, and nuts is used for pulling especially large and stubborn bearings, gears, and discs. The multiple holes in the jaws allow for individual adjustment to the desired reach.

BENEFITS

- Universally applicable due to adjustable reach.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y205-00 | -273759                                                                                     | 548<br>18 1/2                                                                                  | 4,41<br>9.724                                                                                | Y28-205, Y28-206,<br>Y20-205, Y20-206,<br>Y205-20, Y206-30                           | ✓                                                                                     |
| Y205-27 | -423574                                                                                     | 850<br>23 5/8                                                                                  | 6,58<br>14.509                                                                               | Y28-205, Y28-206,<br>Y20-205, Y20-206,<br>Y205-20, Y206-30                           | ✓                                                                                     |
| Y305-00 | -273834                                                                                     | 805<br>28 3/8                                                                                  | 10,16<br>2.558                                                                               | Y38-205, Y38-206,<br>Y30-205, Y30-206,<br>Y305-20, Y306-30                           | ✓                                                                                     |
| Y505-00 | -273919                                                                                     | 1100<br>38 3/16                                                                                | 22,44<br>49.480                                                                              | Y58-205, Y58-206,<br>Y50-205, Y50-206,<br>Y505-20, Y506-30                           | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES Y205/206 2-JAW TRAVERSE

The accessories for hydraulic pullers are used for the pullers from the KUKKO hydraulic program in craft, industry, and workshop. The puller jaws with tabs, screws, and nuts, as well as 2-jaw or 3-jaw crossbars, are designed for the series Y20, Y28, Y30, Y38, Y50, and Y58.



## TECHNICAL ATTRIBUTES

| #       |  | Max. tension force |  |  |  |
|---------|-----------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | t/US t. sh.        | kg/lb                                                                             |                                                                                    |                                                                                     |
| Y205-20 | -038976                                                                           | 20<br>22.05        | 2,27<br>5.005                                                                     | Y28-205, Y28-206,<br>Y20-205, Y20-206,<br>YRH-202, YRH-206                         | ✓                                                                                   |
| Y206-30 | -039478                                                                           | 20<br>22.05        | 5<br>11.025                                                                       | Y28-205, Y28-206,<br>Y20-205, Y20-206,<br>YRH-202, YRH-206                         | ✓                                                                                   |
| Y305-20 | -040931                                                                           | 30<br>33.07        | 3,786<br>8.348                                                                    | Y38-205, Y38-206,<br>Y30-205, Y30-206,<br>YRH-302                                  | ✓                                                                                   |
| Y306-30 | -041433                                                                           | 30<br>33.07        | 4,97<br>10.959                                                                    | Y38-205, Y38-206,<br>Y30-205, Y30-206,<br>YRH-302                                  | ✓                                                                                   |
| Y505-20 | -042911                                                                           | 50<br>55.12        | 7,85<br>17.309                                                                    | Y58-205, Y58-206,<br>Y50-205, Y50-206,<br>YRH-603                                  | ✓                                                                                   |
| Y506-30 | -043413                                                                           | 50<br>55.12        | 1,55<br>3.418                                                                     | Y58-205, Y58-206,<br>Y50-205, Y50-206,<br>YRH-603                                  | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES Y-17 PRESSURE PIECE FOR AXLE BORES



The pressure pieces for axle bores are used for pulling bearings and gears in craft, industry, and workshops that are mounted on hollow shafts or in housings. The spindle pressure piece serves as a counter-axis to the puller, transferring the force onto the pressure piece through the spindle.

#### BENEFITS

- Broader application possibilities for various extraction situations
- The set is available in both 12-piece and 6-piece versions, and if needed, the pressure pieces are also available individually.

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-01-17 | -233173                                                                                   | 20 - 23<br>13/16-7/8                                                                         | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-02-17 | -233258                                                                                   | 23 - 26<br>7/8-1 1/32                                                                        | 1               | 0,4<br>0.882                                                                                 | ✓                                                                                   |
| Y-03-17 | -233333                                                                                   | 26 - 30<br>1 1/32-1 3/16                                                                     | 1               | 0,5<br>1.103                                                                                 | ✓                                                                                   |
| Y-04-17 | -233418                                                                                   | 29 - 33<br>1 1/8-1 5/16                                                                      | 1               | 0,6<br>1.323                                                                                 | ✓                                                                                   |
| Y-05-17 | -233586                                                                                   | 33 - 39<br>1 5/16-1 9/16                                                                     | 1               | 0,165<br>0.364                                                                               | ✓                                                                                   |
| Y-06-17 | -233661                                                                                   | 36 - 42<br>1 7/16-1 5/8                                                                      | 1               | 0,2<br>0.441                                                                                 | ✓                                                                                   |
| Y-07-17 | -233746                                                                                   | 39 - 46<br>1 9/16-1 13/16                                                                    | 1               | 0,22<br>0.485                                                                                | ✓                                                                                   |
| Y-08-17 | -233821                                                                                   | 42 - 48<br>1 5/8-1 7/8                                                                       | 1               | 0,288<br>0.635                                                                               | ✓                                                                                   |
| Y-09-17 | -233906                                                                                   | 45 - 52<br>1 3/4-2 1/16                                                                      | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-10-17 | -234163                                                                                   | 49 - 58<br>1 15/16-2 5/16                                                                    | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-11-17 | -234248                                                                                   | 51 - 62<br>2 1/64-2 7/16                                                                     | 1               | 0,52<br>1.147                                                                                | ✓                                                                                   |
| Y-12-17 | -234408                                                                                   | 55 - 65<br>2 3/16-2 9/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-13-17 | -234576                                                                                   | 58 - 68<br>2 5/16-2 11/16                                                                    | 1               | 0,65<br>1.433                                                                                | ✓                                                                                   |
| Y-14-17 | -234651                                                                                   | 61 - 71<br>2 3/8-2 13/16                                                                     | 1               | 0,26<br>0.573                                                                                | ✓                                                                                   |
| Y-15-17 | -234736                                                                                   | 65 - 74<br>2 9/16-2 15/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-16-17 | -234811                                                                                   | 71 - 81<br>2 13/16-3 3/16                                                                    | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |
| Y-17-17 | -234996                                                                                   | 77 - 88<br>3 1/32-3 7/16                                                                     | 1               | 0,3<br>0.662                                                                                 | ✓                                                                                   |

PRODUCT DETAILS

| #           | <br>GTIN | <br>mm/inch | Number of parts | <br>kg/lb |  |
|-------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Y-18-17     | -235078                                                                                   | 20 - 62<br>13/16-2 7/16                                                                      | 11              | 2,235<br>4.928                                                                               | ✓                                                                                   |
| Y-19-17     | -235153                                                                                   | 33 - 81<br>1 5/16-3 3/16                                                                     | 12              | 5,7<br>12.569                                                                                | ✓                                                                                   |
| Y-20-17     | -235238                                                                                   | 55 - 88<br>2 3/16-3 7/16                                                                     | 6               | 4,9<br>10.805                                                                                | ✓                                                                                   |
| Y-60-100-17 | -120466                                                                                   | 64 - 70<br>2 1/2-2 3/4                                                                       | 3               | 4,455<br>9.823                                                                               | ✓                                                                                   |





## PRODUCT DETAILS

### SERIES YD PRESSURE PIECE FOR HOLLOW PISTON CYLINDER



The pressure pieces for hollow piston cylinders are screwed into the internal thread of the piston rod of the hollow piston cylinder. The center spindle can be inserted directly into the threaded piece or secured and adjusted using a quick adjustment nut when using a pressure piece with a smooth bore. When using the closed pressure piece, the cylinders can be used as lifting jacks.

#### BENEFITS

- Pressure pieces enable the versatile application of the hollow piston cylinder from KUKKO as a pressure or pull cylinder.

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  |  | Max. tension<br>force<br><br>t/US t. sh. |  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YDB-33E | -400308                                                                                     | 58<br>2 5/16                                                                                   | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                              | 0,21<br>0.463                                                                                  | ✓                                                                                     |
| YDB-55E | -400483                                                                                     | 85<br>3 3/8                                                                                    | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                              | 0,5<br>1.103                                                                                   | ✓                                                                                     |
| YDG-20E | -399091                                                                                     | 50<br>1 15/16                                                                                  | 1"-8 UNC                                                                            | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                  | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| YDG-30E | -399176                                                                                     | 60<br>2 3/8                                                                                    | 1 1/4"-7<br>UNC                                                                     | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                              | 0,285<br>0.628                                                                                 | ✓                                                                                     |
| YDG-50E | -399251                                                                                     | 85<br>3 3/8                                                                                    | 1 5/8"-5<br>1/2 UNS                                                                 | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                              | 0,85<br>1.874                                                                                  | ✓                                                                                     |
| YDM-20E | -414183                                                                                     | 50<br>1 15/16                                                                                  | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                  | 0,28<br>0.617                                                                                  | ✓                                                                                     |
| YDM-30E | -414268                                                                                     | 58<br>2 5/16                                                                                   | -                                                                                   | 1 7/8"-16 UN                                                                        | 30<br>33.07                              | YRH-302                                                                              | 0,38<br>0.838                                                                                  | ✓                                                                                     |
| YDM-50E | -414343                                                                                     | 85<br>3 3/8                                                                                    | -                                                                                   | 2 3/4"-16 UN                                                                        | 50<br>55.12                              | YRH-603                                                                              | 1,6<br>3.528                                                                                   | ✓                                                                                     |
| YDB-27E | -400223                                                                                     | 50<br>1 15/16                                                                                  | -                                                                                   | 1 9/16"-16 UN                                                                       | 20<br>22.05                              | YRH-202,<br>YRH-206                                                                  | 0,17<br>0.375                                                                                  | ✓                                                                                     |



KUKKO // Pull forward



TI · 8351  
Centri Porsche Ticino







# AUTOMOTIVE

Whether it's pulling out wet cylinder liners, pressing out ball pins, pulling off hub pullers, steering wheel pullers, wiper arms, camshafts, or steering arm pullers, spreading piston rings, during the disassembly of oil filter wrenches, as well as for removing and tensioning spring compressors – KUKKO offers the perfect solution for every application.

For automotive include, among others:

- Cylinder liner pullers
- Ball joint presses
- Hub pullers
- Steering wheel pullers
- Wiper arm pullers
- Camshaft pullers
- Steering arm pullers
- Piston ring pliers
- Oil filter wrenches
- Spring compressors



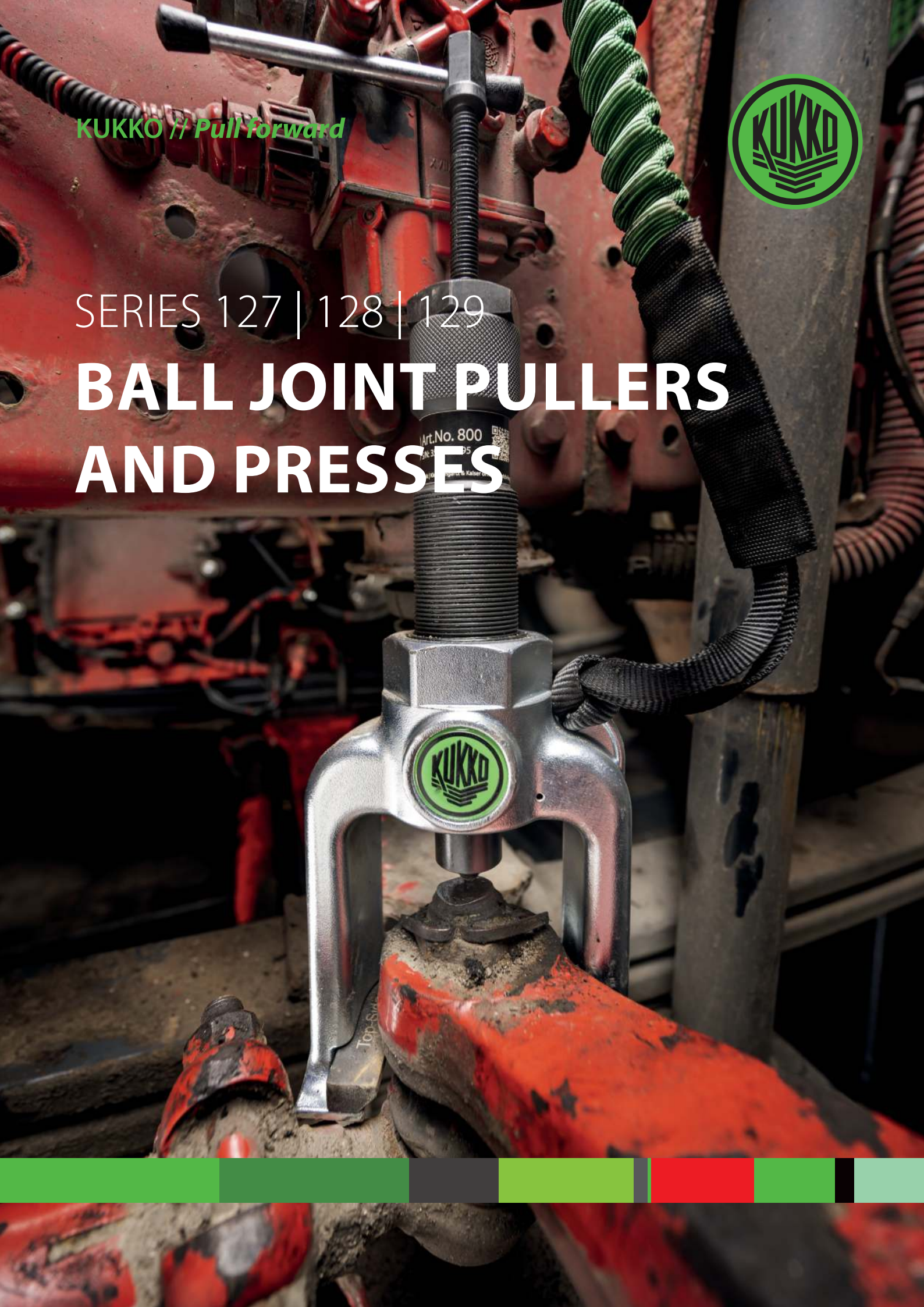


KUKKO // Pull Forward



SERIES 127 | 128 | 129

# BALL JOINT PULLERS AND PRESSES



## APPLICATION

Ball joints are found on vehicles both in the axle suspension and steering systems. Ball joints are subject to heavy loads, causing the ball heads to wear out over time. This results in play in the joints, which can affect steering and driving safety. At the latest, at this point, it is urgently necessary to replace the ball joints.

To ensure ball joints can be removed without damage, KUKKO offers the optimal tools with series 128 and 129.

## FEATURES OF THE SERIES

### SERIES 127



#### Universal Joint Pin Puller

The bell-shaped direct-pressure ball joint puller from series 127 is used as a press for the ball studs during removal of ball joints as well as tie rod ends on tie rods in Automotive and industry. The puller enables damage-free work and is optimal when space is limited.

##### Benefits

Thanks to its simple, yet effective design, the direct-pressure ball joint puller is particularly suited for quick and uncomplicated use

### SERIES 128



#### Ball Joint Puller with Direct Pressure

The bell-shaped ball joint puller from series 128 is used as a press for the ball studs during removal of ball joints as well as tie rod ends on tie rods for all vehicle types. The puller enables damage-free work and is optimal when there is plenty of space available.

##### Benefits

Thanks to its simple, yet effective design, the direct-pressure ball joint puller is particularly suited for quick and uncomplicated use

### SERIES 129



#### Ball Joint Press for cars

The ball joint press with lever transmission from series 129 is used as a press for the ball studs during removal of ball joints as well as tie rod ends on tie rods for cars and light delivery vans. Due to its lever ratio, the ball joint press can also apply high force even where there is barely any room to access.

##### Benefits

- The side screw can be adjusted to flexibly adapt the tension range
- The spread can be increased by a simple modification

### SERIES 135



#### Separating Fork

The separating forks of series 135 are used for loosening ball stud joints jammed in a conical seat, loosening steering arms, during disassembly of shock absorbers, and for all kinds of separating work in Automotive and industry.

##### Benefits

- The range includes sizes with various jaw openings for use in any case



## DESIGN OF SERIES 128

---



## DESIGN OF SERIES 129

---



## OPTIONAL EXTENSION

For particularly stubborn components, the mechanical spindle can be easily replaced by a hydraulic spindle, enabling a medium tension force of up to 20 t.

### Hydraulic spindle 800



#### Benefits:

- Hydraulic spindle guarantees easy and controlled extraction of especially stubborn parts with minimal effort
- Grease hydraulic spindle doubles the manual extraction force by 100%
- Handy format for quick, portable use
- Thanks to integrated grease hydraulics, no external pump required

### Fall protection 660



## APPLICATION EXAMPLES



Separating a control arm from the wheel suspension



The ball joint puller 128-60 in use pressing out a tie rod end on a tie rod in a workshop



The ball joint press 129-3 in use pressing out a tie rod end in a workshop



PRODUCT DETAILS

SERIES 127-0  
DIRECT PRINTING BALL JOINT PULLER



The bell-shaped direct press ball joint puller of series 127 is used to press out the ball pins when removing ball joints as well as tie rod ends on tie rods in automotive and industry. The puller allows for damage-free work and is optimal when there is little space available.

BENEFITS

- Due to its simple yet effective design, the direct puller ball joint remover is particularly suitable for quick and uncomplicated application.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 127-2  | -123290                                                                                     | 33,5<br>1 5/16                                                                                 | 120<br>88.51                                                                                    | 70                             | 7<br>7.72                               | 17<br>11/16                                                                                     | 1,38<br>3.043                                                                                  | ✓                                                                                     |
| 127-3  | -981784                                                                                     | 34<br>1 5/16                                                                                   | 140<br>103.26                                                                                   | 100                            | 10<br>11.02                             | 19<br>3/4                                                                                       | 0,965<br>2.128                                                                                 | ✓                                                                                     |
| 127-4  | -123306                                                                                     | 37<br>1 7/16                                                                                   | 120<br>88.51                                                                                    | 70                             | 7<br>7.72                               | 17<br>11/16                                                                                     | 1,33<br>2.933                                                                                  | ✓                                                                                     |
| 127-55 | -007156                                                                                     | 32<br>1 1/4                                                                                    | 120<br>88.51                                                                                    | 70                             | 7<br>7.72                               | 17<br>11/16                                                                                     | 2,45<br>5.402                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 127-A DIRECT PRINTING BALL JOINT PULLER



The ball joint puller of the series 127-A is used to press out the ball studs when removing ball joints and steering tie rod ends on tie rods. The pullers guarantee damage-free working and impress with their versatility in automotive and industry.

#### BENEFITS

- Due to its simple yet effective design, the ball joint puller is particularly suitable for quick and uncomplicated applications.
- Hook eye on the puller serves for attaching a fall protection for safety.



## TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                        |                                                                                       |
| 127-6296 | -023279                                                                             | 19<br>3/4                                                                           | 28 - 42<br>1 1/8 - 1<br>5/8                                                         | 52<br>2 1/16                                                                        | 100<br>73.76                                                                        | 50                       | 5<br>5.51                | 0,3<br>0.662                                                                          | K-127-A/6              | ✓                                                                                     |
| 127-7314 | -023286                                                                             | 19<br>3/4                                                                           | 34 - 61<br>1 5/16 - 2<br>3/8                                                        | 60<br>2 3/8                                                                         | 100<br>73.76                                                                        | 50                       | 5<br>5.51                | 1,55<br>0.662                                                                         | K-127-A/6              | ✓                                                                                     |
| 127-7503 | -023293                                                                             | 17<br>11/16                                                                         | 0 - 125<br>0 - 4<br>15/16                                                           | 100<br>3 15/16                                                                      | 80<br>59.01                                                                         | 45                       | 4.5<br>4.96              | 1,795<br>0.662                                                                        | K-127-A/6              | ✓                                                                                     |

SERIES K-127-A  
FRONT-END SERVICE SET



The 6-piece front-end service set is used for the disassembly and maintenance of steering arms, ball joints, tie rods, and wheel bearings. The set includes a total of five ball joint pullers or extractors in different designs and sizes. The set K-127-A impresses with its versatility and offers an ideal assortment of important tools for the automotive industry.

BENEFITS

- Due to its simple yet effective design, the ball joint puller of series 128 is particularly suitable for a quick and straightforward application.
- The bolt on the ball joint extractor of series 219 can be adjusted to flexibly adapt the clamping range.
- The spherical bearing pullers of series 127-A are equipped with a hook eye for attaching a safety line.

TECHNICAL ATTRIBUTES

| #             |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force | Number<br>of parts |  | Consists<br>of                                                   |  |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|               | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | Nm/ft lb                                                                            | kN                       | t/US t.<br>sh.           |                    | kg/lb                                                                                 |                                                                  |                                                                                       |
| K-127-A/<br>6 | -023309                                                                             | 0 - 125<br>0 - 4<br>15/16                                                           | 100<br>3 15/16                                                                      | 18<br>11/16                                                                         | 20<br>13/16                                                                         | 50<br>1 15/16                                                                       | 100<br>73.76                                                                        | 70                       | 7<br>7.72                | 6                  | 8,4<br>0.662                                                                          | 127-6296,<br>127-7314,<br>127-7503,<br>204-1,<br>128-1,<br>129-0 | ✓                                                                                     |

### SERIES 128 BELL-SHAPED BALL JOINT PULLER



The bell-shaped ball joint puller of series 128 is used for pressing out the ball studs when disassembling ball joints and tie rod ends on tie rods for all vehicle types. The puller allows for damage-free work and is optimal when there is plenty of space available. The series 128 impresses with its fast and easy operating method and is available in various sizes.

#### BENEFITS

- Due to its simple yet effective design, the direct puller ball joint remover is particularly suitable for quick and uncomplicated application.



#### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>SW<br>mm/inch | <br>kg/lb | Included in<br>the set |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| 128-1 | -024108                                                                                     | 18<br>11/16                                                                                    | 80<br>59.01                                                                                     | 70                             | 7<br>7.72                               | 17<br>11/16                                                                                          | 0,34<br>0.750                                                                                  | K-127-A/6              | ✓                                                                                     |
| 128-2 | -024283                                                                                     | 23<br>7/8                                                                                      | 120<br>88.51                                                                                    | 70                             | 7<br>7.72                               | 17<br>11/16                                                                                          | 0,52<br>1.147                                                                                  | -                      | ✓                                                                                     |
| 128-3 | -024368                                                                                     | 29<br>1 1/8                                                                                    | 140<br>103.26                                                                                   | 100                            | 10<br>11.02                             | 19<br>3/4                                                                                            | 0,94<br>2.073                                                                                  | -                      | ✓                                                                                     |
| 128-4 | -024443                                                                                     | 40<br>1 9/16                                                                                   | 250<br>184.40                                                                                   | 100                            | 10<br>11.02                             | 24<br>15/16                                                                                          | 1,715<br>3.782                                                                                 | -                      | ✓                                                                                     |
| 128-5 | -024511                                                                                     | 46<br>1 13/16                                                                                  | 250<br>184.40                                                                                   | 100                            | 10<br>11.02                             | 24<br>15/16                                                                                          | 1,84<br>4.057                                                                                  | -                      | ✓                                                                                     |



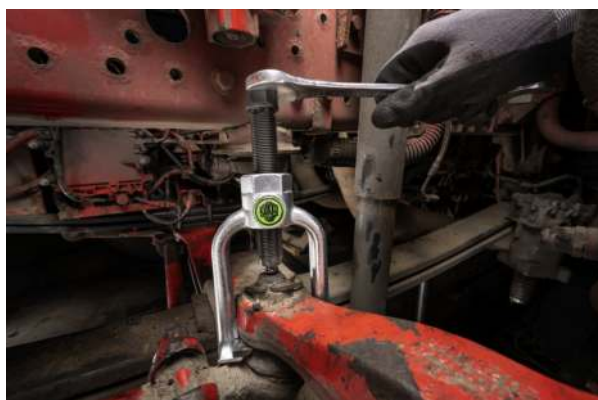
### SERIES 128-0 BELL-SHAPED BALL JOINT PULLER



The bell-shaped ball joint puller of series 128 is used to press out the ball studs when removing ball joints and tie rod ends on tie rods in automotive and industry applications. The puller allows for damage-free working and is optimal when there is plenty of space available. The series 128 impresses with its quick and easy operation and is available in various sizes.

#### BENEFITS

- Due to its simple yet effective design, the direct print ball joint puller is particularly suitable for quick and uncomplicated application.
- The ball joint pullers can be used hydraulically together with the YSM series lift cylinder.



#### TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | SW<br><br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 128-30 | -006937                                                                                     | 30<br>1 3/16                                                                                   | 150<br>110.64                                                                                   | 100                            | 10<br>11.02                             | 22<br>7/8                                                                                             | 1,5<br>3.308                                                                                   | ✓                                                                                     |
| 128-40 | -006968                                                                                     | 39<br>1 9/16                                                                                   | 150<br>110.64                                                                                   | 100                            | 10<br>11.02                             | 22<br>7/8                                                                                             | 4,225<br>9.316                                                                                 | ✓                                                                                     |
| 128-50 | -006982                                                                                     | 46<br>1 13/16                                                                                  | 150<br>110.64                                                                                   | 100                            | 10<br>11.02                             | 22<br>7/8                                                                                             | 1,9<br>4.190                                                                                   | ✓                                                                                     |
| 128-60 | -007019                                                                                     | 55<br>2 3/16                                                                                   | 150<br>110.64                                                                                   | 100                            | 10<br>11.02                             | 22<br>7/8                                                                                             | 4,6<br>10.143                                                                                  | ✓                                                                                     |

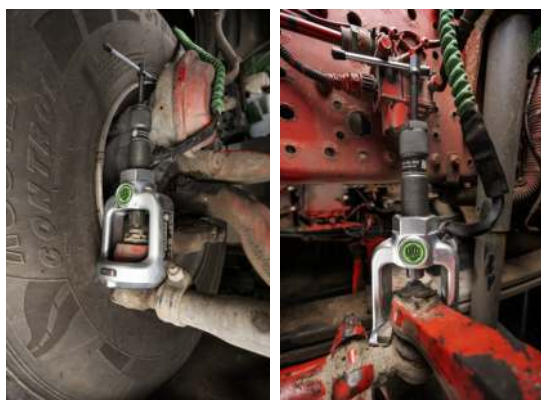
### SERIES 128-H HYDRAULIC BALL JOINT PULLER



The bell-shaped hydraulic ball joint puller from series 128-H is used for pressing out ball pins when removing ball joints and tie rod ends on tie rods in automotive and industry applications. The puller allows for non-damaging work and is optimal when there is plenty of space available. The 128 series impresses with its fast and easy operation and is available in various sizes. The grease hydraulic spindle achieves an average pulling force of up to 15 t.

#### BENEFITS

- Due to its simple yet effective design, the direct-print ball joint puller is particularly suitable for quick and uncomplicated application.
- The hydraulics ensure a force-saving and safe operation.



#### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>SW<br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 128-30-H | -006944                                                                                     | 30<br>1 3/16                                                                                   | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                             | 2,1<br>4.631                                                                                   | ✓                                                                                     |
| 128-40-H | -006975                                                                                     | 39<br>1 9/16                                                                                   | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                             | 4,98<br>4.631                                                                                  | ✓                                                                                     |
| 128-50-H | -006999                                                                                     | 46<br>1 13/16                                                                                  | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                             | 4,9<br>10.805                                                                                  | ✓                                                                                     |
| 128-60-H | -007026                                                                                     | 55<br>2 3/16                                                                                   | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                             | 5<br>11.025                                                                                    | ✓                                                                                     |

SERIES 128-T-4  
KUKKO SYSTEM FOR REPAIR WORK ON VW T4  
TRAILING JOINTS



The KUKKO system for repair work on the ball joint of series 128 is used for the installation and removal of the ball joints on the T4 in automotive and industry. The system allows for damage-free operation and is optimal when there is plenty of space available. The series 128 impresses with its fast and simple working method and is available in various sizes. This version was specifically developed for applications on the VW T4.

BENEFITS

- Two additional spacer plates of 40 mm and 46 mm are included.
- Due to its simple yet effective design, the system is particularly suitable for quick and uncomplicated application.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 128-T-4 | -018022                                                                                     | 40, 46, 51, 55<br>1 9/16, 1<br>13/16, 2 1/64,<br>2 3/16                                        | 250<br>184.40                                                                                   | 100                            | 10<br>11.02                             | 24<br>15/16                                                                                     | 2,81<br>6.196                                                                                  | ✓                                                                                     |

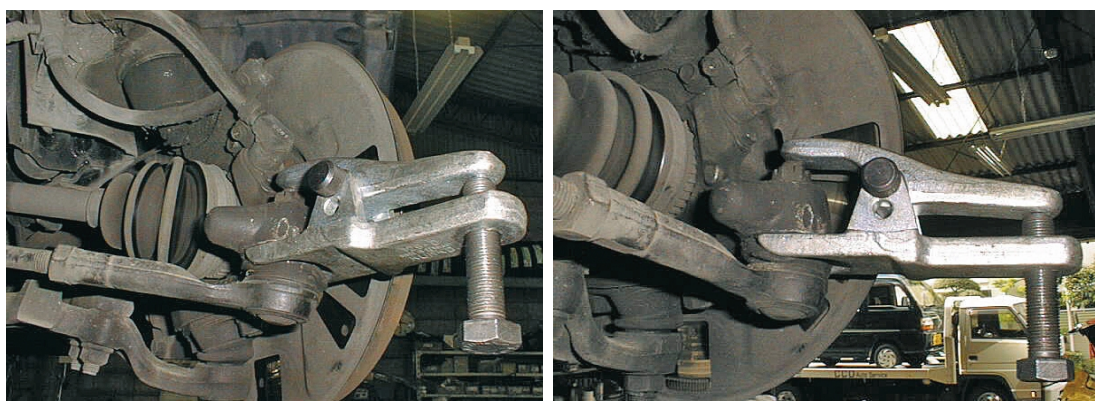
## PRODUCT DETAILS

### SERIES 129 BALL JOINT EXTRACTOR WITH LEVER TRANSLATION FOR PASSENGER CARS

The ball joint puller with lever transmission from series 129 is used for pressing out the ball pins when disassembling ball joints and tie rod ends on steering rods for cars and light vans. Due to its lever transmission, it can apply a lot of force in all cases.

#### BENEFITS

- The bolt can be adjusted to flexibly adapt the clamping range.
- The spread can be increased by simple conversion.



#### TECHNICAL ATTRIBUTES

| #          |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force | SW<br> |  | Included in<br>the set |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
|            | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | mm/inch                                                                                   | kg/lb                                                                                 |                        |                                                                                       |
| 129-0-25   | -989667                                                                             | 25<br>1                                                                             | 50<br>1 15/16                                                                       | 45<br>33.19                                                                         | 65                       | 6.5<br>7.17              | 24<br>15/16                                                                               | 1,26<br>2.778                                                                         | -                      | ✓                                                                                     |
| 129-0-29   | -989674                                                                             | 29,5<br>1 3/16                                                                      | 50<br>1 15/16                                                                       | 45<br>33.19                                                                         | 65                       | 6.5<br>7.17              | 24<br>15/16                                                                               | 1,245<br>2.745                                                                        | -                      | ✓                                                                                     |
| 129-0-DC-1 | -923920                                                                             | 20<br>13/16                                                                         | 50<br>1 15/16                                                                       | 45<br>33.19                                                                         | 65                       | 6.5<br>7.17              | 24<br>15/16                                                                               | 1,23<br>2.712                                                                         | -                      | ✓                                                                                     |
| 129-0-DC-2 | -923647                                                                             | 20<br>13/16                                                                         | 50<br>1 15/16                                                                       | 45<br>33.19                                                                         | 65                       | 6.5<br>7.17              | 24<br>15/16                                                                               | 1,225<br>2.701                                                                        | -                      | ✓                                                                                     |
| 129-0      | -410536                                                                             | 20<br>13/16                                                                         | 50<br>1 15/16                                                                       | 45<br>33.19                                                                         | 65                       | 6.5<br>7.17              | 24<br>15/16                                                                               | 1,225<br>2.701                                                                        | K-127-A/6              | ✓                                                                                     |



SERIES 129-1  
BALL JOINT PULLER WITH LEVER  
TRANSLATION, FOR CARS AND LIGHT VANS



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-1-B-1 | -923654                                                                                     | 31<br>1 1/4                                                                                    | 50<br>1 15/16                                                                                  | 30<br>22.13                                                                                     | 30                             | 3<br>3.31                               | 17<br>11/16                                                                                      | 0,725<br>1.599                                                                                 | ✓                                                                                     |
| 129-1     | -024696                                                                                     | 22<br>7/8                                                                                      | 50<br>1 15/16                                                                                  | 30<br>22.13                                                                                     | 30                             | 3<br>3.31                               | 17<br>11/16                                                                                      | 0,72<br>1.588                                                                                  | ✓                                                                                     |

The Ball joint press with lever ratio from the 129 series is used to press out the ball studs when removing ball joints as well as tie rod ends on tie rods for car and light vans. Thanks to its lever ratio, the Ball joint press can also apply a lot of force where there is hardly any access space. The 129 series impresses with its wide range of applications. Within the series, there are various sizes of Ball joint press with different jaw opening. The lever clamping range can be adjusted via the thread of the center spindle.

BENEFITS

- The bolt can be adjusted to flexibly adapt the clamping range.

## PRODUCT DETAILS

### SERIES 129-2 UNIVERSAL PRESS WITH LEVER TRANSLATION, SUITABLE FOR PASSENGER CARS, VANS, AND MEDIUM TRUCKS

The Ball joint press with lever transmission of the 129 series is used to press out the ball studs when removing Ball joints as well as tie rod ends on tie rods, universally for car, vans and medium Truck. Thanks to its lever transmission, the Ball joint press can apply a lot of force even where there is hardly any access space available. The 129 series impresses with its versatility of applications. The lever clamping range can be adjusted via the thread of the center spindle.

#### BENEFITS

- The ball joint puller is universally applicable through three jaw widths.
- The bolt can be adjusted to flexibly adapt the clamping range.



#### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-2 | -024771                                                                                     | 16, 22, 32<br>5/8, 7/8, 1<br>1/4                                                               | 70<br>2 3/4                                                                                    | 35<br>25.82                                                                                     | 30                             | 3<br>3.31                               | 17<br>11/16                                                                                      | 1,13<br>2.492                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES 129-25  
UNIVERSAL BALL JOINT PULLER



The universal ball joint puller of the series 129 is used for pressing out the ball pins when removing ball joints on tie rods and track rods in passenger cars. Thanks to its leverage, the ball joint puller can also apply a lot of force where there is hardly any access space. The series 129 impresses with its wide range of applications. The lever clamping range can be adjusted via the thread of the center spindle.

BENEFITS

- With the center spindle, the press can be adjusted and pre-tensioned.
- The bolt can be adjusted to flexibly adapt the clamping range.
- The spread can be adjusted threefold by a simple modification.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-25 | -967924                                                                                     | 19<br>3/4                                                                                      | 45<br>1 3/4                                                                                    | 140<br>103.26                                                                                  | 170                            | 17<br>18.74                             | 19<br>3/4                                                                                        | 1,62<br>3.572                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 129-3-4 BALL JOINT PRESS WITH LEVER TRANSLATION, FOR MEDIUM AND HEAVY TRUCKS, BUSES, AND CONSTRUCTION VEHICLES



The ball joint extractor with lever translation of series 129 is used for pressing out the ball pins when removing ball joints and tie rod ends on tie rods, for medium and heavy trucks, buses, and construction vehicles. Due to its lever translation, the ball joint extractor can also apply a lot of force in areas with limited access. Series 129 impresses with its newly layered design and application diversity. Various designs enable optimal application in every situation.

#### BENEFITS

- Better haptics through modern and ergonomic design
- Low effort for high extraction performance
- The reach can be easily adjusted using a spring mechanism
- The bolt can be adjusted to flexibly adapt the clamping range.



#### TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-3 | -270949                                                                                     | 31<br>1 1/4                                                                                    | 70<br>2 3/4                                                                                    | 85<br>62.70                                                                                     | 100                            | 10<br>11.02                             | 19<br>3/4                                                                                        | 3,316<br>7.312                                                                                 | ✓                                                                                     |
| 129-4 | -271021                                                                                     | 40<br>1 9/16                                                                                   | 85<br>3 3/8                                                                                    | 125<br>92.20                                                                                    | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                        | 3,26<br>7.188                                                                                  | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 129-3-A JOINT EXTRACTOR WITH LEVERAGE TRANSLATION, SPECIALLY DESIGNED FOR CARS WITH ALUMINUM CHASSIS

The ball joint puller with lever translation of series 129 is used to press out the ball pins when disassembling ball joints and tie rod ends on tie rods, specifically designed for cars with aluminum chassis. Its lever translation generates a lot of force even in confined spaces.

#### BENEFITS

- The reach can be easily adjusted with a spring mechanism.
- The bolt can be adjusted to flexibly adapt the clamping range.



#### TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 129-3-A-32 | -989681                                                                                    | 32<br>1 1/4                                                                                   | 65<br>2 9/16                                                                                  | 35<br>25.82                                                                                    | 65                             | 6.5<br>7.17                             | 19<br>3/4                                                                                       | 1,925<br>4.245                                                                                | ✓                                                                                    |
| 129-3-A-34 | -989698                                                                                    | 34<br>1 5/16                                                                                  | 65<br>2 9/16                                                                                  | 35<br>25.82                                                                                    | 65                             | 6.5<br>7.17                             | 19<br>3/4                                                                                       | 1,96<br>4.322                                                                                 | ✓                                                                                    |
| 129-3-A    | -803178                                                                                    | 30<br>1 3/16                                                                                  | 65<br>2 9/16                                                                                  | 35<br>25.82                                                                                    | 65                             | 6.5<br>7.17                             | 19<br>3/4                                                                                       | 1,96<br>4.322                                                                                 | ✓                                                                                    |

PRODUCT DETAILS

SERIES 129-4-30  
BALL JOINT EXTRACTOR WITH LEVER  
TRANSLATION FOR PASSENGER CARS



The ball joint press with lever translation of the series 129 is used for pushing out the ball pins when removing ball joints as well as tie rod ends at tie rods on passenger cars. Due to its design, the disassembly of the support joint occurs without contact with other elements and is therefore gentle.

BENEFITS

- Better haptics through modern and ergonomic design
- Low effort for high pulling performance
- The reach can be easily adjusted using a spring mechanism.
- The bolt can be adjusted to flexibly adapt the clamping range.



TECHNICAL ATTRIBUTES

| #        |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force | SW<br> |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | mm/inch                                                                                     | kg/lb                                                                                 |                                                                                       |
| 129-4-30 | -102653                                                                             | 30<br>1 3/16                                                                        | 70<br>2 3/4                                                                         | 85<br>62.70                                                                         | 100                      | 10<br>11.02              | 19<br>3/4                                                                                   | 2,8<br>6.174                                                                          | ✓                                                                                     |

PRODUCT DETAILS

SERIES 129-5  
PULLER FOR HEAVY TRUCKS



The ball joint press for heavy duty trucks in the series 129-5 is used for pressing out the ball pins during the disassembly of ball joints on drag and tie rods, specifically for medium and heavy-duty trucks, buses, and construction vehicles. The series 129 impresses with its versatility of application. The lever span is adjustable via the thread of the center spindle.

BENEFITS

- The bolt can be adjusted to flexibly adapt the clamping range.

TECHNICAL ATTRIBUTES

| #     |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | mm/inch                                                                               | kg/lb                                                                                 |                                                                                       |
| 129-5 | -865084                                                                             | 36<br>1 7/16                                                                        | 70<br>2 3/4                                                                         | 200<br>147.52                                                                       | 150                      | 15<br>16.53              | 19<br>3/4                                                                             | 4,24<br>9.349                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 129-5-0 2-JAW AND PUSHROD PULLER FOR HEAVY TRUCKS



The 2-jaw puller for heavy trucks of the series 129 is used for mechanically pressing out the ball studs when removing ball joints on thrust and steering rods. The series 129 impresses with its versatility of applications. Within the series, there are different sizes of ball joint presses with varying jaw openings. The lever clamping range can be adjusted via the thread of the center spindle.

#### BENEFITS

- The extra strong version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- With the center spindle, the press can be adjusted and pre-tensioned.
- "Suitable for the following vehicle types: Mercedes Benz: ACTROS, ATEGO from 18 tons, SKO 405, -N, -GN (low-floor buses) MAN: F2000, TG, A 23 (low-floor articulated buses) Scania: series 3 and 4, Icarus"
- Depending on the space requirement, the mechanical drive spindle can be actuated by modification from above or below.



#### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-5-45 | -333316                                                                                     | 45<br>1 3/4                                                                                    | 120<br>4 3/4                                                                                   | 210<br>154.90                                                                                   | 100                            | 10<br>11.02                             | 27<br>1 1/16                                                                                     | 7,96<br>17.552                                                                                 | ✓                                                                                     |
| 129-5-50 | -123313                                                                                     | 55<br>2 3/16                                                                                   | 120<br>4 3/4                                                                                   | 420<br>309.79                                                                                   | 200                            | 20<br>22.05                             | 27<br>1 1/16                                                                                     | 6,84<br>15.082                                                                                 | ✓                                                                                     |



PRODUCT DETAILS

SERIES 129-5-H  
HYDRAULIC SPINDLE PULLER FOR HEAVY  
TRUCKS



The ball joint puller with hydraulic spindle for heavy trucks of series 129 is used for the hydraulic extraction of the ball pins when removing ball joints on tie rods and steering rods specifically designed for medium and heavy trucks, buses, and construction vehicles. The series 129 impresses with its versatility. The hydraulic spindle guarantees an easy and controlled removal of particularly seized parts with minimal effort.

BENEFITS

- Low effort for high pulling performance
- The spindle neck prevents the key from slipping off.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | SW<br><br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-5-H | -865091                                                                                     | 36<br>1 7/16                                                                                   | 70<br>2 3/4                                                                                    | 70                                                                                        | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                              | 5,34<br>11.775                                                                                 | ✓                                                                                     |

## SERIES 129-5-H-0 2-JAW AND 3-JAW PULLER WITH HYDRAULIC LIFTING CYLINDER



The 129 series puller with hydraulic lift cylinder is used to hydraulically press out the ball pins when removing ball joints on tie rods and steering rods specifically for trucks and low-floor buses. A hydraulic pump is required for operation.

### BENEFITS

- The hydraulic presses are powered by a hydraulic cylinder, allowing for controlled and safe operation.
- The extra powerful version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- With the center spindle, the press can be adjusted and pre-tensioned.
- Suitable for the following vehicle types: Mercedes Benz: ACTROS, ATEGO from 18 tons, SKO 405, -N, -GN (low-floor buses), MAN: F2000, TG, A 23 (low-floor articulated buses), Scania: series 3 and 4, Icarus.
- Depending on the space requirements, the mechanical drive spindle can be operated by conversion from above or below.



### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                       | t/US t. sh.              | bar                                                                                   | kg/lb                                                                                 |                                                                                       |
| 129-5-45-H10 | -333361                                                                             | 28,5<br>1 1/8                                                                       | 45<br>1 3/4                                                                         | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 100                      | 10<br>11.02              | 700                                                                                   | 8,28<br>18.257                                                                        | ✓                                                                                     |
| 129-5-45-H20 | -333422                                                                             | 28,5<br>1 1/8                                                                       | 45<br>1 3/4                                                                         | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 200                      | 20<br>22.05              | 700                                                                                   | 9,57<br>21.102                                                                        | ✓                                                                                     |
| 129-5-50-H10 | -000317                                                                             | 28,5<br>1 1/8                                                                       | 55<br>2 3/16                                                                        | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 100                      | 10<br>11.02              | 700                                                                                   | 7,65<br>16.868                                                                        | ✓                                                                                     |
| 129-5-50-H20 | -000324                                                                             | 28,5<br>1 1/8                                                                       | 55<br>2 3/16                                                                        | 6<br>1/4                                                                            | 120<br>4 3/4                                                                        | 200                      | 20<br>22.05              | 700                                                                                   | 9,2<br>20.286                                                                         | ✓                                                                                     |

PRODUCT DETAILS

SERIES 129-6  
TRUCK BALL JOINT PRESS "UNIVERSAL"



The truck ball joint press "Universal" of series 129 is used for pressing out particularly firmly seated ball pins when removing ball joints on push and steering rods for trucks, buses, and construction vehicles. The series 129 impresses with its versatility.

BENEFITS

- Versatile due to the three different separator jaws included in the scope of delivery.
- Especially suitable for solving ball joint connections that are stuck in the cone seat.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-6 | -971662                                                                                     | 25, 32, 47<br>1, 1 1/4, 1 7/8                                                                  | 300<br>221.28                                                                                   | 100                            | 10<br>11.02                             | 27<br>1 1/16                                                                                    | 9,24<br>20.374                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 129-7 LEVER PRESSURE BALL JOINT PULLER



The tie rod and drag link joint puller with mechanical spindle from the 129-7 series is used for pressing out and separating ball studs when removing Ball joints on tie rods and drag links. The puller is specifically designed for use on Trucks and low-floor buses. Thanks to the integrated adapter plate and the reducing piece, the puller can be used not only with a mechanical spindle but also with a grease hydraulic spindle from the 800 series or a lifting cylinder (YSM-200).

#### BENEFITS

- The extra strong version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- The low overall height is suitable for low-floor buses of the types MAN, Mercedes-Benz, CITARO, etc.
- Compatible with various drive types: grease-hydraulic spindle (800 series), lifting cylinder (YSM-200) or mechanical spindle



## TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-7-36 New | -399992                                                                                     | 36<br>1 7/16                                                                                   | 60<br>2 3/8                                                                                    | 100                         | 10<br>11.02                          | 5,395<br>11.896                                                                                | ✓                                                                                     |
| 129-7-46 New | -399978                                                                                     | 46<br>1 7/16                                                                                   | 60<br>2 3/8                                                                                    | 100                         | 10<br>11.02                          | 5,8<br>12.789                                                                                  | ✓                                                                                     |



### SERIES 129-7-H 2-JAW AND 3-JAW PULLER WITH HYDRAULIC LIFTING CYLINDER



The tie rod and drag link joint puller with grease hydraulic spindle from series 129-7-H is used for hydraulically pressing out and separating ball studs when removing ball joints on tie rods and drag links. The puller is specifically designed for use on trucks and low-floor buses. Thanks to the integrated adapter plate and the reducing piece, the puller can be used with a grease hydraulic spindle from the 800 series, a stroke cylinder (YSM-200), as well as with a mechanical spindle.

#### BENEFITS

- The hydraulic press with its hydraulic cylinder enables controlled and safe pulling off.
- The extra powerful version of the base body and reinforced fork is particularly suitable for heavy trucks and low-floor buses.
- The low-profile design is suitable for low-floor buses of the types MAN, Mercedes-Benz, CITARO, etc.
- Compatible with different drive types: grease hydraulic spindle (800 series), lifting cylinder (YSM-200), or mechanical spindle



#### TECHNICAL ATTRIBUTES

| #                     |  |  |  | Max. tensile force | Max. tension force |  |  |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kN                 | t/US t. sh.        | kg/lb                                                                                 |                                                                                       |
| 129-7-36-H <b>New</b> | -399954                                                                             | 36<br>1 7/16                                                                        | 60<br>2 3/8                                                                         | 100                | 10<br>11.02        | 5,395<br>11.896                                                                       | ✓                                                                                     |
| 129-7-46-H <b>New</b> | -399961                                                                             | 46<br>1 13/16                                                                       | 60<br>2 3/8                                                                         | 100                | 10<br>11.02        | 6,78<br>14.950                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 129-H BALL JOINT PRESS WITH SHORT HYDRAULIC SPINDLE

The spherical joint press with short hydraulic spindle of series 129 is used to press out particularly stuck ball pins when removing ball joints and steering arm ends from steering rods, for medium trucks, buses, and construction vehicles. The hydraulic spindle achieves an average pulling force of up to 15 tons.

#### BENEFITS

- Low effort for high pulling performance
- The reach can be easily adjusted using a spring mechanism.
- The bund of the spindle neck prevents the slipping of the key.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 129-3-H | -803253                                                                                     | 31<br>1 1/4                                                                                    | 70<br>2 3/4                                                                                    | 40<br>29.50                                                                                     | 100                            | 10<br>11.02                             |                                                                                                  | 4,16<br>9.173                                                                                  | ✓                                                                                     |
| 129-4-H | -803666                                                                                     | 40<br>1 9/16                                                                                   | 85<br>3 3/8                                                                                    | 70<br>51.63                                                                                     | 150                            | 15<br>16.53                             | 19<br>3/4                                                                                        | 4,175<br>9.206                                                                                 | ✓                                                                                     |

SERIES 145  
SPREADER FOR SUSPENSION AND STEERING  
PARTS



The spreaders for strut and steering components of series 145 are used for the safe and completely damage-free widening of the mountings of struts or steering parts from threads in the automotive and workshop industries. They are specifically designed for the gentle spreading of clamping fits on aluminum chassis. Especially in very tight and unclear spatial conditions, series 145 becomes an ideal problem solver due to its compact and handy design.

BENEFITS

- The installation and removal of the shock absorber is achieved in a single step and without additional effort.
- An accidental slipping of the tool is impossible due to the fastening on the cross or support arm.
- The ball bearing nut easily withstands the spreading forces specified by the automotive industry.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch |  | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 145-2 | -123337                                                                                     | 40<br>1 9/16                                                                                   | M10                                                                                 | 13<br>1/2                                                                                      | 0,245<br>0.540                                                                                 | ✓                                                                                     |
| 145-3 | -001420                                                                                     | 50<br>1 15/16                                                                                  | M12                                                                                 | 13<br>1/2                                                                                      | 0,31<br>0.684                                                                                  | ✓                                                                                     |

## SERIES K-363 PULLER AND PRESS SET



The puller and press set of the K-363 series enables the safe pressing out and pressing in of rubber bearings, sockets, and joint connections, as well as the removal and installation of press fits on Ball joints and U-Joints, drive shafts, and brake anchor bolts. Equipped with a robust C press frame, a sleeve holder, and three sleeves in various diameters, the set offers maximum flexibility and precise, efficient work on a wide variety of vehicles.

### BENEFITS

- Versatile for use with trucks, vans, SUVs and selected cars
- Sleeve holder with quick-release for rapid sleeve replacement
- Eye on the C-press frame for secure fastening during operation and storage
- Plastic flap under the C press frame for mounting an AirTag tracking device



### TECHNICAL ATTRIBUTES

| #                |  |  |  |                                                                      |  |  |  |  |  | Max.<br>tension<br>force | Number<br>of parts |  | Consists of                                                         |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     | mm                                                                                  | Nm/ft lb                                                                            | t/US t.<br>sh.           |                    | kg/lb                                                                                 |                                                                     |                                                                                       |
| K-363-2-S<br>New | -041877                                                                             | 170<br>6<br>11/16                                                                   | 65<br>2<br>9/16                                                                     | 76 x 3 x<br>55,63 x<br>3 x 45,<br>51 x 2,6<br>x 45<br>2 63/64<br>x 1/8 x<br>2 11/64,<br>2 31/64<br>x 1/8 x<br>1 49/64,<br>2 1/64 x<br>3/32 x 1<br>49/64 | 25<br>1                                                                             | 45,7<br>1<br>13/16                                                                  | G<br>5/8" /<br>14                                                                   | W<br>1.1/2"-16<br>(55°,<br>16Gang)                                                  | 250<br>184.40                                                                       | 10<br>11.02              | 6                  | 9<br>11.025                                                                           | 36-2, 71-SR-14,<br>036305227,<br>03629503,<br>03629504,<br>03629505 | ✓                                                                                     |



SERIES 135  
SEPARATOR

The fork separators of series 135 are used for loosening ball pivot joints that are wedged in the cone seat, for loosening steering levers, for disassembling shock absorbers, and for other separation work of all kinds in automotive and industry. Their universal applicability makes the fork separators an important companion for disassembly and separation tasks.

BENEFITS

- The set includes sizes with various jaw openings for use in every case.



TECHNICAL ATTRIBUTES

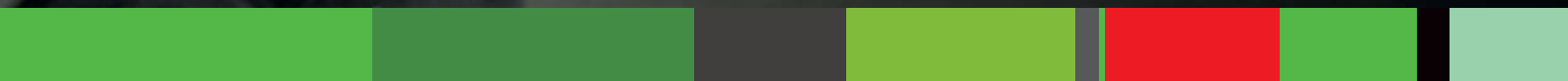
| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 135-1 | -024856                                                                                     | 310<br>12 3/16                                                                                 | 18<br>11/16                                                                                    | 0,74<br>1.632                                                                                  | ✓                                                                                     |
| 135-2 | -024931                                                                                     | 316<br>12 7/16                                                                                 | 23<br>7/8                                                                                      | 0,8<br>1.764                                                                                   | ✓                                                                                     |
| 135-3 | -025013                                                                                     | 319<br>12 9/16                                                                                 | 29<br>1 1/8                                                                                    | 0,815<br>1.797                                                                                 | ✓                                                                                     |
| 135-4 | -025198                                                                                     | 335<br>13 3/16                                                                                 | 39<br>1 9/16                                                                                   | 1,465<br>3.230                                                                                 | ✓                                                                                     |
| 135-5 | -220531                                                                                     | 340<br>13 3/8                                                                                  | 45<br>1 3/4                                                                                    | 1,28<br>2.822                                                                                  | ✓                                                                                     |



**KUKKO // Pull forward**

SERIES 10-A | 10-M | 38 | 40  
226 | 229 | Y-60-100 | CITARO

# HUB PULLER



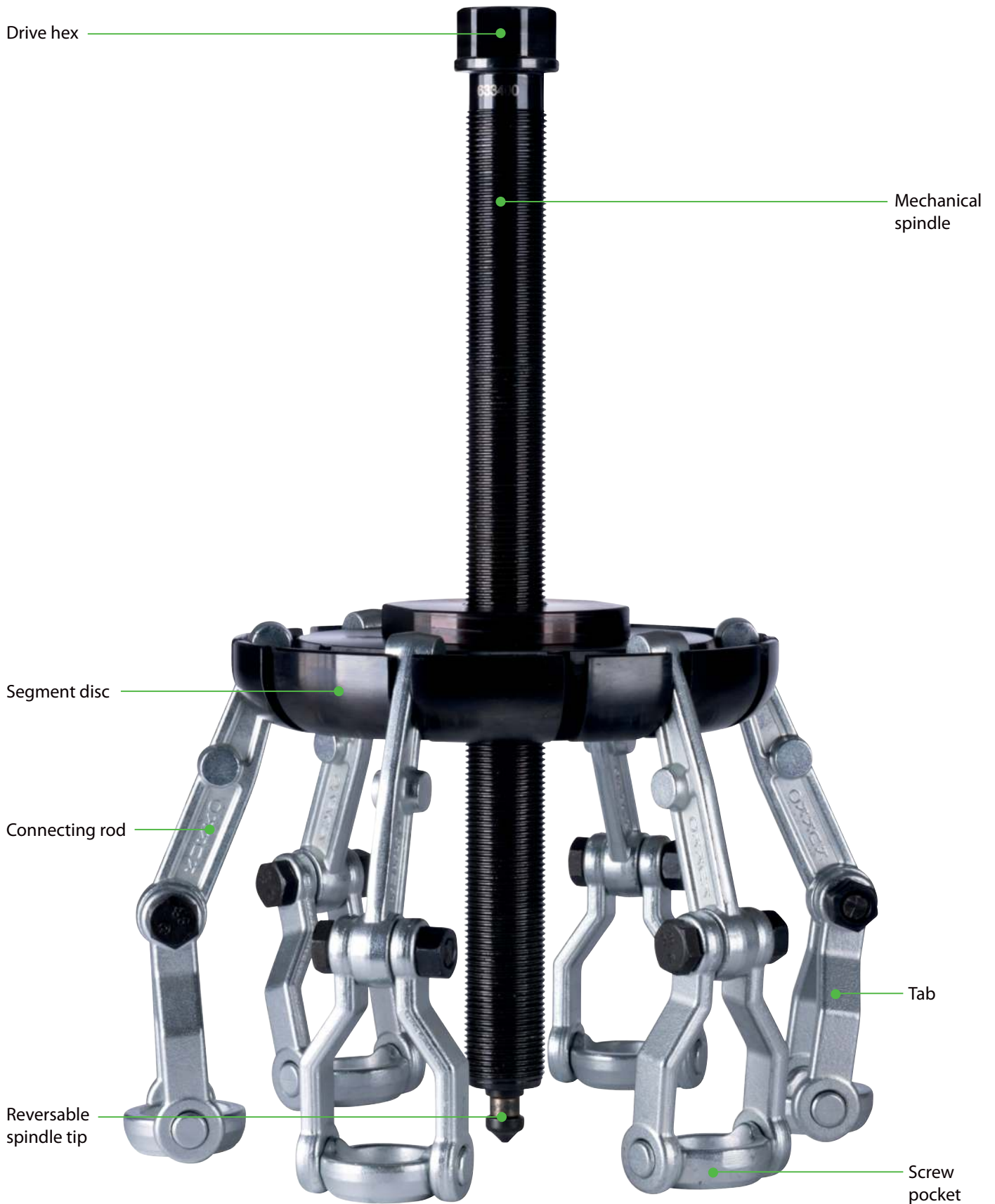
## APPLICATION

---

Hubs are subject to considerable stress. In vehicles, the hub is mounted on the drive shaft in the center of the wheel. Special tools are required for removing the hub. Depending on the installation situation, KUKKO offers various removal tools.

## CONSTRUCTION OF A HUB PULLER FROM SERIES 10-M

---



# CONSTRUCTION OF A HUB PULLER FROM SERIES 229





## FEATURES OF THE SERIES

### SERIES 10-A



The hydraulic hub puller is used for pulling hubs on cars and trucks. The grease-hydraulic spindle achieves a tension force of 20 t. Up to six jaws can be mounted on the segment disc, making the puller universally applicable. Additionally, the jaws can be set to two different lengths.

### SERIES 10-M



The hub puller with segment crossbar is used for pulling hubs on trucks. Up to six jaws can be hooked into different positions on the crossbar. The jaws can also be adjusted to two different lengths. As a result, the puller is universally usable even with variable bolt circle diameters.

### SERIES 38



The hub puller with segment crossbar is used for pulling hubs on trucks. Up to five jaws, which are freely movable on the crossbar, can be hooked onto the segment crossbar. This makes the puller universally applicable to various vehicle models. The freely moving T-handle on the spindle head ensures manual tightening of the spindle in confined spaces.

### SERIES 40



The hub puller with segment crossbar is used for pulling hubs on trucks. The spindle runs in an axially movable threaded bushing, in case impacts on the spindle head are needed to loosen the hub. The freely moving T-handle on the spindle head guarantees manual spindle tightening in tight spaces.

### SERIES 226



The puller device for truck axles of series 226 is used for pulling hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive sector. In addition to the puller device, several adapters are included, allowing use on most common models.

### SERIES 229



The hub puller with sliding hammer of series 229 is used for removing all 4- and 5-hole hubs of almost all car types in automotive. The flange is slotted differently to accommodate standard bolts. Also available with hydraulic spindle.

## FEATURES OF THE SERIES

### SERIES Y-60-100



The hydraulic hub puller for commercial vehicles and low-floor buses is used for safe and quick removal of the hub from commercial vehicles and buses in the automotive sector. The bolt circle disc and the 30 t hydraulic cylinder are capable of loosening very tightly seated and difficult-to-remove hubs.

### SERIES CITARO



The hydraulic hub puller "Citaro" is used for pulling hubs in the automotive sector. With it, very tightly seated and difficult-to-remove hubs can be perfectly loosened. The 30 t hydraulic cylinder enables time-saving and universal application, even with stubborn parts.

## APPLICATION EXAMPLES



Attaching the puller to the hub



The hub puller 229-1-1 with sliding hammer for pulling out tightly seated hubs on a car

SERIES 10-M  
HUB PULLER



The hub puller with crossbar is used for pulling wheel hubs on trucks. Up to six puller jaws can be hung in different positions on the crossbar. The jaws can also be adjusted to two different lengths. This makes the puller universally applicable even with variable bolt circle diameters.

BENEFITS

- Preservation of wheel bolt threads by consistently flat-lying nut pockets
- Length-adjustable and individually positionable pulling jaws as well as variously sized part discs ensure universal application on trucks.

TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 10-M | -862311                                                                                     | 350<br>13 3/4                                                                                  | 150<br>5 7/8                                                                                   | 36<br>1 7/16                                                                                   | 450<br>331.92                                                                                   | 150                            | 15<br>16.53                             | 16<br>35.280                                                                                   | ✓                                                                                     |

SERIES 10-A  
HYDRAULIC HUB PULLER SET



The hydraulic hub puller is used for pulling hub assemblies on passenger cars and trucks. The grease-hydraulic spindle achieves a pulling force of 20 t. Up to six pulling jaws can be used on the partial disc, making the puller universally applicable. Additionally, the pulling jaws can be adjusted to two different lengths. The 22-piece set includes: one partial disc, six pulling jaws, twelve insert rings in different sizes, one hydraulic spindle, and two pressure pieces.

BENEFITS

- Adjustable and individually positionable jaws guarantee universal application on cars and trucks.
- Thanks to the partial disk, different hole circles can be covered.
- Preservation of wheel bolt integrity through consistently flat-lying nut pockets.
- Fat hydraulic spindle guarantees easy and controlled removal of particularly stubborn parts with minimal effort.



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 10-A | -005626                                                                                     | 250<br>9 13/16                                                                                 | 150<br>5 7/8                                                                                   | 17<br>11/16                                                                                    | 200                            | 20<br>22.05                             | 17,34<br>38.235                                                                                | ✓                                                                                     |
| 10-G | -005701                                                                                     | 350<br>13 3/4                                                                                  | 150<br>5 7/8                                                                                   |                                                                                                | 200                            | 20<br>22.05                             | 24,88<br>54.860                                                                                | ✓                                                                                     |



SERIES 38  
HUB PULLER



The hub puller with crossbar is used for pulling hub assemblies on trucks. Up to five puller jaws can be hung on the crossbar, which are freely movable on it. This makes the puller universally applicable for various vehicle models. The freely movable T-handle at the spindle head guarantees manual tightening of the spindle in tight spaces.

BENEFITS

- Preservation of wheel bolt threads by consistently flat-lying nut pockets
- Integrated, free-moving T-handle ensures manual spindle drive in tight spaces

TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 38 | -014383                                                                                     | 250<br>9 13/16                                                                                 | 105<br>4 1/8                                                                                   | 27<br>1 1/16                                                                                   | 5,68<br>12.524                                                                                 | ✓                                                                                     |

SERIES 40  
HUB PULLER



The hub puller with the crossbar is used for pulling hubs from trucks. The spindle runs in a threaded bushing that is axially movable, in case impacts on the spindle head are necessary to loosen the hub. The freely movable T-handle on the spindle head ensures manual tightening of the spindle in tight spaces.

BENEFITS

- Preservation of wheel bolt threads by consistently flat-lying nut pockets
- Integrated, free-moving T-handle ensures manual spindle drive in tight spaces



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 40-3 | -014611                                                                                     | 225<br>8 7/8                                                                                   | 150<br>5 7/8                                                                                   | 27<br>1 1/16                                                                                   | 4,51<br>9.945                                                                                  | ✓                                                                                     |
| 40-5 | -014956                                                                                     | 225<br>8 7/8                                                                                   | 150<br>5 7/8                                                                                   | 27<br>1 1/16                                                                                   | 5,44<br>11.995                                                                                 | ✓                                                                                     |

SERIES 229-1-1  
HUB PULLER WITH SLIDING HAMMER



The hub puller with sliding hammer of series 229 is used to extract all 4- and 5-hole hubs of almost all types of passenger cars in automotive applications. The flange is designed with slots of varying spacing to accommodate standard screws.

BENEFITS

- Also suitable for pressing drive shafts in vehicles with front-wheel drive.
- The hub puller is suitable for removing all 4- and 5-hole hubs on VW, Audi, Seat, Skoda, Opel, Volvo, Fiat, Renault, etc.
- The reducer can be screwed in to work with a mechanical spindle.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 229-1-1 | -283703                                                                                     | 97 - 145<br>3 13/16-5 11/16                                                                    | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                        | 12,2<br>26.901                                                                                 | ✓                                                                                     |

SERIES 229-1-2  
HUB PULLER WITH SLIDING HAMMER



The hub puller with sliding hammer of series 229 is used to extract all 4- and 5-hole hubs of almost all types of passenger cars in automotive applications. The flange is designed with slots of varying spacing to accommodate standard screws.

BENEFITS

- Also suitable for pressing drive shafts in vehicles with front-wheel drive
- The hub puller is suitable for removing all 4- and 5-hole hubs on VW, Audi, Seat, Skoda, Opel, Volvo, Fiat, Renault, etc.
- The reducer can be screwed in to work with a mechanical spindle.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 229-1-2 | -545733                                                                                     | 97 - 145<br>3 13/16-5 11/16                                                                    | 700<br>27 9/16                                                                                 | 340<br>13 3/8                                                                                  | 5                                                                                          | 11,29<br>24.894                                                                                | ✓                                                                                     |



SERIES 229  
HYDRAULIC HUB PULLER



The hydraulic hub puller of the series 229 is used for removing all 4- and 5-hole hubs of almost all car types in automotive and industry. The flange is designed with slots of different spacings to accommodate commercially available screws.

BENEFITS

- Also suitable for pressing drive shafts in vehicles with front-wheel drive.
- The hub puller is suitable for pulling all 4- and 5-hole wheel hubs on VW, Audi, Seat, Skoda, Opel, Volvo, Fiat, Renault etc.
- The reducer can be screwed in to work with a mechanical spindle.



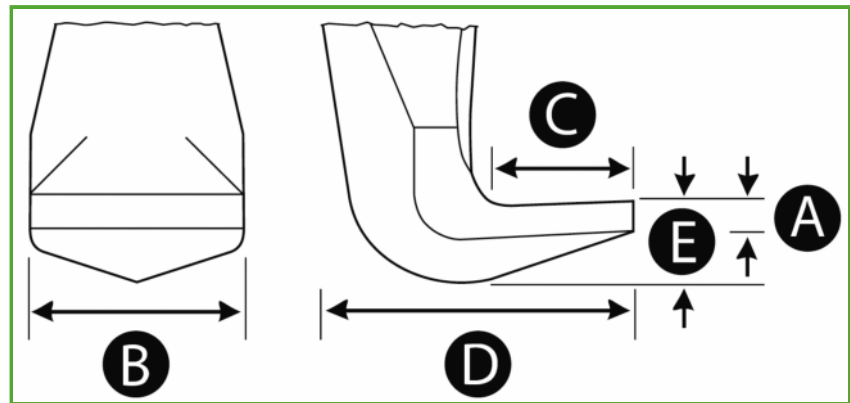
TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>Nm/ft lb | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 229-2 | -995026                                                                                     | 97 - 145<br>3 13/16-5 11/16                                                                    | 40<br>29.50                                                                                     | 100                         | 10<br>11.02                          | 4,665<br>10.286                                                                                | ✓                                                                                     |
| 229-3 | -995033                                                                                     | 97 - 145<br>3 13/16-5 11/16                                                                    | 70<br>51.63                                                                                     | 150                         | 15<br>16.53                          | 4,735<br>10.441                                                                                | ✓                                                                                     |

SERIES 229-1  
CLAW WITH SLIDING HAMMER

The sliding hammer with specially profiled hook of series 229 is used for loosening the control arm from the ball joint clamp and for bodywork in automotive and industry.

- BENEFITS**
- Specialized tool for safe and gentle disassembly



TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                   | kg/lb                                                                                 |                                                                                       |
| 229-1 | -995002                                                                             | 25<br>1                                                                             | 40<br>1 9/16                                                                        | 85<br>3 3/8                                                                         | 700<br>27 9/16                                                                      | 340<br>13 3/8                                                                       | 5                                                                                    | 12,095<br>28.555                                                                      | ✓                                                                                     |



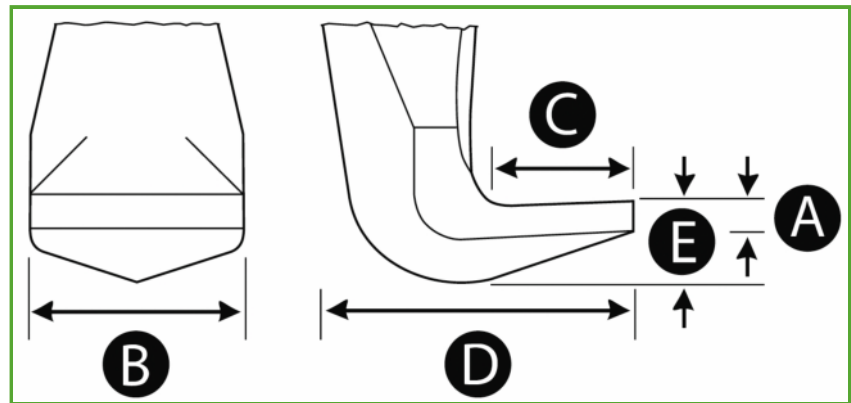
SERIES 230-I  
PULLING TOOL FOR INJECTORS



The extraction tool for injectors of series 230-I is used for removing fuel injectors from diesel engines in cars during service and automotive applications. The ergonomically shaped, massive sliding piece of the sliding hammer allows optimal force transfer and achieves a strong shock effect. It also ensures contactless and gentle extraction.

BENEFITS

- The shape of the sliding piece allows for a high impact weight of the sliding hammer with simple application.
- The internal stop point prevents crushing and ensures a safe working process.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/<br>inch | <br>mm/inch | <br>mm/<br>inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 230-I | -977626                                                                                     | 15<br>9/16                                                                                         | 20<br>13/16                                                                                    | 27<br>1 1/16                                                                                       | 370<br>14 9/16                                                                                 | 250<br>9 13/16                                                                                 | 1.7                                                                                        | 2,71<br>5.976                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES 226  
PULLER DEVICE FOR TRUCK AXLES



The pulling device for truck axles of the series 226 is used for pulling wheel hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive industry. In addition to the pulling device, several adapters are included, which allow application on most common models.

BENEFITS

- Printing pieces and extensions are already included in the set and expand the application.



TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Included in<br>the set |  |
|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm                                                                                | mm/inch                                                                           | Nm/ft lb                                                                          | kN                       | t/US t.<br>sh.           | kg/lb                                                                               |                        |                                                                                     |
| 226-4/11 | -831362                                                                           | 115 - 380<br>4 1/2 - 14<br>15/16                                                  | 370<br>14 9/16                                                                    | 90x30,<br>110x30mm<br>3 9/16x1<br>3/16, 4<br>5/16x1 3/16                          | M18x1,5,<br>M20x1,5,<br>M22x1,5                                                   | 36<br>1 7/16                                                                      | 450<br>331.92                                                                     | 150                      | 15<br>16.53              | 22,9<br>50.495                                                                      | K-226-4/12             | ✓                                                                                   |



PRODUCT DETAILS

SERIES K-226  
PULLER DEVICE FOR TRUCK AXLES IN CASE



The 15-piece puller for truck axles in the K-226 series case is used for pulling wheel hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive industry. In addition to pullers, it also includes a hydraulic additional press and several adapters that allow application on most common models.

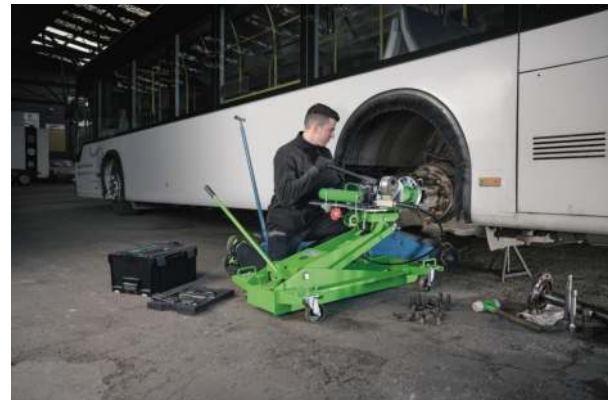
BENEFITS

- Printing pieces and extensions are already included in the set and expand the application.

TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm | <br>Max.<br>tensile<br>force<br>kN | <br>Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
| K-226-4/12 | -035753                                                                                     | 336<br>13 1/4                                                                                  | 116 - 380<br>4 9/16 - 14<br>15/16                                                              | M18x1,5,<br>M20x1,5,<br>M22x1,5                                                           | 150                                                                                                                   | 15<br>16.53                                                                                                                    | 25,14<br>55.434                                                                                | 9-2, 18-4   | ✓                                                                                     |

SERIES CITARO  
MOBILE HYDRAULIC HUB PULLER "CITARO"



The hydraulic hub puller "Citaro" is used for pulling wheel hubs in the automotive industry. It allows for the perfect loosening of very stuck, difficult-to-remove wheel hubs. The 30 t pressure cylinder enables a time-saving and versatile application, even with stubborn parts.

BENEFITS

- For quick and easy positioning on the vehicle, the work unit is pivotable and pre-adjustable.
- The lever actuation allows ergonomic operation from the work area thanks to 360° swivel capability.
- The overload protection and the lowering device with easily accessible rotary valve reduces the risk of injury.
- Thanks to the 4 swivel casters and easy adjustability, it can be used mobily at any time.
- The flat design allows working on low-lying vehicles.



TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>bar | <br>M16x1,5,<br>M18x1,5,<br>M20x1,5 | Max.<br>tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | Usage                                                         | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YHU-S-Citaro | -060137                                                                                     | 700                                                                                        | M16x1,5,<br>M18x1,5,<br>M20x1,5                                                                                        | 300                            | 30<br>33.07                          | ZF axle A, B<br>and C (type<br>AV132) RL<br>75 E, RL 75<br>EC | 2<br>4.410                                                                                     | ✓                                                                                     |

SERIES Y-60-000  
HYDRAULIC HUB PULLER



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>bar |  | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-60-100 | -356780                                                                                     | 168, 184, 190<br>6 5/8, 7 1/4, 7 1/2                                                           | 700                                                                                        | M16x1,5,<br>M18x1,5,<br>M20x1,5                                                     | 300                            | 30<br>33.07                             | 37<br>81.585                                                                                   | ✓                                                                                     |
| Y-60-200 | -104060                                                                                     | 225, 275, 335<br>8 7/8, 10 13/16, 13 3/16                                                      | 700                                                                                        | M22 x 1,5                                                                           | 300                            | 30<br>33.07                             | 37<br>81.585                                                                                   | ✓                                                                                     |

The hydraulic hub puller for commercial vehicles and low-floor buses is used for the safe and quick disassembly of the wheel hub in commercial vehicles and buses in the automotive industry. The bolt circle plate and the 30 t pressure cylinder are capable of loosening very tight and difficult-to-remove wheel hubs.

BENEFITS

- The hole circle disc with various radii and drill diameters allows for use with a variety of models.
- By storing it in the box, the completeness of the set can be easily overviewed.
- The pulling process protects the hub bearings and removes them quickly and without damage.

## PRODUCT DETAILS

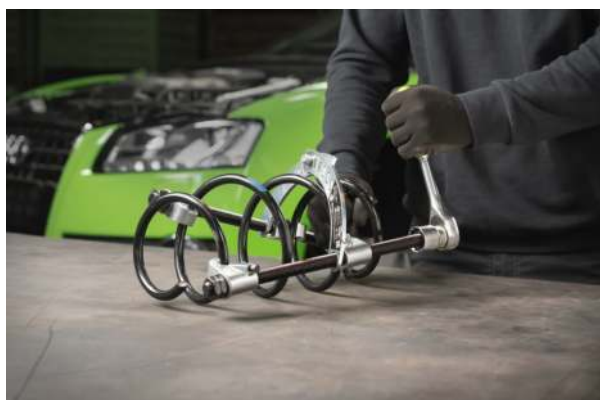
### SERIES 65 UNIVERSAL PULLER



The "Universal" spring compressors of series 65 are used for the removal and tensioning of coil springs in the automotive sector. Spring compressors are simple yet essential tools that allow for the safe removal and installation of springs and shock absorbers. The universal design makes it applicable for use on most vehicles.

#### BENEFITS

- The adjustable connecting bracket makes it easier to apply and tension even in hard-to-reach places.



## TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 65-0 | -020636                                                                                     | 260<br>10 1/4                                                                                  | 110 - 180<br>4 5/16 - 7<br>1/16                                                                | 100 - 200<br>3 15/16 - 7<br>7/8                                                                | 27<br>1 1/16                                                                                   | 20                             | 2<br>2.20                               | 3,2<br>7.056                                                                                   | ✓                                                                                     |
| 65-1 | -020711                                                                                     | 360<br>14 3/16                                                                                 | 110 - 180<br>4 5/16 - 7<br>1/16                                                                | 100 - 300<br>3 15/16 - 11<br>13/16                                                             | 27<br>1 1/16                                                                                   | 20                             | 2<br>2.20                               | 3,295<br>7.265                                                                                 | ✓                                                                                     |
| 65-2 | -020896                                                                                     | 460<br>18 1/8                                                                                  | 110 - 180<br>4 5/16 - 7<br>1/16                                                                | 100 - 400<br>3 15/16 - 15<br>3/4                                                               | 27<br>1 1/16                                                                                   | 20                             | 2<br>2.20                               | 3,615<br>7.971                                                                                 | ✓                                                                                     |



PRODUCT DETAILS

SERIES 66  
SPRING COMPRESSOR "MACPHERSON"



The “MacPherson” spring compressors of the 66 series are used in automotive applications for removing and compressing coil springs. Spring compressors are simple but important tools that enable the safe removal and installation of springs and shock absorbers. The “MacPherson” design can handle even the heaviest springs.

BENEFITS

- The adjustable connecting bracket makes it easier to apply and tension even in hard-to-reach places.

TECHNICAL ATTRIBUTES

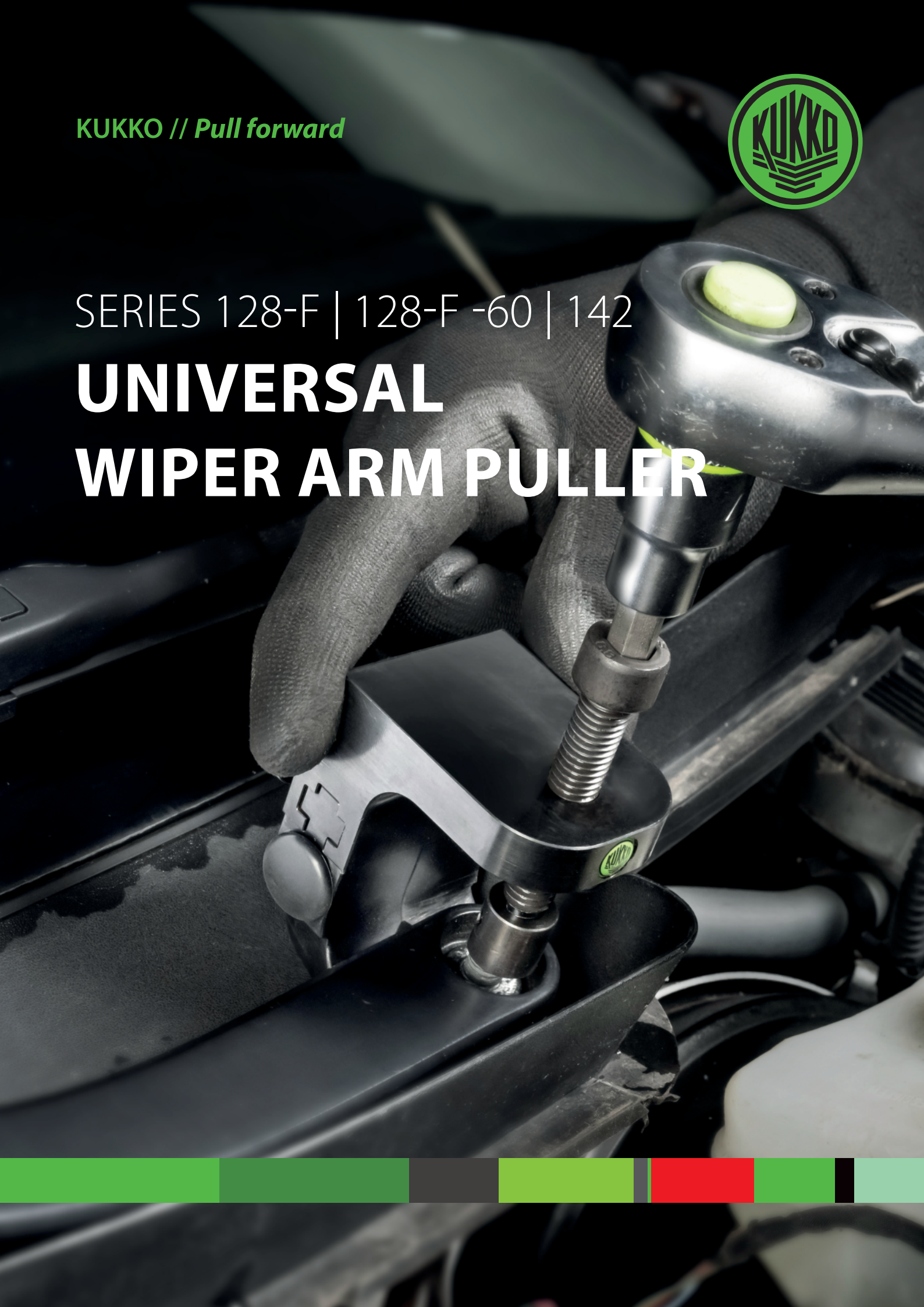
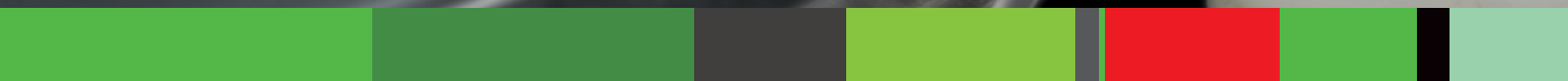
| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 66-1 | -020971                                                                                     | 300<br>11 13/16                                                                                | 110 - 180<br>4 5/16 - 7 1/16                                                                   | 100 - 250<br>3 15/16 - 9 13/16                                                                 | 24<br>15/16                                                                                    | 25                             | 2.5<br>2.76                             | 2,99<br>6.593                                                                                  | ✓                                                                                     |
| 66-2 | -170201                                                                                     | 450<br>17 11/16                                                                                | 110 - 180<br>4 5/16 - 7 1/16                                                                   | 100 - 400<br>3 15/16 - 15 3/4                                                                  | 24<br>15/16                                                                                    | 25                             | 2.5<br>2.76                             | 3,54<br>7.806                                                                                  | ✓                                                                                     |
| 66-3 | -170386                                                                                     | 450<br>17 11/16                                                                                | 110 - 180<br>4 5/16 - 7 1/16                                                                   | 100 - 400<br>3 15/16 - 15 3/4                                                                  | 24<br>15/16                                                                                    | 25                             | 2.5<br>2.76                             | 4,29<br>9.459                                                                                  | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 128-F | 128-F -60 | 142

# UNIVERSAL WIPER ARM PULLER



## APPLICATION

Bent or broken wiper arms must be quickly replaced in order to clear the windshield and rear window of rain, snow, and dirt. As a rule, the wiper arms are seated very tightly and cannot be removed without special tools. The wiper arm pullers from KUKKO are the ideal choice for dismounting especially stubborn or rusted-on wiper arms.

### Benefits

- Particularly gentle pulling thanks to the special pressure piece on the spindle
- Adjustable spread using the spring mechanism (series 128-F-60)
- Suitable for windshields and rear windows where the washer hose runs through the hub (series 128-F-60)

## CONSTRUCTION

### ART. NO. 128-F-SW



### ART. NO. 128-F-60





## SPECIAL FEATURES OF THE SERIES

### SERIES 128-F-SW



**128-F-SW**

The universal wiper arm puller can be used on 80% of all vehicle models. The specially developed pressure piece protects the washer fluid hose during the pulling process.

### SERIES 142



**142-2**

The models of series 142 are adapted to the aerodynamic and safety-related developments of the automotive industry. Due to reduced space conditions, the spindle is adjustable in both angle and length.

### SERIES 128-F-60



**128-F-60**

The wiper arm puller with adjustable spread (16-38 mm) can be used universally. Thanks to the spring mechanism, the jaws are optimally positioned. A special benefit is the

## APPLICATION EXAMPLES



Removing a wiper arm with the 128-F-SW



Removing a wiper arm with the 128-F-60



PRODUCT DETAILS

SERIES 128-F  
2-JAW UNIVERSAL PULLER

The 2-jaw universal puller is used for removing stuck, rusted, and deeply set wiper arms on windshields and rear windows. The pressure piece on the spindle ensures the perfect contact surface and guarantees a gentle removal.

- BENEFITS**
- Gentle removal thanks to special pressure piece on the spindle
  - Spindle outlet to protect the thread



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 128-F-SW | -971242                                                                                     | 25 - 60<br>1 - 2 3/8                                                                           | 50<br>1 15/16                                                                                  | 13<br>1/2                                                                                      | 0,245<br>0.540                                                                               | K-142/4,<br>K-142/6 | ✓                                                                                     |

SERIES 128-F-60  
2-JAW UNIVERSAL PULLER



The universal pullers with adjustable spread of series 128-F-60 are used for removing stuck, rusted, and deeply mounted wiper arms in the automotive industry. The returning spring mechanism keeps the jaws under tension. Thanks to interchangeable jaws, the puller can also be used on low-mounted wiper arms.

BENEFITS

- Suitable for windshields and rear windows where the wiper water hose passes through the hub.
- The choice of special threads allows for particularly high pulling forces.
- Particularly gentle removal thanks to a special pressure piece on the spindle
- Adjustable span using spring mechanism
- Interchangeable hooks thanks to modular system



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 128-F-60 | -007071                                                                                     | 16 - 38<br>5/8   1 1/2                                                                         | 13<br>1/2                                                                                      | 0,3<br>0.662                                                                                   | ✓                                                                                     |

SERIES 142  
UNIVERSAL WIPER PULLER



The universal pullers of series 142 are used for removing stuck, rusted, and recessed windshield wiper arms in the automotive sector. The optimal bell shape and easy adjustability make the puller applicable for most models of common windshield wiper arms.

BENEFITS

- Suitable for windshields and rear windows where the wiper water hose passes through the hub.
- The choice of special threads allows for particularly high pulling forces.
- Particularly gentle removal thanks to a special pressure piece on the spindle
- Anti-slip safety (spindle neck) for safe working with wrench
- Spindle outlet for thread protection

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set         |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|
| 142-1 | -555572                                                                                     | 15<br>9/16                                                                                     | 8<br>5/16                                                                                      | 0,245<br>0.540                                                                               | K-142/4, K-142/6,<br>K-22-A | ✓                                                                                     |
| 142-2 | -555602                                                                                     | 23,5<br>15/16                                                                                  | 8<br>5/16                                                                                      | 0,26<br>0.573                                                                                | K-142/6, K-22-A             | ✓                                                                                     |
| 142-3 | -555619                                                                                     | 15<br>9/16                                                                                     | 8<br>5/16                                                                                      | 0,225<br>0.496                                                                               | K-142/6, K-22-A             | ✓                                                                                     |
| 142-4 | -555626                                                                                     | 26,5<br>1 1/32                                                                                 | 16<br>5/8                                                                                      | 0,215<br>0.474                                                                               | K-142/4, K-142/6,<br>K-22-A | ✓                                                                                     |

SERIES K-142  
UNIVERSAL PULLER SET



The 5- and 8-piece universal wiper arm puller sets from the K-142 series are used to pull off stuck, rusted, and deeply seated wiper arms on all vehicle models. Included are, besides the wiper pullers of series 142, a wiper arm puller from series 128-F-SW as well as a 2-jaw universal puller with self-centering jaws from series 43. The sets, due to this composition, are able to gently and safely pull even in tricky pulling situations without the need to disassemble additional parts.

BENEFITS

- Suitable for windshields and rear windows where the wiper water hose goes through the hub.
- The selection of special threads allows for particularly high extraction forces.
- Particularly gentle removal thanks to a special pressure piece on the spindle



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                      |  |
|---------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------------|
| K-142/4 | -039232                                                                                    | 0 - 60<br>0 - 2 3/8                                                                           | 0 - 50<br>0 - 1 15/16                                                                         | 15, 26,5<br>9/16, 1 1/16                                                                      | 1,35<br>2.977                                                                               | 128-F-SW,<br>142-1, 142-4,<br>43-1               | ✓                                                                                    |
| K-142/6 | -039249                                                                                    | 0 - 60<br>0 - 2 3/8                                                                           | 0 - 50<br>0 - 1 15/16                                                                         | 15, 15, 23,5,<br>56,5<br>9/16, 9/16,<br>15/16, 2 1/4                                          | 2,61<br>5.755                                                                               | 43-1, 128-F-SW,<br>142-1, 142-2, 142-3,<br>142-4 | ✓                                                                                    |



KUKKO // *Pull forward*



SERIES 31 | 32 | 33 | 34

# STEERING WHEEL PULLER



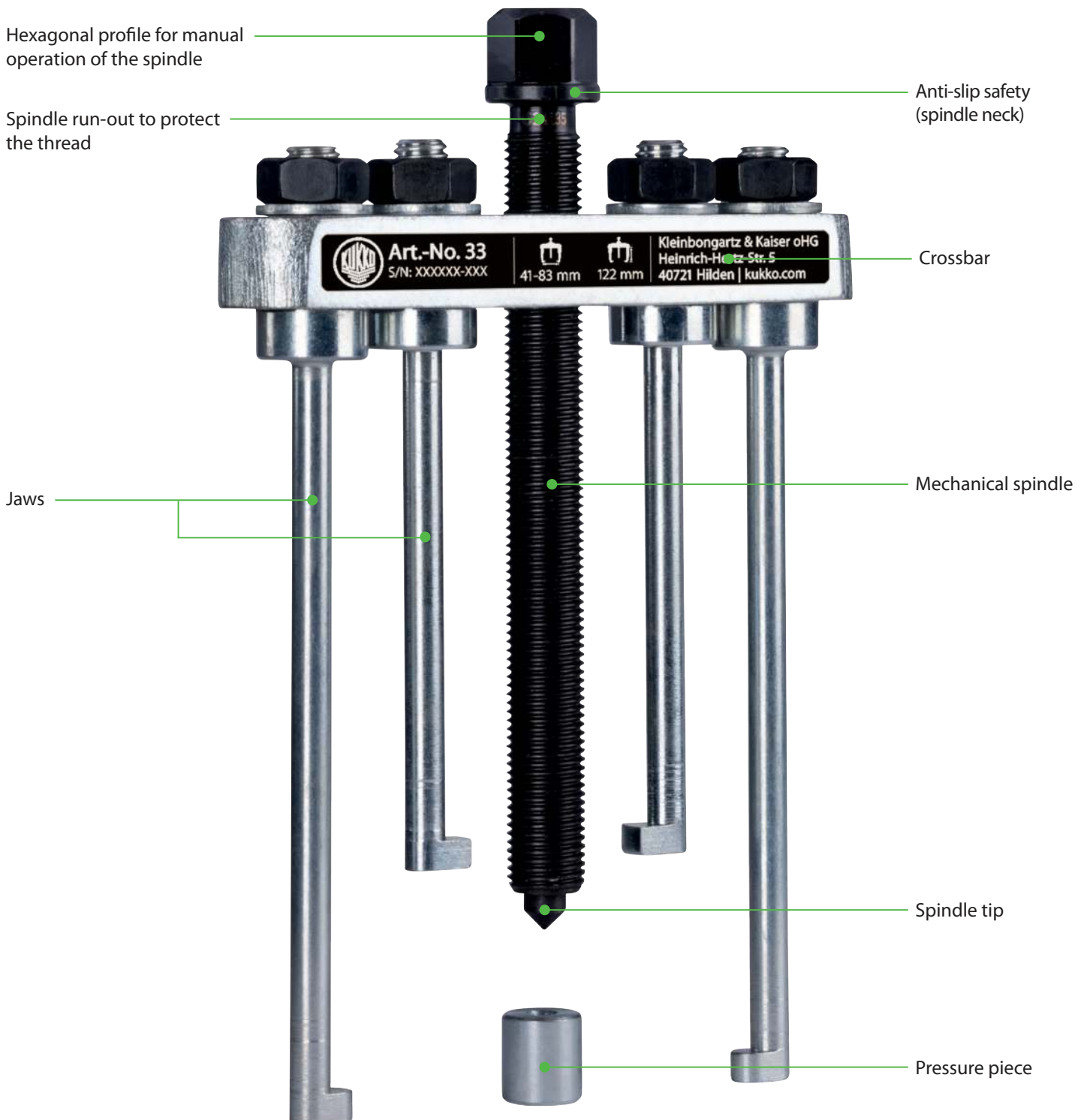
# APPLICATION

With KUKKO steering wheel pullers, steering wheels are professionally and gently removed. Depending on the vehicle model and installation situation, KUKKO offers various steering wheel pullers in its range. The selection ranges from pullers for steering wheels with three or four spokes to pullers for sport steering wheels.

## Benefits

- Universal application thanks to variously sized spacer rings (series 31)
- Universal application thanks to variously sized pull rings (series 32)
- Universal application for a variety of steering wheel types thanks to jaws of different lengths (series 33)
- Separate protective cap for the steering shaft thread is included (series 33 and 34)

## CONSTRUCTION OF A STEERING WHEEL PULLER (SERIES 33)



# SPECIAL FEATURES OF THE SERIES

## SERIES 31

### Steering wheel puller



31-1

The universally applicable steering wheel puller is used for the gentle removal of steering wheels in a wide variety of designs. The particularly robust design of the puller withstands even the highest loads.

## SERIES 32

### Steering wheel puller



32-1

The steering wheel puller is used for the gentle removal of steering wheels with three or four spokes. The particularly robust design of the puller withstands even the highest loads.

## SERIES 33

### 2-jaw steering wheel puller



33

The 2-jaw steering wheel puller is used for removing steering wheels with narrow pull-off slots. The two short jaws are ideally suited for sport steering wheels. The long jaws are used for standard steering wheels. Due to their construction, the jaws can be adjusted in any direction.

## SERIES 34

### 2-jaw steering wheel puller



34-1

The 2-jaw steering wheel puller is used for removing steering wheels with large pull-off slots. Variant 34-0 is equipped with a pair of short jaws. Model 34-1 includes an additional pair of long jaws. Due to their construction, the jaws can be adjusted in any direction.

SERIES 31  
UNIVERSAL PULLER

The universally applicable steering wheel puller is used for gentle removal of steering wheels in various designs. The particularly powerful design of the puller withstands even the strongest loads.



BENEFITS

- Universally applicable thanks to various sizes of insert rings
- Safe setup of the spindle through a swiveling spindle tip on both smooth surfaces and during centering (Switch Technology)



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 31-1 | -013881                                                                                     | 30 - 60<br>1 3/16   2 3/8                                                                      | 22<br>7/8                                                                                      | 5,09<br>13.010                                                                                 | ✓                                                                                     |
| 31-2 | -013966                                                                                     | 80 - 90<br>3 1/8   3 9/16                                                                      | 22<br>7/8                                                                                      | 4,86<br>10.716                                                                                 | ✓                                                                                     |



SERIES 32  
STEERING WHEEL PULLER



The steering wheel puller is used for gentle removal of steering wheels with three or four spokes. The particularly strong design of the puller withstands even the highest loads.

BENEFITS

- The rubber coating on the pulling ring provides protection for the steering wheel and spokes during the extraction process.
- Universally applicable thanks to variously sized pull rings
- Secure mounting of the spindle with a swivel spindle tip on both smooth surfaces and during centering (Switch Technology)

TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 32-1 | -014048                                                                                   | 53 - 92<br>2 1/16 - 3 5/8                                                                    | 100<br>3 7/8                                                                                 | 17<br>11/16                                                                                  | 1,56<br>3.440                                                                                | ✓                                                                                   |
| 32-2 | -014123                                                                                   | 53 - 92<br>2 1/16 - 3 5/8                                                                    | 120<br>4 3/4                                                                                 | 19<br>3/4                                                                                    | 2,325<br>5.127                                                                               | ✓                                                                                   |

SERIES 33  
STEERING WHEEL PULLER FOR STEERING  
WHEELS WITH NARROW PULLER SLOTS



The 2-jaw puller is used for removing steering wheels with narrow pull slots. The two short jaws are ideally suited for sports steering wheels. The long jaws are used for standard steering wheels. Due to their construction, the jaws are adjustable in any direction. Thanks to the slim design of the puller, it can reach into narrow pull slots to disassemble the steering wheel or other hard-to-reach components.

BENEFITS

- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.
- Spindle outlet to protect the thread
- Universally applicable for a variety of steering wheel types thanks to different lengths of jaws.
- A separate protective cap for the steering column thread is included.



TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 33 | -014208                                                                                     | 41 - 83<br>1 5/8 - 3 1/4                                                                       | 122<br>3 1/2   5 1/8                                                                           | 17<br>11/16                                                                                    | 0,745<br>1.643                                                                                 | ✓                                                                                     |

SERIES 34  
STEERING WHEEL PULLER FOR STEERING  
WHEELS WITH LARGE PULLER SLOTS



The 2-jaw puller is used for pulling steering wheels with large pull slots and hard-to-reach components. The variant 34-0 is equipped with a pair of short jaws. The model 34-1 has an additional pair of long jaws. Due to their construction, the jaws are adjustable in any direction. Thanks to the sturdy design of the puller, it can reach into large pull slots to access the steering wheel.

BENEFITS

- Anti-slip safety (spindle neck) at the spindle head for safe working with wrench.
- Spindle outlet to protect the thread
- Separate protective cap for the steering shaft thread is attached

TECHNICAL ATTRIBUTES

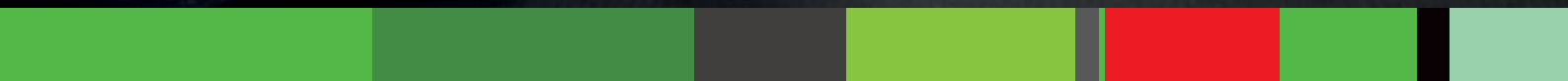
| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>SW<br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 34-0 | -865879                                                                                     | 28 - 90<br>1 1/8 - 3 9/16                                                                      | 85<br>3 3/8                                                                                    | 17<br>11/16                                                                                          | 0,68<br>1.499                                                                                  | ✓                                                                                     |
| 34-1 | -865886                                                                                     | 28 - 90<br>1 1/8 - 3 9/16                                                                      | 85<br>3 3/8                                                                                    | 17<br>11/16                                                                                          | 0,96<br>2.117                                                                                  | ✓                                                                                     |

KUKKO // *Pull forward*



SERIES 118

# PULLER FOR CAMSHAFT GEARS





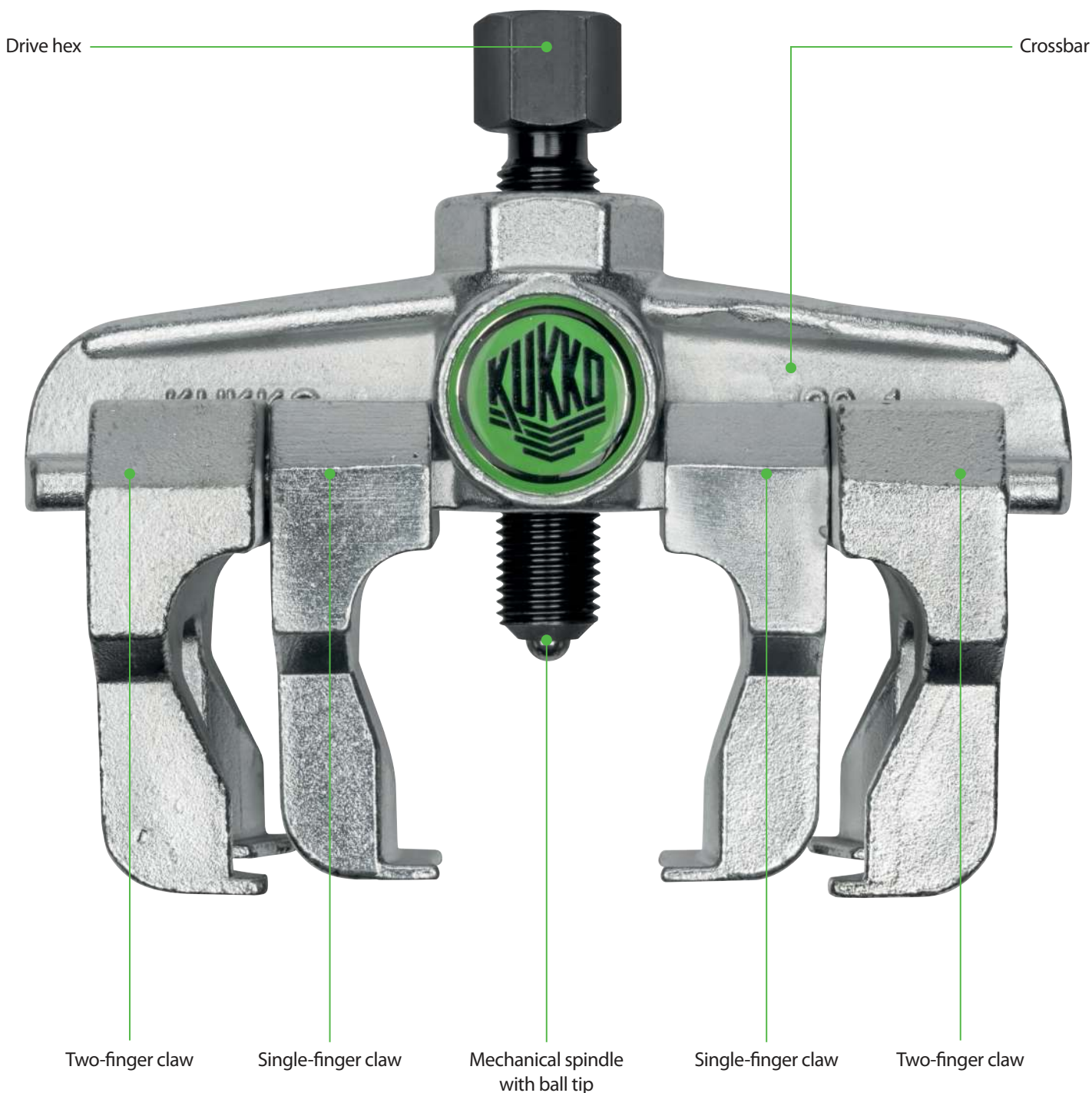
## APPLICATION

The pullers for camshaft gears of series 118 are equipped with sliding, always parallel jaws and are used for pulling spoked camshaft gears in the automobile workshop. Thanks to the four special jaws, particularly safe and damage-free removal is guaranteed. Usable up to a maximum spread of 115 mm and a maximum reach of 43 mm.

### Benefits

- Special jaws for ideal adaptation to camshaft gears
- Anti-slip safety (spindle neck) at the spindle head for safe operation with a wrench
- Spindle runout for protection of the thread

## CONSTRUCTION OF A PULLER FOR CAMSHAFT GEARS



## SPECIAL FEATURES OF THE SERIES

Depending on the installation situation of the camshaft gear, there are two different puller models, which differ by the number of their hooks.

### MODEL 118-0

Puller for camshaft gears  
with 4 different claw types



### MODEL 118-1

Puller for camshaft gears  
with 2 different claw types



## APPLICATION EXAMPLES



Both photos show the pulling process of a camshaft gear using the 118-0 with the single-finger claws.

SERIES 118  
PULLER FOR CAMSHAFT GEARS

The camshaft puller with sliding, always parallel puller jaws is used for pulling spoke camshaft wheels in the automotive workshop. Equipped with four special puller jaws, the external puller guarantees particularly safe, non-destructive disassembly.

BENEFITS

- Special puller jaws for ideal fitting on camshaft gears
- Anti-slip safety (spindle neck) at the spindle head for safe work with wrench.
- Spindle outlet to protect the thread



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 118-0 | -860904                                                                                     | 28 - 115<br>1 1/8 - 4 1/2                                                                      | 43<br>1 11/16                                                                                  | 17<br>11/16                                                                                    | 35<br>25.82                                                                                     | 20                             | 2<br>2.20                               | 1,26<br>2.778                                                                                  | ✓                                                                                     |
| 118-1 | -989636                                                                                     | 42 - 115<br>1 5/8 - 4 1/2                                                                      | 43<br>1 11/16                                                                                  | 17<br>11/16                                                                                    | 35<br>25.82                                                                                     | 20                             | 2<br>2.20                               | 1,28<br>2.822                                                                                  | ✓                                                                                     |



KUKKO // *Pull forward*



SERIES 16

# CYLINDER LINER PULLER





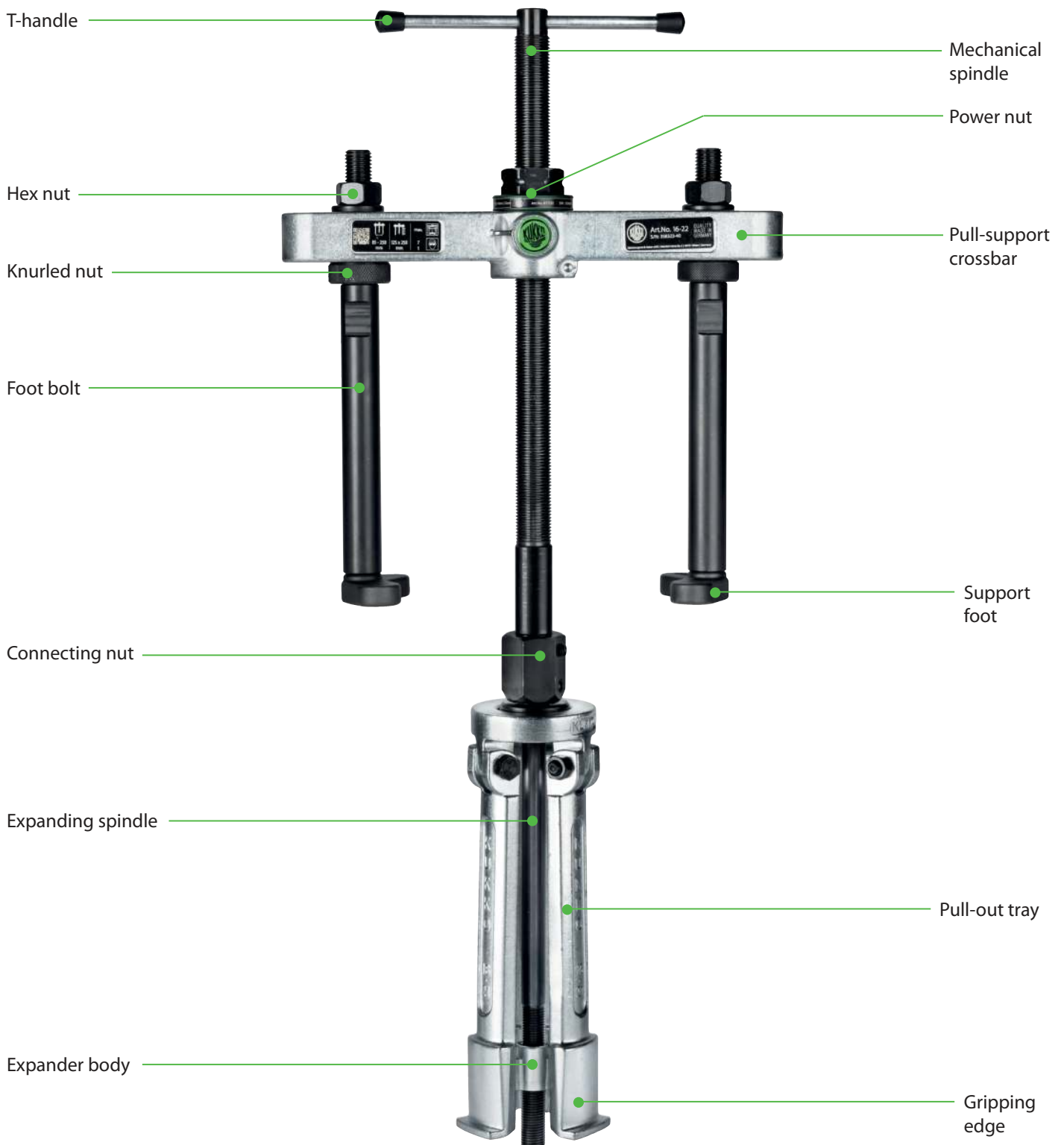
## APPLICATION

Cylinder liners protect the engine block from wear. As wear parts, the liners must be replaced over time. For pulling wet cylinder liners as well as similar components in trucks, cars, and stationary engines, KUKKO recommends Series 16. The combination of internal extractor and counter stay guarantees powerful and gentle pulling. In addition, the integrated power nut ensures effortless operation with minimal friction loss.

### Benefits

- The mechanical spindle allows even bearings sitting close to the rear wall to be pulled out safely and quickly
- The friction resistance of the counter stay nut is reduced to a minimum thanks to a built-in pressure bearing
- The support feet are suitable for large cylinder liners and bearings
- The foot bolts ensure an especially firm positioning during extraction

## STRUCTURE OF A CYLINDER LINER PULLER



# PRODUCT RANGE OVERVIEW

## Internal extractor



Expanding range from 60 - 155 mm



(View from below)

16-21

## Counter stays



16-22



16-23

## Cylinder liner puller



16



16-2

## SETS



K-16-A



K-16-B

The K-16-A series set with a 2-jaw crossbar and the K-16-B with multi-crossbar contain an application-oriented combination for immediate and universal use in cylinder liner removal.

## SPECIAL FEATURES OF THE COUNTER STAY 16-23

### MULTI-CROSSBAR



The new multi-crossbar of the 68 series offers space for up to four foot bolts. This guarantees a larger contact area and thus a more even force distribution.

### SCALE FOR FINE ADJUSTMENT



Above the crossbar is a scale with various numerical values. This adjustment aid ensures that the foot bolts can be set at equal intervals to allow for uniform extraction load.

### SCREW CONNECTION



The knurled surface stands out for its especially sturdy design and a large contact area. The knurling guarantees easy, powerful operation of the knurled nut.

### POWER NUT



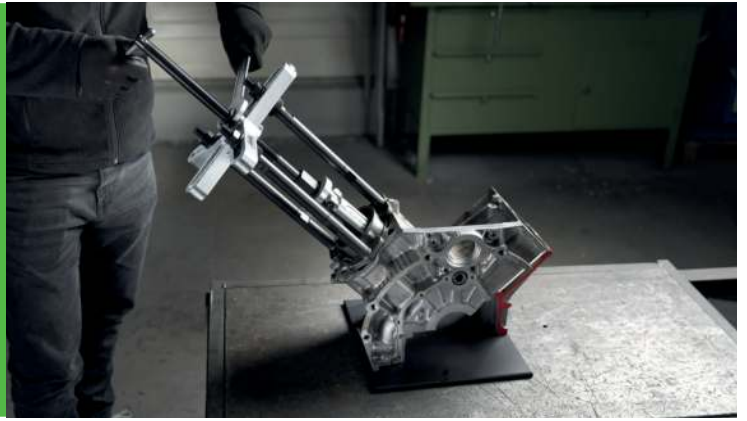
KUKKO's power nut guarantees more energy-saving clamping of tools and workpieces, as well as torque application with minimal friction loss.



## TIPS

### EXTENDING THE FOOT BOLTS:

The K-16-A and K-16-B sets include 2 and 3 extensions for the foot bolts, respectively. To increase the reach, simply screw the extensions onto the foot bolts.



### EXTENDING THE SPINDLE:

When dismantling particularly deeply-situated components, the spindle can be extended using a spindle extension.



## APPLICATION EXAMPLES



A look inside while pulling out a cylinder liner



With three foot bolts on the multi-crossbar you achieve optimal positioning during the extraction process using the 16-2 cylinder liner puller



## SERIES 16 CYLINDER SLEEVES PULLER



The cylinder sleeve pullers of series 16 are used for extracting cylinder liners and similar parts. Three spreading bodies ensure an optimal fit of the internal extractor to the respective application. The integrated POWER NUT allows for a high force expenditure. Items 16-22 and 16-23 are counter stays and can be combined with the internal extractor 16-21.

### BENEFITS

- Pullers are suitable for large cylinder sleeves and bearings and guarantee a firm stand when pulling out.
- Knurled nut provides a large contact area for even and powerful extraction.
- The Power Nut minimizes friction resistance while simultaneously allowing forces that can otherwise only be achieved with hydraulic spindles.
- The mechanical spindle allows bearings that are tightly seated on the rear wall to be safely and quickly extracted.



### TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Max. tensile force | Max. tension force |  |  |  |  | Included in the set |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/<br>inch                                                                         | mm/<br>inch                                                                         | kN                 | t/US t.<br>sh.     | mm                                                                                  | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |                     |                                                                                       |
| 16-21 | -251559                                                                             | {9786}<br>{10140}                                                                   | 60 - 155<br>2 3/8 - 6 1/8                                                           | 190<br>7 1/2                                                                        | 70<br>2 3/4                                                                         | 70                 | 7<br>7.72          | G 1/2                                                                               | 32<br>1 1/4                                                                         | 3,47<br>7.651                                                                         | 16-22,<br>16-23                                                                       | K-16-A,<br>K-16-B   | ✓                                                                                     |
| 16-22 | -251634                                                                             | 85 - 250<br>3 3/8 - 9 13/16                                                         |                                                                                     |                                                                                     |                                                                                     | 70                 | 7<br>7.72          | G 1/2                                                                               | 32<br>1 1/4                                                                         | 4,325<br>9.537                                                                        | -                                                                                     | K-16-A              | ✓                                                                                     |
| 16-23 | -060731                                                                             | 85 - 250<br>3 3/8 - 9 13/16                                                         |                                                                                     |                                                                                     |                                                                                     | 70                 | 7<br>7.72          | G 1/2                                                                               | 32<br>1 1/4                                                                         | 5,96<br>13.142                                                                        | -                                                                                     | K-16-B              | ✓                                                                                     |
| 16    | -008023                                                                             | {9786}<br>{10140}                                                                   | 60 - 155<br>2 3/8 - 6 1/8                                                           | 120<br>4 3/4                                                                        | 70<br>2 3/4                                                                         | 70                 | 7<br>7.72          | G 1/2                                                                               | 32<br>1 1/4                                                                         | 7,6<br>16.758                                                                         | -                                                                                     | K-16-A              | ✓                                                                                     |
| 16-2  | -060717                                                                             | {9786}<br>{10140}                                                                   | 60 - 155<br>2 3/8 - 6 1/8                                                           | 120<br>4 3/4                                                                        | 70<br>2 3/4                                                                         | 70                 | 7<br>7.72          | G 1/2                                                                               | 32<br>1 1/4                                                                         | 0,3<br>0.662                                                                          | -                                                                                     | K-16-B              | ✓                                                                                     |

SERIES K-16  
CYLINDER SLEEVE PULLER SETS



The 10- or 12-piece cylinder bushing puller sets are used for extracting cylinder liners and similar components. Three spreading bodies ensure optimal adaptation of the internal extractor to the respective application, and the POWER SCREW allows for high force application.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The mechanical spindle securely and quickly extracts bearings that are positioned tightly against the back wall.
- The friction resistance of the counter stay nut is minimized by a built-in pressure bearing.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of                         |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|
| K-16-A | -711664                                                                                     | 60 - 155<br>2 3/8 - 6 1/8                                                                      | 85 - 250<br>3 3/8 - 9 13/16                                                                    | 70                             | 7<br>7.72                               | 11,76<br>25.931                                                                                | 16-21, 16-22,<br>16-22-V,<br>19-7-P | ✓                                                                                     |
| K-16-B | -711671                                                                                     | 60 - 155<br>2 3/8 - 6 1/8                                                                      | 85 - 250<br>3 3/8 - 9 13/16                                                                    | 70                             | 7<br>7.72                               | 13,82<br>30.473                                                                                | 16-21, 16-23,<br>16-22-V,<br>19-7-S | ✓                                                                                     |

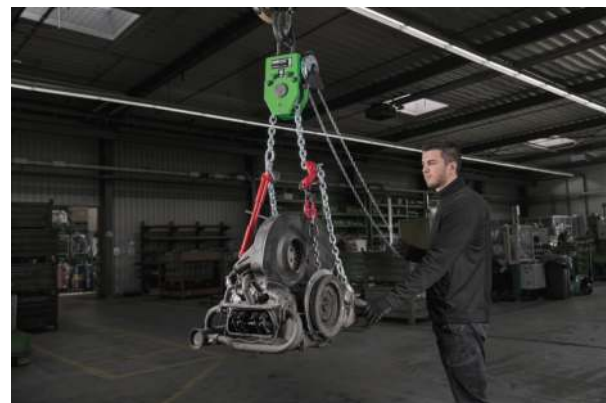
SERIES URANOS  
MOBILE ENGINE CONDUCTOR "URANOS"



The motor conductor "URANOS" is used for directing the angle during the installation and removal of engines, transmissions, and batteries of all kinds in industry and workshop. By operating the hand chain, the motor conductor can be universally and easily adjusted to ensure smooth operation on the engine. The self-locking worm gear and the 3-point suspension provide the necessary stability and safety.

BENEFITS

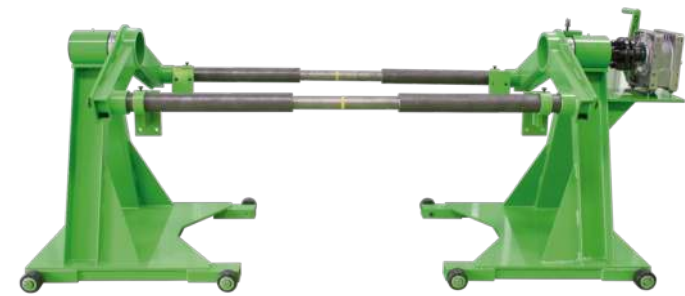
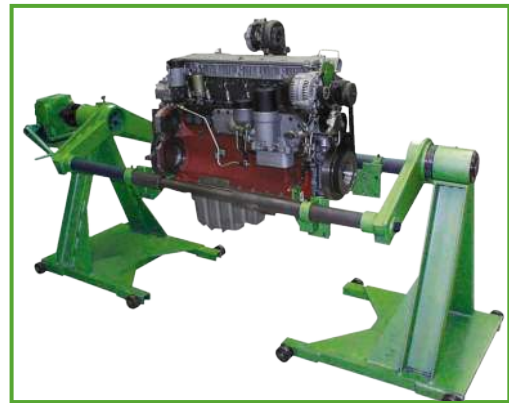
- The actuation of the hand chain can occur in all angular positions without impairment.
- The necessary tilt is securely held by the built-in, self-locking worm gear as soon as the operation of the hand chain ceases.
- The large translation of the snail gear with the highest possible efficiency ensures quick handling in all positions.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| W-3180 | -318007                                                                                     | 1.900<br>74 13/16                                                                              | 700<br>27 9/16                                                                                 | 500<br>19 11/16                                                                                | 2.000                                                                                     | 32<br>70.560                                                                                   | ✓                                                                                     |
| W-3188 | -318809                                                                                     | 1.245<br>49 1/64                                                                               | 500<br>19 11/16                                                                                | 345<br>13 9/16                                                                                 | 500                                                                                       | 11,85<br>26.129                                                                                | ✓                                                                                     |

SERIES W-6066  
MOTOR MOUNTING BRACKETS



The engine mounting stand of the W-6066 series is used for double-sided mounting of various engines in industry and workshops. It consists of 1 driven bearing pedestal, 1 counter bearing pedestal, 2 yokes, 4 support arms, 4 clamping dogs and 2 connecting tubes and, thanks to interchangeable clamping dogs, is suitable for various engines.

BENEFITS

- Adaptation to many engines possible
- Highest productivity through simple and fast handling
- Easy alignment through 4 rollers per assembly stand
- Easy operation thanks to oil-lubricated gearbox with high efficiency
- Continuous rotation of the motor by 360° is possible in both directions.



TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                    | kg/lb                                                                                 |                                                                                       |
| W-6066 | -120785                                                                             | 1950<br>76 3/4                                                                      | 900<br>35 7/16                                                                      | 1070<br>42 1/8                                                                      | 667<br>26 1/4                                                                       | 1.200                                                                                 | 45<br>99.225                                                                          | ✓                                                                                     |



SERIES W-6067  
MOTOR MOUNTING BRACKETS



The motor assembly stand of the W-6067 series is used for one-sided support of various engines in industrial and workshop environments. It consists of 1 driven bearing block, 1 clamping rail with a disc, tabs, and screws, as well as 1 support arm and is suitable for different engines thanks to replaceable clamping jaws.

BENEFITS

- Adaptation to many engines possible
- Highest productivity through simple and fast handling
- Easy alignment through 4 rollers per assembly stand
- Easy operation thanks to oil-lubricated gearbox with high efficiency
- Continuous rotation of the motor by 360° is possible in both directions.

TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |  |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                    | kg/lb                                                                                 |                                                                                       |
| W-6067 | -120853                                                                             | 1120<br>44 1/8                                                                      | 950<br>37 3/8                                                                       | 1070<br>42 1/8                                                                      | 930<br>36 5/8                                                                       | 130<br>5 1/8                                                                        | 600                                                                                   | 24<br>52.920                                                                          | ✓                                                                                     |

KUKKO // *Pull forward*



# TESTING & MEASURING





## APPLICATION

The pneumatic test cases of series W-6050 are used for testing control pressures, intervals, gradations, control and safety functions, tightness and pressure drops of compressed air brake systems up to 4 circuits and others in industry and workshops. For buses, the case is used to test all air suspension systems and door operating units, as well as control and servo units on special vehicles.

## STRUCTURE OF A TEST CASE



## APPLICATION EXAMPLE



Connecting a pneumatic hose to the coupling plug



Interior view of the test case

SERIES W-6050  
PNEUMATIC TEST CASE



The Pneumatic test cases of the series W-6050 are used for testing switching pressures, intervals, gradations, control and safety functions, tightness, and pressure losses of compressed air brake systems with up to 4 circuits, as well as other applications in industry and workshops. For buses, the case is used to test all air suspension systems and door actuation devices, as well as control or servo devices on special vehicles.

BENEFITS

- Swingable instrument panel with built-in pressure gauges, using hinges
- Quick coupling connections on the front of the control panel
- Color-coded test tubes and pressure gauges with a visual indicator for better clarity.



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>bar | <br>bar | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| W-6050/6 | -130265                                                                                     | 645<br>25 3/8                                                                                  | 355<br>13 1                                                                                    | 250<br>9 13/16                                                                                 | 100<br>3 15/16                                                                                 | 0,1                                                                                        | 16                                                                                           | 19<br>41.895                                                                                   | ✓                                                                                     |
| W-6050/8 | -605084                                                                                     | 645<br>25 3/8                                                                                  | 355<br>13 1                                                                                    | 250<br>9 13/16                                                                                 | 100<br>3 15/16                                                                                 | 0,5                                                                                        | 25                                                                                           | 23<br>50.715                                                                                   | ✓                                                                                     |



PRODUCT DETAILS

SERIES W-6050/9  
PNEUMATIC TEST CASE

The special pressure gauges are accessories for the pneumatic testing case W-6050. They are equipped with a rubber protective cap, connecting nipple, and safety chain for quick coupling and securing with the test hoses.



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>bar | <br>bar | <br>kg/lb |  |
|----------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| W-6050/9 | -605091                                                                                   | 100<br>3 15/16                                                                               | 0,1                                                                                      | 16                                                                                       | 0,84<br>1.852                                                                                | ✓                                                                                   |

PRODUCT DETAILS

SERIES 124-K  
2-JAW PULLEY PULLER SET FOR ALL VEHICLE  
TYPES



The car pulley puller set for all vehicle types is used for removing multi-ribbed pulleys with a diameter of up to 195 mm in automotive applications. The 2-jaw design allows for space-saving work, which functions in any position and even under full load, thanks to the parallel puller jaws.

BENEFITS

- Universally applicable for most vehicle types
- The flange of the spindle neck prevents the slipping of the key.
- The included hook extensions allow adjustment to all given installation conditions.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>M10 | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 124-K | -736841                                                                                     | 17<br>11/16                                                                                    | 195<br>7 11/16                                                                                 | 68 - 88<br>7 11/16 - 3<br>7/16                                                                 | M10                                                                                        | 2,52<br>5.557                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES 101-1  
PISTON RING PLIERS



The piston ring pliers of the series 101 are used for spreading piston rings in crafts, industry, and workshops. The piston ring pliers are capable of spreading piston rings without damaging the original shape of the rings.

BENEFITS

- The design allows for the gentle and uniform pulling apart of piston rings.
- Through the pliers shape, the piston rings can be securely inserted.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 101-1 | -022531                                                                                     | 200<br>7 7/8                                                                                   | 50 - 100<br>1 15/16 - 3 15/16                                                                  | 0,25<br>0.551                                                                                  | ✓                                                                                     |
| 101-2 | -022616                                                                                     | 240<br>9 7/16                                                                                  | 90 - 150<br>3 9/16 - 5 7/8                                                                     | 0,4<br>0.882                                                                                   | ✓                                                                                     |

PRODUCT DETAILS

SERIES 101-3  
UNIVERSAL PISTON RING PLIERS



The universal piston ring placement pliers are used for the efficient installation of piston rings in the automotive industry. The placement pliers are capable of gently and problem-free mounting of piston rings without overstretching or causing any other damage. The pliers are handy and due to their lightweight adjustability, they are flexible for use with various piston rings.

BENEFITS

- The precise setting of the spread prevents the overextension or breakage of the piston rings
- Wear, oil loss, or other damage to piston rings or cylinders is effectively prevented.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 101-3 | -974489                                                                                   | 220<br>8 11/16                                                                               | 60 - 140<br>2 3/8 - 5 1/2                                                                    | 0,31<br>0.684                                                                                | ✓                                                                                   |



PRODUCT DETAILS

SERIES 100  
PISTON RING CLAMPS



The piston ring tension bands of the series 100 are used to tension the piston rings during the installation of the pistons in the cylinders in automotive applications. The tension bands in various sizes are ideally suited for wide application in the automotive industry.

BENEFITS

- Simple application for the safe installation of pistons
- Easy operation with hex key

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 100-1 | -022203                                                                                     | 57 - 125<br>2 1/4 - 4 15/16                                                                    | 80<br>3 1/8                                                                                    | 0,285<br>0.628                                                                                 | ✓                                                                                     |
| 100-2 | -022388                                                                                     | 90 - 175<br>3 9/16 - 6 7/8                                                                     | 80<br>3 1/8                                                                                    | 0,32<br>0.706                                                                                  | ✓                                                                                     |
| 100-3 | -022463                                                                                     | 90 - 175<br>3 9/16 - 6 7/8                                                                     | 165<br>6 1/2                                                                                   | 0,595<br>1.312                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 103-1  
VALVE SPRING COMPRESSOR



The valve spring compressors of series 103 are used for the damage-free installation and removal of valves for overhead cam engines in the automotive industry. The compressors allow for a safe removal of valves by tensioning the valve spring.

BENEFITS

- Suitable for both installation and removal.
- Safe and gentle work on the engine



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 103-1 | -022876                                                                                     | 290<br>11 7/16                                                                                 | 60 - 230<br>2 3/8 - 9 1/16                                                                     | 1,21<br>2.668                                                                                  | ✓                                                                                     |

SERIES 104  
STRAP WRENCH FOR OIL FILTER REMOVAL



The series 104 strap wrench is a spare part used for Removing oil filters in trades, industry, and workshops. The strap can be tightened around the filter to remove it nondestructively using the handle.

BENEFITS

- The sturdy, non-slip fabric tape with rubberized grip ensures smooth disassembly.



TECHNICAL ATTRIBUTES

| #   | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 104 | -023606                                                                                     | 180<br>7 1/16                                                                                  | 0,26<br>0.573                                                                                | ✓                                                                                     |

PRODUCT DETAILS

SERIES 104-32  
OIL FILTER WRENCH WITH 32-LINK CHAIN



The oil filter wrench with a 32-link chain from series 104 is a replacement part that is used for oil filter Removing in trade, industry, and workshops. The chain can be reliably tensioned to remove the oil filter without causing damage.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 104-32 | -790751                                                                                   | 0-110<br>0-4 5/16                                                                            | 32<br>1 1/4                                                                                  | 0,36<br>0.794                                                                                | ✓                                                                                   |

SERIES 105  
OIL FILTER WRENCH



The oil filter wrenches of series 105 are spare parts used for loosening oil filters and other round screw connections in crafts, industry, and workshops. The variant 105-0 features a robust handle for quick use, while the variant 105-1 has a space-saving square drive for work even in the tightest of spaces.

- BENEFITS**
- The steel band is adjustable and universally applicable.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 105-0 | -023866                                                                                     | 70-110<br>2 3/4-4 5/16                                                                         | 0,33<br>0.728                                                                                | ✓                                                                                     |
| 105-1 | -175749                                                                                     | 70-110<br>2 3/4-4 5/16                                                                         | 0,22<br>0.485                                                                                | ✓                                                                                     |



PRODUCT DETAILS

SERIES 108  
OIL FILTER CLAW KEY

The Oil Filter Claw Wrenches are spare parts used for loosening oil filters and other round fasteners in crafts, industry, and workshop. The extremely strong and durable oil filter claws are capable of safely and non-destructively removing even tightly stuck oil filters.



BENEFITS

- Universal use even in hard-to-reach places



TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  |  |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|       | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 108-1 | -760426                                                                           | 60-100<br>2 3/8-3 15/16                                                           | 10<br>3/8                                                                         | 12,5<br>1/2                                                                       | 21<br>13/16                                                                       | 0,38<br>0.838                                                                       | ✓                                                                                   |
| 108-2 | -965487                                                                           | 65-120<br>2 9/16-4 3/4                                                            | 10<br>3/8                                                                         | 12,5<br>1/2                                                                       | 22<br>7/8                                                                         | 0,595<br>1.312                                                                      | ✓                                                                                   |
| 108-3 | -967900                                                                           | 90-140<br>3 9/16-5 1/2                                                            | 12,5<br>1/2                                                                       | 12,5<br>1/2                                                                       |                                                                                   | 1<br>2.205                                                                          | ✓                                                                                   |

SERIES 451  
LOCKING CLAW



The locking claw of the series 451 is used to securely fix gas struts during replacement on hoods and tailgates. By blocking the strut rod, unintended lowering is prevented so that work on the engine or the replacement of another strut can be carried out safely. Thanks to its compact design, the claw is also suitable for use in hard-to-reach areas of the vehicle body.

BENEFITS

- Easy to use by locking the damper rod
- Prevents unintentional lowering of the hood or tailgate
- Precise fit for a secure hold
- Versatile for use at various points on the vehicle
- Increases work safety during maintenance and repair



TECHNICAL ATTRIBUTES

| #         |  |  |  |  |  | Magnetic |  |  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|           | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |          | kg/lb                                                                                 |                                                                                       |
| 451-1 New | -488900                                                                             | 65<br>2 9/16                                                                        | 40<br>1 9/16                                                                        | 40<br>1 9/16                                                                        | 1/2<br>13                                                                           | Yes      | 0,3<br>0.176                                                                          | ✓                                                                                     |

SERIES 48  
SINGLE-HANDED TENSIONING PULLER



The handy 2-jaw puller with self-centering jaws is used to remove battery terminals. It can loosen any component that sits on a shaft and is freely accessible from the outside. The narrow jaws are suitable for tight, hard-to-reach spots. The freely movable pin on the T-handle ensures comfortable one-handed tightening of the spindle in confined spaces. The pulling process occurs in direct contact with the part to be tightened, thereby ensuring a controlled application of force.

BENEFITS

- Self-centering of the jaws by manually tightening the spindle (Autogrip Technology)
- Integrated, freely movable pin on the T-handle ensures manual spindle drive in the tightest spaces
- Easy one-handed operation for flexible working
- The slim design of the jaws allows access to hard-to-reach places. No additional tool is required for the pulling process.

TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | Max. tensile<br>force<br>kN | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 48 | -170539                                                                                     | 0 - 60<br>0 - 2 3/8                                                                            | 40<br>1 5/8                                                                                    | 15                          | 1.5<br>1.65                          | 0,225<br>0.496                                                                                 | ✓                                                                                     |

SERIES 134  
RELEASE TOOL FOR PLUG CONNECTIONS



The release tool for plug connections of the 134 series was specially developed for the damage-free disconnection of electrical plug connections on various vehicle components. It enables safe and efficient work on sensitive systems within the VAG Group as well as at SCANIA and MAN. Suitable for injectors, rail pressure sensors, fluid level sensors, ignition coils, vacuum sensors, brake wear sensors, pressure regulators, and lighting systems.

BENEFITS

- Damage-free unlocking of electrical plug-in connections
- Safe working on sensitive vehicle components
- Versatile for use on numerous sensors and actuators
- Protects connector housings and locking mechanisms
- Enables fast and efficient Removing



TECHNICAL ATTRIBUTES

| #                  | <br>GTIN | <br>mm/inch | <br>mm/inch | Blade shape | <br>kg/lb |  |
|--------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 134-751 <b>New</b> | -166297                                                                                     | 157<br>6 3/16                                                                                  | 69<br>2 11/16                                                                                  | straight    | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| 134-752 <b>New</b> | -166303                                                                                     | 223<br>8 9/16                                                                                  | 133<br>5 1/8                                                                                   | bent        | 0,3<br>0.662                                                                                   | ✓                                                                                     |



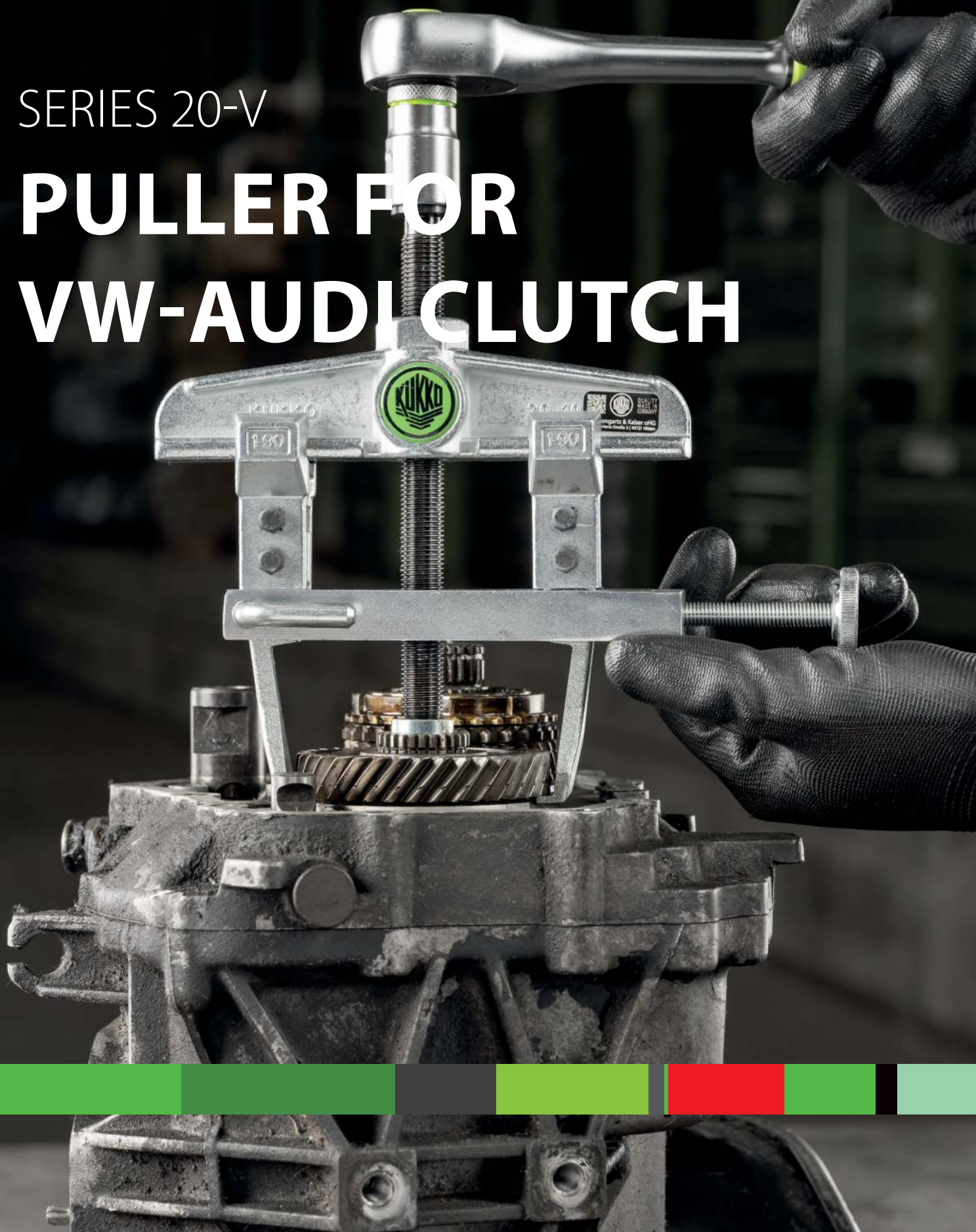


KUKKO // *Pull forward*



SERIES 20-V

# PULLER FOR VW-AUDI CLUTCH



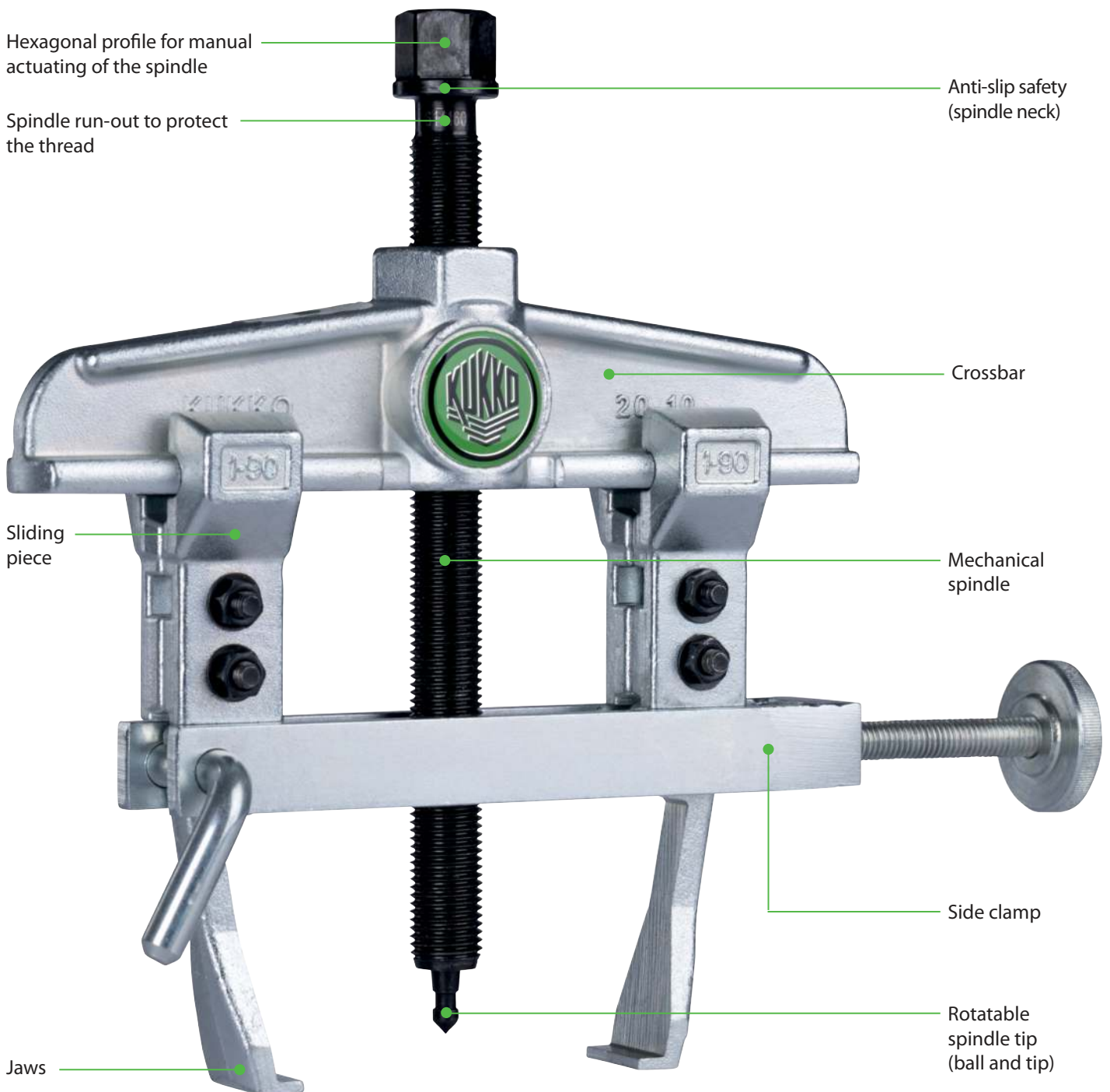
## APPLICATION

The 2-jaw puller of Series 20-V is used for pulling transmission gears on the VW/Audi clutch-gearbox combination from model year 2007 onwards. With strong, slim special jaws and a clamp that can be subsequently fixed on the side, Series 20-V is an ideal problem solver. In addition to Volkswagen and Audi models, it can also be used for many other gears and ball bearings where working with standard pullers is impossible.

### Benefits

- Screw connection enables easy loosening and particularly tight fastening of the jaws with an allen key
- Also suitable for eccentric components thanks to freely movable jaws sliding on the crossbar
- Optimal spindle adaptation to the shaft due to 2-sided spindle tip (ball and tip)
- Hexagonal profile on the crossbar for safe counter-holding
- Anti-slip safety (spindle neck) for safe operation with a wrench

## CONSTRUCTION





## APPLICATION IMAGES



Pulling a gear wheel with the 20-10-V



The clamp presses the jaws to the part to be pulled off



Detail view of the special hook shape

SERIES 20-V  
2-JAW PULLER FOR GEAR WHEELS FOR VW/  
AUDI CLUTCH-TRANSMISSION COMBINATION



The 2-jaw puller for gear wheels is used for removing gear wheels for the VW/Audi clutch-transmission combination from the year 2007 onwards in craft, workshop, and industry. With powerful, slim special hooks and a subsequently fixable lateral clamping device, the series 20-V is an ideal problem solver. Apart from models from VW and Audi, it is also usable for many other gears and ball bearings where work with standard pullers is impossible.

BENEFITS

- The screw connection allows for easy loosening and particularly tight fastening of the jaws with an allen key
- Application also for eccentric components through freely movable, sliding puller jaws on the crossbar.
- Hexagonal profile on the crossbar for secure counter-holding
- Anti-slip safety at the spindle neck for safe working with a screw wrench
- Optimal adjustment of the spindle to the shaft through 2-sided spindle tip (ball and tip)



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            | kN                       | t/US t. sh.              | kg/lb                                                                                 |                                                                                       |
| 20-10-V | -907944                                                                             | 0 - 120<br>0 - 4 3/4                                                                | 100<br>3 15/16                                                                      | 17<br>11/16                                                                         | 80<br>59.01                                                                         | 45                       | 4.5<br>4.96              | 1,59<br>3.506                                                                         | ✓                                                                                     |



PRODUCT DETAILS

SERIES YHU  
MOBILE HYDRAULIC TRANSMISSION JACK  
"RHINO"



The hydraulic transmission jack RHINO is used for work on car and truck transmissions, clutches, and differentials. The two-axis swivel base plate with adjustable mounts and chains serves to align the pickups and tool universal mount up to 1.5 tons.

BENEFITS

- The lever actuation is swiveling 360° and removable, allowing for ergonomic operation from the work area.
- The overload protection and the lowering mechanism for controlled load lowering reduce the risk of injuries or damages.
- The RHINO is always easy to move around thanks to its four swivel casters.
- The flat design allows working on low-lying vehicles.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|-------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| YHU-S | -060113                                                                                   | 652<br>25 11/16                                                                              | 890<br>35 1/32                                                                               | 1105<br>43 1/2                                                                               | 725<br>28 9/16                                                                               | 1.500                                                                                     | 146<br>321.930                                                                               | ✓                                                                                   |

PRODUCT DETAILS

SERIES K-226  
PULLER DEVICE FOR TRUCK AXLES IN CASE



The 15-piece puller for truck axles in the K-226 series case is used for pulling wheel hubs on SAF and BPW axles for trucks and commercial vehicles in the automotive industry. In addition to pullers, it also includes a hydraulic additional press and several adapters that allow application on most common models.

BENEFITS

- Printing pieces and extensions are already included in the set and expand the application.



TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm | <br>Max.<br>tensile<br>force<br>kN | <br>Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | Consists of |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
| K-226-4/12 | -035753                                                                                     | 336<br>13 1/4                                                                                  | 116 - 380<br>4 9/16 - 14<br>15/16                                                              | M18x1,5,<br>M20x1,5,<br>M22x1,5                                                           | 150                                                                                                                   | 15<br>16.53                                                                                                                    | 25,14<br>55.434                                                                                | 9-2, 18-4   | ✓                                                                                     |

PRODUCT DETAILS

SERIES 18-4SAF  
PULLER SET IN A SET FOR SAF AXLES

The 7-piece puller set in the Set for SAF axles of series 18 is used for Pulling axles on Trucks in the automotive sector. Due to its combination of puller, extension and adapter, the set is particularly suitable for SAF axles of types SK9030 / 9037 / 9042 / 11030 / 11242.



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists of      |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                                                                                     | kN                       | t/US t. sh.              | kg/lb                                                                                 |                  |                                                                                       |
| 18-4SAF | -465246                                                                             | 535<br>21 1/16                                                                      | 116 - 380<br>4 9/16 - 14<br>15/16                                                   | 36<br>1 7/16                                                                        | M18 x 1,5                                                                           | 150                      | 15<br>16.53              | 24,43<br>53.868                                                                       | 18-4, 19-4-<br>P | ✓                                                                                     |

PRODUCT DETAILS

SERIES 102  
PISTON PIN PRESS FOR ASSEMBLY AND  
DISASSEMBLY



The piston pin presses of the series 102 are used for the gentle insertion and extraction of piston pins in the automotive industry. The tool enables safe assembly and disassembly of piston pins via pressure pieces without damaging the piston in the process. Item 102-0 contains two additional pressure pieces, while 102-1 is designed for large piston ring diameters and includes three additional pressure pieces.

BENEFITS

- Damage-free work on the piston
- Customizable versatile application



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 102-0 | -170874                                                                                     | 38<br>1 1/2                                                                                    | 0,17<br>0.375                                                                                | ✓                                                                                     |
| 102-1 | -022791                                                                                     | 100<br>3 15/16                                                                                 | 1,335<br>2.944                                                                               | ✓                                                                                     |



SERIES 204-V  
2-JAW BEARING PULLER WITH SIDE CLAMP  
AND ADAPTER



The 2-jaw bearing puller with side clamp from series 204-V is used for pulling particularly tight workpieces. The additionally included adapter fits all common axle bores. Thanks to the clamp, the pressure of the jaws is increased manifold.

BENEFITS

- The lateral clamp ensures that the puller jaws are pressed particularly firmly against the part to be pulled off.
- 2-fold exertion of force from above and the side ensures 100% secure grip
- The adapter fits all common axle holes such as VAG and other models.
- The slim design of the jaws allows access to hard-to-reach areas.
- Anti-slip safety at the spindle neck for safe working with wrench



TECHNICAL ATTRIBUTES

| #     |         |                          |              |           |             | Max.<br>tensile<br>force | Max.<br>tension<br>force |                |   |
|-------|---------|--------------------------|--------------|-----------|-------------|--------------------------|--------------------------|----------------|---|
|       | GTIN    | mm/inch                  | mm/inch      | mm/inch   | Nm/ft lb    | kN                       | t/US t. sh.              | kg/lb          |   |
| 204-V | -974533 | 26 - 90<br>1 5/8 - 3 5/8 | 100<br>3 7/8 | 22<br>7/8 | 75<br>55.32 | 40                       | 4<br>4.41                | 2,075<br>6.064 | ✓ |

SERIES W-714  
THREAD RENEWER

The thread renewers of the series W-714 are used for the repair of damaged threads and similar parts in crafts, industry, and workshops. The thread renewers are capable of reliably restoring threads even for special parts that would otherwise be significantly more expensive in their new acquisition.

BENEFITS

- Suitable for right and left-hand threads



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| W-714-1 | -131248                                                                                     | 160<br>6 5/16                                                                                  | 12 - 25<br>1/2-1                                                                               | 0,3<br>0.662                                                                                   |
| W-714-2 | -131255                                                                                     | 260<br>10 1/4                                                                                  | 25 - 65<br>1-2 9/16                                                                            | 0,3<br>0.662                                                                                   |
| W-714-3 | -131286                                                                                     | 355<br>13 1                                                                                    | 44 - 100<br>1 3/4-3 15/16                                                                      | 1,8<br>3.969                                                                                   |
| W-714-4 | -131316                                                                                     | 406<br>15 1                                                                                    | 100 - 150<br>3 15/16-5 7/8                                                                     | 1,515<br>3.341                                                                                 |



PRODUCT DETAILS

SERIES 126  
MONTAGE AND DISASSEMBLY TOOL FOR  
BRAKE CALIPERS, BRAKE PADS, BRAKE  
PISTONS, AND PULLEYS



The brake caliper tool assortment of series 126 is used for a quick and time-saving repair on brake calipers in the automotive sector. The assortment includes a piston retraction device, brake pad puller, brake piston retaining clip, brake piston pliers, brake caliper brush, and brake caliper file for general use in vehicle maintenance.

BENEFITS

- Different tools for different applications
- The set offers a complete compilation for universal repair.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | Item name                                                     | <br>kg/lb |  |
|--------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 126-10 | -534966                                                                                   | Brake caliper tool set                                        | 2,46<br>5.424                                                                              | ✓                                                                                   |
| 126-01 | -496271                                                                                   | Brake Pad Puller                                              | 0,105<br>0.331                                                                             | ✓                                                                                   |
| 126-02 | -496356                                                                                   | Retaining clip for brake piston                               | 0,06<br>1.323                                                                              | ✓                                                                                   |
| 126-03 | -496431                                                                                   | Brake caliper wrench                                          | 0,28<br>0.617                                                                              | ✓                                                                                   |
| 126-04 | -534881                                                                                   | Brake Caliper Brush                                           | 0,096<br>2.117                                                                             | ✓                                                                                   |
| 127    | -492051                                                                                   | Brake caliper file with handle, flat scraper on the front end | 0,1<br>0.221                                                                               | ✓                                                                                   |

### SERIES 126-15 BRAKE CALIPER TOOL



**Art.No. 126-00**

**Art.No. 126-15**



The brake piston retraction tools of the 126-15 series are used to retract brake pistons in fixed-caliper and floating-caliper brake systems without causing damage. Depending on the version, they are suitable for different brake calipers. The 126-00 piston retraction device is the ideal choice for brakes with one brake cylinder. The 126-15 brake piston retraction tool is suitable for systems with multiple brake cylinders. Its robust design also makes it suitable for high-performance brake calipers.

#### BENEFITS

- Compatible with all common vehicle types without an integrated handbrake locking device.
- The puller is suitable for the following vehicles: Touareg, Phaeton, Porsche Cayenne, Audi A8, Q7, BMW M3, etc.
- The solid execution ensures a synchronous resetting of all pistons.
- No cocking of the piston when retracting
- Low force required thanks to precise guidance



#### TECHNICAL ATTRIBUTES

| #      |  GTIN |  mm/inch |  mm/inch |  mm/inch |  mm/inch |  kg/lb |  |
|--------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 126-00 | -487774                                                                                  | 20 - 85<br>13/16 - 3 3/8                                                                    | 185<br>7 5/16                                                                               |                                                                                             | 66<br>2 5/8                                                                                 | 1,845<br>4.068                                                                              | ✓                                                                                     |
| 126-15 | -018954                                                                                  | 20 - 90<br>13/16 - 3 9/16                                                                   | 174<br>6 7/8                                                                                | 115<br>4 1/2                                                                                | 290<br>11 7/16                                                                              | 0,3<br>0.662                                                                                | ✓                                                                                     |



PRODUCT DETAILS

SERIES 123  
EXTRACTOR LEVER FOR DISC BRAKE PADS

The extractor levers for brake pads of series 123 are used in the automotive industry to remove stuck brake shoes from the fixed caliper of disc brakes.

BENEFITS

- Simple application with high efficiency
- Article 123 is specifically designed for Mercedes models.



Art.No. 123



Art.No. 123-2



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 123   | -270789                                                                                   | 400<br>15 3/4                                                                                | 0,595<br>1.312                                                                             | ✓                                                                                   |
| 123-2 | -431586                                                                                   | 400<br>15 3/4                                                                                | 0,505<br>1.213                                                                             | ✓                                                                                   |

SERIES W-3132/K2  
RIVET MACHINES



The W-3132 series riveter is suitable for all riveting work, especially for brake and clutch linings, etc., and even with complicated jaws featuring longitudinal and height ribs. It is a manual tool for riveting and unriveting with a long lever for energy-saving operation. The riveting is done from below, and the unriveting from above.

BENEFITS

- Simple and practical to handle
- The riveting machine can be clamped in the vise as well as attached to the wall with screws.
- The shape of the rivet inserts allows for the use of solid and hollow rivets.
- Due to the favorable leverage ratios, only a small amount of pressure is required even with full rivets.
- The rivet inserts are replaceable by loosening two knob screws.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| W-3132/K2 | -555662                                                                                    | 10<br>3/8                                                                                     | 9,395<br>20.716                                                                             | ✓                                                                                    |







# CUTTING & LOOSENING

Whether for splitting seized nuts, restoring threaded connections, cutting discs, removing adhesive weights, manufacturing seals, punching and stamping a wide variety of materials, extracting broken parts, or cleaning nozzles – KUKKO offers the perfect solution for every application.

Cutting & Loosening includes:

- Nut splitter
- Thread repair
- Thread files
- Disc cutters
- Soft scrapers
- Handle punches
- Scissors
- Screw hole punch
- Screw extractors
- Sets of nozzle reamers





KUKKO // *Pull forward*



SERIES 54 | 55 | 56 | Y-57

# NUT SPLITTERS



Art.No. 55-2  
19 - 27 mm  
Kleinbongartz & Kaiser oHG  
Heinrich-Hertz-Str. 5 | 40721 Hilden | Germany  
SN: XXXXXX-XXX

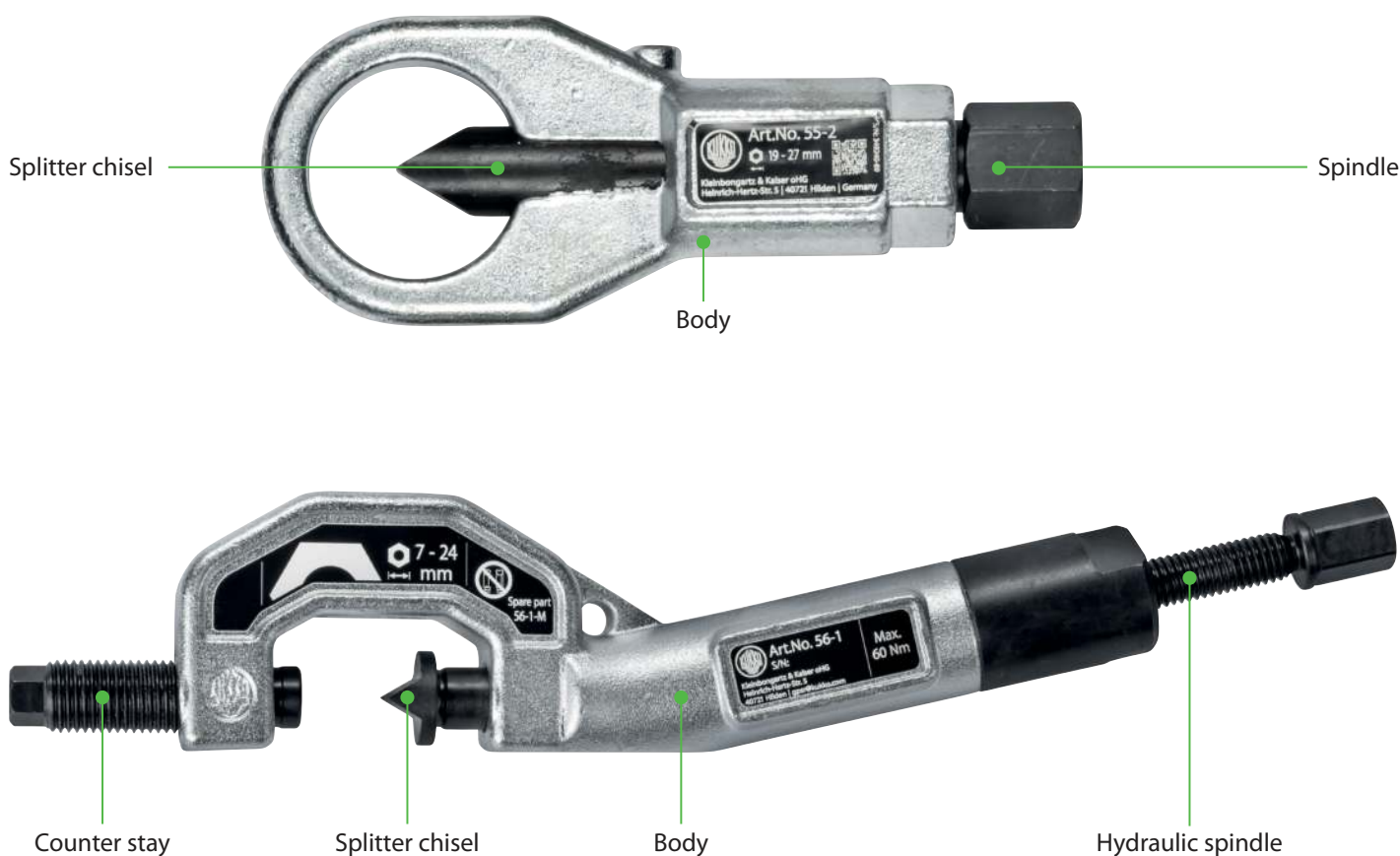
# APPLICATION

When nuts have been in contact with moisture for an extended period, they start to rust. Rusted elements in threaded connections can cause impairments in constructions of all kinds. Depending on the degree of corrosion, the nut can no longer be unscrewed without damaging the stud bolt. In addition, nuts lose their shape with use, so they can no longer be gripped with a wrench. KUKKO Nut splitters offer the solution to these problems.

## Benefits

- Splitting the nut is possible without damaging the stud bolt
- Pullback Technology guarantees easy retraction of the splitter chisel from the split nut
- Very sharp cutting edges thanks to faceted grinding
- Splitter chisels are available as replacement parts and can be quickly exchanged if damaged

## DESIGN



## TIP:

### Replacement parts

All splitter chisels of series 54, 55, and 56 are available as replacement parts and are very easy to replace.



54-2-M-C



## FEATURES OF THE SERIES

### SERIES 54

**Double-edged, mechanical nut splitters**



**54-2**

The double-edged nut splitter splits the nut in just one work step thanks to its double splitting action.

### SERIES 55

**Single-edged, mechanical nut splitters**



**55-0**

The single-edged, mechanical nut splitter is used in confined working environments when there is little space around the nut.

### SERIES 56

**Single-edged, grease-hydraulic nut splitters**



**56-1**

Thanks to the grease hydraulics, the single-edged, grease-hydraulic nut splitter requires only minimal effort.

## SETS



**K-54-B**



**K-55-B**

The mechanical nut splitter sets feature an application-oriented compilation for immediate and universal use. The practical ready-to-use sets are available with both single-edged nut splitters (series 55) and double-edged models (series 54).

## SERIES Y-57 - THE HYDRAULIC NUT SPLITTER



**Y-57**

### The sets of series 57 contain:

A hydraulic nut splitter, a replacement splitter chisel, and two allen keys for replacing the splitter chisel. For maximum ease of use, the nut splitter is also available with hydraulic drive. The oil hydraulics guarantee an immense cutting force of up to 90 t.



**Y-57-41**



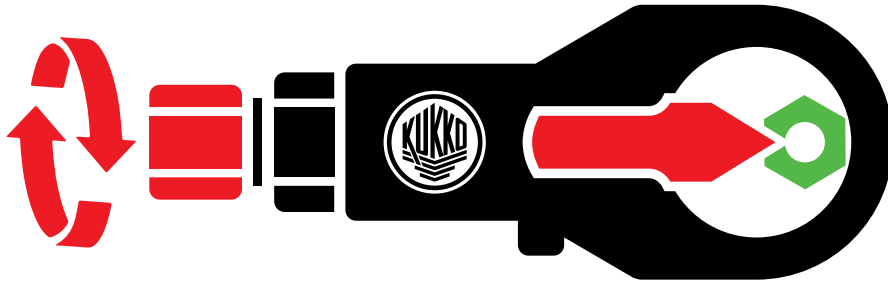


## FUNCTIONALITY

### Mechanical:

Cutting force  
up to 10 t

By actuating the hexagon drive, the spindle is manually pulled under pressure to fix it until the splitter chisel presses against the flat side of the nut. The spindle is moved with a ratchet or an open-end wrench until the nut is completely split.



### Grease-hydraulic:

Cutting force  
up to 10 t

By actuating the spindle, the small piston is pushed forward, causing the hydraulic grease to be transported into the large cylinder. The increasing pressure sets the large piston in motion. Simultaneously, the splitter chisel is moved forward. Here, the splitter chisel pushes against the nut, which is held in position by the counter stay. Thanks to hydraulic power transmission, maximum force is achieved with minimal effort.



### Oil-hydraulic:

Cutting force  
up to 10 t

The pump-hydraulic nut splitter also requires a hydraulic pump. This transports the hydraulic oil into the inner cylinder of the nut splitter. As pressure increases, the piston is set in motion. Simultaneously, the splitter chisel is pressed against the nut to be split. The hydraulic force transmission results from the interplay of hydraulic pump and nut splitter, ensuring maximum power transmission with minimal effort.

Hydraulic force  
by pump:





## APPLICATION EXAMPLES



By tightening the spindle, the splitter chisel is pressed into the nut to be split.



After splitting, the nut can easily be removed from the thread.

# APPLICATION AREAS

## SERIES 55

Art.-No. 55-0



**M1**  
2,5  
mm

-

**M6**  
10  
mm

Art.-No. 55-1



**M6**  
10  
mm

-

**M12**  
19  
mm

Art.-No. 55-2



**M12**  
10  
mm

-

**M18**  
19  
mm

Art.-No. 55-3



**M16**  
24  
mm

-

**M22**  
32  
mm

Art.-No. 55-4



**M20**  
19  
mm

-

**M27**  
27  
mm

## SERIES 54

Art.-No. 54-2



**M6**  
10  
mm

-

**M18**  
27  
mm

Art.-No. 54-3



**M10**  
17  
mm

-

**M22**  
32  
mm

## SERIES 56

Art.-No. 56-1



**M4**  
7  
mm

-

**M16**  
24  
mm

Art.-No. 56-2



**M14**  
22  
mm

-

**M27**  
41  
mm

Art.-No. 56-3



**M18**  
27  
mm

-

**M30**  
46  
mm

## SERIES 57

Art.-No. Y-57-10



**M6**  
10  
mm

-

**M12**  
19  
mm

Art.-No. Y-57-19



**M12**  
19  
mm

-

**M18**  
27  
mm

Art.-No. Y-57-24



**M16**  
24  
mm

-

**M22**  
32  
mm

Art.-No. Y-57-32



**M22**  
32  
mm

bis

**M27**  
41  
mm

Art.-No. Y-57-41



**M27**  
41  
mm

-

**M33**  
50  
mm

Art.-No. Y-57-50



**M33**  
50  
mm

-

**M42**  
65  
mm

Art.-No. Y-57-60



**M39**  
60  
mm

-

**M48**  
75  
mm

WHICH NUT SPLITTER IS THE RIGHT ONE?

|                        | SERIES / MODEL |      |      |      |      |      |      |      |
|------------------------|----------------|------|------|------|------|------|------|------|
|                        | 55-0           | 55-1 | 55-2 | 55-3 | 55-4 | 54-2 | 54-3 | 56-1 |
| THREAD SIZE OF THE NUT | M1   2,5 mm    | X    |      |      |      |      |      |      |
|                        | M1,2   3 mm    | X    |      |      |      |      |      |      |
|                        | M1,4   3 mm    | X    |      |      |      |      |      |      |
|                        | M1,7   3,2 mm  | X    |      |      |      |      |      |      |
|                        | M2   4 mm      | X    |      |      |      |      |      |      |
|                        | M2,5   5 mm    | X    |      |      |      |      |      |      |
|                        | M3   5,5 mm    | X    |      |      |      |      |      |      |
|                        | M3,5   6 mm    | X    |      |      |      |      |      |      |
|                        | M4   7 mm      | X    |      |      |      |      |      | X    |
|                        | M5   8 mm      | X    |      |      |      |      |      | X    |
|                        | M6   10 mm     | X    | X    |      |      | X    |      | X    |
|                        | M7   11 mm     |      | X    |      |      | X    |      | X    |
|                        | M8   13 mm     |      | X    |      |      | X    |      | X    |
|                        | M10   17 mm    |      | X    |      |      | X    | X    | X    |
|                        | M12   19 mm    |      | X    | X    |      | X    | X    | X    |
|                        | M14   22 mm    |      |      | X    |      | X    | X    | X    |
|                        | M16   24 mm    |      |      | X    | X    | X    | X    | X    |
|                        | M18   27 mm    |      |      | X    | X    | X    | X    |      |
|                        | M20   30 mm    |      |      |      | X    | X    | X    |      |
|                        | M22   32 mm    |      |      |      | X    | X    | X    |      |
|                        | M24   36 mm    |      |      |      |      | X    |      |      |
|                        | M27   41 mm    |      |      |      |      | X    |      |      |
|                        | M30   46 mm    |      |      |      |      | X    |      |      |
|                        | M33   50 mm    |      |      |      |      |      |      |      |
|                        | M36   55 mm    |      |      |      |      |      |      |      |
|                        | M39   60 mm    |      |      |      |      |      |      |      |
|                        | M42   65 mm    |      |      |      |      |      |      |      |
|                        | M45   70 mm    |      |      |      |      |      |      |      |
|                        | M48   75 mm    |      |      |      |      |      |      |      |
|                        | M52   80 mm    |      |      |      |      |      |      |      |
|                        | M56   85 mm    |      |      |      |      |      |      |      |
|                        | M60   90 mm    |      |      |      |      |      |      |      |
|                        | M64   95 mm    |      |      |      |      |      |      |      |
|                        | M68   100 mm   |      |      |      |      |      |      |      |
|                        | M72   105 mm   |      |      |      |      |      |      |      |
|                        | M76   110 mm   |      |      |      |      |      |      |      |
|                        | M80   115 mm   |      |      |      |      |      |      |      |
|                        | M85   120 mm   |      |      |      |      |      |      |      |
|                        | M90   130 mm   |      |      |      |      |      |      |      |
|                        | M95   135 mm   |      |      |      |      |      |      |      |
|                        | M100   145 mm  |      |      |      |      |      |      |      |

## OF THE NUT SPLITTER

[illegible]



SERIES 54  
TWO-EDGED, MECHANICAL NUT SPLITTER



The two-edged mechanical nut splitters are used for splitting irreversibly jammed, rusty, or over-tightened nuts with a tensile strength of up to 800 N/mm². In this splitting process, the threaded pin remains undamaged. The two sharp edges of the chisel, which are ground with a facet, penetrate deeply into the nut when the spindle is tightened until it is split. Thanks to the double splitting effect, only one working step is necessary.

BENEFITS

- Removing the mother is possible without damaging the threaded bolt.
- Pullback Technology guarantees an easy retraction of the chisel from the blasted nut.
- Double explosive effect saves time
- Also suitable for application in pipeline construction and other industries.



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>8 | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 54-2 | -170614                                                                                     | 10 - 27<br>3/8 - 1 1/16                                                                        | 8                                                                                        | 17<br>11/16                                                                                    | 14<br>9/16                                                                                     | 0,505<br>1.213                                                                                 | ✓                                                                                     |
| 54-3 | -170799                                                                                     | 17 - 32<br>11/16 - 1 7/16                                                                      | 8                                                                                        | 19<br>3/4                                                                                      | 16<br>5/8                                                                                      | 0,72<br>1.588                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES K-54-B  
CASES AND SETS FOR CUTTING &  
LOOSENING

The 6-piece mechanical Nut splitter set of the K-54-B series is used for splitting irreversibly seized, rusted or stripped nuts up to a tensile strength of 800 N/mm2. The two sharp cutting edges of the chisel penetrate deep into the nut when the spindle is tightened until it is split.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm<br>mm/inch | <br>mm/inch |  | <br>kg/lb | Consists of                |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------|
| K-54-B | -019531                                                                                     | 16<br>5/8                                                                                            | 10 - 36<br>3/8 - 1 7/16                                                                        | 8                                                                                   | 2,015<br>4.741                                                                               | 54-2, 54-3, 54-2-M, 54-3-M | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 55 SINGLE-SIDED, MECHANICAL NUT SPLITTER



The single-cut, mechanical Nut splitters are used for splitting seized, rusted, or overtightened nuts up to a tensile strength of 600 N/mm<sup>2</sup>. During this splitting process, the threaded pin remains undamaged. The sharp cutting edge of the chisel, sharpened by a faceted grind, penetrates deep into the nut when the spindle is tightened until the nut is split. In confined environments, when only a small amount of space is available around the nut, the single-cut Nut splitter is exactly the right choice.

#### BENEFITS

- Removing the mother is possible without damaging the thread bolt.
- Pullback Technology guarantees easy retraction of the chisel from the exploded nut.
- Also suitable for use in pipeline construction and other industries



#### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 55-0 | -019906                                                                                     | 4 - 10<br>3/16 - 3/8                                                                           | 6                                                                                              | 14<br>9/16                                                                                     | 8<br>5/16                                                                                      | 0,1<br>0.221                                                                                  | -                   | ✓                                                                                     |
| 55-1 | -020063                                                                                     | 10 - 18<br>3/8 - 11/16                                                                         | 6                                                                                              | 17<br>11/16                                                                                    | 12<br>1/2                                                                                      | 0,22<br>0.485                                                                                 | K-55-B              | ✓                                                                                     |
| 55-2 | -020148                                                                                     | 19 - 27<br>3/4 - 1 1/16                                                                        | 6                                                                                              | 17<br>11/16                                                                                    | 14<br>9/16                                                                                     | 0,435<br>0.959                                                                                | K-55-B              | ✓                                                                                     |
| 55-3 | -020223                                                                                     | 27 - 32<br>1 1/16 - 1 7/16                                                                     | 6                                                                                              | 19<br>3/4                                                                                      | 16<br>5/8                                                                                      | 0,66<br>1.455                                                                                 | K-55-B              | ✓                                                                                     |
| 55-4 | -020308                                                                                     | 32 - 46<br>1 1/4 - 1 15/16                                                                     | 6                                                                                              | 32<br>1 1/4                                                                                    | 26<br>1 1/32                                                                                   | 2,55<br>5.623                                                                                 | -                   | ✓                                                                                     |

PRODUCT DETAILS

SERIES K-55-B  
CASES AND SETS FOR CUTTING &  
LOOSENING

The 7-piece mechanical nut splitter set is used to split seized, rusted or overtightened nuts with a tensile strength of up to 800 N/mm2. When the spindle is tightened, the two sharp cutting edges of the chisel penetrate deep into the nut until it splits.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm<br>mm/inch | <br>mm/inch | <br>6 | <br>kg/lb | Consists of                                          |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-55-B | -405877                                                                                     | 16<br>5/8                                                                                            | 10 - 36<br>3/8 - 1 7/16                                                                        | 6                                                                                        | 2,015<br>4.741                                                                               | 55-1, 55-2, 55-3,<br>97-1, 55-1-M,<br>55-2-M, 55-3-M | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 56 SINGLE-EDGE, HYDRAULIC NUT SPLITTER



56-1



56-2



56-3

The single-sided, fat-hydraulic nut splitters are used for splitting particularly large, stuck, rusted, or overtightened nuts of quality classes 5, 6, 8, and 10. During this splitting process, the threaded pin remains undamaged. Thanks to the fat hydraulics, only a small amount of force is required. For better ease of use, the nut splitter is slightly angled.

#### BENEFITS

- Removing the mother is possible without damaging the thread bolt.
- Fat hydraulic ensures a significant reduction in workload.
- Very sharp cutting edges due to facet grinding
- Slightly angled design for better ease of use
- Also suitable for use in pipeline construction and other industries.



#### TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 56-1 | -020483                                                                                     | 7 - 24<br>1/4 -<br>15/16                                                                       | 10                                                                                             | 13<br>1/2                                                                                      | 18<br>11/16                                                                                    | 60<br>44.26                                                                                      | 0,86<br>1.896                                                                                  | ✓                                                                                     |
| 56-2 | -020551                                                                                     | 22 - 36<br>7/8 - 1<br>7/16                                                                     | 10                                                                                             | 17<br>11/16                                                                                    | 30<br>1 3/16                                                                                   | 70<br>51.63                                                                                      | 2,865<br>6.317                                                                                 | ✓                                                                                     |
| 56-3 | -111501                                                                                     | 27 - 46<br>1 1/16 - 1<br>13/16                                                                 | 10                                                                                             | 34<br>15/16                                                                                    | 37<br>1 7/16                                                                                   | 50<br>36.88                                                                                      | 6,6<br>14.553                                                                                  | ✓                                                                                     |

## SERIES Y-57 4-PIECE HYDRAULIC NUT SPLITTER SET



The 4-part, pump-hydraulic nut splitter sets are used for splitting irreversibly stuck, rusted, or overtightened nuts of all quality classes. The TiN coating of the chisel has particularly good friction properties, which allows for high cutting performance.

### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the L-Boxx, the completeness of the set can be easily overviewed.
- Splitting the mother is possible without damaging the threaded bolt.
- Enormous explosive power thanks to pump hydraulics
- Also suitable for use in pipeline construction and other industries.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>12 | <br>mm/inch | <br>bar | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-57-10 | -123559                                                                                     | 10 - 19<br>3/8 - 3/4                                                                           | 12                                                                                        | 17<br>11/16                                                                                    | 700                                                                                        | 2,26<br>4.983                                                                                  | ✓                                                                                     |
| Y-57-19 | -123566                                                                                     | 19 - 24<br>3/4 - 15/16                                                                         | 12                                                                                        | 25<br>1                                                                                        | 700                                                                                        | 3,24<br>7.144                                                                                  | ✓                                                                                     |
| Y-57-24 | -870675                                                                                     | 24 - 32<br>15/16 - 1<br>1/4                                                                    | 12                                                                                        | 30<br>1 3/16                                                                                   | 700                                                                                        | 5,4<br>11.907                                                                                  | ✓                                                                                     |
| Y-57-32 | -870682                                                                                     | 32 - 41<br>1 1/4 - 1 5/8                                                                       | 12                                                                                        | 32<br>1 1/4                                                                                    | 700                                                                                        | 8,53<br>18.809                                                                                 | ✓                                                                                     |
| Y-57-41 | -870699                                                                                     | 41 - 50<br>1 5/8 - 1<br>15/16                                                                  | 12                                                                                        | 45<br>1 3/4                                                                                    | 700                                                                                        | 13,44<br>29.635                                                                                | ✓                                                                                     |
| Y-57-50 | -870705                                                                                     | 50 - 60<br>1 15/16 - 2<br>3/8                                                                  | 12                                                                                        | 48<br>1 7/8                                                                                    | 700                                                                                        | 25,8<br>56.889                                                                                 | ✓                                                                                     |
| Y-57-60 | -870712                                                                                     | 60 - 75<br>2 3/8 - 2<br>15/16                                                                  | 12                                                                                        | 70<br>2 3/4                                                                                    | 700                                                                                        | 34,1<br>75.191                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 55-C  
SINGLE-EDGED, MECHANICAL GASKET  
CUTTER



The single-edged mechanical gasket cutter of the series 55-C is used for removing gaskets on pipelines for craft, workshop, and industry. Due to its open design, the gasket cutter can be slid over pipelines, even if they are installed in a closed system. The sharp edge of the chisel, created by a facet grind, penetrates deeply into the gasket when the spindle is tightened, until it is cut through.

BENEFITS

- The open construction guarantees access to hard-to-reach seals.
- Pullback Technology guarantees an easy retraction of the pusher from the cut seal.
- Also suitable for use in pipeline construction and other industries

TECHNICAL ATTRIBUTES

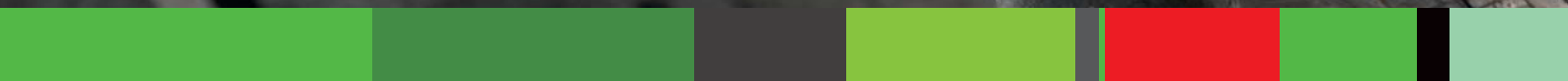
| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 55-2-C | -021350                                                                                   | 30<br>1 3/16                                                                                 | 17<br>11/16                                                                                  | 14<br>9/16                                                                                   | 0,445<br>0.981                                                                               | ✓                                                                                   |

KUKKO // *Pull forward*



SERIES K-78 & T-AW

# INDUCTION HEATING DEVICES





## APPLICATION & FUNCTIONAL PRINCIPLE

Preheating devices are based on the principle of induction and can be compared to the way a transformer operates. The electric voltage and current circulating in the induction coil generate a low voltage within the workpiece, which in turn induces a high current. This high current results in the rapid and uniform heating of the workpiece. As the temperature increases, the metal expands. During this process, all components of the heating device itself remain cool, ensuring safe handling.

The application of the preheating device is simple and efficient. In just a few steps, the workpiece is brought to the required temperature, helping to avoid assembly errors—an important contribution to preventing subsequent bearing failures. The preheating device is suitable for all ring-shaped metal parts, such as gears, flanges, or pulleys.

### Benefits

- Contactless preheating: Inductive heating is performed without contact—no mechanical stress on the workpiece.
- Fast and uniform heating: High currents in the workpiece provide efficient and consistent heating.
- Force-free assembly: Heated workpieces expand and can be mounted onto shafts without mechanical force.
- No heating of the device itself: All components of the preheating device remain cool during operation
- Increased safety and durability
- Easy handling: Intuitive use in just a few steps—ideal for daily use in the workshop or production.
- Avoidance of assembly errors: Reduction of damage due to incorrect assembly, e.g., on bearings or fits.
- Versatile use: Suitable for all ring-shaped metal parts like gears, flanges, or pulleys.
- Environmentally friendly and economical: Low energy consumption compared to other heating methods.
- Clean process: No exhaust gases, no smoke, no environmental pollution.

## STRUCTURE OF AN INDUCTION HEATING DEVICE (SERIES K-78)



### NOTE:

Traditional preheating methods such as open flames, oil baths, ovens, and preheating plates are less recommended. Heating with an open flame is inefficient, unsafe, and can damage bearings. Oil bath methods consume high energy, are temperature-critical, and present significant contamination and safety risks. Ovens and preheating plates are only suitable for smaller bearings—for larger ones, they are slow, imprecise, and potentially dangerous during operation.

## OPTIONAL EXTENSIONS:

In addition to the standard package, optional extensions are available for the induction heating device. For an overview of the available components, please refer to the table below.

|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| <b>78-1100</b>      | Flexible heating coil, length 1100 mm for K-78-12-A, K-78-23-A, K-78-20-A in Quadrobox     |
| <b>78-2-B/6</b>     | 6-piece heating coil set for K-78-12-A, K-78-23-A, K-78-20-A                               |
| <b>78-2000</b>      | Flexible heating coil, length 2000 mm for K-78-23-A, K-78-20-A in Quadrobox                |
| <b>78-2500</b>      | Flexible heating coil, length 2500 mm for K-78-23-A, K-78-20-A in Quadrobox                |
| <b>78-2X-M10-55</b> | Heating coil M10, length 250 mm for K-78-23-A, K-78-20-A in Quadrobox                      |
| <b>78-2X-M12-55</b> | Heating coil M12, length 200 mm for K-78-23-A, K-78-20-A in Quadrobox                      |
| <b>78-2X-M16-55</b> | Heating coil M16, length 200 mm for K-78-23-A, K-78-20-A in Quadrobox                      |
| <b>78-2X-M20-55</b> | Heating coil M20, length 200 mm for K-78-23-A, K-78-20-A in Quadrobox                      |
| <b>78-2X-M24-55</b> | Heating coil M24, length 240 mm for K-78-23-A, K-78-20-A in Quadrobox                      |
| <b>78-2X-M30-55</b> | Heating coil M30, length 240 mm for K-78-23-A, K-78-20-A in Quadrobox                      |
| <b>78-3-15</b>      | Self-forming heating coils, length 1500 mm in Quadrobox                                    |
| <b>78-3-20</b>      | Self-forming heating coils, length 2000 mm in Quadrobox                                    |
| <b>78-3000</b>      | Flexible heating coil, length 3000 mm for K-78-23-A, K-78-20-A in Quadrobox                |
| <b>78-3500</b>      | Flexible heating coil, length 3500 mm for K-78-23-A, K-78-20-A in Quadrobox                |
| <b>78-40</b>        | Heating plate 10 x 10 cm for K-78-12-A, K-78-23-A, K-78-20-A in Quadrobox                  |
| <b>78-50</b>        | U-heating coil, radius 160, length 600 mm for K-78-12-A, K-78-23-A, K-78-20-A in Quadrobox |
| <b>78-60</b>        | Tie rod heater, length 200 mm for K-78-12-A, K-78-23-A, K-78-20-A in Quadrobox             |
| <b>78-6600</b>      | Flexible heating coil, length 6600 mm for K-78-23-A, K-78-20-A in Quadrobox                |



## SERIES T-AW

### Stationary, inductive bearing preheating device



The inductive bearing heating devices of the T-AW series are used for universal applications in heating bearings and other rotationally symmetrical workpieces in workshops and industry. The bearings can be pulled vertically over the yoke (normal heating) or placed horizontally onto the block (Turbo Boost). The bearing heating device guarantees fast, uniform, and continuous heating of the workpiece to ensure more effective further processing.

## APPLICATION EXAMPLES:



Heating a ball bearing with a flexible heating coil



Heating a nut with a heating coil



Heating a pipe with a heating coil to bend it afterwards



If the device's internal temperature is too high, the heating process is automatically stopped.



## PRODUCT DETAILS

### SERIES T-AW INDUCTIVE BEARING HEATERS



The inductive bearing heating devices of the series T-AW are used for universal applications in heating bearings and other rotationally symmetrical workpieces in crafts, workshops, and industry. The bearings can be pulled vertically over the bracket (normal heating) or optionally laid horizontally on the block (Turbo Boost). The bearing heating device ensures quick, uniform, and continuous warming of the workpiece to facilitate more effective further handling.

#### BENEFITS

- Individual settings can be adjusted via temperature and time programming.
- The heating system is always suitable due to various yokes.
- With the integrated display and the heating speed monitoring via microprocessor control, accurate temperature monitoring is possible at all times.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |          |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | V                                                                                 | mm/inch                                                                           | mm/inch                                                                                   | kg                                                                                |                                                                                    | kg/lb                                                                               |                                                                                     |
| T-AW-20 | -830976                                                                           | 110-230 V AC<br>- 16 A - 50<br>HzV                                                | 20, 35, 60<br>13/16, 1 3/8, 2<br>3/8                                              | 215, 225,<br>290<br>8 7/16, 8<br>7/8, 11<br>7/16                                          | 15-40                                                                             | 0-240° C                                                                           | 20,1<br>4.631                                                                       | ✓                                                                                   |
| T-AW-40 | -831133                                                                           | 110-230 V AC<br>- 16 A - 50<br>HzV                                                | 15, 20, 35, 60,<br>70<br>9/16, 13/16, 1<br>3/8, 2 3/8, 2<br>3/4                   | 330, 345,<br>355, 360,<br>410<br>12 63/64,<br>13 9/16, 13<br>31/32, 14<br>3/16, 16<br>1/8 | 5-70                                                                              | 0-240° C                                                                           | 42<br>92.610                                                                        | ✓                                                                                   |





SERIES K-78  
INDUCTION HEATERS



The induction heaters of the K-78 series are power tools for flame-free heating of magnetizable metals such as screws or bearing parts. With the innovative induction technology, heat is generated directly in the workpiece, allowing extremely fast and precise temperature control. Ideally suited for industrial applications, repairs, or forging and hardening of metal. The induction heaters are available in different versions, which are distinguished by their respective electronic power.

BENEFITS

- Rapid heating of metal without preheating
- Induction technology only heats the material.
- Precise control of the heating temperature
- Versatile for various applications



TECHNICAL ATTRIBUTES

| #         |  | Output power |  | Frequency | protection class | Degree of protection (IP) | Number of heating coils |  |  |
|-----------|-------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|-----------|------------------|---------------------------|-------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|           | GTIN                                                                                | Watt         | V                                                                                   | Hz        |                  |                           |                         | kg                                                                                    |                                                                                       |
| K-78-12-A | -013102                                                                             | 1200         | 230                                                                                 | 50/60 Hz  | I                | IP20                      | 1                       | 4,84                                                                                  | -                                                                                     |
| K-78-23-A | -013126                                                                             | 2300         | 230                                                                                 | 50/60 Hz  | I                | IP20                      | 1                       | 0,30                                                                                  | ✓                                                                                     |
| K-78-20-A | -013119                                                                             | 2000         | 120                                                                                 | 50/60 Hz  | I                | IP20                      | 1                       | 0,30                                                                                  | -                                                                                     |

## SERIES 78-0 ACCESSORIES FOR WARMING DEVICES

The induction coils of the KUKKO series K-78 are specially developed accessories that enable precise and efficient heating. They are available in various sizes and shapes to ensure optimal adaptation to different metal parts without directly touching them. Their robust construction and heat-resistant materials ensure a long service life and reliable performance in professional applications.



### TECHNICAL ATTRIBUTES

| #        | <br>GTIN | Type of accessories/spare part Warming devices | <br>L<br>mm/inch | <br>M | Inner diameter of the heating coil<br>mm/inch |  | <br>kg/lb |  |
|----------|--------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 78-12-A  | -012822                                                                                    | Heating coil set                               | 250<br>9 13/16                                                                                     | M8 - M30                                                                                |                                               | K-78-12-A                                                                            | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-2-B/6 | -012907                                                                                    | Heating coil set                               | 250<br>9 13/16                                                                                     | M8 - M30                                                                                |                                               | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                                | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-1100  | -012754                                                                                    | Flexible heating coil                          | 1100<br>43 5/16                                                                                    | -                                                                                       |                                               | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                                | 0,2<br>0.441                                                                                  | -                                                                                    |
| 78-2000  | -012914                                                                                    | Flexible heating coil                          | 2000<br>78 3/4                                                                                     | -                                                                                       |                                               | K-78-23-A,<br>K-78-20-A                                                              | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-2500  | -012921                                                                                    | Flexible heating coil                          | 2500<br>98 7/16                                                                                    | -                                                                                       |                                               | K-78-23-A,<br>K-78-20-A                                                              | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-3000  | -013034                                                                                    | Flexible heating coil                          | 3000<br>118 1/8                                                                                    | -                                                                                       |                                               | K-78-23-A,<br>K-78-20-A                                                              | 0,4<br>0.882                                                                                  | -                                                                                    |
| 78-3500  | -013041                                                                                    | Flexible heating coil                          | 3500<br>137 13/16                                                                                  | -                                                                                       |                                               | K-78-23-A,<br>K-78-20-A                                                              | 0,3<br>1.103                                                                                  | -                                                                                    |
| 78-6600  | -013096                                                                                    | Flexible heating coil                          | 6600<br>259 13/16                                                                                  | -                                                                                       |                                               | K-78-23-A,<br>K-78-20-A                                                              | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-3-15  | -013010                                                                                    | Self-forming heating coils                     | 1500<br>59 1/16                                                                                    | -                                                                                       |                                               | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                                | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-3-20  | -013027                                                                                    | Self-forming heating coils                     | 2000<br>78 3/4                                                                                     | -                                                                                       |                                               | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                                | 0,3<br>0.662                                                                                  | -                                                                                    |
| 78-40    | -013065                                                                                    | Hot plate                                      |                                                                                                    | -                                                                                       |                                               | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                                | 0,2<br>0.441                                                                                  | -                                                                                    |
| 78-50    | -013072                                                                                    | U-heating coil                                 | 600<br>23 5/8                                                                                      | -                                                                                       |                                               | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                                | 0,3<br>0.662                                                                                  | -                                                                                    |

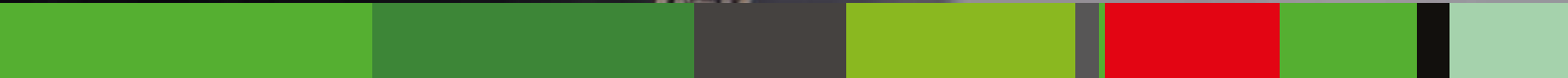
## PRODUCT DETAILS

| #              |  | Type of accessories/spare part Warming devices |  |  | Inner diameter of the heating coil |  |  |  |
|----------------|-----------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                | GTIN                                                                              |                                                | mm/inch                                                                           |                                                                                   | mm/inch                            |                                                                                     | kg/lb                                                                               |                                                                                     |
| 78-60          | -013089                                                                           | Tie rod heater                                 | 200<br>7 7/8                                                                      | -                                                                                 |                                    | K-78-12-A,<br>K-78-23-A,<br>K-78-20-A                                               | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-2X-M30-25   | -012990                                                                           | Heating coil                                   | 240<br>9 7/16                                                                     | M30                                                                               | 52<br>2 1/16                       | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-2X-M30-55   | -013003                                                                           | Heating coil                                   | 240<br>9 7/16                                                                     | M30                                                                               | 52<br>2 1/16                       | K-78-23-A,<br>K-78-20-A                                                             | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-12-M24-25   | -012884                                                                           | Heating Coil                                   | 240<br>9 7/16                                                                     | M24                                                                               | 47<br>1 7/8                        | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 78-2X-M24-55   | -012983                                                                           | Heating coil                                   | 240<br>9 7/16                                                                     | M24                                                                               | 47<br>1 7/8                        | K-78-23-A,<br>K-78-20-A                                                             | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-12-M20-35   | -012877                                                                           | Heating coil                                   | 200<br>7 7/8                                                                      | M20                                                                               | 40<br>1 9/16                       | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 78-2X-M20-55   | -012969                                                                           | Heating coil                                   | 200<br>7 7/8                                                                      | M20                                                                               | 40<br>1 9/16                       | K-78-23-A,<br>K-78-20-A                                                             | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-12-M16-35   | -012860                                                                           | Heating coil                                   | 200<br>7 7/8                                                                      | M16                                                                               | 32<br>1 1/4                        | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 78-2X-M16-55   | -012952                                                                           | Heating coil                                   | 200<br>7 7/8                                                                      | M16                                                                               | 32<br>1 1/4                        | K-78-23-A,<br>K-78-20-A                                                             | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-12-M12-35   | -012853                                                                           | Heating coil                                   | 200<br>7 7/8                                                                      | M12                                                                               | 26<br>1 1/32                       | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 78-2X-M12-55   | -012945                                                                           | Heating coil                                   | 200<br>7 7/8                                                                      | M12                                                                               | 26<br>1 1/32                       | K-78-23-A,<br>K-78-20-A                                                             | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-12-M10-35-2 | -080340                                                                           | Heating coil                                   | 250<br>9 13/16                                                                    | M10                                                                               | 23<br>7/8                          | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-2X-M10-55   | -012938                                                                           | Heating coil                                   | 250<br>9 13/16                                                                    | M10                                                                               | 23<br>7/8                          | K-78-23-A,<br>K-78-20-A                                                             | 0,3<br>0.662                                                                        | -                                                                                   |
| 78-12-M10-35   | -012846                                                                           | Heating coil                                   | 150<br>5 7/8                                                                      | M10                                                                               | 23<br>7/8                          | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 78-12-M08-35   | -012839                                                                           | Heating coil                                   | 150<br>5 7/8                                                                      | M08                                                                               | 18<br>11/16                        | K-78-12-A                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |

KUKKO // *Pull forward*



# DRIVE TECHNOLOGY





SERIES 58-1  
MOUNTING CLAMP



The assembly clamp from series 58-1 is used for tensioning chains and similar parts in crafts, industry, and workshops. It is particularly suitable for tensioning chains and can be complemented by other tools from KUKKO in application.

BENEFITS

- Guaranteed fast and straightforward installation of connecting links
- Easy assembly of the respective chain ends
- Easy handling and flexible to use



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 58-1 | -800245                                                                                     | 9 - 46<br>3/8 - 1 13/16                                                                        | 5<br>3/16                                                                                      | 3<br>1/8                                                                                       | 0,17<br>0.375                                                                                  | ✓                                                                                     |
| 58-2 | -774454                                                                                     | 25,4 - 63,5<br>1 - 2 1/2                                                                       | 8,5<br>5/16                                                                                    | 6<br>1/4                                                                                       | 0,865<br>0.662                                                                                 | ✓                                                                                     |

SERIES 59-1  
CHAIN BREAKER BASIC DEVICE

The chain breaker device of series 59 is used for breaking various chains in industry and workshop. It serves as the basis for chain breaking, which can be supplemented by other KUKKO tools.

BENEFITS

- Guaranteed a quick and uncomplicated separation of chains
- Easy handling and flexible to use



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 59-1 | -800214                                                                                     | 48<br>1 7/8                                                                               | 3,28 - 5,72<br>1/8-3/16                                                                        | 0,924<br>2.037                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 59-1-1  
SPARE PART SETS FOR THE CHAIN TENSIONER  
BASE UNIT



Spare part sets for the chain splitter base unit of series 59 are a spare part set that provides essential elements for using the base unit.

BENEFITS

- Used together with the chain breaker basic device 59-1 or the KUKKO chain breaker set KS-59-1/14.

TECHNICAL ATTRIBUTES

|        |  | # | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |  |
|--------|---------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|        |                                                                                 |   |                                                                                           |                                                                                              |                                                                                              |                                                                                              |                                                                                            |                                                                                     |                                                                                     |
| 59-1-1 |                                                                                 |   | -800221                                                                                   | 3,0; 3,9<br>1/8;1/8                                                                          | 3,28 - 4,45<br>1/8-3/16                                                                      | 3<br>1/8                                                                                     | 0,13<br>0.287                                                                              | K-59-1/14                                                                           | ✓                                                                                   |
| 59-1-2 |                                                                                 |   | -800238                                                                                   | 4,2; 5,0<br>3/16;3/16                                                                        | 5,08 - 5,72<br>3/16-3/16                                                                     | 4<br>3/16                                                                                    | 0,19<br>0.419                                                                              | K-59-1/14                                                                           | ✓                                                                                   |

PRODUCT DETAILS

SERIES 59  
CHAIN TOOLS FOR CHAIN TENSIONING,  
CHAIN BREAKING, AND ASSEMBLY  
TENSIONING

The 15-piece chain tensioner set of the series 59 is ideal for Separation, tensioning and riveting chains. It was developed specifically for the installation and Removing of single chains. The set includes pins in various diameters, suitable for different chain sizes: 3.28 mm for 3/8" chains, 4.45 mm for 1/2" chains, 5.08 mm for 5/8" chains, and 5.72 mm for 3/4" chains. With this set, you can not only perform safe Separation of chains, but also rivet them precisely again with the help of the integrated crimping aid.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-59-1/14 | -000461                                                                                     | 6,3 - 19<br>1/4-3/4                                                                            | 48<br>1 7/8                                                                                    | 3,0; 3,9; 4,2; 5,0<br>1/8; 1/8; 3/16; 3/16                                                     | 3,28 - 5,72<br>1/8-3/16                                                                        | 3,0; 4,0<br>1/8; 3/16                                                                            | 2,465<br>5.435                                                                                 | ✓                                                                                     |



PRODUCT DETAILS

SERIES 59-0  
CHAIN TOOLS FOR CHAIN TENSIONING,  
CHAIN BREAKING, AND ASSEMBLY  
TENSIONING



The series 59-0 bicycle chain tool enables bicycle chains to be opened, shortened, and closed precisely and in a controlled manner. It is ideal for the professional removal and installation of chains during bicycle maintenance, repair, and servicing. Thanks to its compact design, the tool is easy to handle and can be positioned precisely on the chain. The chain pin can be pushed out or pressed in in a controlled manner without placing unnecessary strain on the chain.

BENEFITS

- Precise opening, shortening and closing of bicycle chains
- Versatile use for maintenance, repair, and service work
- Gentle processing of the chain without unnecessary strain
- Controlled pressing out and in of the chain pin

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>compartment | <br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 59-0 New | -036125                                                                                     | 9, 10, 11, 12                                                                                      | 3,4<br>1/8                                                                                     | 0,2<br>0.441                                                                                   | ✓                                                                                     |

KUKKO // Pull forward



# CUTTING & LOOSENING



# APPLICATION

Whether it's cutting and punching a wide variety of materials, manufacturing seals, removing adhesive weights and residues, or renewing threads - KUKKO offers the perfect solution for every application.

## FEATURES OF THE SERIES

### SERIES 321



The disc cutter is used for cutting discs, leather, paper, pressboard, and plastic as well as for making seal rings. The sharp cutting blade is guided along a rail and can be positioned with millimeter precision.

### SERIES 2200



The soft scraper is used for gently removing adhesive weights, seal residues, glued trim strips, badges, and vignettes. The ergonomic handle fits comfortably in the hand. Thanks to the polished scraper blade, even stubborn adhesive residues disappear.

### SERIES 326



The handle hole punches are used for punching or making seals and seal rings from rubber, leather, felt, plastic, cork, and various fabrics.

### SERIES 121



The screw punch is used for uniform punching of plastic bumpers for distance sensors and for punching holes in thin-walled materials. The workpiece is not deformed during the process.

### SERIES 49



The screw extractor with a finely serrated shape is used to extract broken bolts and screws with right-hand threads.

### SERIES 245



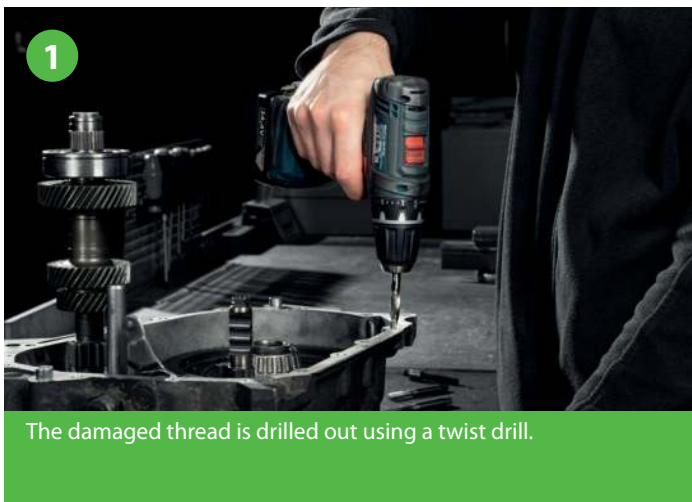
The 13-piece set of nozzle reamers is used for cleaning nozzles. The set consists of two tool holders and eleven reamers with different diameters ranging from 0.6 to 1.9 mm.



# THREAD REPAIR WITH THE K-58 SET

The thread repair set from the K-58 series is suitable for the restoration of highly loadable screw connections on stripped internal threads as well as the repair of damaged or over-torqued threads on all oil pans and oil drain plugs. Worn and damaged threads can be professionally and cost-effectively renewed in just a few steps.

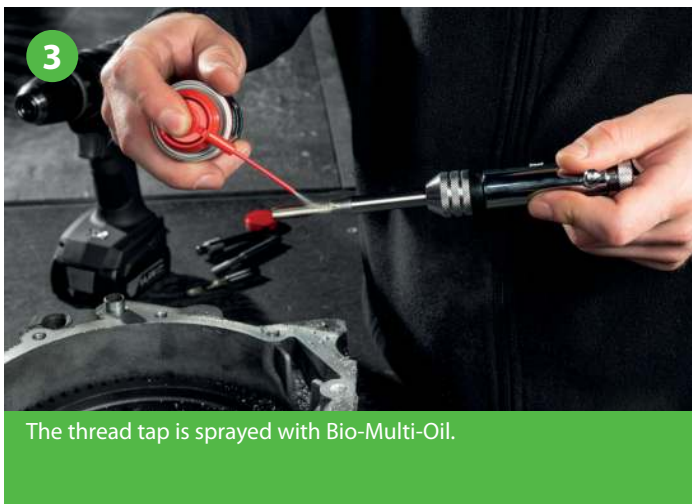
The 60-piece set includes: 40 thread inserts in various sizes, 4 twist drills, 4 seat cutters, 4 thread taps, 4 installation tools, a 2-piece tool holder with ratchet function, a can of Bio-Multi-Oil, and a KUKKO chip with individual serial number for extended warranty. For metric threads M5, M6, M8, and M10.



The damaged thread is drilled out using a twist drill.



The seat cutter ensures the bore is countersunk.



The thread tap is sprayed with Bio-Multi-Oil.



A new thread is tapped using the thread tap.



The spindle insert is screwed onto the installation tool.



The installation tool screws in the spindle insert. The special shape of the installation tool also lightly presses the spindle insert into place.



## APPLICATION EXAMPLE



A disc cutter with 2 blades from series 322 cutting circular cutouts



A soft scraper from series 2200 gently removing a product label



The screw punch 121-182 is inserted through the previously drilled hole



A screwdriver from the screwdriver set 49-A has successfully removed a screw

SERIES K-58  
KUKKO-THREAD-REPAIR-SET



The thread repair set is used for restoring high-load screw connections in torn internal threads, as well as for repairing defective and stripped threads in all oil pans and drain plugs. Worn and damaged threads can be properly and cost-effectively renewed in just a few steps. The 58-piece set includes: 40 thread inserts in various sizes, 4 drill bits, 4 seating mills, 4 thread cutters, 4 insertion tools, a 2-piece tool holder with ratchet function, and a can of bio multi-oil.

BENEFITS

- The collar makes additional fixation in the workpiece unnecessary and ensures stability without additional space requirement.
- The synchronous threaded design also allows for repairs on thin-walled components.
- Thread repair is also possible with short and few threads.
- Through the forming, the socket is turning-resistant.
- Application-oriented assembly for universal use



TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-58-M05-M10 | -038853                                                                                     | M5x7,6, M5x10,<br>M6x9,4, M6x12,<br>M8x11,7, M8x16,2,<br>M10x14, M10x20                   | 5,1, 6,2, 8,6, 10,3<br>3/16, 1/4, 5/16, 3/8                                                    | 2,7<br>5.954                                                                                   | ✓                                                                                     |

SERIES K-98  
KUKKO-THREAD-REPAIR-SET



The thread repair set is used to restore heavy-duty screw connections in stripped internal threads and to repair damaged and over-torqued threads on all oil pans and oil drain plugs. Worn and damaged threads can be professionally and cost-effectively renewed in just a few steps. The -piece set includes: 40 spindle inserts in various sizes, 4 drill bits, 4 seat cutters, 4 thread taps, 4 installation tools, and a 2-piece tool holder with ratcheting function.

BENEFITS

- The collar makes additional fixation in the workpiece unnecessary and ensures stability without additional space requirement.
- The synchronous threaded design also allows for repairs on thin-walled components.
- Thread repair is also possible with short and few threads.
- Through the forming, the socket is turning-resistant.
- Application-oriented assembly for universal use

TECHNICAL ATTRIBUTES

| #                 | <br>GTIN | <br>mm | <br>mm/inch | Number of parts | <br>kg/lb |  |
|-------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-98-A <b>New</b> | -044144                                                                                     | M5x0,8, M6x1,0,<br>M8x1,25, M10x1,5,<br>M12x1,75                                          | 5,2, 6,2, 8,4, 10,4,<br>12,4<br>3/16                                                           | 130             | 2,07<br>4.542                                                                                  | ✓                                                                                     |

SERIES W-714  
THREAD RENEWER



The thread renewers of the series W-714 are used for the repair of damaged threads and similar parts in crafts, industry, and workshops. The thread renewers are capable of reliably restoring threads even for special parts that would otherwise be significantly more expensive in their new acquisition.

BENEFITS

- Suitable for right and left-hand threads



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| W-714-1 | -131248                                                                                     | 160<br>6 5/16                                                                                  | 12 - 25<br>1/2-1                                                                               | 0,3<br>0.662                                                                                   |
| W-714-2 | -131255                                                                                     | 260<br>10 1/4                                                                                  | 25 - 65<br>1-2 9/16                                                                            | 0,3<br>0.662                                                                                   |
| W-714-3 | -131286                                                                                     | 355<br>13 1                                                                                    | 44 - 100<br>1 3/4-3 15/16                                                                      | 1,8<br>3.969                                                                                   |
| W-714-4 | -131316                                                                                     | 406<br>15 1                                                                                    | 100 - 150<br>3 15/16-5 7/8                                                                     | 1,515<br>3.341                                                                                 |



SERIES 97  
HANDY THREAD FILE FOR REWORKING  
THREADS



The handy thread file is used for manual reworking and cleaning of damaged internal and external threads on technical components such as screws, bolts, axles, or shafts. Additionally, the file is used for repairing external threads where die heads cannot be used or are not available. Overall, the thread file has eight different pitches, which allows for the processing of different thread diameters. In the KUKKO range, there is a suitable thread file for the four common thread types DIN-ISO, Whitworth + BSF, SAE/UNF, and Whitworth/pipe threads.

BENEFITS

- Thread files are used where cutter dies cannot be applied.
- Various slopes allow processing of different thread sizes.
- Expensive, complex components can be repaired quickly.

TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>Grad | Suitable for thread type              | <br>kg/lb | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 97-1 | -490231                                                                                     | 230<br>9 1/16                                                                                  | 60                                                                                          | DIN ISO Metrisch                      | 0,8, 1, 1,25, 1,5,<br>1,75, 2, 2,5, 3                                                         | 0,125<br>0.276                                                                                 | ✓                                                                                     |
| 97-2 | -490316                                                                                     | 230<br>9 1/16                                                                                  | 55                                                                                          | Whitworth + BSF                       | 10, 11, 12, 14:<br>16, 18, 20, 24                                                             | 0,14<br>0.309                                                                                  | ✓                                                                                     |
| 97-3 | -490491                                                                                     | 230<br>9 1/16                                                                                  | 60                                                                                          | SAE UNF, UNC                          | 11, 12, 13, 14,<br>16, 18, 20, 24                                                             | 0,13<br>0.287                                                                                  | ✓                                                                                     |
| 97-4 | -720253                                                                                     | 230<br>9 1/16                                                                                  | 55                                                                                          | Whitworth<br>Rohrgewinde GAZ,<br>BSPP | 11, 14, 19, 28                                                                                | 0,13<br>0.287                                                                                  | ✓                                                                                     |

## SERIES 49 SCREW EXTRACTOR



The screw extractors of series 49 with finely grooved shape are used for removing broken bolts and screws with right-hand threads. Thus, the screw extractor is an indispensable tool that neither hobbyists nor professional craftsmen can do without.

### BENEFITS

- Fine grooves ensure better traction and thus a comfortable working method.
- Optimized thread lengths ensure a shallow drilling depth.



### TECHNICAL ATTRIBUTES

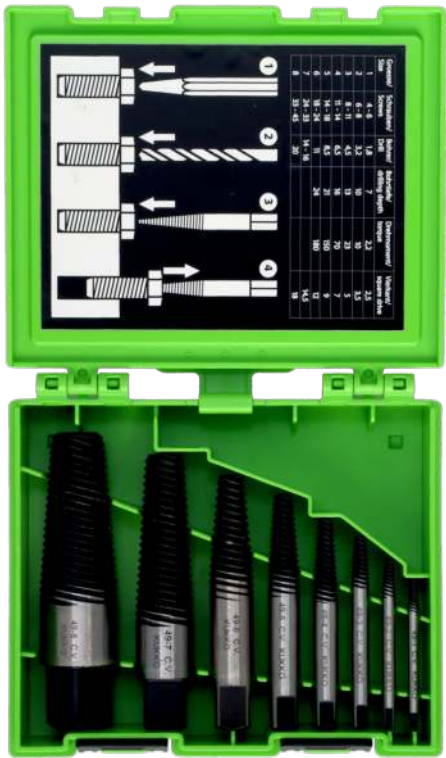
| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 49-1 | -018008                                                                                     | 50<br>1 15/16                                                                                  | 3 - 6<br>1/8 - 1/4                                                                             | 2,7<br>1/8                                                                                     | 0,0005<br>0.001                                                                              | -                   | ✓                                                                                     |
| 49-2 | -018183                                                                                     | 57<br>2 1/4                                                                                    | 6 - 8<br>1/4 - 5/16                                                                            | 3,8<br>1/8                                                                                     | 0,01<br>0.221                                                                                | -                   | ✓                                                                                     |
| 49-3 | -018268                                                                                     | 64<br>2 1/2                                                                                    | 8 - 11<br>5/16 - 7/16                                                                          | 4,9<br>3/16                                                                                    | 0,015<br>0.331                                                                               | -                   | ✓                                                                                     |
| 49-4 | -018343                                                                                     | 71<br>2 13/16                                                                                  | 11 - 14<br>7/16 - 9/16                                                                         | 7<br>1/4                                                                                       | 0,03<br>0.662                                                                                | -                   | ✓                                                                                     |
| 49-5 | -018428                                                                                     | 78<br>3 1/16                                                                                   | 14 - 18<br>9/16 - 11/16                                                                        | 9<br>3/8                                                                                       | 0,05<br>1.103                                                                                | -                   | ✓                                                                                     |
| 49-6 | -018596                                                                                     | 85<br>3 3/8                                                                                    | 18 - 24<br>11/16 - 15/16                                                                       | 12<br>1/2                                                                                      | 0,1<br>0.221                                                                                 | K-49-B              | ✓                                                                                     |
| 49-7 | -018671                                                                                     | 92<br>3 5/8                                                                                    | 24 - 33<br>15/16 - 1 5/16                                                                      | 14,5<br>9/16                                                                                   | 0,165<br>0.364                                                                               | -                   | ✓                                                                                     |

PRODUCT DETAILS

| #     |  |  |  |  |  | Included in the set |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|       | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                             |                     |                                                                                     |
| 49-8  | -018756                                                                           | 100<br>3 15/16                                                                    | 33 - 45<br>1 5/16 - 1 3/4                                                         | 18<br>11/16                                                                       | 0,29<br>0.639                                                                     | -                   | ✓                                                                                   |
| 49-9  | -018831                                                                           | 112<br>4 7/16                                                                     | 45 - 52<br>1 3/4 - 2 1/16                                                         | 24<br>15/16                                                                       | 0,555<br>1.224                                                                    | -                   | ✓                                                                                   |
| 49-10 | -239809                                                                           | 141,5<br>5 9/16                                                                   | 52 - 64<br>2 1/16 - 2 1/2                                                         | 31,2<br>1 1/4                                                                     | 0,99<br>2.183                                                                     | -                   | ✓                                                                                   |



SERIES 49-S  
SCREW EXTRACTOR SET



The screw extractor sets with finely ridged shapes are used for extracting broken bolts and screws with right-hand thread. The screw extractors are essential tools that neither hobbyists nor professional tradespeople can do without. The set includes screw extractors for thread diameters starting from M3 and, depending on the variant, up to diameters of M18 (49-A), M24 (49-B), or M45 (49-C).

BENEFITS

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.
- Fine grooves ensure better traction and thus a comfortable work process.
- Optimized thread lengths ensure a shallow drilling depth.



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 49-A | -018916                                                                                     | 50, 57, 64,<br>71, 78<br>1 15/16;2<br>1/4;2 1/2;2<br>13/16;3 1/16                              | M3 - M18<br>-                                                                                  | 2,7; 3,8; 4,9; 7; 9<br>1/16;1/8;3/16;1/4;3/8                                                   | 0,53<br>1.169                                                                                  | ✓                                                                                     |
| 49-B | -019098                                                                                     | 50, 57, 64,<br>71, 78, 85<br>1 15/16;2<br>1/4;2 1/2;2<br>13/16;3<br>1/16;3 3/8                 | M3 - M24<br>-                                                                                  | 2,7; 3,8; 4,9; 7; 9; 12<br>1/16;1/8;3/16;1/4;3/8;1/2                                           | 0,625<br>1.378                                                                                 | ✓                                                                                     |



PRODUCT DETAILS

| #    |  |  |  |  |  |  |
|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 49-C | -019173                                                                           | 50, 57, 64,                                                                       | M3 - M45                                                                          | 2,7; 3,8; 4,9; 7; 9; 12; 14,5; 18<br>1/16; 1/8; 3/16; 1/4; 3/8; 1/2; 9/16; 11/16  | 0,807<br>1.654                                                                      | ✓                                                                                   |
|      |                                                                                   | 71, 78, 85,                                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|      |                                                                                   | 92, 100                                                                           |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|      |                                                                                   | 1 15/16; 2                                                                        |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|      |                                                                                   | 1/4; 2 1/2; 2                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|      |                                                                                   | 13/16; 3                                                                          | -                                                                                 |                                                                                   |                                                                                     |                                                                                     |
|      |                                                                                   | 1/16; 3 3/8; 3                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|      |                                                                                   | 5/8; 3 15/16                                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |



## PRODUCT DETAILS

### SERIES 49-0 SCREW EXTRACTOR



The screw extractors of series 49-0 with broad ribbed shape are used for removing broken bolts and screws with right-hand threads. Thus, the screw extractor is an indispensable tool that neither hobbyist nor professional tradesman can do without.

#### BENEFITS

- Wide grooves are particularly suitable for soft materials, such as brass and aluminum.
- Optimized thread lengths ensure a shallow drilling depth.



## TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 49-01 | -490569                                                                                     | 48<br>1 7/8                                                                                    | 3 - 6<br>1/8 - 1/4                                                                             | 3,2<br>1/8                                                                                     | 0,05<br>1.103                                                                                  | ✓                                                                                     |
| 49-02 | -490644                                                                                     | 54<br>2 1/8                                                                                    | 6 - 8<br>1/4 - 5/16                                                                            | 4,2<br>3/16                                                                                    | 0,005<br>1.103                                                                                 | ✓                                                                                     |
| 49-03 | -490729                                                                                     | 60<br>2 3/8                                                                                    | 8 - 11<br>5/16 - 7/16                                                                          | 5<br>3/16                                                                                      | 0,01<br>0.221                                                                                  | ✓                                                                                     |
| 49-04 | -490804                                                                                     | 67<br>2 5/8                                                                                    | 11 - 14<br>7/16 - 9/16                                                                         | 6,4<br>1/4                                                                                     | 0,02<br>0.441                                                                                  | ✓                                                                                     |
| 49-05 | -490989                                                                                     | 86,5<br>3 3/8                                                                                  | 14 - 18<br>9/16 - 11/16                                                                        | 9<br>3/8                                                                                       | 0,04<br>0.882                                                                                  | ✓                                                                                     |
| 49-06 | -491061                                                                                     | 95<br>3 3/4                                                                                    | 18 - 24<br>11/16 - 15/16                                                                       | 12<br>1/2                                                                                      | 0,12<br>0.265                                                                                  | ✓                                                                                     |

SERIES 49-0-S  
SCREW EXTRACTOR SET WITH WIDE-  
GROOVED, AMERICAN SHAPE



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 49-0-S | -491146                                                                                     | 48, 54, 60, 67, 86, 5, 95<br>1 7/8; 2 1/8; 2 3/8; 2 5/8; 3 3/8; 3 3/4                          | 3 - 24<br>1/8 - 15/16                                                                          | 3, 2, 4, 2, 5, 6, 4, 9, 12<br>1/8; 3/16; 3/16; 1/4; 3/8; 1/2                                   | 0,195<br>0.430                                                                                 | ✓                                                                                     |

The screw extractor set with wide, grooved shape is used for extracting broken bolts and screws with right-hand threads. The screw extractors are an indispensable tool that neither hobbyist nor professional craftsmen can do without. The set includes screw extractors for thread diameters from 3 to 24 mm.

BENEFITS

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.
- Wide grooves are particularly suitable for soft materials, e.g. brass, aluminum.
- Optimized thread lengths ensure a low drilling depth

SERIES 49-T  
"SUPER TRACTION" SCREW EXTRACTOR



The screw extractor "Super Traction" is used to extract broken bolts and screws with right-hand threads. Thus, the screw extractor is an indispensable tool that neither hobbyist screwdrivers nor professional craftsmen can do without.

BENEFITS

- Narrow grooves ensure better traction and thus a comfortable operation.
- Optimized thread lengths ensure a shallow drilling depth.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Included in the set |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| 49-T-1 | -758461                                                                                     | 50<br>1 15/16                                                                                  | 4 - 5<br>3/16 - 3/16                                                                           | 2,6<br>1/8                                                                                     | 0,01<br>0.221                                                                                | K-49-B              | ✓                                                                                     |
| 49-T-2 | -758539                                                                                     | 55<br>2 3/16                                                                                   | 5 - 7<br>3/16 - 1/4                                                                            | 3,8<br>1/8                                                                                     | 0,01<br>0.221                                                                                | K-49-B              | ✓                                                                                     |
| 49-T-3 | -758614                                                                                     | 61<br>2 3/8                                                                                    | 8 - 12<br>5/16 - 1/2                                                                           | 4,8<br>3/16                                                                                    | 0,015<br>0.331                                                                               | K-49-B              | ✓                                                                                     |
| 49-T-4 | -758799                                                                                     | 65<br>2 9/16                                                                                   | 12 - 14<br>1/2 - 9/16                                                                          | 7<br>1/4                                                                                       | 0,02<br>0.441                                                                                | K-49-B              | ✓                                                                                     |
| 49-T-5 | -758874                                                                                     | 69<br>2 11/16                                                                                  | 16 - 20<br>5/8 - 13/16                                                                         | 9<br>3/8                                                                                       | 0,044<br>0.970                                                                               | K-49-B              | ✓                                                                                     |



PRODUCT DETAILS

SERIES 49-T-A  
SCREW EXTRACTOR SET "SUPER TRACTION"



The screw extractor set "Super Traction" is used to extract broken bolts and screws with right-handed threads. The screw extractors are an indispensable tool that neither DIY enthusiasts nor professional craftsmen can do without. The set includes screw extractors for thread diameters from 4 to 20 mm.

BENEFITS

- Application-oriented assembly for universal use
- Through the shared storage, the completeness of the set can be easily overseen.
- Narrow grooves ensure better traction and thus a comfortable working method.
- Optimized thread lengths ensure a shallow drilling depth.

TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 49-T-A | -758959                                                                             | 50, 55, 61, 65, 69<br>1 15/16;2 3/16;2 3/8;2 9/16;2 11/16                           | 4 - 20<br>3/16 - 13/16                                                              | 2,6, 3,8, 4,8, 7, 9<br>1/16;1/8;3/16;1/4;3/8                                        | 0,11<br>0.243                                                                         | ✓                                                                                     |

SERIES K-49  
READY-TO-USE SCREW EXTRACTOR SET IN CASE



The 10-piece, ready-to-use screw extractor set from the K-49 series with finely grooved shape is used to extract broken bolts and screws with right-hand thread. Ideally suited for screws with a thread diameter from 4 to 20 mm. The set includes six screw extractors, a ratchet, two chucks, and an adapter, making it immediately ready for use. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without.

BENEFITS

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.
- Fine grooves ensure better traction and thus a comfortable work process.
- Optimized thread lengths ensure a shallow drilling depth.



TECHNICAL ATTRIBUTES

| #      |  |  |  |  |  | Consists of                                  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                |                                              |                                                                                       |
| K-49-B | -041938                                                                             | 50, 55, 61, 65, 69.83<br>1 15/16, 2 3/16, 2 3/8, 2 9/16, 2 11/16                    | 4 - 20<br>3/16 - 13/16                                                              | 2,6, 3,8, 4,8, 7, 9, 12<br>1/16, 1/8, 1/8, 3/16, 5/16                               | 1,17<br>0.485                                                                        | 49-T-1, 49-T-2, 49-T-3, 49-T-4, 49-T-5, 49-6 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 49-U  
SCREW EXTRACTOR WITH DRILLS AND DRILL  
SOCKET

The screw extractors with drills and drill sockets are used for extracting broken bolts and screws. Thus, screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without.

BENEFITS

- Optimized thread lengths ensure a low drilling depth



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 49-U-11 | -799549                                                                                   | M5 - M7<br>-                                                                                 | 3,2<br>1/8                                                                                   | 0,03<br>0.662                                                                                | ✓                                                                                   |
| 49-U-12 | -799624                                                                                   | M8 - M9<br>-                                                                                 | 4,8<br>3/16                                                                                  | 0,055<br>1.213                                                                               | ✓                                                                                   |
| 49-U-13 | -799709                                                                                   | M10 -<br>-                                                                                   | 6,4<br>1/4                                                                                   | 0,085<br>1.874                                                                               | ✓                                                                                   |
| 49-U-14 | -799884                                                                                   | M12 -<br>-                                                                                   | 8<br>5/16                                                                                    | 0,125<br>0.276                                                                               | ✓                                                                                   |
| 49-U-15 | -799969                                                                                   | M14 - M16<br>-                                                                               | 8,7<br>5/16                                                                                  | 0,16<br>0.353                                                                                | ✓                                                                                   |

PRODUCT DETAILS

SERIES 49-U-B  
SCREW EXTRACTOR SET



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 49-U-B | -799136                                                                                     | M5 - M16<br>-                                                                                  | 3,2-8,7<br>1/8-5/16                                                                            | 0,85<br>1.874                                                                                  | ✓                                                                                     |

The 25-piece screw extractor set with drills and drill sockets is used for universal extraction of broken bolts and screws. The screw extractors are an indispensable tool that neither hobbyists nor professional craftsmen can do without. The set includes screw extractors for screw threads from M5 to M16.

BENEFITS

- Application-oriented assembly for universal use
- Through the shared storage, the completeness of the set can be easily overseen.
- The fine meshing of the rotating pins prevents the bolt from expanding and jamming.





PRODUCT DETAILS

SERIES 245  
DÜSEN-REIBAHLEN-SATZ



The 12-piece nozzle reamer set is used for cleaning nozzles. The set consists of two tool holders and eleven reamers with various diameters ranging from 0.6 to 1.9 mm.

BENEFITS

- Compact and handy range that can be used for all nozzle sizes.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 245-004 | -597412                                                                                     | 150<br>5 7/8                                                                                   | 0,6; 0,65; 0,7; 0,75;<br>0,8; 0,9; 1,0; 1,1; 1,3;<br>1,5; 1,7; 1,9<br>1/32 - 1/16              | 20 - 50<br>13/16-1 15/16                                                                        | 0,025<br>0.551                                                                                 |

SERIES 321  
SLICE CUTTER FOR CUTTING DISCS AND SEAL  
RINGS



The circular cutter is used for cutting discs, leather, paper, particle board, and plastic, as well as for making seal rings. The sharp cutting blade is guided on a rail and can be aligned with millimeter precision. With the circular cutter, precise round cutouts can be made in the range of 40 to 200 mm in diameter.

BENEFITS

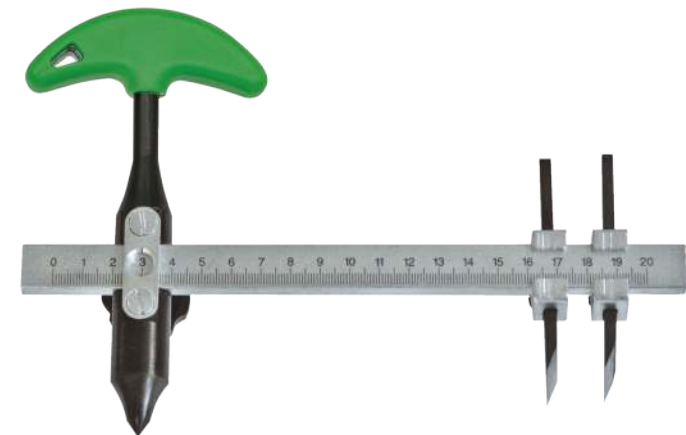
- Millimeter scale on prism rail enables precise work
- The plastic handle sits particularly well and securely in the hand.
- Enables cutting of various materials
- Suitable for seal ring production with small and large cuts



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 321-200 | -616144                                                                                     | 40 - 200<br>1 9/16 - 7 7/8                                                                     | 0,495<br>1.091                                                                               | ✓                                                                                     |
| 321-400 | -616229                                                                                     | 40 - 400<br>1 9/16 - 15 3/4                                                                    | 0,61<br>1.345                                                                                | ✓                                                                                     |
| 321-600 | -616304                                                                                     | 40 - 600<br>1 9/16 - 23 5/8                                                                    | 0,75<br>1.654                                                                                | ✓                                                                                     |
| 321-800 | -616489                                                                                     | 40 - 800<br>1 9/16 - 31 1/2                                                                    | 0,88<br>1.940                                                                                | ✓                                                                                     |

SERIES 322  
SLICE CUTTER WITH 2 BLADES FOR CUTTING  
DISCS AND SEAL RINGS



The disc cutter with two blades is used for cutting discs and sealing rings made of rubber, leather, paper, particle board, and plastic. The two sharp cutting blades are guided on a rail that can be aligned with millimeter precision. With the disc cutter, precise circular cutouts can be made with diameters ranging from 40 to 200 mm.

BENEFITS

- The millimeter scale on the prism rail enables precise work.
- The plastic handle lies particularly well and securely in the hand.
- Enables cutting of various materials as well as producing seal rings.
- Suitable for sealing ring creation with small and large cuts.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 322-200 | -616632                                                                                     | 40 - 200<br>1 9/16 - 7 7/8                                                                     | 0,56<br>1.235                                                                                | ✓                                                                                     |
| 322-400 | -616717                                                                                     | 40 - 400<br>1 9/16 - 15 3/4                                                                    | 0,68<br>1.499                                                                                | ✓                                                                                     |
| 322-600 | -616892                                                                                     | 40 - 600<br>1 9/16 - 23 5/8                                                                    | 0,825<br>1.819                                                                               | ✓                                                                                     |
| 322-800 | -616977                                                                                     | 40 - 800<br>1 9/16 - 31 1/2                                                                    | 0,95<br>2.095                                                                                | ✓                                                                                     |

SERIES 2200  
GENTLE SOFT SCRAPER



Soft scrapers are used for gently removing adhesive weights and sealant remnants, bonded protective strips, badges, and stickers. The ergonomic handle fits particularly well in the hand. Thanks to the polished scraper blade, even difficult-to-remove adhesive residues disappear. At the same time, the manufacturing from polyoxymethylene ensures that the surface to be treated is not damaged. Especially suitable for applications on sensitive surfaces such as adhesive weights on aluminum rims.

BENEFITS

- Sharp scraping blade removes stuck residue completely
- Good haptics due to ergonomic grip
- Anti-slip safety at the handle to protect against injuries
- Grip sizes for hanging or securing the scraper
- The scraper blade is resharpenable.



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 2200-1 | -324284                                                                                     | 190<br>7 1/2                                                                                   | 22<br>7/8                                                                                      | 60<br>2 3/8                                                                                     | 0,07<br>1.544                                                                                  |
| 2200-2 | -324291                                                                                     | 210<br>8 1/4                                                                                   | 22<br>7/8                                                                                      | 80<br>3 1/8                                                                                     | 0,072<br>1.588                                                                                 |
| 2200-3 | -324307                                                                                     | 280<br>11 1/32                                                                                 | 22<br>7/8                                                                                      | 150<br>5 7/8                                                                                    | 0,083<br>1.830                                                                                 |
| 2200-4 | -324314                                                                                     | 280<br>11 1/32                                                                                 | 28<br>1 1/8                                                                                    | 150<br>5 7/8                                                                                    | 0,089<br>1.962                                                                                 |



PRODUCT DETAILS

SERIES 2200-ST  
GENTLE SOFT SCRAPER SET

The soft scraper set is used for gently removing adhesive weights and sealant residues, glued protective strips, plaques, and stickers. Thanks to the polished scraper blade, even stubborn adhesive residues disappear, while the manufacturing from polyoxymethylene prevents surface damage.

BENEFITS

- The sharp scraper blade removes stubborn residues without a trace.
- Universal use thanks to soft scrapers in various sizes
- Good haptics with ergonomic grip
- Anti-slip safety at the handle to protect against injuries
- Grip sizes for hanging or securing the scraper



TECHNICAL ATTRIBUTES

| #    | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 2200 | -001611                                                                                     | 190, 210, 280, 280<br>7 1/2; 8 1/4; 11 1/32; 11 1/32                                           | 22, 22, 22, 28<br>7/8; 7/8; 7/8; 1 1/8                                                         | 60, 80, 150, 150<br>2 3/8; 3 1/8; 5 7/8; 5 7/8                                                   | 0,325<br>0.717                                                                                 |

## PRODUCT DETAILS

### SERIES 326 HENKELLOCHEISEN

The Henkellocheisen are used for punching or creating seals and sealing rings from rubber, leather, felt, plastic, cork, as well as various fabrics. The short hollow cylinder is sharply cut at the lower edge. The conical punch head is attached to two carriers. This creates a double-sided recess. Thanks to the particularly powerful design of the Henkellocheisen, a wide variety of materials can be processed.

#### BENEFITS

- Extra sharp blades for the individual processing of various materials
- Uniform force distribution on the hollow cylinder due to impact action
- "Also suitable for sealing ring production with small and large cuts."



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 326-002 | -620837                                                                             | 100<br>3 15/16                                                                      | 2<br>1/16                                                                           | 0,045<br>0.992                                                                        | ✓                                                                                     |
| 326-003 | -620912                                                                             | 100<br>3 15/16                                                                      | 3<br>1/8                                                                            | 0,045<br>0.992                                                                        | ✓                                                                                     |
| 326-004 | -621094                                                                             | 100<br>3 15/16                                                                      | 4<br>3/16                                                                           | 0,045<br>0.992                                                                        | ✓                                                                                     |
| 326-005 | -621179                                                                             | 110<br>4 5/16                                                                       | 5<br>3/16                                                                           | 0,056<br>1.235                                                                        | ✓                                                                                     |
| 326-006 | -621254                                                                             | 110<br>4 5/16                                                                       | 6<br>1/4                                                                            | 0,058<br>1.279                                                                        | ✓                                                                                     |
| 326-007 | -621339                                                                             | 110<br>4 5/16                                                                       | 7<br>1/4                                                                            | 0,059<br>1.301                                                                        | ✓                                                                                     |
| 326-008 | -621414                                                                             | 110<br>4 5/16                                                                       | 8<br>5/16                                                                           | 0,0795<br>1.753                                                                       | ✓                                                                                     |
| 326-009 | -621582                                                                             | 110<br>4 5/16                                                                       | 9<br>3/8                                                                            | 0,08<br>1.764                                                                         | ✓                                                                                     |
| 326-010 | -621667                                                                             | 110<br>4 5/16                                                                       | 10<br>3/8                                                                           | 0,075<br>1.654                                                                        | ✓                                                                                     |
| 326-011 | -621742                                                                             | 125<br>4 15/16                                                                      | 11<br>7/16                                                                          | 0,12<br>0.265                                                                         | ✓                                                                                     |
| 326-012 | -621827                                                                             | 125<br>4 15/16                                                                      | 12<br>1/2                                                                           | 0,12<br>0.265                                                                         | ✓                                                                                     |
| 326-013 | -621902                                                                             | 125<br>4 15/16                                                                      | 13<br>1/2                                                                           | 0,1<br>0.221                                                                          | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 326-014 | -622084                                                                           | 137<br>5 3/8                                                                      | 14<br>9/16                                                                        | 0,155<br>0.342                                                                      | ✓                                                                                   |
| 326-015 | -622169                                                                           | 137<br>5 3/8                                                                      | 15<br>9/16                                                                        | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 326-016 | -622244                                                                           | 137<br>5 3/8                                                                      | 16<br>5/8                                                                         | 0,155<br>0.342                                                                      | ✓                                                                                   |
| 326-017 | -622329                                                                           | 137<br>5 3/8                                                                      | 17<br>11/16                                                                       | 0,16<br>0.353                                                                       | ✓                                                                                   |
| 326-018 | -622404                                                                           | 141<br>5 9/16                                                                     | 18<br>11/16                                                                       | 0,195<br>0.430                                                                      | ✓                                                                                   |
| 326-019 | -622572                                                                           | 141<br>5 9/16                                                                     | 19<br>3/4                                                                         | 0,185<br>0.408                                                                      | ✓                                                                                   |
| 326-020 | -622657                                                                           | 141<br>5 9/16                                                                     | 20<br>13/16                                                                       | 0,185<br>0.408                                                                      | ✓                                                                                   |
| 326-021 | -622732                                                                           | 153<br>6 1/32                                                                     | 21<br>13/16                                                                       | 0,27<br>0.595                                                                       | ✓                                                                                   |
| 326-022 | -622817                                                                           | 153<br>6 1/32                                                                     | 22<br>7/8                                                                         | 0,28<br>0.617                                                                       | ✓                                                                                   |
| 326-023 | -622992                                                                           | 153<br>6 1/32                                                                     | 23<br>7/8                                                                         | 0,265<br>0.584                                                                      | ✓                                                                                   |
| 326-024 | -623074                                                                           | 153<br>6 1/32                                                                     | 24<br>15/16                                                                       | 0,275<br>0.606                                                                      | ✓                                                                                   |
| 326-025 | -623159                                                                           | 162<br>6 3/8                                                                      | 25<br>1                                                                           | 0,37<br>0.816                                                                       | ✓                                                                                   |
| 326-026 | -623234                                                                           | 162<br>6 3/8                                                                      | 26<br>1 1/32                                                                      | 0,375<br>0.827                                                                      | ✓                                                                                   |
| 326-027 | -623319                                                                           | 162<br>6 3/8                                                                      | 27<br>1 1/16                                                                      | 0,36<br>0.794                                                                       | ✓                                                                                   |
| 326-028 | -623494                                                                           | 175<br>6 7/8                                                                      | 28<br>1 1/8                                                                       | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 326-029 | -623562                                                                           | 175<br>6 7/8                                                                      | 29<br>1 1/8                                                                       | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 326-030 | -623647                                                                           | 175<br>6 7/8                                                                      | 30<br>1 3/16                                                                      | 0,435<br>0.959                                                                      | ✓                                                                                   |
| 326-031 | -623722                                                                           | 175<br>6 7/8                                                                      | 31<br>1 1/4                                                                       | 0,5<br>1.103                                                                        | ✓                                                                                   |
| 326-032 | -623807                                                                           | 175<br>6 7/8                                                                      | 32<br>1 1/4                                                                       | 0,49<br>1.080                                                                       | ✓                                                                                   |
| 326-033 | -623982                                                                           | 175<br>6 7/8                                                                      | 33<br>1 5/16                                                                      | 0,495<br>1.091                                                                      | ✓                                                                                   |
| 326-034 | -624064                                                                           | 180<br>7 1/16                                                                     | 34<br>1 5/16                                                                      | 0,59<br>1.301                                                                       | ✓                                                                                   |
| 326-035 | -624149                                                                           | 180<br>7 1/16                                                                     | 35<br>1 3/8                                                                       | 0,585<br>1.290                                                                      | ✓                                                                                   |
| 326-036 | -624224                                                                           | 180<br>7 1/16                                                                     | 36<br>1 7/16                                                                      | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 326-037 | -624309                                                                           | 180<br>7 1/16                                                                     | 37<br>1 7/16                                                                      | 0,575<br>1.268                                                                      | ✓                                                                                   |
| 326-038 | -624484                                                                           | 190<br>7 1/2                                                                      | 38<br>1 1/2                                                                       | 0,705<br>1.654                                                                      | ✓                                                                                   |
| 326-039 | -624552                                                                           | 190<br>7 1/2                                                                      | 39<br>1 9/16                                                                      | 0,0023<br>0.507                                                                     | ✓                                                                                   |
| 326-040 | -624637                                                                           | 190<br>7 1/2                                                                      | 40<br>1 9/16                                                                      | 0,63<br>1.389                                                                       | ✓                                                                                   |

## PRODUCT DETAILS

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 326-041 | -911003                                                                           | 205<br>8 1/16                                                                     | 41<br>1 5/8                                                                       | 1,2<br>2.646                                                                        | ✓                                                                                   |
| 326-042 | -624897                                                                           | 205<br>8 1/16                                                                     | 42<br>1 5/8                                                                       | 1,8<br>3.969                                                                        | ✓                                                                                   |
| 326-043 | -624972                                                                           | 205<br>8 1/16                                                                     | 43<br>1 11/16                                                                     | 2,13<br>4.697                                                                       | ✓                                                                                   |
| 326-044 | -625054                                                                           | 205<br>8 1/16                                                                     | 44<br>1 3/4                                                                       | 1,015<br>2.536                                                                      | ✓                                                                                   |
| 326-045 | -625139                                                                           | 205<br>8 1/16                                                                     | 45<br>1 3/4                                                                       | 0,98<br>2.161                                                                       | ✓                                                                                   |
| 326-046 | -625214                                                                           | 205<br>8 1/16                                                                     | 46<br>1 13/16                                                                     | 0,87<br>1.918                                                                       | ✓                                                                                   |
| 326-047 | -625399                                                                           | 215<br>8 7/16                                                                     | 47<br>1 7/8                                                                       | 2,6<br>5.733                                                                        | ✓                                                                                   |
| 326-048 | -625474                                                                           | 215<br>8 7/16                                                                     | 48<br>1 7/8                                                                       | 0,93<br>2.051                                                                       | ✓                                                                                   |
| 326-049 | -625542                                                                           | 215<br>8 7/16                                                                     | 49<br>1 15/16                                                                     | 0,99<br>2.183                                                                       | ✓                                                                                   |
| 326-050 | -625627                                                                           | 215<br>8 7/16                                                                     | 50<br>1 15/16                                                                     | 1,02<br>2.646                                                                       | ✓                                                                                   |
| 326-055 | -625702                                                                           | 220<br>8 11/16                                                                    | 55<br>2 3/16                                                                      | 1,165<br>2.569                                                                      | ✓                                                                                   |
| 326-060 | -625887                                                                           | 240<br>9 7/16                                                                     | 60<br>2 3/8                                                                       | 1,775<br>3.914                                                                      | ✓                                                                                   |
| 326-065 | -625962                                                                           | 240<br>9 7/16                                                                     | 65<br>2 9/16                                                                      | 1,685<br>3.715                                                                      | ✓                                                                                   |
| 326-070 | -626044                                                                           | 250<br>9 13/16                                                                    | 70<br>2 3/4                                                                       | 2,225<br>4.906                                                                      | ✓                                                                                   |
| 326-075 | -626129                                                                           | 255<br>10 1/32                                                                    | 75<br>2 15/16                                                                     | 2,23<br>4.917                                                                       | ✓                                                                                   |
| 326-080 | -626204                                                                           | 340<br>13 3/8                                                                     | 80<br>3 1/8                                                                       | 3,89<br>8.577                                                                       | ✓                                                                                   |
| 326-085 | -922320                                                                           | 340<br>13 3/8                                                                     | 85<br>3 3/8                                                                       | 4,565<br>10.066                                                                     | ✓                                                                                   |
| 326-090 | -626389                                                                           | 365<br>14 3/8                                                                     | 90<br>3 9/16                                                                      | 4,3<br>9.482                                                                        | ✓                                                                                   |
| 326-095 | -917128                                                                           | 365<br>14 3/8                                                                     | 95<br>3 3/4                                                                       | 6,29<br>13.869                                                                      | ✓                                                                                   |
| 326-100 | -626464                                                                           | 380<br>14 15/16                                                                   | 100<br>3 15/16                                                                    | 6<br>13.230                                                                         | ✓                                                                                   |





SERIES 326-KS  
HENKELLOCHEISEN SET IN A PLASTIC ROLL  
BAG



The 9-piece set of hole punches with different diameters is used for punching holes or creating seals and sealing rings from rubber, leather, felt, plastic, cork, as well as various fabrics. The short hollow cylinder is sharply cut at the bottom edge. The conical punch head is attached to two supports, resulting in a dual recess. Thanks to the particularly sturdy design of the hole punches, a wide variety of materials can be processed. The practical roll-up bag made of plastic provides maximum organization and is also ideal for transport.

BENEFITS

- Extra sharp blades for the individual processing of various materials
- Uniform distribution of force on the hollow cylinder due to impact action
- Ideal storage in roll bag ensures order and is suitable for transport.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 326-109 | -916695                                                                                     | 100 - 141<br>3 15/16-5 9/16                                                                    | 3, 5, 7, 9, 11, 13, 15,<br>17, 19<br>1/8, 3/16, 1/4, 3/8,<br>7/16, 1/2, 9/16,<br>11/16, 3/4    | 1,025<br>2.756                                                                                 | ✓                                                                                     |
| 326-119 | -916701                                                                                     | 100 - 141<br>3 15/16-5 9/16                                                                    | 2, 3, 4, 5, 6, 7, 8, 9, 10,<br>11, 12, 13, 14, 15, 16,<br>17, 18, 19, 20<br>1/16               | 1,94<br>4.278                                                                                  | ✓                                                                                     |
| 326-120 | -626532                                                                                     | 100 - 162<br>3 15/16-6 3/8                                                                     | 3, 5, 6, 8, 10, 12, 13,<br>14, 16, 19, 22, 25<br>1/8                                           | 1,82<br>4.013                                                                                  | ✓                                                                                     |
| 326-130 | -997700                                                                                     | 100 - 175<br>3 15/16-6 7/8                                                                     | 2, 4, 6, 8, 10, 12, 14,<br>16, 18, 20, 22, 24, 26,<br>28, 30<br>1/16                           | 3,01<br>6.836                                                                                  | ✓                                                                                     |

SERIES 326-TS  
HENKELLOCHEISEN SET WITH PLASTIC PLATE  
IN PLASTIC CASE



The 24-piece set of hollow punches with varying diameters is used for punching or creating seals and sealing rings from rubber, leather, felt, plastic, cork, and various fabrics. Thanks to its sturdy design, various materials can be processed.

BENEFITS

- Extra sharp blades for the individual processing of various materials
- Uniform distribution of force on the hollow cylinder due to impact effect
- Ideal storage in the case guarantees order and is suitable for transport.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch                                                                                                                                   | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 326-230 | -687991                                                                                     | 100 - 175<br>3 15/16-6 7/8                                                                     | 2, 3, 4, 5, 6, 7, 8, 9, 10,<br>11, 12, 13, 14, 15, 16,<br>17, 18, 19, 20, 22, 24,<br>25, 28, 30<br>1/16, 1/8, 3/16, 3/16,<br>1/4, 1/4, 5/16, 3/8,<br>7/16, 1/2, 9/16, 5/8,<br>11/16, 3/4, 13/16,<br>7/8, 15/16, 1 1/8, 1<br>3/16 | 4,68<br>10.319                                                                                 | ✓                                                                                     |

SERIES 326-300  
RING PUNCTURING TOOL SET



The ring punch tool set is used for punching or creating seals and seal rings from rubber, leather, felt, plastic, cork, as well as fabrics. Thanks to the double attachment, seal rings can be produced in just one operation by simultaneously attaching two punch blades of different diameters to the punch holder. The punch blades are particularly sharp. This allows for the processing of a wide variety of materials.

BENEFITS

- Extra sharp stamping knives for the individual processing of various materials
- A variety of ring diameters enables numerous combination options
- Seal rings can be manufactured in just one working step.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch                                                       | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 326-320 | -915605                                                                                     | 3, 4, 6, 8, 10, 12, 14, 16, 18, 20<br>1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 11/16, 13/16                                                        | 0,66<br>1.455                                                                                | -                                                                                     |
| 326-330 | -745004                                                                                     | 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30<br>1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 11/16, 13/16, 7/8, 15/16, 1 1/32, 1 1/8, 1 3/16 | 1,405<br>3.197                                                                               | ✓                                                                                     |

PRODUCT DETAILS

| #       |  |                                                                                                                                                                                                                                                                                                 |  |  |
|---------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                                                                                                                                                                                                                                                                                                                          | kg/lb                                                                             |                                                                                     |
| 326-350 | -915612                                                                           | 2, 3, 4, 5, 6, 7, 8, 9, 10, 12,<br>14, 16, 18, 20, 22, 24, 26,<br>28, 30, 32, 34, 36, 38, 40,<br>42, 44, 46, 48, 50<br>1/16, 1/8, 3/16, 3/16, 1/4,<br>1/4, 5/16, 3/8, 3/8, 1/2,<br>9/16, 5/8, 11/16, 13/16,<br>7/8, 15/16, 1 1/32, 1 1/8,<br>1 3/16, 1 1/4, 1 5/16, 1<br>7/16, 1 1/2, 1 9/16, 1 5/8,<br>1 3/4, 1 13/16, 1 7/8, 1<br>15/16                                        | 2,975<br>6.560                                                                    | ✓                                                                                   |
| 326-360 | -745264                                                                           | 2, 3, 4, 6, 8, 10, 12, 14, 16,<br>18, 20, 22, 24, 26, 28, 30,<br>32, 34, 36, 38, 40, 42, 44,<br>46, 48, 50, 52, 54, 56, 58,<br>60<br>1/16, 1/8, 3/16, 1/4, 5/16,<br>3/8, 1/2, 9/16, 5/8, 11/16,<br>13/16, 7/8, 15/16, 1 1/32,<br>1 1/8, 1 3/16, 1 1/4, 1<br>5/16, 1 7/16, 1 1/2, 1<br>9/16, 1 5/8, 1 3/4, 1<br>13/16, 1 7/8, 1 15/16, 2<br>1/16, 2 1/8, 2 3/16, 2<br>5/16, 2 3/8 | 5,655<br>12.469                                                                   | ✓                                                                                   |





### SERIES 121 SCREW HOLE PUNCH



The screw hole punches of series 121 are used for the uniform punching of plastic bumpers for distance sensors and for punching holes in thin-walled materials. The workpiece is not deformed during the process. Each screw hole punch consists of a punch, a die and a pressure screw in a particularly robust design.

#### BENEFITS

- Special cutting geometry prevents the detachment of the carriage paint
- Can be used without any problems on already painted bumpers.



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 121-182 | -831379                                                                                     | M10x1                                                                               | 18,2<br>11/16                                                                                  | 17<br>11/16                                                                                    | 0,105<br>0.331                                                                                 | ✓                                                                                     |
| 121-184 | -403163                                                                                     | M10x1                                                                               | 18,4<br>11/16                                                                                  | 17<br>11/16                                                                                    | 0,9<br>1.985                                                                                   | ✓                                                                                     |
| 121-186 | -058745                                                                                     | M10x1                                                                               | 18,6<br>11/16                                                                                  | 17<br>11/16                                                                                    | 0,095<br>2.095                                                                                 | ✓                                                                                     |
| 121-190 | -079092                                                                                     | M10x1                                                                               | 19<br>3/4                                                                                      | 17<br>11/16                                                                                    | 0,15<br>0.331                                                                                  | ✓                                                                                     |
| 121-200 | -202544                                                                                     | M10x1                                                                               | 20<br>13/16                                                                                    | 17<br>11/16                                                                                    | 0,1<br>0.221                                                                                   | ✓                                                                                     |
| 121-225 | -202575                                                                                     | M10x1                                                                               | 22,5<br>7/8                                                                                    | 17<br>11/16                                                                                    | 0,125<br>0.276                                                                                 | ✓                                                                                     |
| 121-260 | -831386                                                                                     | M10x1                                                                               | 26<br>1 1/32                                                                                   | 17<br>11/16                                                                                    | 0,16<br>0.353                                                                                  | ✓                                                                                     |
| 121-265 | -058752                                                                                     | M10x1                                                                               | 26,5<br>1 1/32                                                                                 | 17<br>11/16                                                                                    | 0,014<br>30.870                                                                                | ✓                                                                                     |
| 121-266 | -403187                                                                                     | M10x1                                                                               | 26,6<br>1 1/32                                                                                 | 17<br>11/16                                                                                    | 0,195<br>0.430                                                                                 | ✓                                                                                     |
| 121-282 | -079757                                                                                     | M10x1                                                                               | 28,2<br>1 1/8                                                                                  | 17<br>11/16                                                                                    | 0,18<br>0.397                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              |                                                                                   | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 121-293 | -058776                                                                           | M10x1                                                                             | 29,3<br>1 1/8                                                                     | 17<br>11/16                                                                       | 0,195<br>0.430                                                                      | ✓                                                                                   |
| 121-310 | -009716                                                                           | M10x1                                                                             | 31<br>1 1/4                                                                       | 17<br>11/16                                                                       | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 121-319 | -403194                                                                           | M10x1                                                                             | 31,9<br>1 1/4                                                                     | 17<br>11/16                                                                       | 0,255<br>0.562                                                                      | ✓                                                                                   |
| 121-326 | -403200                                                                           | M10x1                                                                             | 32,6<br>1 1/4                                                                     | 17<br>11/16                                                                       | 0,265<br>0.584                                                                      | ✓                                                                                   |
| 121-389 | -403224                                                                           | M10x1                                                                             | 38,9<br>1 1/2                                                                     | 17<br>11/16                                                                       | 0,34<br>0.750                                                                       | ✓                                                                                   |



## SERIES 122 SHEET METAL PUNCH



The screw hole punches of series 122 are used for uniform punching of plastic bumpers for distance sensors and for punching holes in thin-walled materials. The workpiece is not deformed during the operation. Each screw hole punch consists of a punch, a die and a pressure screw in a particularly robust design.

### BENEFITS

- Special cutting geometry prevents the detachment of the carriage paint
- Can be used without any problems on already painted bumpers.
- No deformation of the workpiece – for clean work results
- Minimal effort – thanks to the integrated Power Nut on selected versions

### TECHNICAL ATTRIBUTES

| #                  |  |  |  |  | With Power Nut |  |  |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    | GTIN                                                                                |                                                                                     | mm/inch                                                                             | mm/inch                                                                             |                | kg/lb                                                                                 |                                                                                       |
| 122-125 <b>New</b> | -414305                                                                             | M6x30                                                                               | 12,5<br>1/2                                                                         | 17<br>11/16                                                                         | No             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-152 <b>New</b> | -414312                                                                             | M8x1                                                                                | 15,2<br>9/16                                                                        | 17<br>11/16                                                                         | No             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-162 <b>New</b> | -414329                                                                             | M10x1                                                                               | 16,5<br>5/8                                                                         | 17<br>11/16                                                                         | No             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-186 <b>New</b> | -414336                                                                             | M10x1                                                                               | 18,6<br>11/16                                                                       | 17<br>11/16                                                                         | No             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-200 <b>New</b> | -414350                                                                             | M10x1                                                                               | 20,0<br>13/16                                                                       | 17<br>11/16                                                                         | No             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-205 <b>New</b> | -414367                                                                             | M10x1                                                                               | 20,5<br>13/16                                                                       | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-220 <b>New</b> | -414374                                                                             | M10x1                                                                               | 22,0<br>7/8                                                                         | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-225 <b>New</b> | -414381                                                                             | M10x1                                                                               | 22,5<br>7/8                                                                         | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-255 <b>New</b> | -414398                                                                             | M10x1                                                                               | 25,5<br>1                                                                           | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-283 <b>New</b> | -414404                                                                             | M10x1                                                                               | 28,3<br>1 1/8                                                                       | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-300 <b>New</b> | -414411                                                                             | M10x1                                                                               | 30,5<br>1 3/16                                                                      | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-320 <b>New</b> | -414435                                                                             | M10x1                                                                               | 32,0<br>1 1/4                                                                       | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 122-325 <b>New</b> | -414442                                                                             | M16x1,5                                                                             | 32,5<br>1 1/4                                                                       | 17<br>11/16                                                                         | Yes            | 0,3<br>0.662                                                                          | ✓                                                                                     |

## PRODUCT DETAILS

| #                  |  |  |  |  | With Power Nut |  |  |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    | GTIN                                                                              |                                                                                   | mm/inch                                                                           | mm/inch                                                                           |                | kg/lb                                                                               |                                                                                     |
| 122-350 <b>New</b> | -414459                                                                           | M16x1,5                                                                           | 35,0<br>1 3/8                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-370 <b>New</b> | -414466                                                                           | M16x1,5                                                                           | 37,0<br>1 7/16                                                                    | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-405 <b>New</b> | -414473                                                                           | M16x1,5                                                                           | 40,5<br>1 9/16                                                                    | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-450 <b>New</b> | -414480                                                                           | M16x1,5                                                                           | 45,0<br>1 3/4                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-470 <b>New</b> | -414497                                                                           | M20x1,5                                                                           | 47,0<br>1 7/8                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-505 <b>New</b> | -414503                                                                           | M20x1,5                                                                           | 50,5<br>1 15/16                                                                   | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-540 <b>New</b> | -414510                                                                           | M20x1,5                                                                           | 54,0<br>2 1/8                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-600 <b>New</b> | -414527                                                                           | M20x1,5                                                                           | 60,0<br>2 3/8                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-635 <b>New</b> | -414534                                                                           | M20x1,5                                                                           | 63,5<br>2 1/2                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-700 <b>New</b> | -414541                                                                           | M20x1,5                                                                           | 70,0<br>2 3/4                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-750 <b>New</b> | -414558                                                                           | M20x1,5                                                                           | 75,0<br>2 15/16                                                                   | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 122-800 <b>New</b> | -414565                                                                           | M20x1,5                                                                           | 80,0<br>3 1/8                                                                     | 17<br>11/16                                                                       | Yes            | 0,3<br>0.662                                                                        | ✓                                                                                   |



PRODUCT DETAILS

SERIES 334-820  
CONTROL HOLE PUNCH



The control hole punches of series 334-820 are used for marking test labels and for the cancellation of receipts, tickets, train passes, etc.

BENEFITS

- Stable construction and easy application

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 334-820 | -929558                                                                                   | 120<br>4 3/4                                                                                 | 3<br>1/8                                                                                     | 0,18<br>0.397                                                                                | ✓                                                                                   |



SERIES 750  
REVOLVING HOLE PUNCH



- BENEFITS**
- Anti-slip safety (spindle neck) Thighs made of red PVC
  - Hole punch diameter 2 – 2.5 – 3 – 3.5 – 4 and 4.5 mm
  - The set hole size is legible at the sight window.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 750-220 | -611927                                                                                     | 220<br>8 11/16                                                                                 | 2,0; 2,5; 3,0; 3,5; 4,0;<br>4,5<br>1/16, 1/8, 1/8, 1/8,<br>3/16, 3/16                          | 0,27<br>0.595                                                                                  | ✓                                                                                     |
| 750-250 | -650520                                                                                     | 250<br>9 13/16                                                                                 | 2,0; 2,5; 3,0; 3,5; 4,0;<br>4,5<br>1/16, 1/8, 1/8, 1/8,<br>3/16, 3/16                          | 0,45<br>0.992                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 970 IDEAL SCISSORS



The Ideal scissors in the heavy-duty version are used for straight and continuous cuts as well as figure cuts on hard-to-separate sheets. The arms of the scissors are made of sturdy steel sheet and equipped with an anti-slip safety 2-component cover. The built-in opening spring ensures easy handling and operation. The maximum cutting capacity ranges from 1.2 mm for sheets up to 1.8 mm for V2A sheets. Thanks to the optimized design and geometry of the scissors, hard-to-reach places can also be accessed.

#### BENEFITS

- High force through lever amplification
- Ergonomic handle for fatigue-free working
- Available in right-hand or left-hand cutting.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |                                                                                    | kg/lb                                                                               |                                                                                     |
| 970-260 | -687427                                                                           | 260<br>10 1/4                                                                     | 32<br>1 1/4                                                                       | 1,8<br>1/32                                                                       | Right                                                                              | 0,525<br>1.158                                                                      | ✓                                                                                   |
| 970-261 | -687595                                                                           | 260<br>10 1/4                                                                     | 32<br>1 1/4                                                                       | 1,8<br>1/32                                                                       | Left                                                                               | 0,54<br>1.191                                                                       | ✓                                                                                   |

### SERIES 971 CIRCULAR PATTERN SNIPS



The circular pattern snips in the lightweight version are used for curved cuts as well as short and straight cuts. The arms of the snips are made of sturdy sheet steel and equipped with an anti-slip safety 2-component cover. The built-in opening spring guarantees easy handling and operation. The maximum cutting capacity ranges from 1.0 mm for V2A sheets to 1.2 mm for sheets. Thanks to the optimized design and geometry of the snips, even hard-to-reach spots can be accessed.

#### BENEFITS

- High force through lever amplification
- Ergonomic handle for fatigue-free working
- Curved shape available for right- or left-cutting

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                                                                                      | kg/lb                                                                                 |                                                                                       |
| 971-240 | -557157                                                                             | 243<br>9 9/16                                                                       | 30<br>1 3/16                                                                        | 1,2<br>1/32                                                                         | Right                                                                                | 0,4<br>0.882                                                                          | ✓                                                                                     |
| 971-241 | -557232                                                                             | 243<br>9 9/16                                                                       | 30<br>1 3/16                                                                        | 1,2<br>1/32                                                                         | left                                                                                 | 0,38<br>0.838                                                                         | ✓                                                                                     |
| 971-242 | -558222                                                                             | 250<br>9 13/16                                                                      | 30<br>1 3/16                                                                        | 1,2<br>1/32                                                                         | left                                                                                 | 0,4<br>0.882                                                                          | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 972 SHEET METAL SHEARS



The heavy-duty figurine sheet metal shear is used for curve cuts as well as short and straight cuts. The arms of the shear are made of sturdy sheet steel and are equipped with an anti-slip safety 2-component cover. The built-in opening spring ensures easy handling and operation. The maximum cutting capacity ranges from 1.2 mm for V2A sheets up to 1.8 mm for sheets. Thanks to the optimized design and geometry of the shear, even hard-to-reach areas can be accessed.

#### BENEFITS

- High force through lever amplification
- Ergonomic handle for fatigue-free working
- Curved shape available in right or left cutting.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |                                                                                    | kg/lb                                                                               |                                                                                     |
| 972-260 | -558307                                                                           | 260<br>10 1/4                                                                     | 40<br>1 9/16                                                                      | 1,8<br>1/32                                                                       | Right                                                                              | 0,465<br>1.025                                                                      | ✓                                                                                   |
| 972-261 | -558482                                                                           | 260<br>10 1/4                                                                     | 40<br>1 9/16                                                                      | 1,8<br>1/32                                                                       | left                                                                               | 0,475<br>1.047                                                                      | ✓                                                                                   |

### SERIES 973 IDEAL SHEARS



The Ideal shear in the lightweight version is used for straight and continuous cuts as well as figure cuts on hard-to-separate sheets. The arms of the shear are made of sturdy sheet steel and are equipped with an anti-slip safety 2-component coating. The built-in opening spring ensures easy handling and operation. The maximum cutting capacity ranges from 1.0 mm for V2A sheets to 1.2 mm for sheets. Thanks to the optimized design and geometry of the shear, hard-to-reach areas can also be accessed.

#### BENEFITS

- High force through lever amplification
- Ergonomic handle for fatigue-free working
- Available as right-hand or left-hand cutting

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                                                                                      | kg/lb                                                                                 |                                                                                       |
| 973-241 | -558635                                                                             | 235<br>9 1/4                                                                        | 30<br>1 3/16                                                                        | 1,2<br>1/32                                                                         | left                                                                                 | 0,415<br>0.915                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 974 IDEAL SHEARS



The Ideal shear in the heavy version is used for straight and continuous cuts as well as figure cuts on hard-to-separate sheets. The arms of the shear are made of sturdy sheet steel and equipped with an anti-slip safety 2-component coating. The built-in opening spring guarantees easy handling and operation. The maximum cutting capacity ranges from 1.2 mm for V2A sheets to 1.8 mm for sheets. Thanks to the optimized design and geometry of the shear, even hard-to-reach areas can be accessed.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |                                                                                    | kg/lb                                                                               |                                                                                     |
| 974-260 | -558710                                                                           | 260<br>10 1/4                                                                     | 32<br>1 1/4                                                                       | 1,8<br>1/32                                                                       | Right                                                                              | 0,535<br>1.180                                                                      | ✓                                                                                   |
| 974-261 | -558895                                                                           | 260<br>10 1/4                                                                     | 32<br>1 1/4                                                                       | 1,8<br>1/32                                                                       | left                                                                               | 0,53<br>1.169                                                                       | ✓                                                                                   |

### SERIES 974-HS IDEAL SHEARS



The Ideal scissors are used for straight and continuous cuts as well as figure cuts on difficult-to-separate sheets. The scissors head is TiN-coated and ensures an even higher service life. The blades are made of high-speed steel, which increases the cutting speed.

#### BENEFITS

- High force through lever amplification
- Ergonomic handle for fatigue-free working
- TiN-coated scissors head for higher tool life
- Cutting from HSS to increase cutting speed
- Available for left or right cutting

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                                                                                      | kg/lb                                                                                 |                                                                                       |
| 974-HSL | -710279                                                                             | 260<br>10 1/4                                                                       | 37<br>1 7/16                                                                        | 1,8<br>1/32                                                                         | Right                                                                                | 0,55<br>1.213                                                                         | ✓                                                                                     |
| 974-HSR | -710354                                                                             | 260<br>10 1/4                                                                       | 37<br>1 7/16                                                                        | 1,8<br>1/32                                                                         | left                                                                                 | 0,55<br>1.213                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 980 BERLINER SHEARS



The Berlin sheet metal shear is used for long and straight cuts for non-deforming cutting of sheets. Thanks to the blue protective coating, the arms have a particularly good grip. The firm stop protects the blades and prevents possible injury from crushing. Additionally, the sheet metal shear is characterized by easy handling and smooth cutting.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 980-250 | -560775                                                                                   | 250<br>9 13/16                                                                               | Right                                                                             | 0,465<br>1.025                                                                               | ✓                                                                                   |
| 980-275 | -560850                                                                                   | 275<br>10 13/16                                                                              | Right                                                                             | 0,645<br>1.422                                                                               | ✓                                                                                   |
| 980-300 | -645922                                                                                   | 300<br>11 13/16                                                                              | Right                                                                             | 0,685<br>1.510                                                                               | ✓                                                                                   |

### SERIES 981 PELIKAN CONTINUOUS CUTTING SCISSORS



The Pelikan guillotine shear is used for long, straight as well as continuous cuts for non-chip cutting of sheets. Due to its special design, the shear is particularly suitable for cutting sheet metal panels. Thanks to the blue protective coating, the arms have a particularly good grip. The fixed stop protects the blades and prevents possible injury from crushing. Additionally, the sheet metal shear is characterized by its easy handling and smooth cutting.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 981-300 | -560935                                                                                     | 300<br>11 13/16                                                                                | Right                                                                               | 0,68<br>1.499                                                                                  | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 982 SHEET METAL SHEARS



The sheet metal shears are used for short and straight cuts as well as contour cuts for non-deforming cutting of sheets. Thanks to the blue protective coating, the arms have particularly good grip. The solid stop protects the blades and prevents possible injury from crushing. In addition, the shears stand out for their easy handling and smooth cutting.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           |                                                                                   | kg/lb                                                                               |                                                                                     |
| 982-250 | -561017                                                                           | 250<br>9 13/16                                                                    | Right                                                                             | 0,465<br>1.025                                                                      | ✓                                                                                   |
| 982-251 | -561192                                                                           | 250<br>9 13/16                                                                    | left                                                                              | 0,52<br>1.147                                                                       | ✓                                                                                   |
| 982-275 | -561277                                                                           | 275<br>10 13/16                                                                   | Right                                                                             | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 982-276 | -561352                                                                           | 275<br>10 13/16                                                                   | left                                                                              | 0,47<br>1.036                                                                       | ✓                                                                                   |
| 982-300 | -646004                                                                           | 300<br>11 13/16                                                                   | Right                                                                             | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 982-301 | -646189                                                                           | 300<br>11 13/16                                                                   | Left                                                                              | 0,7<br>1.544                                                                        | ✓                                                                                   |

### SERIES 983 IDEAL SHEARS



The Ideal scissors are used for straight and tapered cuts as well as figure cuts for cutting sheets without deformation. Thanks to the blue protective coating, the arms have a particularly good grip. The solid stop protects the blades and prevents possible injury from crushing. In addition, the sheet metal scissors stand out for their easy handling and smooth cutting.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             |                                                                                     | kg/lb                                                                                 |                                                                                       |
| 983-260 | -561437                                                                             | 260<br>10 1/4                                                                       | Right                                                                               | 0,615<br>1.356                                                                        | ✓                                                                                     |
| 983-261 | -561505                                                                             | 260<br>10 1/4                                                                       | left                                                                                | 0,59<br>1.301                                                                         | ✓                                                                                     |
| 983-280 | -561680                                                                             | 280<br>11 1/32                                                                      | Right                                                                               | 0,65<br>1.433                                                                         | ✓                                                                                     |
| 983-281 | -561765                                                                             | 280<br>11 1/32                                                                      | left                                                                                | 0,65<br>1.433                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 986 GOLDSMITH / FINE SHEET METAL SHEARS



The goldsmith / sheet metal shears are used for cutting thin sheets. Thanks to the protective coating, the arms have a particularly good grip. The firm stop protects the blades and prevents possible injury from crushing. The slim design of the arms allows processing even in hard-to-reach places.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.
- Slim thigh shape for working in hard-to-reach places
- Available with straight or curved cutting edges

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 986-180 | -562182                                                                                   | 180<br>7 1/16                                                                                | Right                                                                             | 0,15<br>0.331                                                                                | ✓                                                                                   |
| 986-181 | -562267                                                                                   | 180<br>7 1/16                                                                                | left                                                                              | 0,12<br>0.265                                                                                | ✓                                                                                   |

### SERIES 987 GOLDSMITH / FINE SHEET METAL SHEARS



The goldsmith's fine sheet metal shear is used for cutting thin sheets. Thanks to the protective coating, the arms have a particularly good grip. The slim design of the arms allows processing even in hard-to-reach places.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.
- Slim thigh shape for working in hard-to-reach places
- Available with straight or curved cutting edges

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 987-180 | -562342                                                                                     | 180<br>7 1/16                                                                                  | Right                                                                               | 0,15<br>0.331                                                                                  | ✓                                                                                     |
| 987-181 | -562427                                                                                     | 180<br>7 1/16                                                                                  | left                                                                                | 0,13<br>0.287                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 988 GOLDSMITH / FINE SHEET METAL SHEARS



The goldsmith / sheet metal shears are used for cutting thin sheets. Thanks to the protective coating, the arms have a particularly good grip. The firm stop protects the blades and prevents possible injury from crushing. The slim design of the arms allows processing even in hard-to-reach places.

#### BENEFITS

- High force through lever amplification
- Fixed stop offers protection for the blades.
- The protective coating ensures better grip.
- Slim thigh shape for working in hard-to-reach places
- Available with straight or curved cutting edges

#### TECHNICAL ATTRIBUTES

| #       | GTIN    | mm/inch       |       |                | kg/lb |  |
|---------|---------|---------------|-------|----------------|-------|--|
| 988-180 | -562595 | 180<br>7 1/16 | Right | 0,105<br>0.331 | ✓     |  |
| 988-181 | -562670 | 180<br>7 1/16 | left  | 0,09<br>1.985  | ✓     |  |

### SERIES 993 UNIVERSAL COMBINATION SCISSORS



The universal combination scissors are used for cutting various materials for industry and crafts. The scissors cut, for example, sheet metal, wire, plastic, rubber, leather, cardboard, and paper. This makes them a true all-rounder among cutting tools. Equipped with a practical one-handed metal lock, the scissors can be easily opened or closed.

#### BENEFITS

- High force through lever amplification
- Practical One-Handed Closure
- Universally applicable for processing various materials

#### TECHNICAL ATTRIBUTES

| #       | GTIN    | mm/inch      | mm/inch      |       | kg/lb          |   |
|---------|---------|--------------|--------------|-------|----------------|---|
| 993-140 | -563585 | 140<br>5 1/2 | 33<br>1 5/16 | Right | 0,08<br>1.764  | - |
| 993-190 | -563660 | 190<br>7 1/2 | 42<br>1 5/8  | Right | 0,125<br>0.276 | ✓ |

PRODUCT DETAILS

SERIES 995  
WORK SCISSORS



The work scissors are used for cutting thick paper, cardboard, thin rubber, leather, and textiles, making them versatile. They feature one long and one round grip eye, which guarantees optimal guidance.

- BENEFITS**
- High force through lever amplification
  - Universally applicable for processing various materials
  - Optimal handling thanks to long and round grip eye

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch |  | <br>kg/lb |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 995-175 | -166441                                                                                   | 250<br>9 13/16                                                                               | 83<br>3 1/4                                                                                  | Right                                                                              | 0,215<br>0.474                                                                               |
| 995-200 | -563905                                                                                   | 175<br>6 7/8                                                                                 | 94<br>3 11/16                                                                                | Right                                                                              | 0,22<br>0.485                                                                                |
| 995-225 | -166465                                                                                   | 225<br>8 7/8                                                                                 | 110<br>4 5/16                                                                                | Right                                                                              | 0,285<br>0.628                                                                               |
| 995-250 | -564087                                                                                   | 200<br>7 7/8                                                                                 | 120<br>4 3/4                                                                                 | Right                                                                              | 0,4<br>0.882                                                                                 |

SERIES 997  
DOCHTSCHERE



The wick scissors are used to cut burnt-down wicks to the desired length. The glowing wick stays on the cutting edge without contaminating the candle. The wick scissors feature two round finger holes that ensure optimal handling.

- BENEFITS**
- High force through lever amplification
  - Cut the glowing wick.
  - Optimal handling thanks to round grip eyes

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch |  | <br>kg/lb |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 997-150 | -140311                                                                                     | 150<br>5 7/8                                                                                   | 43<br>1 11/16                                                                                  | Right                                                                                | 0,215<br>0.474                                                                                 |







# PRESSING & INSERTION

Both for the professional and precise installation of bearings, the exchange of silent bearings on axles in the automotive industry, as well as for the hydraulic pressing in and out of kingpins - KUKKO offers the perfect solution for every application.

The activity Pressing & Insertion includes:

- Ball bearing installation tool sets
- Universal press frames
- Workshop press AXLE



KUKKO // *Pull forward*



# PRESSING & INSERTION



# APPLICATION BEARING INSTALLATION TOOL OF SERIES 71

The heavy-duty steel bearing installation tool set of series 71 is used for installing bearings using a hydraulic press or hammer in handicraft, industry, and workshop. The set includes 33 impact rings and 5 impact tubes made of extra strong steel, as well as 1 SELCTHOR with two different impact inserts (PU/CA). The tool set enables damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

## Benefits

- Application-oriented selection for universal use
- The required combination of impact ring and impact sleeve for installing the ball bearing can be found in the table in the case lid
- By combining impact ring and impact tube, the installation forces are never transmitted through the rolling elements of the bearing, thus protecting it

## CONSTRUCTION



## SETS

The bearing installation sets are provided in various set combinations. Depending on the application, you can choose from different assortments.



K-71-L-F



K-71-W-B



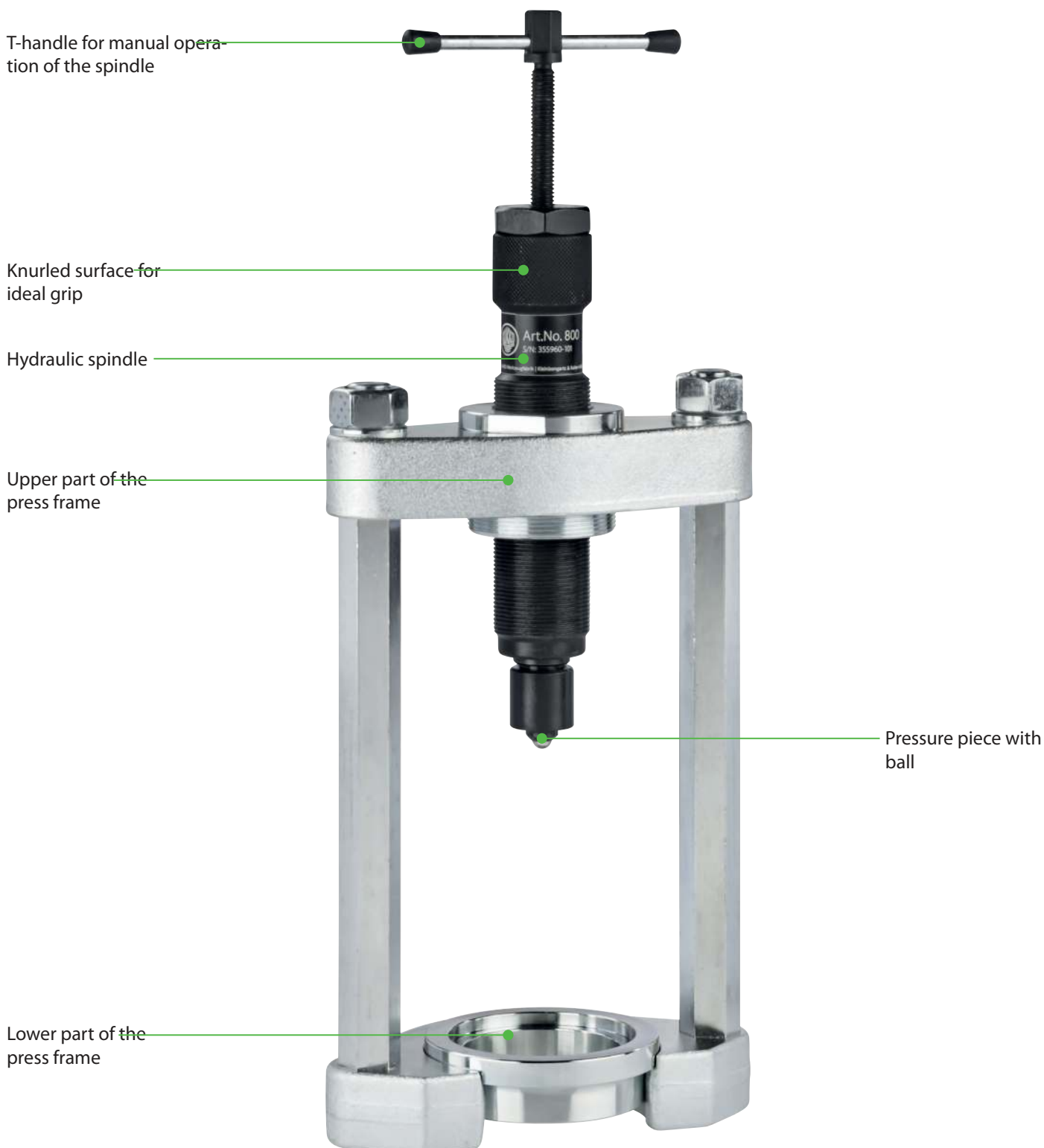
# APPLICATION UNIVERSAL PRESS FRAME OF SERIES 880 & 890

The universal press frames for silent bushings are used for changing bearings on front and rear axles without removing the axle in automotive applications, e.g., for silent bearings, hydro bearings, plastic bearings, ball joints, or shock absorber rubber. Press frames of series 880 are available in different models for varying load requirements and are universally applicable.

## Benefits

- The compact and sturdy design makes the press frames versatile in their application
- The hydraulic system enables high pull-off performance with minimal effort
- The axially operating stroke piston does not rotate within the hydraulic spindle

## CONSTRUCTION



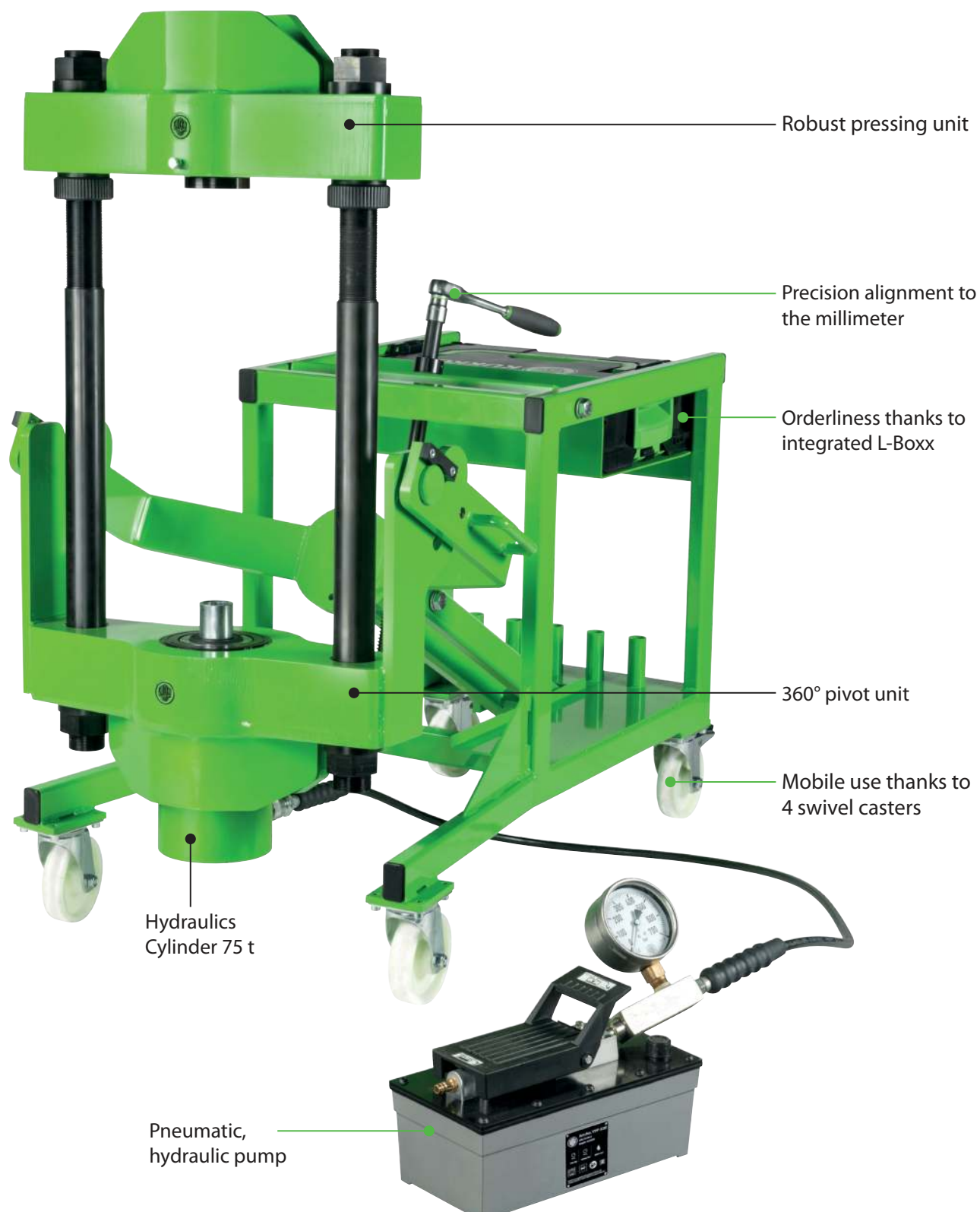
# APPLICATION OF THE KNUCKLE PIN PRESS AXLE

The hydraulic knuckle pin press is used for quick pressing in and out of all common knuckle pins on commercial vehicle front axles. For positioning, the working unit is pivotable and adjustable, and the flat design enables work even on vehicles with low clearance.

## Benefits

- The press can be used both with the axle installed and removed
- The 360° pivotable lever operation allows ergonomic handling from the working area
- Flexible positioning in the workshop due to its mobile application

## CONSTRUCTION

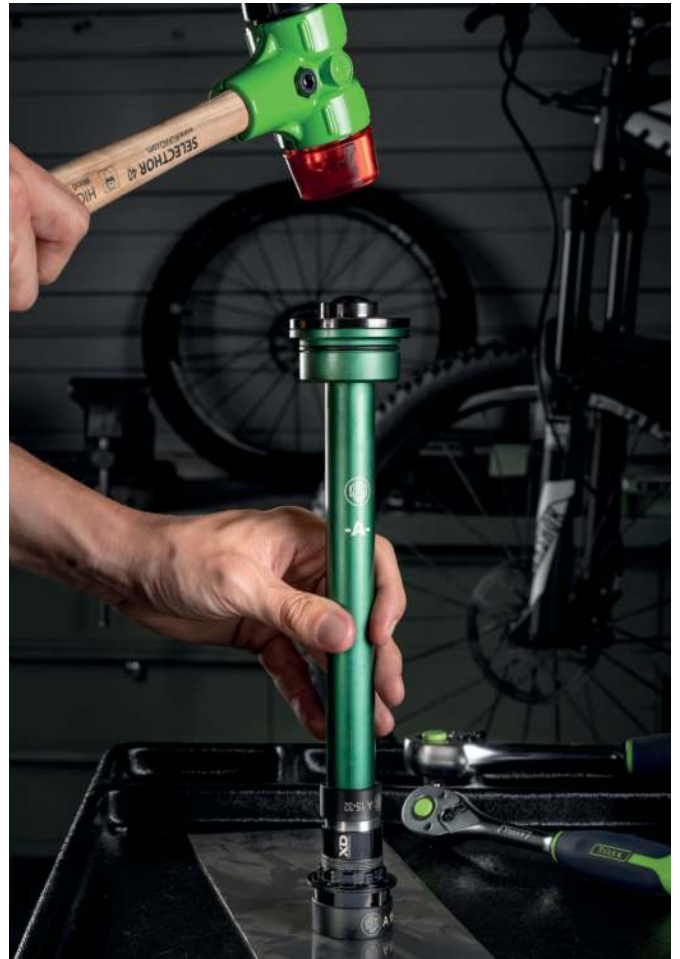




## APPLICATION EXAMPLES



Inserting the matching impact ring into the impact tube when using a K-71 set



Pressing in a bearing using a K-71



The hydraulic knuckle pin press "AXLE"Y-AP-75 is adjusted with a ratchet



The hydraulic knuckle pin press "AXLE"Y-AP-75 is ready for use on a truck

SERIES 71  
BEARING INSTALLATION TOOL SET MADE OF  
STEEL, HEAVY-DUTY.



The heavy-duty bearing installation tool set made of steel from series 71 is used for the installation of bearings using a hydraulic press or hammer in crafts, industry, and workshops. The set includes 33 impact rings and 5 impact tubes made of extra strong steel, as well as 1 SELECTHOR with two different impact inserts (PU/CA). The tool set allows for damage-free installation of bearings without damaging shafts, bearing housings, or seal rings.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The combination of the impact ring and impact sleeve required for the installation of the ball bearing can be found in the table on the lid of the suitcase.
- Combining the impact ring and impact tube ensures that the installation forces are never transmitted through the rolling bodies of the bearing, thus protecting it.
- The included SELECTHOR hammer can be used flexibly by swapping the provided striking heads.



TECHNICAL ATTRIBUTES

| #  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 71 | -314841                                                                                     | 15, 20, 30, 40, 55<br>9/16;13/16;1 3/16;1 9/16;2 3/16                                          | 25, 30, 40, 50, 65<br>1                                                                        | 225<br>8 7/8                                                                                   | 26 - 110<br>1 1/32-4 5/16                                                                       | 17,75<br>39.139                                                                                | ✓                                                                                     |

## SERIES K-71-L BALL BEARING INSTALLATION KIT, LIGHTWEIGHT CONSTRUCTION SITE MODEL



The ball bearing installation kits from series K-71-L are used for the quick, precise, and safe installation of bearings and seal rings in crafts, industry, and workshops. The set includes impact rings made of impact-resistant polyoxymethylene (POM-C), impact tubes made of aluminum, an impact head, and a soft-face hammer. The tool set ensures the damage-free installation of bearings without damage to axles, bearing housings, or seal rings.

### BENEFITS

- Application-oriented assembly for universal use
- By storing it in the box, the completeness of the set can be easily overviewed.
- The impact rings are equipped with a rubber ring and ensure the locking on the impact tube.
- The required combination of impact ring and impact sleeve for the installation of the ball bearing can be found in the table in the lid of the case.
- By combining the impact ring and impact tube, the installation forces are never transmitted through the roller bodies of the bearing, thus protecting it.



### TECHNICAL ATTRIBUTES

| #                   | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-71-L-A            | -909818                                                                                     | 19, 32<br>3/4; 1 1/4                                                                           | 220<br>8 11/16                                                                                 | 26 - 55<br>1 1/32-2 3/16                                                                       | 5,155<br>11.367                                                                                | ✓                                                                                     |
| K-71-L-B            | -909825                                                                                     | 32, 50<br>1 1/4, 1<br>15/16                                                                    | 220<br>8 11/16                                                                                 | 52 - 110<br>2 1/16-4 5/16                                                                      | 6,15<br>13.561                                                                                 | ✓                                                                                     |
| K-71-L-C            | -909832                                                                                     | 19, 32, 50<br>1 1/4, 1<br>15/16                                                                | 220<br>8 11/16                                                                                 | 26 - 110<br>1 1/32-4 5/16                                                                      | 6,555<br>14.454                                                                                | ✓                                                                                     |
| K-71-L-D <b>New</b> | -013355                                                                                     | 19, 32, 50, 60<br>3/4                                                                          | 220<br>8 11/16                                                                                 | 26 - 130<br>1 1/32-5 1/8                                                                       | 9,265<br>14.454                                                                                | ✓                                                                                     |



SERIES 880  
UNIVERSAL PRESS FRAME FOR SILENT  
BUSHINGS



The universal press frames for silent bushings are used for axle changes on the front and rear axles in automotive applications without removing the axle, for example, for silent bearings, hydraulic bearings, plastic bearings, control arms or shock absorber rubber. The press frames of the series 880 are available in various designs for varying load requirements and can be used universally.

BENEFITS

- For the series 800, there are numerous easily interchangeable and combinable individual parts and extensions.
- The compact and sturdy design makes the press frames versatile in their application.
- The hydraulics enable high pull-out performance with low manual effort.
- The axial working piston does not rotate with the hydraulic spindle.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max. pressing<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 880-800 | -433689                                                                                     | 200<br>7 7/8                                                                                   | 80<br>3 1/8                                                                                    | 40<br>29.50                                                                                     | 10<br>11.02 tn sh                     | 7,1<br>15.656                                                                                  | ✓                                                                                     |
| 880-801 | -433696                                                                                     | 200<br>7 7/8                                                                                   | 80<br>3 1/8                                                                                    | 70<br>51.63                                                                                     | 15<br>16.53 tn sh                     | 6,7<br>14.774                                                                                  | ✓                                                                                     |
| 880-802 | -433702                                                                                     | 200<br>7 7/8                                                                                   | 80<br>3 1/8                                                                                    | 100<br>73.76                                                                                    | 20<br>22.05 tn sh                     | 7,16<br>15.788                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 890  
PULLER SET FOR EVOBUS SUSPENSION  
JOINTS



The puller set for suspension joints EVOBUS is used for the installation and removal of the control arm on ZF axles. The tools can be applied on axles RL 75 E, which serve as the front axle for all high-floor buses (buses with trunk, coaches from Euro II and combi buses from Euro IV) from Setra and Mercedes-Benz. Furthermore, they are applicable to the axles RL 75 EC, which are used as front axles for low-floor buses (Citaro, Setra low-floor series 400 or S 415 NF), and in coaches and combi buses as auxiliary axles.

BENEFITS

- The smooth-running spindle with trapezoidal thread allows for precise force transmission.
- Special tool for optimal application on ZF axles

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>Nm/ft lb | Max. pressing<br>force<br>t/US t. sh. | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 890-EVO1 | -020834                                                                                     | 320<br>12 5/8                                                                                  | 58 - 79<br>2 5/16-3 1/8                                                                        | 36<br>1 7/16                                                                                   | 400<br>295.04                                                                                   | 12<br>13.23 tn sh                     | 12,69<br>27.981                                                                                | ✓                                                                                     |



SERIES AXLE  
MOBILE HYDRAULIC AXLE PIN PRESS "AXLE"



The hydraulic king pin press "AXLE" of the Y-AP-75 series was developed specifically for the fast and safe pressing in and out of all common king pins on commercial vehicle front axles. The press frame is of heavy-duty design. The press is freely rotatable and lockable. The extended scope of delivery includes a pneumatic-hydraulic pump with pressure gauge, hose and coupling (YPP-525) as well as an 8-piece pressure bolt set (Y-AP-371). This makes the king pin press ready for immediate use. Optionally, two additional bolt and socket sets for MAN (Y-AP-372) and Daimler Truck (Y-AP-373) are available.

BENEFITS

- The press can be used both in the assembled and disassembled state of the axle.
- The 360° swiveling lever actuation enables ergonomic operation from within the work area
- The drain actuation is easily accessible through a well-accessible rotary valve and can be dosed to effectively prevent accidents.
- Flexible positioning in the workshop due to mobile application capability
- Wide working height range

| Druckbolzen   Pressure Bolts |                |
|------------------------------|----------------|
| Durchmesser   Diameter       | Länge   Length |
| 21,5 mm                      | 150 mm         |
| 24,5 mm                      | 150 mm         |
| 29 mm                        | 120 mm         |
| 35 mm                        | 120 mm         |
| 29 mm                        | 220 mm         |
| 35 mm                        | 220 mm         |
| 39 mm                        | 120 mm         |
| 39 mm                        | 220 mm         |



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  | Max. pressing force  |  | Consists of          |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/inch                                                                             | bar                                                                                 | °                                                                                   | t/US t. sh.          | kg/lb                                                                                 |                      |                                                                                       |
| Y-AP-75 | -691157                                                                             | 370<br>14<br>9/16                                                                   | 615<br>24 3/16                                                                      | 1.100<br>43 5/16                                                                    | 155<br>6 1/8                                                                        | 700                                                                                 | 360                                                                                 | 75<br>82.67 tn<br>sh | 286<br>630.630                                                                        | YPP-525,<br>Y-AP-371 | ✓                                                                                     |

SERIES Y-AP-3XX  
ACCESSORIES FOR “AXLE” Y-AP-75



The bolt and socket sets of series Y-AP-3XX are custom-fit accessories for the “AXLE” Y-AP-75 and enable fast and safe pressing-out and pressing-in of kingpins on Trucks. They are characterized by high load capacity and precise manufacturing, ensuring reliable, professional use in workshops and industry. Item Y-AP-372 was developed specifically for MAN vehicles, while Y-AP-373 is optimally matched to Daimler Trucks. Delivered in KUKKO L-BOXX for safe storage.

| Y-AP-371 Druckbolzen   Pressure Bolts |                | Y-AP-372 Druckbolzen   Pressure Bolts - für/for MAN |                | Y-AP-373 Druckbolzen   Pressure Bolts - für/for Daimler Truck |                |
|---------------------------------------|----------------|-----------------------------------------------------|----------------|---------------------------------------------------------------|----------------|
| Durchmesser   Diameter                | Länge   Length | Durchmesser   Diameter                              | Länge   Length | Durchmesser   Diameter                                        | Länge   Length |
| 21,5 mm                               | 150 mm         | 45 mm                                               | 33 mm          | 22 mm                                                         | 180 mm         |
| 24,5 mm                               | 150 mm         | 48 mm                                               | 100 mm         | 26 mm                                                         | 100 mm         |
| 29 mm                                 | 120 mm         | 50 mm                                               | 27 mm          | 31 mm                                                         | 120 mm         |
| 35 mm                                 | 120 mm         | 50 mm                                               | 35 mm          | 31 mm                                                         | 220 mm         |
| 29 mm                                 | 220 mm         | 56 mm                                               | 65 mm          | 37 mm                                                         | 24 mm          |
| 35 mm                                 | 220 mm         | 62 mm                                               | 115 mm         | 37 mm                                                         | 115 mm         |
| 39 mm                                 | 120 mm         | 62 mm                                               | 125 mm         | 37 mm                                                         | 120 mm         |
| 39 mm                                 | 220 mm         | 65 mm                                               | 135 mm         | 39 mm                                                         | 23 mm          |
|                                       |                | 66 mm                                               | 55 mm          | 42 mm                                                         | 23 mm          |
|                                       |                | 66 mm                                               | 100 mm         | 42 mm                                                         | 90 mm          |
|                                       |                | 70 mm                                               | 145 mm         | 45 mm                                                         | 23 mm          |
|                                       |                | 72 mm                                               | 105 mm         | 55 mm                                                         | 140 mm         |

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-AP-371 | -060076                                                                                     | 21,5 - 39<br>13/16-1 9/16                                                                      | 120 - 220<br>4 3/4-8 11/16                                                                     | 10,7<br>33.075                                                                               | Y-AP-75                                                                               | ✓                                                                                     |
| Y-AP-372 | -060083                                                                                     | 50 - 66<br>1 15/16-2 5/8                                                                       | 35 - 100<br>1 3/8-3 15/16                                                                      | 19<br>41.895                                                                                 | Y-AP-75                                                                               | ✓                                                                                     |
| Y-AP-373 | -060090                                                                                     | 22 - 37<br>7/8-1 7/16                                                                          | 70 - 220<br>2 3/4-8 11/16                                                                      | 19,1<br>42.116                                                                               | Y-AP-75                                                                               | ✓                                                                                     |

SERIES YPP  
PNEUMATIC, HYDRAULIC PUMP



The pneumatic and hydraulic pumps are used for application with the pullers from the KUKKO hydraulic program in crafts, industry, and workshops. The compressed air-operated hydraulic pump can be used via foot or hand operation and is optionally available individually or together with hose and pressure gauge.

BENEFITS

- Safety valve as overload protection ensures safe working.
- With 2-stage drain valve for easier application
- Applicable for simply acting press cylinders



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>bar | <br>cm <sup>3</sup> | Max. tension<br>force<br>t/US t. sh. | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YPP-520 | -141577                                                                                     | 700                                                                                        | 0.003 m <sup>3</sup>                                                                                   | 75<br>82.67                          | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| YPP-525 | -469732                                                                                     | 700                                                                                        | 0.003 m <sup>3</sup>                                                                                   | 75<br>82.67                          | 12,93<br>28.511                                                                                | ✓                                                                                     |

SERIES YRE  
HYDRAULIC PRESSURE CYLINDERS WITH  
COLLAR THREAD



The hydraulic pressure cylinders with collar threads of the YRE series are used with the KUKKO hydraulic program for application in all situations in crafts, industry, and workshops. The model with a large stroke length allows for energy-saving and versatile work even in difficult pulling situations or when a lot of force is required.

BENEFITS

- All models have a CR-400 coupling sleeve with dust cap.
- External threads on the cylinder head, internal threads on the piston rod, and fastening threads on the cylinder bottom enable easy assembly.
- The prestressed retractable spring increases the retraction speed and thus boosts performance.
- The integrated wiper removes contaminants from the piston and thereby extends the lifespan of the cylinder.



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         |                                                                                     | mm/inch                                                                             | bar                                                                                 | cm <sup>3</sup>                                                                      | kN                                                                                    | t/US t.<br>sh.                                                                        | kg/lb                                                                                 |                                                                                       |
| YRE-050 | -046551                                                                             | 38<br>1 1/2                                                                         | 98<br>3 7/8                                                                         | 216<br>8 1/2                                                                        | 25<br>1                                                                             | 1 1/2"-16<br>UN                                                                     | 125<br>4 15/16                                                                      | 700                                                                                 | 0.0001<br>m <sup>3</sup>                                                             | 50                                                                                    | 5<br>5.51                                                                             | 2,2<br>4.851                                                                          | ✓                                                                                     |
| YRE-101 | -870927                                                                             | 57<br>2 1/4                                                                         | 117<br>4 5/8                                                                        | 250<br>13 3/4                                                                       | 40<br>1 9/16                                                                        | 2.1/4"-14<br>UNS                                                                    | 250<br>9 13/16                                                                      | 700                                                                                 | 0.000406<br>m <sup>3</sup>                                                           | 100                                                                                   | 10<br>11.02                                                                           | 6,4<br>14.112                                                                         | ✓                                                                                     |
| YRE-106 | -879401                                                                             | 57<br>2 1/4                                                                         | 117<br>4 5/8                                                                        | 247<br>9 3/4                                                                        | 40<br>1 9/16                                                                        | 2.1/4"-14<br>UNS                                                                    | 155<br>6 1/8                                                                        | 700                                                                                 | 0.000242<br>m <sup>3</sup>                                                           | 100                                                                                   | 10<br>11.02                                                                           | 4,375<br>9.647                                                                        | -                                                                                     |
| YRE-701 | -021251                                                                             | 152<br>5 1                                                                          | 212<br>8 3/8                                                                        | 285<br>11 1/4                                                                       | 70<br>2 3/4                                                                         | 5.3/4"-12<br>UN                                                                     | 155<br>6 1/8                                                                        | 700                                                                                 | 0.001752<br>m <sup>3</sup>                                                           | 750                                                                                   | 75<br>82.67                                                                           | 32<br>70.560                                                                          | ✓                                                                                     |









# GRIPPING & HOLDING

Whether it is holding, gripping, clamping, and compressing multiple workpieces, separating flange connections, expanding the strut receptacle, clamping and riveting chains, removing and tensioning coil springs, or determining the angle during engine removal – KUKKO offers the perfect solution for every application case.

The Gripping & Holding activity includes, among others:

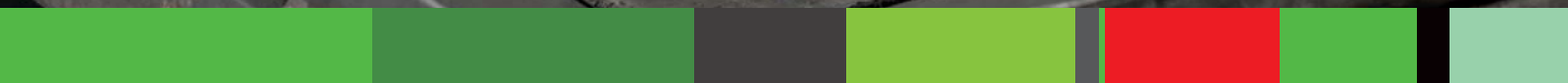
- Screw clamps
- Flange spreader
- Vises
- Flange spreader
- Pliers
- Spreader
- Chain tensioner
- Spring tensioner
- Tool holder
- URANOS



KUKKO // *Pull forward*



# GRIPPING & HOLDING



## APPLICATION

The clamping tools from KUKKO are the ideal choice when it comes to fixing or holding workpieces together. Depending on the area of application or required clamping force, KUKKO offers various tools for individual processing with hand vises, screw clamps, locking pliers, and vises.

## STRUCTURE OF A SCREW CLAMP USING THE 490P AS AN EXAMPLE



### Benefits

- 2K comfort handle provides optimal grip with wet, oily hands
- Maximum power transmission thanks to curved handle with haptoprene surface
- Slip protection enables easy locking of the sliding bracket
- Secure positioning of the sliding bracket
- Pre-setting of the reach
- One-handed locking of the sliding bracket
- Clamping force from 5,000 to 7,000 N (depending on model)
- KTL coating provides significantly increased corrosion protection



## FEATURES OF THE SERIES

### SCREW CLAMPS



**SERIES 490P**

The malleable cast iron screw clamps VIRIDIS with 2K comfort handle are used for pressing together and holding several workpieces. The steel glide rail allows high clamping force. The 490P series is equipped with a 2-component handle, which enables safe and stable work.

### HAND VISES



**SERIES 101**

The hand vises with wide jaws and hexagonal nut are used for surface clamping of smaller workpieces. The inner side of the jaws is serrated with a prismatic notch, allowing both round and edged parts to be clamped. Ideally suited for finer work and forging operations.

### LOCKING PLIERS



**SERIES 690**

The universal locking pliers are used to securely hold and press together round, profile, and flat materials. The locking pliers are very handy and can be operated with one hand. Thanks to the toggle joint mechanism, very high forces can be applied.

### FLANGE SPREADER



**SERIES 160**

Flange spreaders are used in pairs for the safe and accident-free separation of flange connections on pipelines in power plants, petrochemicals or offshore. They enable the separation of large and high-performance flanges and thus facilitate easy maintenance work.

### VICES



**SERIES 525**

The parallel vises with extremely high clamping force are used for clamping and fixing workpieces. Due to the induction-hardened parts, the vise is ideally suited for fixing medium-sized workpieces. This also ensures the necessary durability and stability of the vise.

### MOTOR DIRECTOR



**SERIES URANOS**

The motor director "URANOS" is used for guiding the tilt during the installation and removal of engines, gearboxes, and batteries of all kinds in industry and workshop. By operating the hand chain, the motor director can be universally and easily adjusted to ensure smooth working on the engine.



## APPLICATION EXAMPLES



During welding work, the all-steel screw clamp acts as a "third hand." The picture shows a model from the 469P series.



Clamping a workpiece with a vise from the 525 series



Cutting a wire with a universal locking pliers from the 690 series



Two hand vises 101-100 used to clamp several workpieces for drilling operations

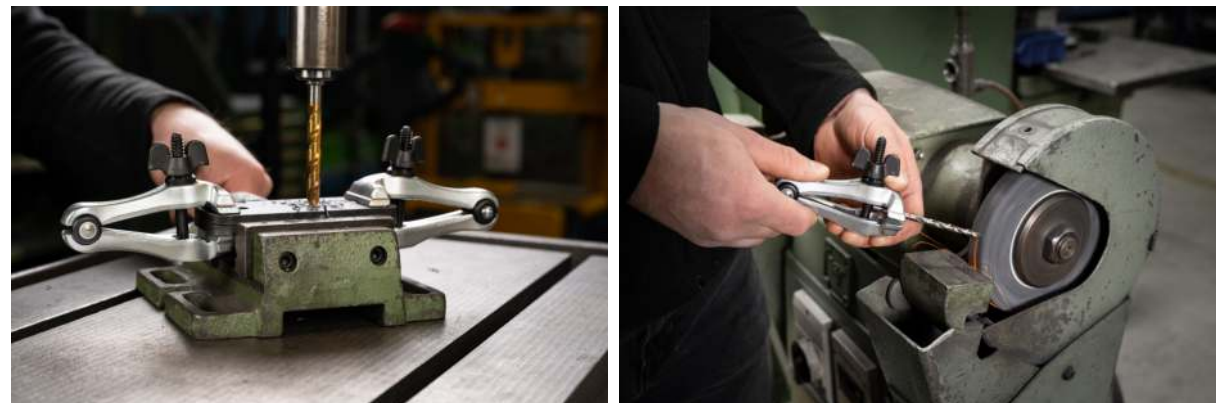
SERIES 101  
HAND VISE WITH WIDE JAW



The hand vises with a wide jaw and hex nut of the series 101 are used for flat clamping of workpieces in workshops, industry, and crafts. The inner side of the jaws is grooved with a prismatic cut, allowing round and angular parts to be clamped. The series 101 impresses with its convenience, enabling rotation and flipping of the workpiece during operation.

BENEFITS

- Universal usability in various work situations
- Robust design with flexible hinge guidance
- Easy adjustability with high clamping force
- Different versions allow for application depending on the size of the workpiece.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Clamping<br>method | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 101-100 | -535049                                                                                     | 100<br>3 15/16                                                                                 | 40<br>1 9/16                                                                                   | 18<br>11/16                                                                                    | Hex nut            | 0,365<br>0.805                                                                                 | ✓                                                                                     |
| 101-120 | -535124                                                                                     | 120<br>4 3/4                                                                                   | 45<br>1 3/4                                                                                    | 22<br>7/8                                                                                      | Hex nut            | 0,5<br>1.103                                                                                   | ✓                                                                                     |
| 101-130 | -042225                                                                                     | 130<br>5 1/8                                                                                   | 48<br>1 7/8                                                                                    | 25<br>1                                                                                        | Hex nut            | 0,545<br>1.202                                                                                 | ✓                                                                                     |
| 101-145 | -535384                                                                                     | 145<br>5 11/16                                                                                 | 52<br>2 1/16                                                                                   | 28<br>1 1/8                                                                                    | wing nut           | 0,805<br>1.775                                                                                 | ✓                                                                                     |
| 101-160 | -535469                                                                                     | 160<br>6 5/16                                                                                  | 58<br>2 5/16                                                                                   | 35<br>1 3/8                                                                                    | wing nut           | 1,04<br>2.293                                                                                  | ✓                                                                                     |
| 101-180 | -535537                                                                                     | 180<br>7 1/16                                                                                  | 60<br>2 3/8                                                                                    | 40<br>1 9/16                                                                                   | wing nut           | 1,56<br>3.440                                                                                  | ✓                                                                                     |
| 101-200 | -535612                                                                                     | 200<br>7 7/8                                                                                   | 65<br>2 9/16                                                                                   | 45<br>1 3/4                                                                                    | wing nut           | 2<br>4.410                                                                                     | ✓                                                                                     |

SERIES 102-120  
POINTED JAW VISE WITH POINTED MOUTH  
AND WING NUT



The pointed jaw vise with pointed mouth and wing nut of the series 102 is used for particularly firm gripping of workpieces on a small surface in workshops, industry, and crafts. The inner side of the jaws is ribbed with a prismatic cut, so that round and angular parts can be clamped. The series 102 impresses with its handy design, which allows for rotating and turning the workpiece during operation.

BENEFITS

- Universal usability in various work situations
- Robust design with flexible joint guidance
- Easy adjustability with high clamping force
- Ideal for limited space conditions

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 102-120 | -527617                                                                                   | 120<br>4 3/4                                                                                 | 13<br>1/2                                                                                    | 20<br>13/16                                                                                  | 0,355<br>0.783                                                                               | ✓                                                                                   |

SERIES 103  
HAND VISE WITH WIDE JAWS AND KEY



The hand vises with wide jaws and key of series 103 are used for flat clamping of workpieces in workshops, industry, and crafts. The inner side of the jaws is grooved with a prismatic cut, allowing both round and angular parts to be clamped securely. The series 103 impresses with its convenience, enabling rotation and turning of the workpiece while working.

BENEFITS

- The key enables a quick and secure grip on the workpiece
- Robust design with flexible joint guidance
- Easy adjustability with high clamping force
- Different designs allow for application depending on the size of the workpiece.

TECHNICAL ATTRIBUTES

| b | #       |  |  |  |  |  |  |
|---|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   |         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
|   | 103-160 | -909833                                                                           | 160<br>6 5/16                                                                     | 58<br>2 5/16                                                                      | 35<br>1 3/8                                                                       | 1,075<br>2.370                                                                      | ✓                                                                                   |
|   | 103-180 | -527952                                                                           | 180<br>7 1/16                                                                     | 60<br>2 3/8                                                                       | 40<br>1 9/16                                                                      | 1,635<br>3.605                                                                      | ✓                                                                                   |
|   | 103-200 | -528034                                                                           | 200<br>7 7/8                                                                      | 65<br>2 9/16                                                                      | 45<br>1 3/4                                                                       | 2,365<br>5.215                                                                      | ✓                                                                                   |



SERIES 106  
DOUBLE STRONG HAND VISE WITH WIDE  
JAW



The double-strong hand vises with wide jaw, hex nut, and key from series 106 are used for clamping workpieces in medium-heavy tasks in steel construction. The inner side of the jaws is grooved with a prismatic cut, allowing for the clamping of round and angular parts. Series 106 impresses with its ease of handling, enabling rotation and flipping of the workpiece during operation.

BENEFITS

- Universal usability in various work situations
- The key enables a quick and secure grip on the workpiece
- Extremely robust construction with flexible joint guidance
- Different designs allow for application depending on the size of the workpiece.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 106-180 | -528782                                                                                   | 180<br>7 1/16                                                                                | 68<br>2 11/16                                                                                | 40<br>1 9/16                                                                                 | 2,335<br>5.149                                                                               | ✓                                                                                   |
| 106-200 | -528867                                                                                   | 200<br>7 7/8                                                                                 | 70<br>2 3/4                                                                                  | 45<br>1 3/4                                                                                  | 2,935<br>6.472                                                                               | ✓                                                                                   |



SERIES 107  
HAND VISES FOR INSTALLERS WITH WIDE  
JAWS



The hand vises for installers with a wide jaw opening, hexagon nut and wrench from series 107 are used for clamping workpieces during work carried out by installers and plumbers. The inner side of the jaws is ribbed with a prismatic groove so that round and angular parts can be clamped. Series 107 impresses with its handiness, which allows the workpiece to be turned and rotated while working.

BENEFITS

- Universal usability in various work situations
- The key enables a quick and secure grip on the workpiece
- Very robust design with flexible joint guidance

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 107-200 | -528942                                                                           | 200<br>7 7/8                                                                      | 85<br>3 3/8                                                                       | 50<br>1 15/16                                                                     | 2,995<br>6.604                                                                      | ✓                                                                                   |

SERIES 109  
WIDE MOUTH MACHINE CLAMP



The machine vises with wide jaws, hexagon nut and key of series 109 are used for clamping workpieces under the highest stress in workshops, industry, and craftsmanship. The inside of the jaws is grooved with a prismatic cut, allowing both round and angular parts to be clamped. The series 109 convinces with its handling, enabling rotation and repositioning of the workpiece while working.

BENEFITS

- Universal usability in various work situations
- The key enables a quick and secure grip on the workpiece
- Very robust design with flexible joint guidance
- Different designs allow for application depending on the size of the workpiece.

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 109-160 | -529024                                                                           | 160<br>6 5/16                                                                     | 65<br>2 9/16                                                                      | 40<br>1 9/16                                                                      | 2,27<br>5.005                                                                       | ✓                                                                                   |
| 109-180 | -529109                                                                           | 180<br>7 1/16                                                                     | 70<br>2 3/4                                                                       | 40<br>1 9/16                                                                      | 3,03<br>7.277                                                                       | ✓                                                                                   |
| 109-200 | -529284                                                                           | 200<br>7 7/8                                                                      | 80<br>3 1/8                                                                       | 50<br>1 15/16                                                                     | 3,52<br>7.762                                                                       | ✓                                                                                   |
| 109-250 | -529369                                                                           | 250<br>9 13/16                                                                    | 90<br>3 9/16                                                                      | 60<br>2 3/8                                                                       | 5,465<br>12.050                                                                     | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES 112-100 NARROW JAW PULLER WITH A 45-DEGREE ANGLED MOUTH



The screw clamps with narrow, angled jaws of the series 112-100 are used for clamping tires from barrels, saw blades during sharpening, etc. in workshops, industry, and trade. The series 112-100 impresses with its application-oriented specialization, ensuring optimal clamping.

#### BENEFITS

- Universal usability in various work situations
- Very robust design with flexible joint guidance
- Different versions enable application depending on the size of the workpiece.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 112-125 | -529444                                                                           | 125<br>4 15/16                                                                    | 28<br>1 1/8                                                                       | 32<br>1 1/4                                                                       | 0,595<br>1.312                                                                      | ✓                                                                                   |
| 112-150 | -529512                                                                           | 150<br>5 7/8                                                                      | 40<br>1 9/16                                                                      | 35<br>1 3/8                                                                       | 1<br>2.205                                                                          | ✓                                                                                   |

### SERIES 113-1 FLAT FILE CLAMP WITH FINE JAW



The 113 series stem clamping vises with fine jaws are used for clamping particularly fine workpieces in workshops, industry, and craftsmanship. The inside of the jaws is ribbed with a prismatic cut, allowing round and angular parts to be clamped. The 113 series is particularly suitable for fine work, for example on watches, and enables a delicate and precise working method.

#### BENEFITS

- Universal usability in various work situations
- Robust design with flexible hinge guidance
- Different designs allow for application depending on the size of the workpiece.
- The clamp is very handy and the coordinated handle ensures a good grip.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 113-115 | -599232                                                                             | 115<br>4 9/16                                                                       | 16<br>5/8                                                                           | 6<br>1/4                                                                            | 0,06<br>1.323                                                                         | ✓                                                                                     |
| 113-116 | -589745                                                                             | 115<br>4 9/16                                                                       | 16<br>5/8                                                                           | 6<br>1/4                                                                            | 0,01<br>0.221                                                                         | ✓                                                                                     |
| 113-130 | -599317                                                                             | 130<br>5 3/16                                                                       | 20<br>13/16                                                                         | 7<br>1/4                                                                            | 0,085<br>1.874                                                                        | ✓                                                                                     |
| 113-131 | -589820                                                                             | 130<br>5 3/16                                                                       | 20<br>13/16                                                                         | 7<br>1/4                                                                            | 0,08<br>1.764                                                                         | ✓                                                                                     |

## SERIES 469 ALL-STEEL SCREW CLAMPS VIRIDIS WITH WOODEN HANDLE

The all-steel clamping tools VIRIDIS with wooden handle from series 469 are used for compressing and holding multiple workpieces in crafts, industry, and workshops. With the built-in spring suspension, the clamps absorb the vibrations of the workpiece. Series 469, with its round wooden handle, is the classic of the clamping tool range.

### BENEFITS

- Tensile force up to 10,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- No danger of injury due to concealed grip attachment in the wooden handle.
- Numerous variations of the spread and extension of clamps allow for holding parts of various sizes.



### TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>N | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 469-0100-050 | -140304                                                                                     | 151<br>5 15/16                                                                                 | 100 / 50<br>3 15/16   1 15/16                                                                  | 2.200                                                                                    | 11,5 x 5,7<br>7/16 x 1/4                                                                        | 0,203<br>0.507                                                                                 | ✓                                                                                     |
| 469-0120-060 | -022686                                                                                     | 181<br>7 1/8                                                                                   | 120 / 60<br>4 3/4   2 3/8                                                                      | 2.700                                                                                    | 13,5 x 6,5<br>9/16 x 1/4                                                                        | 0,28<br>0.617                                                                                  | ✓                                                                                     |
| 469-0160-080 | -010798                                                                                     | 225<br>8 7/8                                                                                   | 160 / 80<br>6 5/16   3 1/8                                                                     | 3.000                                                                                    | 16 x 7,5<br>5/8 x 5/16                                                                          | 0,52<br>1.147                                                                                  | ✓                                                                                     |
| 469-0200-050 | -022822                                                                                     | 251<br>9 7/8                                                                                   | 200 / 50<br>7 7/8   1 15/16                                                                    | 2.200                                                                                    | 11,5 x 5,7<br>7/16 x 1/4                                                                        | 0,245<br>0.540                                                                                 | ✓                                                                                     |
| 469-0200-060 | -022990                                                                                     | 261<br>10 1/4                                                                                  | 200 / 60<br>7 7/8   2 3/8                                                                      | 2.700                                                                                    | 13,5 x 6,5<br>9/16 x 1/4                                                                        | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| 469-0200-080 | -023058                                                                                     | 265<br>10 7/16                                                                                 | 200 / 80<br>7 7/8   3 1/8                                                                      | 3.000                                                                                    | 16 x 7,5<br>5/8 x 5/16                                                                          | 0,55<br>1.213                                                                                  | ✓                                                                                     |
| 469-0200-100 | -023126                                                                                     | 280<br>11 1/32                                                                                 | 200 / 100<br>7 7/8   3 15/16                                                                   | 4.500                                                                                    | 19,5 x 9,5<br>3/4 x 3/8                                                                         | 0,945<br>2.084                                                                                 | ✓                                                                                     |
| 469-0250-100 | -023232                                                                                     | 330<br>12 1                                                                                    | 250 / 100<br>9 13/16   3 15/16                                                                 | 4.500                                                                                    | 19,5 x 9,5<br>3/4 x 3/8                                                                         | 1<br>2.205                                                                                     | ✓                                                                                     |
| 469-0250-120 | -023294                                                                                     | 337<br>13 1/4                                                                                  | 250 / 120<br>9 13/16   4 3/4                                                                   | 5.500                                                                                    | 22 x 10,5<br>7/8 x 7/16                                                                         | 1,265<br>2.789                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

| #              |  |  |  |  |  |  |  |
|----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 469-0300-050   | -023676                                                                           | 351<br>13 13/16                                                                   | 300 / 50<br>11 13/16   1<br>15/16                                                 | 2.200                                                                             | 11,5 x 5,7<br>7/16 x 1/4                                                           | 0,285<br>0.628                                                                      | ✓                                                                                   |
| 469-0300-060   | -023744                                                                           | 361<br>14 3/16                                                                    | 300 / 60<br>11 13/16   2<br>3/8                                                   | 2.700                                                                             | 13,5 x 6,5<br>9/16 x 1/4                                                           | 0,5<br>1.103                                                                        | ✓                                                                                   |
| 469-0300-080   | -023812                                                                           | 365<br>14 3/8                                                                     | 300 / 80<br>11 13/16   3<br>1/8                                                   | 3.000                                                                             | 16 x 7,5<br>5/8 x 5/16                                                             | 0,66<br>1.455                                                                       | ✓                                                                                   |
| 469-0300-100   | -023980                                                                           | 380<br>14 15/16                                                                   | 300 / 100<br>11 13/16   3<br>15/16                                                | 4.500                                                                             | 19,5 x 9,5<br>3/4 x 3/8                                                            | 1,65<br>3.638                                                                       | ✓                                                                                   |
| 469-0300-120   | -024116                                                                           | 387<br>15 1/4                                                                     | 300 / 120<br>11 13/16   4<br>3/4                                                  | 5.500                                                                             | 22 x 10,5<br>7/8 x 7/16                                                            | 1,345<br>2.966                                                                      | ✓                                                                                   |
| 469-0300-140   | -024284                                                                           | 396<br>15 9/16                                                                    | 300 / 140<br>11 13/16   5<br>1/2                                                  | 6.700                                                                             | 25 x 12<br>1 x 1/2                                                                 | 1,85<br>4.079                                                                       | ✓                                                                                   |
| 469-0400-100   | -010927                                                                           | 480<br>18 7/8                                                                     | 400 / 100<br>15 3/4   3<br>15/16                                                  | 4.500                                                                             | 19,5 x 9,5<br>3/4 x 3/8                                                            | 0,9<br>1.985                                                                        | ✓                                                                                   |
| 469-0400-120   | -024734                                                                           | 496<br>19 1/2                                                                     | 400 / 120<br>15 3/4   4 3/4                                                       | 7.500                                                                             | 25 x 12<br>1 x 1/2                                                                 | 1,97<br>4.344                                                                       | ✓                                                                                   |
| 469-0400-120-S | -548520                                                                           | 487<br>19 3/16                                                                    | 400 / 120<br>15 3/4   4 3/4                                                       | 5.500                                                                             | 22 x 10,5<br>7/8 x 7/16                                                            | 1,49<br>3.285                                                                       | ✓                                                                                   |
| 469-0500-120   | -024802                                                                           | 596<br>23 7/16                                                                    | 500 / 120<br>19 11/16   4<br>3/4                                                  | 7.500                                                                             | 25 x 12<br>1 x 1/2                                                                 | 2,175<br>4.796                                                                      | ✓                                                                                   |
| 469-0600-120   | -010965                                                                           | 696<br>27 3/8                                                                     | 600 / 120<br>23 5/8   4 3/4                                                       | 7.500                                                                             | 25 x 12<br>1 x 1/2                                                                 | 0,9<br>1.985                                                                        | ✓                                                                                   |
| 469-0600-120-S | -548537                                                                           | 687<br>27 1/16                                                                    | 600 / 120<br>23 5/8   4 3/4                                                       | 5.500                                                                             | 22 x 10,5<br>7/8 x 7/16                                                            | 1,6<br>3.528                                                                        | ✓                                                                                   |
| 469-0800-120   | -025038                                                                           | 900<br>35 7/16                                                                    | 800 / 120<br>31 1/2   4 3/4                                                       | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 3,19<br>7.034                                                                       | ✓                                                                                   |
| 469-1000-120   | -025106                                                                           | 1100<br>43 5/16                                                                   | 1.000 / 120<br>39 3/8   4 3/4                                                     | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 4,85<br>10.694                                                                      | ✓                                                                                   |
| 469-1250-120   | -025274                                                                           | 1350<br>53 1/8                                                                    | 1.250 / 120<br>49 3/16   4 3/4                                                    | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 4,295<br>9.470                                                                      | ✓                                                                                   |
| 469-1500-120   | -025342                                                                           | 1600<br>62 1                                                                      | 1.500 / 120<br>59 1/16   4 3/4                                                    | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 5,245<br>11.565                                                                     | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 469P ALL-STEEL CLAMPS VIRIDIS WITH 2K COMFORT GRIP

The all-steel screw clamps VIRIDIS with 2K comfort grip of the series 469P are used for compressing and holding multiple workpieces in craft, industry, and workshop. With the built-in spring mechanism, the screw clamps absorb the vibrations of the workpiece. The series 469P features a 2-component grip that enables safe and stable work.

#### BENEFITS

- Tension force up to 10,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- The 2-component handle ensures maximum power transfer even with wet and oily hands.
- Numerous variations of the spread and extension of clamps allow for holding parts of various sizes.



#### TECHNICAL ATTRIBUTES

| #              |  GTIN |  mm/inch |  mm/inch |  Power<br>N |  mm/inch |  kg/lb |  |
|----------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 469P0100-050   | -780172                                                                                  | 151<br>5 15/16                                                                              | 100 / 50<br>3 15/16   1 15/16                                                               | 2.200                                                                                          | 11,5 x 5,7<br>7/16 x 1/4                                                                     | 0,2<br>0.518                                                                                | ✓                                                                                     |
| 469P0200-050   | -779589                                                                                  | 251<br>9 7/8                                                                                | 200 / 50<br>7 7/8   1 15/16                                                                 | 2.200                                                                                          | 11,5 x 5,7<br>7/16 x 1/4                                                                     | 0,57<br>1.257                                                                               | ✓                                                                                     |
| 469P0250-120   | -780219                                                                                  | 337<br>13 1/4                                                                               | 250 / 120<br>9 13/16   4 3/4                                                                | 5.500                                                                                          | 22 x 10,5<br>7/8 x 7/16                                                                      | 1,255<br>2.767                                                                              | ✓                                                                                     |
| 469P0300-120   | -779688                                                                                  | 387<br>15 1/4                                                                               | 300 / 120<br>11 13/16   4 3/4                                                               | 5.500                                                                                          | 22 x 10,5<br>7/8 x 7/16                                                                      | 1,065<br>3.638                                                                              | ✓                                                                                     |
| 469P0400-120-S | -009105                                                                                  | 487<br>19 3/16                                                                              | 400 / 120<br>15 3/4   4 3/4                                                                 | 5.500                                                                                          | 22 x 10,5<br>7/8 x 7/16                                                                      | 1,97<br>4.344                                                                               | ✓                                                                                     |
| 469P0600-120-S | -009099                                                                                  | 687<br>27 1/16                                                                              | 600 / 120<br>23 5/8   4 3/4                                                                 | 5.500                                                                                          | 22 x 10,5<br>7/8 x 7/16                                                                      | 1,6<br>3.528                                                                                | ✓                                                                                     |
| 469P0300-140   | -780264                                                                                  | 396<br>15 9/16                                                                              | 300 / 140<br>11 13/16   5 1/2                                                               | 6.700                                                                                          | 25 x 12<br>1 x 1/2                                                                           | 1,78<br>3.925                                                                               | ✓                                                                                     |
| 469P0400-120   | -780226                                                                                  | 496<br>19 1/2                                                                               | 400 / 120<br>15 3/4   4 3/4                                                                 | 7.500                                                                                          | 25 x 12<br>1 x 1/2                                                                           | 1,93<br>4.344                                                                               | ✓                                                                                     |

## PRODUCT DETAILS

| #            |  |  |  |  |  |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 469P0500-120 | -779695                                                                           | 596<br>23 7/16                                                                    | 500 / 120<br>19 11/16   4 3/4                                                     | 7.500                                                                             | 25 x 12<br>1 x 1/2                                                                 | 2,17<br>4.785                                                                       | ✓                                                                                   |
| 469P0600-120 | -780233                                                                           | 696<br>27 3/8                                                                     | 600 / 120<br>23 5/8   4 3/4                                                       | 7.500                                                                             | 25 x 12<br>1 x 1/2                                                                 | 2,36<br>5.237                                                                       | ✓                                                                                   |
| 469P0800-120 | -779701                                                                           | 900<br>35 7/16                                                                    | 800 / 120<br>31 1/2   4 3/4                                                       | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 3,19<br>7.034                                                                       | ✓                                                                                   |
| 469P1000-120 | -780240                                                                           | 1100<br>43 5/16                                                                   | 1.000 / 120<br>39 3/8   4 3/4                                                     | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 3,66<br>8.070                                                                       | ✓                                                                                   |
| 469P1250-120 | -780257                                                                           | 1350<br>53 1/8                                                                    | 1.250 / 120<br>49 3/16   4 3/4                                                    | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 4,3<br>9.482                                                                        | ✓                                                                                   |
| 469P0400-100 | -779671                                                                           | 480<br>18 7/8                                                                     | 400 / 100<br>15 3/4   3 15/16                                                     | 4.500                                                                             | 19,5 x 9,5<br>3/4 x 3/8                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 469P0300-100 | -779664                                                                           | 380<br>14 15/16                                                                   | 300 / 100<br>11 13/16   3 15/16                                                   | 4.500                                                                             | 19,5 x 9,5<br>3/4 x 3/8                                                            | 1,065<br>3.638                                                                      | ✓                                                                                   |
| 469P0300-050 | -779596                                                                           | 351<br>13 13/16                                                                   | 300 / 50<br>11 13/16   1 15/16                                                    | 2.200                                                                             | 11,5 x 5,7<br>7/16 x 1/4                                                           | 0,325<br>0.518                                                                      | ✓                                                                                   |
| 469P0120-060 | -780189                                                                           | 181<br>7 1/8                                                                      | 120 / 60<br>4 3/4   2 3/8                                                         | 2.700                                                                             | 13,5 x 6,5<br>9/16 x 1/4                                                           | 0,305<br>0.739                                                                      | ✓                                                                                   |
| 469P0200-060 | -779602                                                                           | 261<br>10 1/4                                                                     | 200 / 60<br>7 7/8   2 3/8                                                         | 2.700                                                                             | 13,5 x 6,5<br>9/16 x 1/4                                                           | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 469P0300-060 | -779619                                                                           | 361<br>14 3/16                                                                    | 300 / 60<br>11 13/16   2 3/8                                                      | 2.700                                                                             | 13,5 x 6,5<br>9/16 x 1/4                                                           | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 469P0160-080 | -780196                                                                           | 225<br>8 7/8                                                                      | 160 / 80<br>6 5/16   3 1/8                                                        | 3.000                                                                             | 16 x 7,5<br>5/8 x 5/16                                                             | 0,52<br>1.147                                                                       | ✓                                                                                   |
| 469P0200-080 | -779626                                                                           | 265<br>10 7/16                                                                    | 200 / 80<br>7 7/8   3 1/8                                                         | 3.000                                                                             | 16 x 7,5<br>5/8 x 5/16                                                             | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 469P0300-080 | -779633                                                                           | 365<br>14 3/8                                                                     | 300 / 80<br>11 13/16   3 1/8                                                      | 3.000                                                                             | 16 x 7,5<br>5/8 x 5/16                                                             | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 469P0400-080 | -779640                                                                           | 465<br>18 5/16                                                                    | 400 / 80<br>15 3/4   3 1/8                                                        | 3.000                                                                             | 16 x 7,5<br>5/8 x 5/16                                                             | 0,725<br>1.599                                                                      | ✓                                                                                   |
| 469P0200-100 | -780202                                                                           | 280<br>11 1/32                                                                    | 200 / 100<br>7 7/8   3 15/16                                                      | 4.500                                                                             | 19,5 x 9,5<br>3/4 x 3/8                                                            | 0,935<br>2.117                                                                      | ✓                                                                                   |
| 469P0250-100 | -779657                                                                           | 330<br>12 1                                                                       | 250 / 100<br>9 13/16   3 15/16                                                    | 4.500                                                                             | 19,5 x 9,5<br>3/4 x 3/8                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 469P1500-120 | -779718                                                                           | 1600<br>62 1                                                                      | 1.500 / 120<br>59 1/16   4 3/4                                                    | 10.000                                                                            | 27 x 13<br>1 1/16 x 1/2                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |

## SERIES 469K ALL-STEEL SCREW CLAMPS VIRIDIS WITH KNURLED GRIP



The all-steel clamps VIRIDIS with toggle handle of the 469K series are used for compressing and holding multiple workpieces in craft, industry, and workshop. With the built-in suspension, the clamps absorb the vibrations of the workpiece. The 469K series has a toggle handle, which allows for particularly tight fastening.

### BENEFITS

- Tension force up to 10,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- Numerous variants of the spread and extension of clamps allow for the holding of parts of various sizes.

### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 469K0160-080 | -025410                                                                             | 225<br>8 7/8                                                                        | 160 / 80<br>6 5/16   3 1/8                                                          | 3.000                                                                               | 16 x 7,5<br>5/8 x 5/16                                                               | 0,925<br>2.040                                                                        | ✓                                                                                     |
| 469K0200-100 | -025519                                                                             | 280<br>11 1/32                                                                      | 200 / 100<br>7 7/8   3 15/16                                                        | 4.500                                                                               | 19,5 x 9,5<br>3/4 x 3/8                                                              | 0,915<br>2.018                                                                        | ✓                                                                                     |
| 469K0250-120 | -025588                                                                             | 337<br>13 1/4                                                                       | 250 / 120<br>9 13/16   4 3/4                                                        | 5.500                                                                               | 22 x 10,5<br>7/8 x 7/16                                                              | 1,245<br>2.745                                                                        | ✓                                                                                     |
| 469K0300-140 | -025656                                                                             | 396<br>15 9/16                                                                      | 300 / 140<br>11 13/16   5 1/2                                                       | 6.700                                                                               | 25 x 12<br>1 x 1/2                                                                   | 1,84<br>4.057                                                                         | ✓                                                                                     |
| 469K0400-120 | -026264                                                                             | 496<br>19 1/2                                                                       | 400 / 120<br>15 3/4   4 3/4                                                         | 7.500                                                                               | 25 x 12<br>1 x 1/2                                                                   | 0,8<br>1.764                                                                          | ✓                                                                                     |
| 469K0500-120 | -026646                                                                             | 596<br>23 7/16                                                                      | 500 / 120<br>19 11/16   4 3/4                                                       | 7.500                                                                               | 25 x 12<br>1 x 1/2                                                                   | 2,175<br>4.796                                                                        | ✓                                                                                     |
| 469K0600-120 | -027636                                                                             | 696<br>27 3/8                                                                       | 600 / 120<br>23 5/8   4 3/4                                                         | 7.500                                                                               | 25 x 12<br>1 x 1/2                                                                   | 2,375<br>5.237                                                                        | ✓                                                                                     |
| 469K0800-120 | -027872                                                                             | 900<br>35 7/16                                                                      | 800 / 120<br>31 1/2   4 3/4                                                         | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 3,215<br>7.089                                                                        | ✓                                                                                     |
| 469K1000-120 | -027940                                                                             | 1100<br>43 5/16                                                                     | 1.000 / 120<br>39 3/8   4 3/4                                                       | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 3,66<br>8.070                                                                         | ✓                                                                                     |
| 469K1250-120 | -028008                                                                             | 1350<br>53 1/8                                                                      | 1.250 / 120<br>49 3/16   4 3/4                                                      | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 4,275<br>9.426                                                                        | ✓                                                                                     |
| 469K1500-120 | -028480                                                                             | 1600<br>62 1                                                                        | 1.500 / 120<br>59 1/16   4 3/4                                                      | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 4,875<br>10.749                                                                       | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 469PU ALL-STEEL CLAMPS VIRIDIS WITH 2K COMFORT FOLDING HANDLE

The all-steel VIRIDIS clamps with 2K comfort folding handle from the 469PU series are used for compressing and holding multiple workpieces in crafts, industry, and workshops. With the built-in suspension, the clamps absorb the vibrations of the workpiece. The 469PU series is equipped with a 3-component folding handle that allows for safe and stable work.

#### BENEFITS

- Tensile force up to 7,500 N
- The 2-component handle ensures maximum power transfer even with wet and oily hands.
- Numerous variations of the spread and extension of clamps allow for holding parts of various sizes.



#### TECHNICAL ATTRIBUTES

| #             |  |  |  |  |  |  |  |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|               | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 469PU0200-100 | -780271                                                                             | 280<br>11 1/32                                                                      | 200 / 100<br>7 7/8   3 15/16                                                        | 4.500                                                                               | 19,5 x 9,5<br>3/4 x 3/8                                                              | 1,8<br>3.969                                                                          | ✓                                                                                     |
| 469PU0250-120 | -780288                                                                             | 337<br>13 1/4                                                                       | 250 / 120<br>9 13/16   4 3/4                                                        | 5.500                                                                               | 22 x 10,5<br>7/8 x 7/16                                                              | 1,31<br>2.889                                                                         | ✓                                                                                     |
| 469PU0300-140 | -780295                                                                             | 396<br>15 9/16                                                                      | 300 / 140<br>11 13/16   5 1/2                                                       | 6.700                                                                               | 25 x 12<br>1 x 1/2                                                                   | 1,96<br>4.322                                                                         | ✓                                                                                     |
| 469PU0400-120 | -780301                                                                             | 496<br>19 1/2                                                                       | 400 / 120<br>15 3/4   4 3/4                                                         | 7.500                                                                               | 25 x 12<br>1 x 1/2                                                                   | 0,89<br>1.962                                                                         | ✓                                                                                     |
| 469PU0600-120 | -780318                                                                             | 696<br>27 3/8                                                                       | 600 / 120<br>23 5/8   4 3/4                                                         | 7.500                                                                               | 25 x 12<br>1 x 1/2                                                                   | 2,525<br>5.568                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 473K ALL-STEEL LOCKSMITH CLAMPS WITH KNOB HANDLE



The all-steel locksmith clamps with a handle grip from the series 473K are used for clamping under heavy duty in crafts, industry, and workshops. The heavy locksmith clamp withstands the required increased performances, allowing for application under tough conditions.

#### BENEFITS

- Tension force up to 10,000 N
- Hexagon allows the use of a key, ratchet, or impact wrench.
- Smooth-running trapezoidal spindles ensure even higher force transmission.

#### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 473K0200-120 | -031596                                                                             | 320<br>12 5/8                                                                       | 200 / 120<br>7 7/8   4 3/4                                                          | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 1,935<br>4.267                                                                        | ✓                                                                                     |
| 473K0250-120 | -031664                                                                             | 370<br>14 9/16                                                                      | 250 / 120<br>9 13/16   4 3/4                                                        | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 2,4<br>5.292                                                                          | ✓                                                                                     |
| 473K0300-120 | -031732                                                                             | 420<br>16 9/16                                                                      | 300 / 120<br>11 13/16   4 3/4                                                       | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 2,38<br>5.248                                                                         | ✓                                                                                     |
| 473K0400-120 | -031800                                                                             | 520<br>20 1/2                                                                       | 400 / 120<br>15 3/4   4 3/4                                                         | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 2,39<br>5.270                                                                         | ✓                                                                                     |
| 473K0500-120 | -031978                                                                             | 620<br>24 7/16                                                                      | 500 / 120<br>19 11/16   4 3/4                                                       | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 2,7<br>5.954                                                                          | ✓                                                                                     |
| 473K0600-120 | -032036                                                                             | 720<br>28 3/8                                                                       | 600 / 120<br>23 5/8   4 3/4                                                         | 10.000                                                                              | 27 x 13<br>1 1/16 x 1/2                                                              | 2,8<br>6.174                                                                          | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 475K HEAVY ALL-STEEL LOCKSMITH CLAMPS WITH SCREW HANDLES

The heavy all-steel locksmith clamps with T-bar handle from series 475K are used for heavy and strong applications when clamping workpieces in steel construction, locksmithing, commercial vehicles construction, mechanical engineering, etc. The heavy locksmith clamp withstands the required increased performance and thus allows for application in tough cases.

#### BENEFITS

- Tensile strength up to 12,000 N
- The movable special clamping cap allows for the clamping of oblique workpieces up to 35°.
- Hexagon allows the use of a key, ratchet, or impact wrench.
- Smooth-running trapezoidal spindles ensure an even higher force transmission.



#### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 475K0250-120 | -032104                                                                             | 388<br>15 1/4                                                                       | 250 / 120<br>9 13/16   4 3/4                                                        | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 2,695<br>5.942                                                                        | ✓                                                                                     |
| 475K0300-140 | -032272                                                                             | 438<br>17 1/4                                                                       | 300 / 140<br>11 13/16   5 1/2                                                       | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 3<br>6.615                                                                            | ✓                                                                                     |
| 475K0500-140 | -032418                                                                             | 638<br>25 1/8                                                                       | 500 / 140<br>19 11/16   5 1/2                                                       | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 3,57<br>7.872                                                                         | ✓                                                                                     |
| 475K0800-140 | -032586                                                                             | 938<br>36 15/16                                                                     | 800 / 140<br>31 1/2   5 1/2                                                         | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 4,5<br>9.923                                                                          | ✓                                                                                     |
| 475K1000-120 | -032654                                                                             | 1138<br>44 13/16                                                                    | 1.000 / 120<br>39 3/8   4 3/4                                                       | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 5,005<br>12.128                                                                       | ✓                                                                                     |
| 475K1250-120 | -032722                                                                             | 1388<br>54 5/8                                                                      | 1.250 / 120<br>49 3/16   4 3/4                                                      | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 6<br>13.230                                                                           | ✓                                                                                     |
| 475K1500-120 | -032890                                                                             | 1638<br>64 1/2                                                                      | 1.500 / 120<br>59 1/16   4 3/4                                                      | 12.000                                                                              | 30 x 15<br>1 3/16 x 9/16                                                             | 6,5555<br>14.455                                                                      | ✓                                                                                     |

PRODUCT DETAILS

SERIES 476K  
HEAVY U-CLAMPS WITH KNOB GRIP



The heavy U-clamps with toggle grip from the 476K series are used for clamping on T and double-T steel beam profiles in the industry. The heavy U-clamp also withstands the required increased performance, thus enabling application in critical cases.

BENEFITS

- Tensile strength up to 11,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.



TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>N | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 476K0300-140 | -032968                                                                                     | 535<br>21 1/16                                                                                 | 300 / 140<br>11 13/16   5 1/2                                                                  | 11.000                                                                                   | 30 x 15<br>1 3/16 x 9/16                                                                        | 3,665<br>8.081                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 480K ALL-STEEL CLAMPS



The all-steel locksmith clamps with tommy bar of series 480K are used for clamping workpieces in steel construction, locksmiths, commercial vehicle construction, and mechanical engineering under particularly heavy load. The tommy bar guarantees a good leverage effect for perfect power transmission.

#### BENEFITS

- Tensile force up to 22,000 N

## TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>N | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 480K0300-175 | -033026                                                                                     | 460<br>18 1/8                                                                                  | 300 / 175<br>11 13/16   6 7/8                                                                  | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 5,385<br>11.874                                                                                | ✓                                                                                     |
| 480K0400-175 | -033262                                                                                     | 560<br>22 1/16                                                                                 | 400 / 175<br>15 3/4   6 7/8                                                                    | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 5,955<br>13.131                                                                                | ✓                                                                                     |
| 480K0500-175 | -033330                                                                                     | 660<br>25 1                                                                                    | 500 / 175<br>19 11/16   6 7/8                                                                  | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 5,13<br>11.312                                                                                 | ✓                                                                                     |
| 480K0600-175 | -033408                                                                                     | 760<br>29 15/16                                                                                | 600 / 175<br>23 5/8   6 7/8                                                                    | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 8,2<br>18.081                                                                                  | ✓                                                                                     |
| 480K0800-175 | -033880                                                                                     | 960<br>37 13/16                                                                                | 800 / 175<br>31 1/2   6 7/8                                                                    | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 8,15<br>17.971                                                                                 | ✓                                                                                     |
| 480K1000-175 | -033958                                                                                     | 1160<br>45 11/16                                                                               | 1.000 / 175<br>39 3/8   6 7/8                                                                  | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 9,245<br>20.385                                                                                | ✓                                                                                     |
| 480K1250-175 | -034184                                                                                     | 1410<br>55 1/2                                                                                 | 1.250 / 175<br>49 3/16   6 7/8                                                                 | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 1,7<br>3.749                                                                                   | ✓                                                                                     |
| 480K1500-175 | -034252                                                                                     | 1660<br>65 3/8                                                                                 | 1.500 / 175<br>59 1/16   6 7/8                                                                 | 22.000                                                                                   | 40 x 20<br>1 9/16 x 13/16                                                                       | 11,775<br>25.964                                                                               | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 472 ALL-STEEL LEVER CLAMPS VIRIDIS



The all-steel lever clamps VIRIDIS of the series 472 are used for quickly and effortlessly clamping multiple workpieces with high clamping pressure in crafts, industry, and workshops. The optimized rail profile ensures uniform buildup of clamping force and greater power reserves, especially when fully utilizing the clamping spread. As a result, the series 472 is up to 5x faster than conventional clamps.

#### BENEFITS

- Tensile strength up to 6,000 N
- Through self-locking, insensitive to vibrations of the workpiece
- The translation for the provided text is: "The release lever with anti-slip safety enables safe working."
- Numerous variants of the spread and extension of clamps allow for the holding of parts of various sizes.

#### TECHNICAL ATTRIBUTES

| #            |  GTIN |  mm/inch |  mm/inch |  Power<br>N |  mm/inch |  kg/lb |  |
|--------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 472H0120-060 | -029302                                                                                  | 181<br>7 1/8                                                                                | 120 / 60<br>4 3/4   2 3/8                                                                   | 1.600                                                                                          | 13,5 x 6,5<br>9/16 x 1/4                                                                     | 0,4<br>0.882                                                                                | ✓                                                                                     |
| 472H0160-080 | -030292                                                                                  | 225<br>8 7/8                                                                                | 160 / 80<br>6 5/16   3 1/8                                                                  | 3.000                                                                                          | 16 x 7,5<br>5/8 x 5/16                                                                       | 0,555<br>1.224                                                                              | ✓                                                                                     |
| 472H0200-100 | -030360                                                                                  | 280<br>11 1/32                                                                              | 200 / 100<br>7 7/8   3 15/16                                                                | 3.500                                                                                          | 19,5 x 9,5<br>3/4 x 3/8                                                                      | 0,985<br>2.172                                                                              | ✓                                                                                     |
| 472H0250-120 | -030438                                                                                  | 337<br>13 1/4                                                                               | 250 / 120<br>9 13/16   4 3/4                                                                | 4.000                                                                                          | 22 x 10,5<br>7/8 x 7/16                                                                      | 1,32<br>2.911                                                                               | ✓                                                                                     |
| 472H0300-140 | -030506                                                                                  | 396<br>15 9/16                                                                              | 300 / 140<br>11 13/16   5 1/2                                                               | 5.000                                                                                          | 25 x 12<br>1 x 1/2                                                                           | 2,01<br>4.631                                                                               | ✓                                                                                     |
| 472H0400-120 | -030674                                                                                  | 496<br>19 1/2                                                                               | 400 / 120<br>15 3/4   4 3/4                                                                 | 5.500                                                                                          | 25 x 12<br>1 x 1/2                                                                           | 2,14<br>4.719                                                                               | ✓                                                                                     |
| 472H0500-120 | -030742                                                                                  | 596<br>23 7/16                                                                              | 500 / 120<br>19 11/16   4 3/4                                                               | 5.500                                                                                          | 25 x 12<br>1 x 1/2                                                                           | 2,36<br>5.204                                                                               | ✓                                                                                     |
| 472H0600-120 | -030810                                                                                  | 696<br>27 3/8                                                                               | 600 / 120<br>23 5/8   4 3/4                                                                 | 5.500                                                                                          | 25 x 12<br>1 x 1/2                                                                           | 2,565<br>5.656                                                                              | ✓                                                                                     |
| 472H0800-120 | -030988                                                                                  | 900<br>35 7/16                                                                              | 800 / 120<br>31 1/2   4 3/4                                                                 | 6.000                                                                                          | 27 x 13<br>1 1/16 x 1/2                                                                      | 3,37<br>7.431                                                                               | ✓                                                                                     |
| 472H1000-120 | -031046                                                                                  | 1100<br>43 5/16                                                                             | 1.000 / 120<br>39 3/8   4 3/4                                                               | 6.000                                                                                          | 27 x 13<br>1 1/16 x 1/2                                                                      | 3,83<br>8.445                                                                               | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 490 VIRIDIS CAST IRON SCREW CLAMPS WITH WOODEN HANDLE

The VIRIDIS cast iron clamps with a wooden handle from the series 490 are used for compressing and holding multiple workpieces in crafts, industry, and workshops. The steel sliding rail allows for high clamping force to be achieved. The vibration-dampened fixed and sliding arms made of cast iron guarantee efficient and precise work. The series 490, with its round wooden handle, is a classic in the clamp range.

#### BENEFITS

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- No danger of injury due to concealed grip attachment in the wooden handle.
- Soft plastic protective caps protect sensitive workpiece surfaces



#### TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>N | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 490-0100-050 | -034320                                                                                     | 150<br>5 7/8                                                                                   | 100 / 50<br>3 15/16   1 15/16                                                                  | 1.700                                                                                    | 15 x 5<br>9/16 x 3/16                                                                           | 0,275<br>0.606                                                                                 | ✓                                                                                     |
| 490-0120-065 | -037918                                                                                     | 190<br>7 1/2                                                                                   | 120 / 65<br>4 3/4   2 9/16                                                                     | 1.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,54<br>1.191                                                                                  | ✓                                                                                     |
| 490-0120-080 | -038076                                                                                     | 190<br>7 1/2                                                                                   | 120 / 80<br>4 3/4   3 1/8                                                                      | 2.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,65<br>1.433                                                                                  | ✓                                                                                     |
| 490-0150-050 | -038144                                                                                     | 160<br>6 5/16                                                                                  | 150 / 50<br>5 7/8   1 15/16                                                                    | 1.700                                                                                    | 15 x 5<br>9/16 x 3/16                                                                           | 0,315<br>0.695                                                                                 | ✓                                                                                     |
| 490-0160-080 | -038175                                                                                     | 230<br>9 1/16                                                                                  | 160 / 80<br>6 5/16   3 1/8                                                                     | 2.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,68<br>1.499                                                                                  | ✓                                                                                     |
| 490-0200-050 | -038212                                                                                     | 250<br>9 13/16                                                                                 | 200 / 50<br>7 7/8   1 15/16                                                                    | 1.700                                                                                    | 15 x 5<br>9/16 x 3/16                                                                           | 0,34<br>0.750                                                                                  | ✓                                                                                     |
| 490-0200-065 | -000608                                                                                     | 285<br>11 1/4                                                                                  | 200 / 65<br>7 7/8   2 9/16                                                                     | 1.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| 490-0200-080 | -000615                                                                                     | 265<br>10 7/16                                                                                 | 200 / 80<br>7 7/8   3 1/8                                                                      | 2.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,72<br>1.588                                                                                  | ✓                                                                                     |
| 490-0200-100 | -000622                                                                                     | 290<br>11 7/16                                                                                 | 200 / 100<br>7 7/8   3 15/16                                                                   | 4.000                                                                                    | 30 x 8<br>1 3/16 x 5/16                                                                         | 1,34<br>2.955                                                                                  | ✓                                                                                     |



## PRODUCT DETAILS

| #            |  |  |  |  |  |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 490-0200-120 | -000738                                                                           | 290<br>11 7/16                                                                    | 200 / 120<br>7 7/8   4 3/4                                                        | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,515<br>3.341                                                                      | ✓                                                                                   |
| 490-0250-080 | -000776                                                                           | 315<br>12 3/8                                                                     | 250 / 80<br>9 13/16   3 1/8                                                       | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,77<br>1.698                                                                       | ✓                                                                                   |
| 490-0250-100 | -001155                                                                           | 360<br>14 3/16                                                                    | 250 / 100<br>9 13/16   3 15/16                                                    | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,475<br>3.252                                                                      | ✓                                                                                   |
| 490-0250-120 | -001162                                                                           | 360<br>14 3/16                                                                    | 250 / 120<br>9 13/16   4 3/4                                                      | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,625<br>3.583                                                                      | ✓                                                                                   |
| 490-0300-065 | -001186                                                                           | 385<br>15 3/16                                                                    | 300 / 65<br>11 13/16   2 9/16                                                     | 1.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,715<br>1.577                                                                      | ✓                                                                                   |
| 490-0300-080 | -001193                                                                           | 365<br>14 3/8                                                                     | 300 / 80<br>11 13/16   3 1/8                                                      | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,81<br>1.786                                                                       | ✓                                                                                   |
| 490-0300-100 | -001209                                                                           | 410<br>16 1/8                                                                     | 300 / 100<br>11 13/16   3 15/16                                                   | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,55<br>3.418                                                                       | ✓                                                                                   |
| 490-0300-120 | -001216                                                                           | 410<br>16 1/8                                                                     | 300 / 120<br>11 13/16   4 3/4                                                     | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,8<br>3.969                                                                        | ✓                                                                                   |
| 490-0300-140 | -001223                                                                           | 400<br>15 3/4                                                                     | 300 / 140<br>11 13/16   5 1/2                                                     | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,22<br>4.895                                                                       | ✓                                                                                   |
| 490-0400-080 | -001230                                                                           | 465<br>18 5/16                                                                    | 400 / 80<br>15 3/4   3 1/8                                                        | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,9<br>1.985                                                                        | ✓                                                                                   |
| 490-0400-100 | -001247                                                                           | 510<br>20 1/16                                                                    | 400 / 100<br>15 3/4   3 15/16                                                     | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,8<br>3.969                                                                        | ✓                                                                                   |
| 490-0400-120 | -001254                                                                           | 510<br>20 1/16                                                                    | 400 / 120<br>15 3/4   4 3/4                                                       | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,845<br>4.068                                                                      | ✓                                                                                   |
| 490-0400-140 | -001261                                                                           | 500<br>19 11/16                                                                   | 400 / 140<br>15 3/4   5 1/2                                                       | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,48<br>5.468                                                                       | ✓                                                                                   |
| 490-0400-175 | -001278                                                                           | 500<br>19 11/16                                                                   | 400 / 175<br>15 3/4   6 7/8                                                       | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,74<br>6.042                                                                       | ✓                                                                                   |
| 490-0500-080 | -001339                                                                           | 565<br>22 1/4                                                                     | 500 / 80<br>19 11/16   3 1/8                                                      | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,995<br>2.194                                                                      | ✓                                                                                   |
| 490-0500-100 | -001438                                                                           | 610<br>24 1/64                                                                    | 500 / 100<br>19 11/16   3 15/16                                                   | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,885<br>4.156                                                                      | ✓                                                                                   |
| 490-0500-120 | -001445                                                                           | 610<br>24 1/64                                                                    | 500 / 120<br>19 11/16   4 3/4                                                     | 6.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,5<br>5.513                                                                        | ✓                                                                                   |
| 490-0500-140 | -001452                                                                           | 600<br>23 5/8                                                                     | 500 / 140<br>19 11/16   5 1/2                                                     | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,5<br>5.513                                                                        | ✓                                                                                   |
| 490-0500-175 | -001605                                                                           | 600<br>23 5/8                                                                     | 500 / 175<br>19 11/16   6 7/8                                                     | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,945<br>6.494                                                                      | ✓                                                                                   |
| 490-0600-080 | -001827                                                                           | 685<br>26 15/16                                                                   | 600 / 80<br>23 5/8   3 1/8                                                        | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 490-0600-120 | -001957                                                                           | 710<br>27 15/16                                                                   | 600 / 120<br>23 5/8   4 3/4                                                       | 6.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,175<br>4.796                                                                      | ✓                                                                                   |
| 490-0600-140 | -002169                                                                           | 700<br>27 9/16                                                                    | 600 / 140<br>23 5/8   5 1/2                                                       | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 490-0600-175 | -002244                                                                           | 700<br>27 9/16                                                                    | 600 / 175<br>23 5/8   6 7/8                                                       | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,15<br>6.946                                                                       | ✓                                                                                   |
| 490-0800-120 | -002251                                                                           | 910<br>35 13/16                                                                   | 800 / 120<br>31 1/2   4 3/4                                                       | 6.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,5<br>5.513                                                                        | ✓                                                                                   |
| 490-0800-140 | -002268                                                                           | 900<br>35 7/16                                                                    | 800 / 140<br>31 1/2   5 1/2                                                       | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 490-0800-175 | -002275                                                                           | 900<br>35 7/16                                                                    | 800 / 175<br>31 1/2   6 7/8                                                       | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,3<br>0.662                                                                        | ✓                                                                                   |



PRODUCT DETAILS

| #            |  |  |  |  |  |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 490-1000-120 | -002282                                                                           | 1110<br>43 11/16                                                                  | 1.000 / 120<br>39 3/8   4 3/4                                                     | 7.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,83<br>6.240                                                                       | ✓                                                                                   |
| 490-1000-140 | -002299                                                                           | 1100<br>43 5/16                                                                   | 1.000 / 140<br>39 3/8   5 1/2                                                     | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 490-1000-175 | -002305                                                                           | 1100<br>43 5/16                                                                   | 1.000 / 175<br>39 3/8   6 7/8                                                     | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 4,9<br>10.805                                                                       | ✓                                                                                   |
| 490-1250-120 | -002404                                                                           | 1340<br>52 3/4                                                                    | 1.250 / 120<br>49 3/16   4 3/4                                                    | 7.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 3,25<br>7.166                                                                       | ✓                                                                                   |
| 490-1500-120 | -002572                                                                           | 1590<br>62 5/8                                                                    | 1.500 / 120<br>59 1/16   4 3/4                                                    | 7.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 3,5<br>7.718                                                                        | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 490P VIRIDIS CAST IRON CLAMPS WITH 2K COMFORT GRIP



The VIRIDIS ductile iron clamps with 2K comfort grip from the 490P series are used for compressing and holding multiple workpieces in craft, industry, and workshop. The steel sliding rail allows for a high clamping force to be achieved. The vibration-dampening fixed and sliding arms made of ductile iron guarantee efficient and precise work. The 490P series is equipped with an ergonomically contoured 2-component grip that provides ideal grip and ensures high torque transmission.

#### BENEFITS

- The 2-component handle ensures maximum power transfer even with wet and oily hands.
- Soft plastic protective caps protect sensitive workpiece surfaces



#### TECHNICAL ATTRIBUTES

| #            | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>N | <br>mm/inch | <br>kg/lb |  |
|--------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 490P0100-050 | -777783                                                                                     | 150<br>5 7/8                                                                                   | 100 / 50<br>3 15/16   1<br>15/16                                                               | 1.700                                                                                    | 15 x 5<br>9/16 x 3/16                                                                           | 0,57<br>1.257                                                                                  | ✓                                                                                     |
| 490P0150-050 | -777806                                                                                     | 160<br>6 5/16                                                                                  | 150 / 50<br>5 7/8   1 15/16                                                                    | 1.700                                                                                    | 15 x 5<br>9/16 x 3/16                                                                           | 0,57<br>1.257                                                                                  | ✓                                                                                     |
| 490P0200-050 | -777813                                                                                     | 250<br>9 13/16                                                                                 | 200 / 50<br>7 7/8   1 15/16                                                                    | 1.700                                                                                    | 15 x 5<br>9/16 x 3/16                                                                           | 0,57<br>1.257                                                                                  | ✓                                                                                     |
| 490P0120-065 | -779015                                                                                     | 190<br>7 1/2                                                                                   | 120 / 65<br>4 3/4   2 9/16                                                                     | 1.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,57<br>1.257                                                                                  | ✓                                                                                     |
| 490P0200-065 | -777820                                                                                     | 285<br>11 1/4                                                                                  | 200 / 65<br>7 7/8   2 9/16                                                                     | 1.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,615<br>1.356                                                                                 | ✓                                                                                     |
| 490P0300-065 | -777837                                                                                     | 385<br>15 3/16                                                                                 | 300 / 65<br>11 13/16   2<br>9/16                                                               | 1.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,57<br>1.257                                                                                  | ✓                                                                                     |
| 490P0160-080 | -779022                                                                                     | 230<br>9 1/16                                                                                  | 160 / 80<br>6 5/16   3 1/8                                                                     | 2.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,7<br>1.544                                                                                   | ✓                                                                                     |
| 490P0200-080 | -777851                                                                                     | 265<br>10 7/16                                                                                 | 200 / 80<br>7 7/8   3 1/8                                                                      | 2.700                                                                                    | 22 x 6<br>7/8 x 1/4                                                                             | 0,57<br>1.257                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

| #            |  |  |  |  |  |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 490P0250-080 | -777868                                                                           | 315<br>12 3/8                                                                     | 250 / 80<br>9 13/16   3 1/8                                                       | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0300-080 | -777875                                                                           | 365<br>14 3/8                                                                     | 300 / 80<br>11 13/16   3 1/8                                                      | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0400-080 | -777882                                                                           | 465<br>18 5/16                                                                    | 400 / 80<br>15 3/4   3 1/8                                                        | 2.700                                                                             | 22 x 6<br>7/8 x 1/4                                                                | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0200-100 | -779893                                                                           | 290<br>11 7/16                                                                    | 200 / 100<br>7 7/8   3 15/16                                                      | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,36<br>2.999                                                                       | ✓                                                                                   |
| 490P0250-100 | -777899                                                                           | 360<br>14 3/16                                                                    | 250 / 100<br>9 13/16   3 15/16                                                    | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0300-100 | -777905                                                                           | 410<br>16 1/8                                                                     | 300 / 100<br>11 13/16   3 15/16                                                   | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0400-100 | -777912                                                                           | 510<br>20 1/16                                                                    | 400 / 100<br>15 3/4   3 15/16                                                     | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0500-100 | -777936                                                                           | 610<br>24 1/64                                                                    | 500 / 100<br>19 11/16   3 15/16                                                   | 4.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0250-120 | -780004                                                                           | 360<br>14 3/16                                                                    | 250 / 120<br>9 13/16   4 3/4                                                      | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,615<br>3.561                                                                      | ✓                                                                                   |
| 490P0300-120 | -780011                                                                           | 410<br>16 1/8                                                                     | 300 / 120<br>11 13/16   4 3/4                                                     | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,7<br>3.749                                                                        | ✓                                                                                   |
| 490P0400-120 | -780028                                                                           | 510<br>20 1/16                                                                    | 400 / 120<br>15 3/4   4 3/4                                                       | 4.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 1,87<br>4.123                                                                       | ✓                                                                                   |
| 490P0500-120 | -777943                                                                           | 610<br>24 1/64                                                                    | 500 / 120<br>19 11/16   4 3/4                                                     | 6.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0600-120 | -780035                                                                           | 710<br>27 15/16                                                                   | 600 / 120<br>23 5/8   4 3/4                                                       | 6.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,19<br>4.829                                                                       | ✓                                                                                   |
| 490P0800-120 | -780059                                                                           | 910<br>35 13/16                                                                   | 800 / 120<br>31 1/2   4 3/4                                                       | 6.500                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,525<br>5.568                                                                      | ✓                                                                                   |
| 490P1000-120 | -779473                                                                           | 1110<br>43 11/16                                                                  | 1.000 / 120<br>39 3/8   4 3/4                                                     | 7.000                                                                             | 30 x 8<br>1 3/16 x 5/16                                                            | 2,875<br>6.339                                                                      | ✓                                                                                   |
| 490P0300-140 | -780073                                                                           | 400<br>15 3/4                                                                     | 300 / 140<br>11 13/16   5 1/2                                                     | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,24<br>4.939                                                                       | ✓                                                                                   |
| 490P0400-140 | -779503                                                                           | 500<br>19 11/16                                                                   | 400 / 140<br>15 3/4   5 1/2                                                       | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0500-140 | -779459                                                                           | 600<br>23 5/8                                                                     | 500 / 140<br>19 11/16   5 1/2                                                     | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0600-140 | -779510                                                                           | 700<br>27 9/16                                                                    | 600 / 140<br>23 5/8   5 1/2                                                       | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 490P0800-140 | -790003                                                                           | 900<br>35 7/16                                                                    | 800 / 140<br>31 1/2   5 1/2                                                       | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,56<br>7.850                                                                       | ✓                                                                                   |
| 490P1000-140 | -790010                                                                           | 1100<br>43 5/16                                                                   | 1.000 / 140<br>39 3/8   5 1/2                                                     | 5.000                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,56<br>7.850                                                                       | ✓                                                                                   |
| 490P0400-175 | -780080                                                                           | 500<br>19 11/16                                                                   | 400 / 175<br>15 3/4   6 7/8                                                       | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 2,68<br>5.909                                                                       | ✓                                                                                   |
| 490P0500-175 | -790027                                                                           | 600<br>23 5/8                                                                     | 500 / 175<br>19 11/16   6 7/8                                                     | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,56<br>7.850                                                                       | ✓                                                                                   |

PRODUCT DETAILS

| #            |  |  |  |  |  |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | Power<br>N                                                                        | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 490P0600-175 | -780097                                                                           | 700<br>27 9/16                                                                    | 600 / 175<br>23 5/8   6 7/8                                                       | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,155<br>6.957                                                                      | ✓                                                                                   |
| 490P0800-175 | -780066                                                                           | 900<br>35 7/16                                                                    | 800 / 175<br>31 1/2   6 7/8                                                       | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,375<br>7.442                                                                      | ✓                                                                                   |
| 490P1000-175 | -790034                                                                           | 1100<br>43 5/16                                                                   | 1.000 / 175<br>39 3/8   6 7/8                                                     | 5.500                                                                             | 35 x 9<br>1 3/8 x 3/8                                                              | 3,56<br>7.850                                                                       | ✓                                                                                   |





## PRODUCT DETAILS

### SERIES 490K VIRIDIS TEMPERED CAST IRON SCREW CLAMPS WITH STEEL KNOB HANDLE



The malleable cast iron clamps VIRIDIS with steel handle grip of the series 490K are used for pressing and holding multiple workpieces in crafts, industry, and workshops. The steel sliding piece allows high tension force to be achieved. The vibration-free fixed and sliding arms made of malleable cast iron guarantee efficient and precise work. The series 490K features a handle grip that allows for particularly tight fastening.

#### BENEFITS

- Tensile strength up to 7,000 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- Soft plastic protection caps protect sensitive workpiece surfaces.
- Through the labeling on the jaws, one can quickly keep an eye on the dimensions.

#### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 490K0160-080 | -002657                                                                             | 230<br>9 1/16                                                                       | 160 / 80<br>6 5/16   3 1/8                                                          | 2.700                                                                               | 22 x 6<br>7/8 x 1/4                                                                  | 0,67<br>1.477                                                                         | ✓                                                                                     |
| 490K0200-100 | -002671                                                                             | 290<br>11 7/16                                                                      | 200 / 100<br>7 7/8   3 15/16                                                        | 4.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 0,8<br>1.764                                                                          | ✓                                                                                     |
| 490K0250-120 | -002688                                                                             | 360<br>14 3/16                                                                      | 250 / 120<br>9 13/16   4 3/4                                                        | 4.500                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 1,61<br>3.550                                                                         | ✓                                                                                     |
| 490K0300-120 | -002695                                                                             | 410<br>16 1/8                                                                       | 300 / 120<br>11 13/16   4 3/4                                                       | 4.500                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 1,7<br>3.749                                                                          | ✓                                                                                     |
| 490K0400-120 | -002718                                                                             | 510<br>20 1/16                                                                      | 400 / 120<br>15 3/4   4 3/4                                                         | 4.500                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 1,82<br>4.013                                                                         | ✓                                                                                     |
| 490K0500-120 | -002732                                                                             | 610<br>24 1/64                                                                      | 500 / 120<br>19 11/16   4 3/4                                                       | 6.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 3<br>6.615                                                                            | ✓                                                                                     |
| 490K0600-120 | -002749                                                                             | 710<br>27 15/16                                                                     | 600 / 120<br>23 5/8   4 3/4                                                         | 6.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 2,175<br>4.796                                                                        | ✓                                                                                     |
| 490K0800-120 | -002756                                                                             | 910<br>35 13/16                                                                     | 800 / 120<br>31 1/2   4 3/4                                                         | 6.500                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 3<br>6.615                                                                            | ✓                                                                                     |
| 490K1000-120 | -002770                                                                             | 1110<br>43 11/16                                                                    | 1.000 / 120<br>39 3/8   4 3/4                                                       | 7.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                              | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 490K0300-140 | -002701                                                                             | 400<br>15 3/4                                                                       | 300 / 140<br>11 13/16   5 1/2                                                       | 5.000                                                                               | 35 x 9<br>1 3/8 x 3/8                                                                | 2,235<br>4.928                                                                        | ✓                                                                                     |
| 490K0400-175 | -002725                                                                             | 500<br>19 11/16                                                                     | 400 / 175<br>15 3/4   6 7/8                                                         | 5.500                                                                               | 35 x 9<br>1 3/8 x 3/8                                                                | 0,3<br>0.662                                                                          | ✓                                                                                     |

## SERIES 493 HEAVY MALLEABLE CAST IRON SCREW CLAMPS VIRIDIS WITH WOODEN HANDLE



The VIRIDIS malleable cast iron screw clamps with wooden handle from series 493 are used to press together and hold multiple workpieces in crafts, industry, and workshops. The steel slide rail enables a high clamping force. The low-vibration fixed arm and sliding arms made of malleable cast iron guarantee efficient and precise work. With its round wooden handle, series 493 is a classic in the screw clamp range.

### BENEFITS

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- No danger of injury due to concealed grip attachment in the wooden handle.
- Soft plastic protective caps protect sensitive workpiece surfaces

### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 493-0400-120 | -003562                                                                             | 500<br>19 11/16                                                                     | 400 / 120<br>15 3/4   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 2,62<br>5.777                                                                         | ✓                                                                                     |
| 493-0500-120 | -004262                                                                             | 600<br>23 5/8                                                                       | 500 / 120<br>19 11/16   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 493-0600-120 | -004279                                                                             | 700<br>27 9/16                                                                      | 600 / 120<br>23 5/8   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 3,145<br>6.935                                                                        | ✓                                                                                     |
| 493-0800-120 | -004286                                                                             | 900<br>35 7/16                                                                      | 800 / 120<br>31 1/2   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 493-1000-120 | -004293                                                                             | 1100<br>43 5/16                                                                     | 1.000 / 120<br>39 3/8   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 4,18<br>9.217                                                                         | ✓                                                                                     |
| 493-1250-120 | -004309                                                                             | 1350<br>53 1/8                                                                      | 1.250 / 120<br>49 3/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 4,82<br>10.628                                                                        | ✓                                                                                     |
| 493-1500-120 | -004316                                                                             | 1600<br>62 1                                                                        | 1.500 / 120<br>59 1/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 6<br>13.230                                                                           | ✓                                                                                     |
| 493-1800-120 | -004323                                                                             | 1900<br>74 13/16                                                                    | 1.800 / 120<br>70 7/8   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 5<br>11.025                                                                           | ✓                                                                                     |
| 493-2000-120 | -004330                                                                             | 2100<br>82 11/16                                                                    | 2.000 / 120<br>78 3/4   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 6,8<br>14.994                                                                         | ✓                                                                                     |
| 493-2200-120 | -004347                                                                             | 2300<br>90 9/16                                                                     | 2.200 / 120<br>86 5/8   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 493-2500-120 | -004354                                                                             | 2600<br>102 3/8                                                                     | 2.500 / 120<br>98 7/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 8,15<br>17.971                                                                        | ✓                                                                                     |
| 493-3000-120 | -004361                                                                             | 3100<br>122 1/16                                                                    | 3.000 / 120<br>118 1/8   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 5<br>11.025                                                                           | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 493P HEAVY DUCTILE IRON SCREW CLAMPS VIRIDIS WITH 2K COMFORT GRIP



The VIRIDIS ductile iron screw clamps with a 2K comfort grip from series 493P are used to compress and hold multiple workpieces in craftsmanship, industry, and workshops. The steel sliding rail allows for achieving high clamping force. The vibration-reducing fixed and sliding arms made of ductile iron ensure efficient and precise work. The 493P series is equipped with an ergonomically arched 2-component grip that provides ideal grip and ensures high torque transmission.

#### BENEFITS

- Tensioning force up to 7,500 N
- The 2-component handle ensures maximum power transfer even with wet and oily hands.
- Soft plastic protective caps protect sensitive workpiece surfaces



#### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 493P0400-120 | -790041                                                                             | 500<br>19 11/16                                                                     | 400 / 120<br>15 3/4   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 2,6<br>5.733                                                                          | ✓                                                                                     |
| 493P0500-120 | -780103                                                                             | 600<br>23 5/8                                                                       | 500 / 120<br>19 11/16   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 2,86<br>6.306                                                                         | ✓                                                                                     |
| 493P0600-120 | -780110                                                                             | 700<br>27 9/16                                                                      | 600 / 120<br>23 5/8   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 3,085<br>6.869                                                                        | ✓                                                                                     |
| 493P0800-120 | -779527                                                                             | 900<br>35 7/16                                                                      | 800 / 120<br>31 1/2   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,57<br>1.257                                                                         | ✓                                                                                     |
| 493P1000-120 | -779534                                                                             | 1100<br>43 5/16                                                                     | 1.000 / 120<br>39 3/8   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,57<br>1.257                                                                         | ✓                                                                                     |
| 493P1250-120 | -780127                                                                             | 1350<br>53 1/8                                                                      | 1.250 / 120<br>49 3/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 4,85<br>10.694                                                                        | ✓                                                                                     |
| 493P1500-120 | -780134                                                                             | 1600<br>62 1                                                                        | 1.500 / 120<br>59 1/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 5,5<br>12.128                                                                         | ✓                                                                                     |
| 493P1800-120 | -779541                                                                             | 1900<br>74 13/16                                                                    | 1.800 / 120<br>70 7/8   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,57<br>1.257                                                                         | ✓                                                                                     |

PRODUCT DETAILS

| #            |  |  |  |  |  |  |  |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | Power<br>N                                                                        | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 493P2000-120 | -779558                                                                           | 2100<br>82 11/16                                                                  | 2.000 / 120<br>78 3/4   4 3/4                                                     | 7.500                                                                             | 35 x 11<br>1 3/8 x 7/16                                                            | 7<br>15.435                                                                         | ✓                                                                                   |
| 493P2200-120 | -779565                                                                           | 2300<br>90 9/16                                                                   | 2.200 / 120<br>86 5/8   4 3/4                                                     | 7.500                                                                             | 35 x 11<br>1 3/8 x 7/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 493P2500-120 | -779480                                                                           | 2600<br>102 3/8                                                                   | 2.500 / 120<br>98 7/16   4 3/4                                                    | 7.500                                                                             | 35 x 11<br>1 3/8 x 7/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |
| 493P3000-120 | -779572                                                                           | 3100<br>122 1/16                                                                  | 3.000 / 120<br>118 1/8   4 3/4                                                    | 7.500                                                                             | 35 x 11<br>1 3/8 x 7/16                                                            | 0,57<br>1.257                                                                       | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 493K HEAVY-DUTY MALLEABLE CAST IRON SCREW CLAMPS VIRIDIS WITH STEEL TOMMY BAR HANDLE



The malleable cast iron screw clamps VIRIDIS with steel T-handle of the 493K series are used for compressing and holding multiple workpieces in crafts, industry, and workshops. The sliding rail made of steel makes it possible to achieve high clamping force. The low-vibration fixed and sliding arms made of malleable cast iron guarantee efficient and precise work. The 493K series has a T-handle that enables particularly tight fastening.

#### BENEFITS

- Tensioning force up to 7,500 N
- The pressure plate with integrated spindle locking prevents loosening during vibrations on the workpiece.
- Smooth-running trapezoidal spindles ensure even higher force transmission.
- Soft plastic protective caps protect sensitive workpiece surfaces
- Through the labeling on the jaws, one can quickly keep an eye on the dimensions.

#### TECHNICAL ATTRIBUTES

| #            |  |  |  |  |  |  |  |
|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|              | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 493K0400-120 | -004378                                                                             | 500<br>19 11/16                                                                     | 400 / 120<br>15 3/4   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 2,65<br>5.843                                                                         | ✓                                                                                     |
| 493K0500-120 | -004385                                                                             | 600<br>23 5/8                                                                       | 500 / 120<br>19 11/16   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 493K0600-120 | -004392                                                                             | 700<br>27 9/16                                                                      | 600 / 120<br>23 5/8   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 3,18<br>7.012                                                                         | ✓                                                                                     |
| 493K0800-120 | -004408                                                                             | 900<br>35 7/16                                                                      | 800 / 120<br>31 1/2   4 3/4                                                         | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 3,745<br>8.258                                                                        | ✓                                                                                     |
| 493K1000-120 | -004415                                                                             | 1100<br>43 5/16                                                                     | 1.000 / 120<br>39 3/8   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 4,316<br>9.517                                                                        | ✓                                                                                     |
| 493K1250-120 | -004460                                                                             | 1350<br>53 1/8                                                                      | 1.250 / 120<br>49 3/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 4,88<br>10.760                                                                        | ✓                                                                                     |
| 493K1500-120 | -004477                                                                             | 1600<br>62 1                                                                        | 1.500 / 120<br>59 1/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 5,5<br>12.128                                                                         | ✓                                                                                     |
| 493K2000-120 | -004484                                                                             | 2100<br>82 11/16                                                                    | 2.000 / 120<br>78 3/4   4 3/4                                                       | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 6,82<br>15.038                                                                        | ✓                                                                                     |
| 493K2500-120 | -004491                                                                             | 2600<br>102 3/8                                                                     | 2.500 / 120<br>98 7/16   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 493K3000-120 | -004507                                                                             | 3100<br>122 1/16                                                                    | 3.000 / 120<br>118 1/8   4 3/4                                                      | 7.500                                                                               | 35 x 11<br>1 3/8 x 7/16                                                              | 9,225<br>20.341                                                                       | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 505/509 DEEP-THROAT DUCTILE IRON CLAMPS WITH WOODEN HANDLE

The deep-throat cast-iron clamps with wooden handles from series 505 to 509 are used to compress and hold large workpieces in construction and industry. The steel gliding rail allows for a high clamping force to be achieved. Series 505 to 509, with their round wooden handle, are classics of the clamp assortment.

#### BENEFITS

- No risk of injury due to concealed grip mounting in the wooden handle



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Power<br>N | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 505-040 | -564995                                                                                     | 530<br>20 7/8                                                                                  | 400 / 200<br>15 3/4   7 7/8                                                                    | 5.000                                                                                             | 35 x 11<br>1 3/8 x 7/16                                                                        | 3,256<br>7.179                                                                                 | ✓                                                                                     |
| 507-100 | -566067                                                                                     | 1170<br>46 1/16                                                                                | 1.000 / 300<br>39 3/8   11 13/16                                                               | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 9,57<br>21.102                                                                                 | ✓                                                                                     |
| 507-080 | -565985                                                                                     | 970<br>38 3/16                                                                                 | 800 / 300<br>31 1/2   11 13/16                                                                 | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 8,5<br>18.743                                                                                  | ✓                                                                                     |
| 507-060 | -565800                                                                                     | 770<br>30 5/16                                                                                 | 600 / 300<br>23 5/8   11 13/16                                                                 | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 7,94<br>17.508                                                                                 | ✓                                                                                     |
| 507-040 | -565725                                                                                     | 570<br>22 7/16                                                                                 | 400 / 300<br>15 3/4   11 13/16                                                                 | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 7<br>15.435                                                                                    | ✓                                                                                     |
| 506-100 | -565640                                                                                     | 1170<br>46 1/16                                                                                | 1.000 / 250<br>39 3/8   9 13/16                                                                | 7.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 6,5<br>14.333                                                                                  | ✓                                                                                     |
| 506-080 | -565565                                                                                     | 970<br>38 3/16                                                                                 | 800 / 250<br>31 1/2   9 13/16                                                                  | 7.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 4,2<br>9.261                                                                                   | ✓                                                                                     |
| 506-060 | -565497                                                                                     | 770<br>30 5/16                                                                                 | 600 / 250<br>23 5/8   9 13/16                                                                  | 7.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 7,4<br>16.317                                                                                  | ✓                                                                                     |
| 506-040 | -565312                                                                                     | 570<br>22 7/16                                                                                 | 400 / 250<br>15 3/4   9 13/16                                                                  | 7.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 5<br>11.025                                                                                    | ✓                                                                                     |
| 505-100 | -565237                                                                                     | 1130<br>44 1/2                                                                                 | 1.000 / 200<br>39 3/8   7 7/8                                                                  | 5.000                                                                                             | 35 x 11<br>1 3/8 x 7/16                                                                        | 4,86<br>10.716                                                                                 | ✓                                                                                     |
| 505-080 | -565152                                                                                     | 930<br>36 5/8                                                                                  | 800 / 200<br>31 1/2   7 7/8                                                                    | 5.000                                                                                             | 35 x 11<br>1 3/8 x 7/16                                                                        | 4,35<br>9.592                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

| #       |  |  |  | <br>Power |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                          | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 505-060 | -142506                                                                           | 730<br>28 3/4                                                                     | 600 / 200<br>23 5/8   7 7/8                                                       | 5.000                                                                                      | 35 x 11<br>1 3/8 x 7/16                                                           | 3,855<br>8.500                                                                      | ✓                                                                                   |



## SERIES 505P/507P DEEP-THROAT DIE-CAST CLAMPS WITH 2K COMFORT GRIP



The deep-drawn malleable cast iron screw clamps with 2K comfort handle of the 505P to 509P series are used for compressing and holding large workpieces in construction and industry. The steel sliding rail enables a high clamping force. The 505P to 509P series is equipped with a 2-component handle that enables safe and stable work.

### BENEFITS

- Tensile strength up to 7,000 N
- Smooth-running trapezoidal spindles provide an even higher force transmission.
- The 2-component handle ensures maximum power transmission even with wet and oily hands.
- Numerous variants of the spread and extension of clamps allow for the holding of parts of various sizes.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Power<br>N | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 505P040 | -779725                                                                                     | 530<br>20 7/8                                                                                  | 400 / 200<br>15 3/4   7 7/8                                                                    | 5.000                                                                                             | 35 x 11<br>1 3/8 x 7/16                                                                        | 0,235<br>0.518                                                                                 | ✓                                                                                     |
| 507P100 | -779947                                                                                     | 1170<br>46 1/16                                                                                | 1.000 / 300<br>39 3/8   11<br>13/16                                                            | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 10,77<br>0.518                                                                                 | ✓                                                                                     |
| 507P080 | -779930                                                                                     | 970<br>38 3/16                                                                                 | 800 / 300<br>31 1/2   11<br>13/16                                                              | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 0,235<br>0.518                                                                                 | ✓                                                                                     |
| 507P060 | -779923                                                                                     | 770<br>30 5/16                                                                                 | 600 / 300<br>23 5/8   11<br>13/16                                                              | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 7,8<br>0.518                                                                                   | ✓                                                                                     |
| 507P040 | -779916                                                                                     | 570<br>22 7/16                                                                                 | 400 / 300<br>15 3/4   11<br>13/16                                                              | 6.000                                                                                             | 45 x 12<br>1 3/4 x 1/2                                                                         | 7,005<br>0.518                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 506P100 | -779909                                                                           | 1170<br>46 1/16                                                                   | 1.000 / 250<br>39 3/8   9 13/16                                                   | 7.000                                                                             | 45 x 12<br>1 3/4 x 1/2                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 506P080 | -779770                                                                           | 970<br>38 3/16                                                                    | 800 / 250<br>31 1/2   9 13/16                                                     | 7.000                                                                             | 45 x 12<br>1 3/4 x 1/2                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 506P060 | -779763                                                                           | 770<br>30 5/16                                                                    | 600 / 250<br>23 5/8   9 13/16                                                     | 7.000                                                                             | 45 x 12<br>1 3/4 x 1/2                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 506P040 | -779787                                                                           | 570<br>22 7/16                                                                    | 400 / 250<br>15 3/4   9 13/16                                                     | 7.000                                                                             | 45 x 12<br>1 3/4 x 1/2                                                            | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 505P100 | -779756                                                                           | 1130<br>44 1/2                                                                    | 1.000 / 200<br>39 3/8   7 7/8                                                     | 5.000                                                                             | 35 x 11<br>1 3/8 x 7/16                                                           | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 505P080 | -779749                                                                           | 930<br>36 5/8                                                                     | 800 / 200<br>31 1/2   7 7/8                                                       | 5.000                                                                             | 35 x 11<br>1 3/8 x 7/16                                                           | 0,235<br>0.518                                                                      | ✓                                                                                   |
| 505P060 | -779732                                                                           | 730<br>28 3/4                                                                     | 600 / 200<br>23 5/8   7 7/8                                                       | 5.000                                                                             | 35 x 11<br>1 3/8 x 7/16                                                           | 3,715<br>8.192                                                                      | ✓                                                                                   |



## SERIES 505K/509K DEEP CLAMP CAST IRON SCREW CLAMPS WITH STEEL KNURLED HANDLE



The low-voltage malleable cast iron clamps with steel T-handle of series 505K to 509K are used for compressing and holding large workpieces in construction and industry. The steel sliding rail allows for high clamping force to be achieved. The series 505K to 509K have a T-handle that enables particularly tight fastening.

### BENEFITS

- Tensile strength up to 7,000 N
- Smooth-running trapezoidal spindles provide an even higher force transmission.
- Numerous variants of the spread and reach of clamps allow for holding parts of various sizes.

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Power<br>N                                                                          | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 505K040 | -772482                                                                             | 530<br>20 7/8                                                                       | 400 / 200<br>15 3/4   7 7/8                                                         | 5.000                                                                               | 35 x 11<br>1 3/8 x 7/16                                                             | 3,85<br>8.489                                                                         | ✓                                                                                     |
| 507K100 | -773540                                                                             | 1170<br>46 1/16                                                                     | 1.000 / 300<br>39 3/8   11 13/16                                                    | 6.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 3,58<br>7.894                                                                         | ✓                                                                                     |
| 507K080 | -773472                                                                             | 970<br>38 3/16                                                                      | 800 / 300<br>31 1/2   11 13/16                                                      | 6.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 8,765<br>19.327                                                                       | ✓                                                                                     |
| 507K060 | -773397                                                                             | 770<br>30 5/16                                                                      | 600 / 300<br>23 5/8   11 13/16                                                      | 6.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 7,91<br>17.442                                                                        | ✓                                                                                     |
| 507K040 | -773212                                                                             | 570<br>22 7/16                                                                      | 400 / 300<br>15 3/4   11 13/16                                                      | 6.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 7<br>15.435                                                                           | ✓                                                                                     |
| 506K100 | -773137                                                                             | 1170<br>46 1/16                                                                     | 1.000 / 250<br>39 3/8   9 13/16                                                     | 7.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 9,3<br>20.507                                                                         | ✓                                                                                     |
| 506K080 | -773052                                                                             | 970<br>38 3/16                                                                      | 800 / 250<br>31 1/2   9 13/16                                                       | 7.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 8,085<br>19.514                                                                       | ✓                                                                                     |
| 506K060 | -772970                                                                             | 770<br>30 5/16                                                                      | 600 / 250<br>23 5/8   9 13/16                                                       | 7.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 7,45<br>16.427                                                                        | ✓                                                                                     |
| 506K040 | -772895                                                                             | 570<br>22 7/16                                                                      | 400 / 250<br>15 3/4   9 13/16                                                       | 7.000                                                                               | 45 x 12<br>1 3/4 x 1/2                                                              | 6,4<br>14.112                                                                         | ✓                                                                                     |
| 505K100 | -772710                                                                             | 1130<br>44 1/2                                                                      | 1.000 / 200<br>39 3/8   7 7/8                                                       | 5.000                                                                               | 35 x 11<br>1 3/8 x 7/16                                                             | 5,515<br>12.161                                                                       | ✓                                                                                     |
| 505K080 | -772635                                                                             | 930<br>36 5/8                                                                       | 800 / 200<br>31 1/2   7 7/8                                                         | 5.000                                                                               | 35 x 11<br>1 3/8 x 7/16                                                             | 0,3<br>0.662                                                                          | ✓                                                                                     |



PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | N                                                                                 | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 505K060 | -772550                                                                           | 730<br>28 3/4                                                                     | 600 / 200<br>23 5/8   7 7/8                                                       | 5.000                                                                             | 35 x 11<br>1 3/8 x 7/16                                                           | 3,815<br>8.412                                                                      | ✓                                                                                   |



SERIES 440  
POLE SCREW CLAMP FOR GROUNDING WITH  
GUIDE RING



The pole screw clamps of series 440 are used for grounding during welding work. The solid and application-oriented design allows for safe clamping. The series 440 has a guide ring for ground cables.

BENEFITS

- Tensile strength up to 5,000 N
- Through the labeling on the frames, you can quickly keep track of dimensions.
- Smooth-running trapezoidal spindles ensure even higher force transmission.

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | Power<br>N                                                                          | mm/inch                                                                             | A                                                                                    | kg/lb                                                                                 |                                                                                       |
| 440-150 | -607647                                                                             | 235<br>9 1/4                                                                        | 150 / 60<br>5 7/8   2 3/8                                                           | 5.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                             | 400 A                                                                                | 0,95<br>2.095                                                                         | ✓                                                                                     |
| 440-156 | -032289                                                                             | 235<br>9 1/4                                                                        | 150 / 60<br>5 7/8   2 3/8                                                           | 5.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                             | 600 A                                                                                | 0,9595<br>2.116                                                                       | ✓                                                                                     |
| 440-158 | -803339                                                                             | 235<br>9 1/4                                                                        | 150 / 80<br>5 7/8   3 1/8                                                           | 5.000                                                                               | 30 x 8<br>1 3/16 x 5/16                                                             | 400 A                                                                                | 0,97<br>2.139                                                                         | ✓                                                                                     |

PRODUCT DETAILS

SERIES 365  
C-CLAMPS MADE OF SOLID STEEL WITH  
KNOB HANDLE



The C-clamps made entirely of steel from the series 365 are used for resilient elastic clamping of multiple workpieces in crafts, industry, and workshops. The clamp generates particularly high press force through its trapezoidal spindle. The series 365 has a hand crank, which allows for especially tight fastening.

BENEFITS

- Tensile strength up to 40,000 N
- Smooth-running trapezoidal spindles provide an even higher force transmission.
- Numerous variants of span and reach of clamps allow for holding parts of various sizes.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>N | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 365-050 | -915742                                                                                   | 120<br>4 3/4                                                                                 | 50 / 50<br>1 15/16   1 15/16                                                                 | 10.000                                                                                 | 0,425<br>0.937                                                                               | ✓                                                                                   |
| 365-075 | -915759                                                                                   | 150<br>5 7/8                                                                                 | 75 / 50<br>2 15/16   1 15/16                                                                 | 13.000                                                                                 | 0,625<br>1.378                                                                               | ✓                                                                                   |
| 365-100 | -915766                                                                                   | 186<br>7 5/16                                                                                | 100 / 60<br>3 15/16   2 3/8                                                                  | 15.000                                                                                 | 0,965<br>2.128                                                                               | ✓                                                                                   |
| 365-150 | -915773                                                                                   | 247<br>9 3/4                                                                                 | 150 / 75<br>5 7/8   2 15/16                                                                  | 18.000                                                                                 | 1,445<br>3.186                                                                               | ✓                                                                                   |
| 365-200 | -915780                                                                                   | 308<br>12 1/8                                                                                | 200 / 90<br>7 7/8   3 9/16                                                                   | 22.000                                                                                 | 2,265<br>4.994                                                                               | ✓                                                                                   |
| 365-250 | -915797                                                                                   | 384<br>15 1/8                                                                                | 250 / 100<br>9 13/16   3 15/16                                                               | 40.000                                                                                 | 4,38<br>9.658                                                                                | ✓                                                                                   |

SERIES 420  
C-CLAMPS WITH METRIC FINE THREAD



The C-clamps with metric fine thread of the 420 series are used for compressing and holding multiple workpieces in crafts, industry, and workshops. The clamp ensures precise and metered force application through the spindle with metric thread. The 420 series has a toggle handle that allows for particularly tight fastening.

BENEFITS

- Tensile strength up to 4,000 N
- Numerous variants of span and reach of clamps allow for holding parts of various sizes.

TECHNICAL ATTRIBUTES

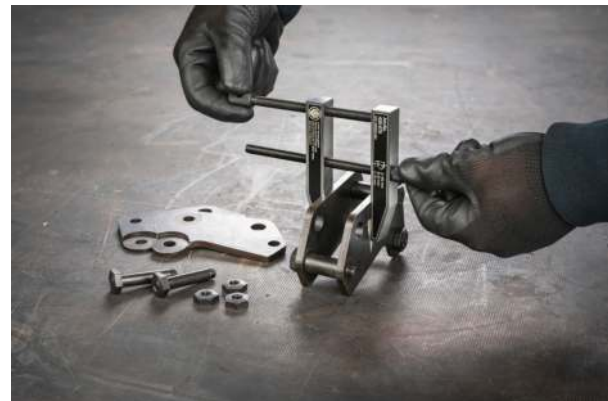
| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Power<br>N | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 420-028 | -604677                                                                                   | 85<br>3 3/8                                                                                  | 28 / 25<br>1 1/8   1                                                                         | 1.000                                                                                           | 0,18<br>0.397                                                                                | ✓                                                                                   |
| 420-053 | -604752                                                                                   | 125<br>4 15/16                                                                               | 53 / 38<br>2 1/16   1 1/2                                                                    | 1.500                                                                                           | 0,345<br>0.761                                                                               | ✓                                                                                   |
| 420-078 | -604837                                                                                   | 155<br>6 1/8                                                                                 | 78 / 50<br>3 1/16   1 15/16                                                                  | 1.500                                                                                           | 0,565<br>1.246                                                                               | ✓                                                                                   |
| 420-130 | -605094                                                                                   | 230<br>9 1/16                                                                                | 130 / 70<br>5 1/8   2 3/4                                                                    | 2.500                                                                                           | 1,45<br>3.197                                                                                | ✓                                                                                   |
| 420-155 | -667122                                                                                   | 260<br>10 1/4                                                                                | 155 / 76<br>6 1/8   2 1                                                                      | 4.000                                                                                           | 2,075<br>6.064                                                                               | ✓                                                                                   |
| 420-206 | -605179                                                                                   | 330<br>12 1                                                                                  | 206 / 86<br>8 1/8   3 3/8                                                                    | 4.000                                                                                           | 3,13<br>6.902                                                                                | ✓                                                                                   |

SERIES 430  
PARALLEL CLAMPS

The parallel clamps of the series 430 are used in crafts, industry, and workshops for the precise, parallel adjustment of the clamping surfaces thanks to their double spindle guidance.

BENEFITS

- Tensile force up to 4,000 N
- Numerous variants of span and reach of clamps allow for holding parts of various sizes.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 430-028 | -606084                                                                                     | 50<br>1 15/16                                                                                  | 28 / 16<br>1 1/8   5/8                                                                         | 0,14<br>0.309                                                                                  | ✓                                                                                     |
| 430-040 | -606169                                                                                     | 60<br>2 3/8                                                                                    | 40 / 25<br>1 9/16   1                                                                          | 0,185<br>0.408                                                                                 | ✓                                                                                     |
| 430-055 | -606244                                                                                     | 75<br>2 15/16                                                                                  | 55 / 35<br>2 3/4   1 3/8                                                                       | 0,29<br>0.507                                                                                  | ✓                                                                                     |
| 430-070 | -606329                                                                                     | 100<br>3 15/16                                                                                 | 70 / 50<br>2 3/4   1 15/16                                                                     | 0,48<br>1.058                                                                                  | ✓                                                                                     |
| 430-105 | -606404                                                                                     | 150<br>5 7/8                                                                                   | 105 / 70<br>4 1/8   2 3/4                                                                      | 0,94<br>2.073                                                                                  | ✓                                                                                     |



## SERIES 431 QUICK-CHANGE COLLETS KANT-TWIST



The KANT-TWIST quick-release clamps of series 431 are versatile tools for internal and external clamping of a wide variety of profiles – ideal for trades, industry, and workshops. These clamps impress with their multifunctionality: they combine the properties of tensioners, pliers, and clamps in a single tool. Thanks to the innovative quick-release mechanism, the clamp can be closed to any workpiece thickness in a matter of seconds.

### BENEFITS

- Tensile force up to 9700 N
- Movable Jaws with Prism Cut
- Numerous variants of the spread and reach of clamps allow for holding parts of various sizes.



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>N | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 431-001 | -606572                                                                                     | 25<br>1                                                                                        | 15 - 17<br>9/16-11/16                                                                          | 8<br>5/16                                                                                      | 1.700                                                                                     | 0,04<br>0.882                                                                                  | ✓                                                                                     |
| 431-002 | -606657                                                                                     | 50<br>1 15/16                                                                                  | 35 - 40<br>1 3/8-1 9/16                                                                        | 12<br>1/2                                                                                      | 3.900                                                                                     | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| 431-003 | -606732                                                                                     | 75<br>2 15/16                                                                                  | 35- 50<br>1 3/8-1 15/16                                                                        | 16<br>5/8                                                                                      | 7.300                                                                                     | 0,525<br>1.158                                                                                 | ✓                                                                                     |
| 431-004 | -606817                                                                                     | 110<br>4 5/16                                                                                  | 60 - 75<br>2 3/8-2 15/16                                                                       | 22<br>7/8                                                                                      | 8.300                                                                                     | 0,77<br>1.698                                                                                  | ✓                                                                                     |
| 431-006 | -606992                                                                                     | 150<br>5 7/8                                                                                   | 60 - 85<br>2 3/8-3 3/8                                                                         | 22<br>7/8                                                                                      | 9.700                                                                                     | 1,375<br>3.032                                                                                 | ✓                                                                                     |
| 431-009 | -607074                                                                                     | 240<br>9 7/16                                                                                  | 80 - 135<br>3 1/8-5 5/16                                                                       | 32<br>1 1/4                                                                                    | 9.700                                                                                     | 3,28<br>7.232                                                                                  | ✓                                                                                     |
| 431-010 | -607159                                                                                     | 255<br>10 1/32                                                                                 | 150 - 190<br>5 7/8-7 1/2                                                                       | 32<br>1 1/4                                                                                    | 9.700                                                                                     | 4,85<br>10.694                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | N                                                                                  | kg/lb                                                                               |                                                                                     |
| 431-012 | -607234                                                                           | 300<br>11 13/16                                                                   | 120 - 170<br>4 3/4-6 11/16                                                        | 32<br>1 1/4                                                                       | 9.700                                                                              | 6,49<br>14.310                                                                      | ✓                                                                                   |

### SERIES 432 PARALLEL CLAMPS

The parallel clamps of series 432 are suitable for universal internal and external clamping of a wide variety of workpiece shapes – ideal for trade, industry, and workshop use. With four different clamping surfaces, they can be used flexibly and ensure universal use on a wide range of workpieces. The clamps impress with their multifunctionality: they combine the properties of tensioners, pliers, and clamps in a single tool. Thanks to the innovative quick-clamping mechanism, they can be adjusted to any workpiece thickness in a matter of seconds.

#### BENEFITS

- Tensile force up to 8,500 N
- Numerous variants of span and reach of clamps allow for holding parts of various sizes.



## TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | N                                                                                   | kg/lb                                                                                 |                                                                                       |
| 432-001 | -795252                                                                             | 25<br>1                                                                             | 15 - 20<br>9/16-13/16                                                               | 1.300                                                                               | 0,06<br>1.323                                                                         | ✓                                                                                     |
| 432-002 | -795337                                                                             | 50<br>1 15/16                                                                       | 33 - 42<br>1 5/16-1 5/8                                                             | 3.100                                                                               | 0,26<br>0.573                                                                         | ✓                                                                                     |
| 432-003 | -795412                                                                             | 75<br>2 15/16                                                                       | 35 - 49<br>1 3/8-1 15/16                                                            | 5.000                                                                               | 0,56<br>1.235                                                                         | ✓                                                                                     |
| 432-004 | -795580                                                                             | 110<br>4 5/16                                                                       | 58 - 78<br>2 5/16-3 1/16                                                            | 6.800                                                                               | 0,85<br>1.246                                                                         | ✓                                                                                     |
| 432-006 | -795665                                                                             | 150<br>5 7/8                                                                        | 110 - 128<br>4 5/16-5 1/32                                                          | 8.500                                                                               | 2,2<br>6.174                                                                          | ✓                                                                                     |

PRODUCT DETAILS

SERIES 450  
MITER WELDING PLIERS



The miter welding pliers of the series 450 are used for accurately clamping workpieces during welding or for assembly work in trades, industry, and workshops. The ductile iron base body has firm, well-machined support surfaces at a clamping angle of 90°.

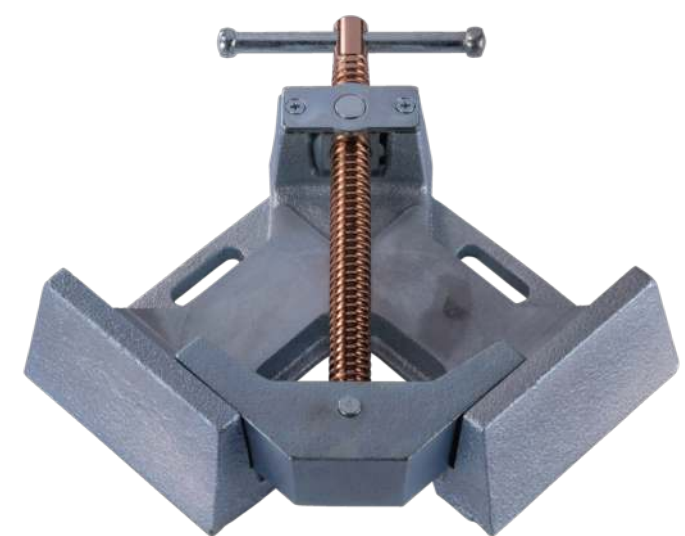
BENEFITS

- Prisms allow clamping for various workpiece shapes.
- The movable clamp jaw makes the miter welding pliers suitable for different material cross-sections.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 450-050 | -564735                                                                                   | 230<br>9 1/16                                                                                | 50<br>1 15/16                                                                                | 1,24<br>2.734                                                                                | ✓                                                                                   |
| 450-100 | -564810                                                                                   | 320<br>12 5/8                                                                                | 100<br>3 15/16                                                                               | 2,78<br>6.130                                                                                | ✓                                                                                   |

SERIES 450-260  
METAL ANGLE CLAMP



The metal angle clamp of the 450 series is used for accurate angular clamping of workpieces during welding or for assembly work in trades, industry and workshops. The malleable cast iron base body has fixed, cleanly machined contact surfaces at a clamping angle of 90°.

BENEFITS

- The movable clamp jaw makes the miter welding pliers suitable for different material cross-sections.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 450-260 | -564650                                                                                     | 250<br>9 13/16                                                                                 | 90<br>3 9/16                                                                                   | 4,16<br>9.173                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

SERIES 516  
GLUE PLIER CLAMP



The clamping pliers of series 516 are used for holding multiple workpieces in craft, industry, and workshops. The clamping pliers feature a strong spring and two opposite vulcanized fiber pads riveted to the gripping surfaces, enabling a secure and comfortable hold.

BENEFITS

- High quality through stamping from sheet steel
- Coating made of vulcanized fiber protects and insulates the workpiece
- Suitable for universal use when holding workpieces
- Secure clamping that protects the material

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 516-110 | -634612                                                                           | 110<br>4 5/16                                                                     | 40 / 37<br>1 9/16   1 7/16                                                        | 0,06<br>1.323                                                                       | ✓                                                                                   |
| 516-155 | -634797                                                                           | 155<br>6 1/8                                                                      | 50 / 56<br>1 15/16   2 3/16                                                       | 0,16<br>0.353                                                                       | ✓                                                                                   |

SERIES 516-200  
GLUE PLIER CLAMP



The glue plier clamps of series 516 are used to hold multiple workpieces in craft, industry, and workshop. The glue plier clamps are equipped with a strong spring and high-quality plastic to ensure powerful and handy holding.

BENEFITS

- By adjusting the grid settings, parts of different sizes can be held precisely.
- Suitable for universal use in holding workpieces.

TECHNICAL ATTRIBUTES

| #       |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |
| 516-200 | -002077                                                                             | 180<br>7 1/16                                                                       | 50 / 46<br>1 15/16   1 13/16                                                        | 0,155<br>0.342                                                                        |
| 516-300 | -002084                                                                             | 240<br>9 7/16                                                                       | 75 / 85<br>2 15/16   3 3/8                                                          | 0,26<br>0.573                                                                         |

## PRODUCT DETAILS

### SERIES 511 WOOD CLAMPING VICES



The wooden clamps of the series 511 are used for pressing and clamping multiple workpieces. The clamps are specially designed for wooden parts and consist of a solid upper part, lower part, and eccentric made of beech wood, as well as a steel rail. This guarantees ideal handling thanks to the infinitely variable adjustment of the clamping pressure through the eccentric lever. The non-slip cork pad prevents pressure points or other damage.

#### BENEFITS

- Infinitely adjustable pressure adjustment via eccentric lever
- Non-slip design, also on curves and edges
- Made from high-quality beech wood and blank galvanized steel rails
- Thanks to wooden parts with a natural surface, particularly environmentally friendly.
- Lightweight

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 511-200 | -917685                                                                                     | 200<br>7 7/8                                                                                   | 200 / 110<br>7 7/8   4 5/16                                                                    | 20 x 5<br>13/16 x 3/16                                                                         | 0,485<br>1.069                                                                                 | ✓                                                                                     |
| 511-300 | -917692                                                                                     | 300<br>11 13/16                                                                                | 300 / 110<br>11 13/16   4 5/16                                                                 | 20 x 5<br>13/16 x 3/16                                                                         | 0,55<br>1.213                                                                                  | ✓                                                                                     |
| 511-400 | -013288                                                                                     | 400<br>15 3/4                                                                                  | 400 / 110<br>15 3/4   4 5/16                                                                   | 20 x 5<br>13/16 x 3/16                                                                         | 0,635<br>1.400                                                                                 | ✓                                                                                     |
| 511-600 | -013295                                                                                     | 600<br>23 5/8                                                                                  | 600 / 110<br>23 5/8   4 5/16                                                                   | 20 x 5<br>13/16 x 3/16                                                                         | 0,815<br>1.797                                                                                 | ✓                                                                                     |
| 511-800 | -013301                                                                                     | 800<br>31 1/2                                                                                  | 800 / 110<br>31 1/2   4 5/16                                                                   | 20 x 5<br>13/16 x 3/16                                                                         | 0,95<br>2.095                                                                                  | ✓                                                                                     |



PRODUCT DETAILS

SERIES 517  
ONE-HAND CLAMPS



The one-handed clamp of series 517 is used for compressing and holding multiple workpieces. The one-handed clamp is primarily used in the wood sector. The one-handed operation ensures maximum flexibility. The protective caps guarantee a gentle handling of the workpiece. Thanks to the 2-component plastic handle, ergonomic working is enabled.

BENEFITS

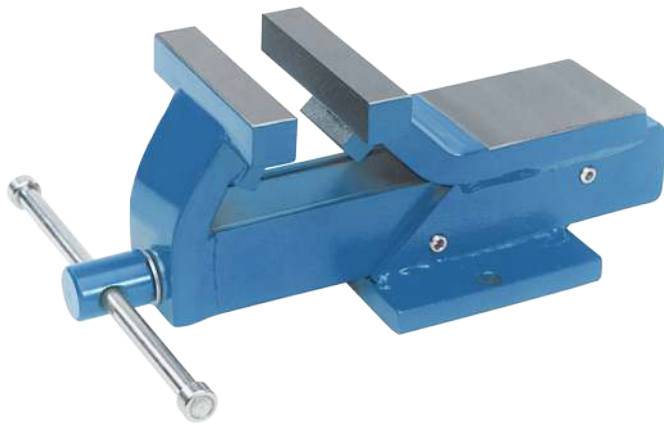
- One-handed operation for tightening and loosening using two separate controls.
- Ergonomically shaped 2-component plastic handle
- Tool-free changeable for spreading thanks to intelligent release mechanism at the upper part.

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 517-150K | -039905                                                                                     | 150 / 85<br>5 7/8   3 3/8                                                                      | 19 x 6<br>3/4 x 1/4                                                                            | 0,655<br>1.444                                                                                 | ✓                                                                                     |
| 517-300K | -039929                                                                                     | 300 / 85<br>11 13/16   3 3/8                                                                   | 19 x 6<br>3/4 x 1/4                                                                            | 0,78<br>1.720                                                                                  | ✓                                                                                     |
| 517-450K | -039943                                                                                     | 450 / 85<br>17 11/16   3 3/8                                                                   | 19 x 6<br>3/4 x 1/4                                                                            | 0,89<br>1.962                                                                                  | ✓                                                                                     |
| 517-600K | -039967                                                                                     | 600 / 85<br>23 5/8   3 3/8                                                                     | 19 x 6<br>3/4 x 1/4                                                                            | 1,025<br>2.756                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 520 ALL-STEEL SCREW CLAMPS



The all-steel vises of series 520 are used for clamping workpieces in crafts, industry, and workshops. The lightweight design of series 520 is ideal for universally clamping simple workpieces, and the material provides the necessary durability and stability of the vise.

#### BENEFITS

- High-quality material and simple actuation
- Easy execution for flexible work in workshops and crafts
- Available optionally in Blue, Red, and Anthracite.

#### TECHNICAL ATTRIBUTES

| #         |  |  |  |  |  |  |  |  |  |  |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                               |                                                                                     |
| 520-080   | -609474                                                                           | 95<br>3 3/4                                                                       | 250<br>9 13/16                                                                    | 93<br>3 11/16                                                                     | 100<br>3 15/16                                                                    | 80<br>3 1/8                                                                       | 20<br>13/16                                                                        | 50<br>1 15/16                                                                       | 3,965<br>8.743                                                                      | ✓                                                                                   |
| 520-100   | -609542                                                                           | 100<br>3 15/16                                                                    | 310<br>12 3/16                                                                    | 112<br>4 7/16                                                                     | 120<br>4 3/4                                                                      | 100<br>3 15/16                                                                    | 22<br>7/8                                                                          | 64<br>2 1/2                                                                         | 7,24<br>15.964                                                                      | ✓                                                                                   |
| 520-125   | -609627                                                                           | 130<br>5 1/8                                                                      | 377<br>14 13/16                                                                   | 137<br>5 3/8                                                                      | 140<br>5 1/2                                                                      | 125<br>4 15/16                                                                    | 25<br>1                                                                            | 75<br>2 15/16                                                                       | 10,265<br>2.789                                                                     | ✓                                                                                   |
| 520-150   | -609702                                                                           | 160<br>6 5/16                                                                     | 435<br>17 1/8                                                                     | 165<br>6 1/2                                                                      | 155<br>6 1/8                                                                      | 150<br>5 7/8                                                                      | 30<br>1 3/16                                                                       | 95<br>3 3/4                                                                         | 16,9<br>37.265                                                                      | ✓                                                                                   |
| 520-175   | -609887                                                                           | 175<br>6 7/8                                                                      | 435<br>17 1/8                                                                     | 165<br>6 1/2                                                                      | 155<br>6 1/8                                                                      | 175<br>6 7/8                                                                      | 30<br>1 3/16                                                                       | 95<br>3 3/4                                                                         | 17<br>37.485                                                                        | ✓                                                                                   |
| 520-100-R | -997090                                                                           | 100<br>3 15/16                                                                    | 310<br>12 3/16                                                                    | 112<br>4 7/16                                                                     | 120<br>4 3/4                                                                      | 100<br>3 15/16                                                                    | 22<br>7/8                                                                          | 64<br>2 1/2                                                                         | 7<br>15.435                                                                         | ✓                                                                                   |
| 520-125-R | -455668                                                                           | 130<br>5 1/8                                                                      | 377<br>14 13/16                                                                   | 137<br>5 3/8                                                                      | 140<br>5 1/2                                                                      | 125<br>4 15/16                                                                    | 25<br>1                                                                            | 75<br>2 15/16                                                                       | 7<br>15.435                                                                         | ✓                                                                                   |
| 520-150-R | -455880                                                                           | 160<br>6 5/16                                                                     | 435<br>17 1/8                                                                     | 165<br>6 1/2                                                                      | 155<br>6 1/8                                                                      | 150<br>5 7/8                                                                      | 30<br>1 3/16                                                                       | 95<br>3 3/4                                                                         | 7<br>15.435                                                                         | ✓                                                                                   |
| 520-175-R | -035808                                                                           | 175<br>6 7/8                                                                      | 435<br>17 1/8                                                                     | 165<br>6 1/2                                                                      | 155<br>6 1/8                                                                      | 175<br>6 7/8                                                                      | 30<br>1 3/16                                                                       | 95<br>3 3/4                                                                         | 7<br>15.435                                                                         | ✓                                                                                   |
| 520-100-G | -997083                                                                           | 100<br>3 15/16                                                                    | 310<br>12 3/16                                                                    | 112<br>4 7/16                                                                     | 120<br>4 3/4                                                                      | 100<br>3 15/16                                                                    | 22<br>7/8                                                                          | 64<br>2 1/2                                                                         | 6,9<br>15.215                                                                       | ✓                                                                                   |
| 520-125-G | -759865                                                                           | 130<br>5 1/8                                                                      | 377<br>14 13/16                                                                   | 137<br>5 3/8                                                                      | 140<br>5 1/2                                                                      | 125<br>4 15/16                                                                    | 25<br>1                                                                            | 75<br>2 15/16                                                                       | 7<br>15.435                                                                         | ✓                                                                                   |
| 520-150-G | -056179                                                                           | 160<br>6 5/16                                                                     | 435<br>17 1/8                                                                     | 165<br>6 1/2                                                                      | 155<br>6 1/8                                                                      | 150<br>5 7/8                                                                      | 30<br>1 3/16                                                                       | 95<br>3 3/4                                                                         | 15<br>33.075                                                                        | ✓                                                                                   |
| 520-175-G | -759872                                                                           | 175<br>6 7/8                                                                      | 435<br>17 1/8                                                                     | 165<br>6 1/2                                                                      | 155<br>6 1/8                                                                      | 175<br>6 7/8                                                                      | 30<br>1 3/16                                                                       | 95<br>3 3/4                                                                         | 17,18<br>37.882                                                                     | ✓                                                                                   |

## PRODUCT DETAILS

### SERIES 525 PARALLEL VISES



The parallel vises of series 525 are used for clamping workpieces in crafts, industry, and workshops. The induction-hardened parts of series 525 make it ideal for the universal clamping of medium-sized workpieces, and the material ensures the necessary durability and stability of the vise.

#### BENEFITS

- High-quality material and easy operation
- Medium execution for flexible work as a Parallel Vise
- Available in the colors blue, red, and anthracite.

#### TECHNICAL ATTRIBUTES

| #                |  |  |  |  |  |  |  |  |  |  |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                  | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                               |                                                                                     |
| <b>525-100</b>   | -925185                                                                           | 125<br>4 15/16                                                                    | 292<br>11 1/2                                                                     | 125<br>4 15/16                                                                    | 125<br>4 15/16                                                                    | 100<br>3 15/16                                                                    | 17<br>11/16                                                                        | 69<br>2 11/16                                                                       | 6,89<br>15.192                                                                      | ✓                                                                                   |
| <b>525-125</b>   | -925192                                                                           | 145<br>5 11/16                                                                    | 350<br>13 3/4                                                                     | 148<br>5 13/16                                                                    | 150<br>5 7/8                                                                      | 125<br>4 15/16                                                                    | 20<br>13/16                                                                        | 82<br>3 1/4                                                                         | 1,32<br>2.911                                                                       | ✓                                                                                   |
| <b>525-150</b>   | -925208                                                                           | 165<br>6 1/2                                                                      | 452<br>17 13/16                                                                   | 178<br>7 1/64                                                                     | 200<br>7 7/8                                                                      | 150<br>5 7/8                                                                      | 24<br>15/16                                                                        | 99<br>3 7/8                                                                         | 11,5<br>25.358                                                                      | ✓                                                                                   |
| <b>525-175</b>   | -925215                                                                           | 190<br>7 1/2                                                                      | 510<br>20 1/16                                                                    | 208<br>8 3/16                                                                     | 220<br>8 11/16                                                                    | 175<br>6 7/8                                                                      | 27<br>1 1/16                                                                       | 122<br>4 13/16                                                                      | 26,46<br>58.344                                                                     | ✓                                                                                   |
| <b>525-100-R</b> | -455675                                                                           | 125<br>4 15/16                                                                    | 292<br>11 1/2                                                                     | 125<br>4 15/16                                                                    | 125<br>4 15/16                                                                    | 100<br>3 15/16                                                                    | 17<br>11/16                                                                        | 69<br>2 11/16                                                                       | 11<br>24.255                                                                        | ✓                                                                                   |
| <b>525-125-R</b> | -178796                                                                           | 145<br>5 11/16                                                                    | 350<br>13 3/4                                                                     | 148<br>5 13/16                                                                    | 150<br>5 7/8                                                                      | 125<br>4 15/16                                                                    | 20<br>13/16                                                                        | 82<br>3 1/4                                                                         | 11,5<br>25.358                                                                      | ✓                                                                                   |
| <b>525-150-R</b> | -813468                                                                           | 165<br>6 1/2                                                                      | 452<br>17 13/16                                                                   | 178<br>7 1/64                                                                     | 200<br>7 7/8                                                                      | 150<br>5 7/8                                                                      | 24<br>15/16                                                                        | 99<br>3 7/8                                                                         | 16,67<br>36.757                                                                     | ✓                                                                                   |
| <b>525-175-R</b> | -831332                                                                           | 190<br>7 1/2                                                                      | 510<br>20 1/16                                                                    | 208<br>8 3/16                                                                     | 220<br>8 11/16                                                                    | 175<br>6 7/8                                                                      | 27<br>1 1/16                                                                       | 122<br>4 13/16                                                                      | 26<br>57.330                                                                        | ✓                                                                                   |
| <b>525-100-G</b> | -035815                                                                           | 125<br>4 15/16                                                                    | 292<br>11 1/2                                                                     | 125<br>4 15/16                                                                    | 125<br>4 15/16                                                                    | 100<br>3 15/16                                                                    | 17<br>11/16                                                                        | 69<br>2 11/16                                                                       | 6,775<br>14.939                                                                     | ✓                                                                                   |
| <b>525-125-G</b> | -096991                                                                           | 145<br>5 11/16                                                                    | 350<br>13 3/4                                                                     | 148<br>5 13/16                                                                    | 150<br>5 7/8                                                                      | 125<br>4 15/16                                                                    | 20<br>13/16                                                                        | 82<br>3 1/4                                                                         | 1,27<br>2.800                                                                       | ✓                                                                                   |
| <b>525-150-G</b> | -097028                                                                           | 165<br>6 1/2                                                                      | 452<br>17 13/16                                                                   | 178<br>7 1/64                                                                     | 200<br>7 7/8                                                                      | 150<br>5 7/8                                                                      | 24<br>15/16                                                                        | 99<br>3 7/8                                                                         | 17<br>37.485                                                                        | ✓                                                                                   |
| <b>525-175-G</b> | -097042                                                                           | 190<br>7 1/2                                                                      | 510<br>20 1/16                                                                    | 208<br>8 3/16                                                                     | 220<br>8 11/16                                                                    | 175<br>6 7/8                                                                      | 27<br>1 1/16                                                                       | 122<br>4 13/16                                                                      | 6,55<br>14.443                                                                      | ✓                                                                                   |

SERIES 160-1  
FLANGE SPREADER



The flange spreaders of series 160 are used in pairs for the safe and accident-free separation of flange connections of pipelines in power plants, petrochemicals, or offshore. They enable the separation of large and high-performance flanges and thus facilitate maintenance work, even when a large access opening is present between the flanges.

BENEFITS

- After completing the work, the flanges will be returned precisely to their original position.
- Flange spreaders are the perfect solution for the repair of pipes and flanges.
- They can also be used for the exchange of bows, flange seals, and metal seals on couplings as well as for the maintenance of heavy equipment and many other tasks.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>Ø min. mm<br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 160-1-E | -245701                                                                                     | 80 - 250<br>3 1/8-9 13/16                                                                      | 14,5<br>9/16                                                                                                | 24<br>15/16                                                                                    | 2,905<br>6.505                                                                                 | ✓                                                                                     |
| 160-1-P | -041167                                                                                     | 80 - 250<br>3 1/8-9 13/16                                                                      | 14,5<br>9/16                                                                                                | 24<br>15/16                                                                                    | 5,87<br>12.943                                                                                 | ✓                                                                                     |

SERIES 160-2  
FLANGE SPREADER



The flange spreaders of the 160 series are used in pairs for the safe and accident-free separation of flange connections of pipelines in power plants, petrochemical plants or offshore. They enable the separation of large and high-performance flanges and thus allow for easy maintenance work, even when a large access opening between the flanges is present.

BENEFITS

- After completing the work, the flanges will be returned precisely to their original position.
- Flange spreaders are the perfect solution for the repair of pipes and flanges.
- They can also be used for the exchange of bows, flange seals, and metal seals on couplings as well as for the maintenance of heavy equipment and many other tasks.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>Ø min. mm<br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 160-2-E | -245886                                                                                     | 250 - 1200<br>9 13/16-47 1/4                                                                   | 24<br>15/16                                                                                                 | 27<br>1 1/16                                                                                   | 8,95<br>19.735                                                                                 | ✓                                                                                     |
| 160-2-P | -041174                                                                                     | 250 - 1200<br>9 13/16-47 1/4                                                                   | 24<br>15/16                                                                                                 | 27<br>1 1/16                                                                                   | 17,65<br>16.295                                                                                | ✓                                                                                     |



SERIES 165  
UNIVERSAL SPREADER



The universal spreader of the series 165 is used for the quick and safe spreading of flanges and similar parts of all kinds and sizes in the industry. It is a universal tool designed for many applications, intended for paired use.

BENEFITS

- The smooth operation of the spreader is performed via a built-in ratchet.
- The tool allows for easy execution of maintenance tasks such as a seal ring replacement.
- After the work is completed, the flanges will be returned exactly to their original position.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>Nm | Max.<br>tensile<br>force<br>kN | Max.<br>tension<br>force<br>t/US t. sh. | <br>kg/lb | <br>✓ |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 165-E | -491979                                                                                     | 10 - 75<br>3/8 - 2 15/16                                                                       | 30<br>1 3/16                                                                                   | 86                                                                                        | 20                             | 2<br>2.20                               | 6,5<br>14.333                                                                                  | ✓                                                                                          |

SERIES Y-165  
HYDRAULIC SPREADER



The hydraulic spreader of the Y-165 series is a technical device that creates an expansion or spreading using hydraulic pressure. The hydraulic spreader consists of a cylinder in which a piston moves. By using hydraulic fluid, the piston is moved with high pressure, which opens the two arms of the spreader. Hydraulic spreaders are mainly used by the fire department, in rescue technology, and industry. The accompanying safety block ensures that the flanges are held in the spread position so that the tool can be repositioned.

BENEFITS

- The hydraulics ensure maximum leverage
- The hydraulic mechanism allows for the application of targeted pressure very efficiently and controllably.
- Flexibly usable for various application situations



TECHNICAL ATTRIBUTES

| #             | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>bar | Max.<br>tensile<br>force<br>kN | Max.<br>tractive<br>force<br>t | <br>kg |  |
|---------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Y-165-15-10-E | -023569                                                                                     | 6 - 46<br>1/4 - 1 13/16                                                                        | 25<br>1                                                                                        | 700                                                                                        | 150                            | 15                             | 3,30                                                                                        | ✓                                                                                     |
| Y-165-15-20-E | -023576                                                                                     | 6 - 46<br>1/4 - 1 13/16                                                                        | 25<br>1                                                                                        | 700                                                                                        | 150                            | 15                             | 0,30                                                                                        | ✓                                                                                     |
| Y-165-25-10-E | -023583                                                                                     | 8 - 59<br>5/16 - 2 5/16                                                                        | 65<br>2 9/16                                                                                   | 700                                                                                        | 250                            | 25                             | 2,14                                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES K-Y-165 HYDRAULIC SPREADER IN SET



The hydraulic spreader of the Y-165 series is a technical device that creates an expansion or spreading using hydraulic pressure. The hydraulic spreader consists of a cylinder in which a piston moves. By using hydraulic fluid, the piston is moved with high pressure, which opens the two arms of the spreader. Hydraulic spreaders are mainly used by the fire department, in rescue technology, and industry. The accompanying safety block ensures that the flanges are held in the spread position so that the tool can be repositioned.

#### BENEFITS

- The hydraulics ensure maximum leverage
- The hydraulic mechanism allows for the application of targeted pressure very efficiently and controllably.
- Flexibly usable for various application situations



#### TECHNICAL ATTRIBUTES

| #               |  GTIN |  mm/inch |  mm/inch |  bar | Max.<br>tensile<br>force<br>kN | Max.<br>tractive<br>force<br>t |  kg |  |
|-----------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-Y-165-15-10-P | -023538                                                                                  | 6 - 46<br>1/4 - 1 13/16                                                                     | 25<br>1                                                                                     | 700                                                                                     | 150                            | 15                             | 6,60                                                                                     | ✓                                                                                     |
| K-Y-165-15-20-P | -023545                                                                                  | 6 - 46<br>1/4 - 1 13/16                                                                     | 25<br>1                                                                                     | 700                                                                                     | 150                            | 15                             | 6,60                                                                                     | ✓                                                                                     |
| K-Y-165-25-10-P | -023552                                                                                  | 8 - 59<br>5/16 - 2 5/16                                                                     | 65<br>2 9/16                                                                                | 700                                                                                     | 250                            | 25                             | 0,30                                                                                     | ✓                                                                                     |

### SERIES 689 LANGBECK LOCKING PLIERS



The Langbeck locking pliers of series 689 are used for clamping and gripping in narrow, tapering areas in workshops, industry, and trade. The locking pliers are not only handy and can be operated with one hand, but the toggle lever mechanism also allows for the application of very high forces. The series 689 is an ideal choice, especially in cases of reduced accessibility.

#### BENEFITS

- The knurled screw with fine thread allows for precise setting of spread and clamping pressure.
- The single-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### TECHNICAL ATTRIBUTES

| #       |  GTIN |  L<br>mm/inch |  max.<br>mm/inch |  kg/lb |  |
|---------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 689-150 | -005664                                                                                  | 150<br>5 7/8                                                                                     | 40<br>1 9/16                                                                                        | 0,3<br>0.662                                                                                | ✓                                                                                     |
| 689-230 | -005688                                                                                  | 230<br>9 1/16                                                                                    | 55<br>2 3/16                                                                                        | 0,395<br>0.871                                                                              | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 690 UNIVERSAL LOCKING PLIERS



The Universal locking pliers of series 690 are used for securely holding round, profile, and flat materials in workshops, industry, and crafts. The locking pliers are not only handy and can be operated with one hand, but the toggle mechanism also allows for very high forces to be applied. The series 690 is a universal model suitable for a variety of workpieces.

#### BENEFITS

- The semicircular jaws are particularly suitable for round and flat material.
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.
- The one-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 690-180 | -651367                                                                                    | 180<br>7 1/16                                                                                 | 35<br>1 3/8                                                                                   | 0,37<br>0.816                                                                                 | ✓                                                                                    |
| 690-250 | -651442                                                                                    | 250<br>9 13/16                                                                                | 50<br>1 15/16                                                                                 | 0,605<br>1.433                                                                                | ✓                                                                                    |
| 690-300 | -651510                                                                                    | 300<br>11 13/16                                                                               | 65<br>2 9/16                                                                                  | 0,95<br>2.095                                                                                 | ✓                                                                                    |

### SERIES 690+ UNIVERSAL LOCKING PLIERS



The universal locking pliers of the 690+ series are used for securely holding round, profile, and flat materials in the workshop, industrial settings, and crafts. The locking pliers are not only handy and can be operated with one hand, but the lever mechanism also allows for very high forces to be applied. The 690+ series is a universal model suitable for a wide range of workpieces.

#### BENEFITS

- Tensioning regulator and release lever make working with locking pliers easier.
- Jaw body and gripping jaws are made of highly durable material.
- High clamping pressure due to knee lever translation

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 690+004 | -909604                                                                                     | 220<br>8 11/16                                                                                 | 30<br>1 3/16                                                                                   | 0,55<br>1.213                                                                                  |

## PRODUCT DETAILS

### SERIES 691 PRISMA LOCKING PLIERS



The Prisma grip pliers of series 691 are used for securely holding round, profile, and flat materials in workshops, industry, and crafts. The grip pliers are not only handy and can be operated with one hand, but thanks to the lever mechanism, very high forces can also be applied. The 691 series features a wire groove in the upper jaw, allowing nails and wires to be accessible and manageable from the front.

#### BENEFITS

- Particularly suitable for round and flat materials
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.
- The one-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch<br>max.                                                                   | kg/lb                                                                               |                                                                                     |
| 691-180 | -651695                                                                           | 180<br>7 1/16                                                                     | 30<br>1 3/16                                                                      | 0,28<br>0.617                                                                       | ✓                                                                                   |
| 691-250 | -651770                                                                           | 250<br>9 13/16                                                                    | 35<br>1 3/8                                                                       | 0,595<br>1.312                                                                      | ✓                                                                                   |

### SERIES 691+ UNIVERSAL OPTI GRIP PLIERS



The Universal Opti-Grip Pliers of series 691+ are used for securely holding round, profile, and flat materials in workshops, industry, and crafts. The grip pliers are not only handy and can be operated with one hand, but the toggle lever mechanism also enables the application of very high forces.

#### BENEFITS

- Tensioning regulator and release lever make working with locking pliers easier.
- Jaw body and gripping jaws are made of highly durable material.
- High clamping pressure due to knee lever translation

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch<br>max.                                                                     | kg/lb                                                                                 |                                                                                       |
| 691+005 | -909611                                                                             | 220<br>8 11/16                                                                      | 30<br>1 3/16                                                                        | 0,495<br>1.091                                                                        | ✓                                                                                     |



PRODUCT DETAILS

SERIES 692  
IDEAL LOCKING PLIERS



The Ideal locking pliers in the 692 series are used for securely holding round, profile and flat material in workshops, industry and the trades. The locking pliers are not only handy and can be operated with one hand; the toggle-lever mechanism also allows very high forces to be applied. The 692 series features a combined jaw shape with four-point support.

BENEFITS

- The knurled screw with fine thread allows for precise setting of spread and clamping pressure.
- The single-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 692-250 | -651930                                                                                   | 250<br>9 13/16                                                                               | 50<br>1 15/16                                                                                | 0,57<br>1.257                                                                                | ✓                                                                                   |

SERIES 693  
PARALLEL-PLUS-LOCKING PLIERS



The Parallel-Plus locking pliers of series 693 are used for securely holding round, profile, and flat materials in workshops, industry, and crafts. The locking pliers are not only handy and can be operated with one hand, but thanks to the toggle lever mechanism, very high forces can also be applied. Series 693 has a combined jaw shape with a swiveling jaw, making parallel and prismatic clamping possible.

BENEFITS

- Suitable for symmetrical materials as well

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 693-250 | -650117                                                                                     | 250<br>9 13/16                                                                                 | 45<br>1 3/4                                                                                    | 0,62<br>1.367                                                                                  | ✓                                                                                     |

## SERIES 694 WIDE-JAW LOCKING PLIERS



The wide-jaw locking pliers of the 694 series are used for clamping edges and surfaces in workshop, industry, and trade. The locking pliers are not only handy and can be operated with one hand; the toggle joint mechanism also allows very high forces to be applied. Thanks to their jaw shape, the 694 series can be used for clamping, bending, and flanging thin, soft sheet metal.

### BENEFITS

- The knurled screw with fine thread allows for precise setting of spread and clamping pressure.
- The single-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 694-275 | -652012                                                                           | 180<br>7 1/16                                                                     | 45<br>1 3/4                                                                       | 0,53<br>1.169                                                                       | ✓                                                                                   |

## SERIES 695 SCHWEISSER-LOCKING PLIERS



The welding grip pliers of series 695 are used for centric clamping when welding profile or flat material by impact in workshop, industry, and trades. The grip pliers are not only handy and can be operated with one hand, but thanks to the lever mechanism, very high forces can also be applied. The series 695, with its U-shaped jaws, facilitates easier and more flexible clamping due to its good vibration absorption.

### BENEFITS

- Also ideal for more delicate surfaces



### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 695-280 | -652197                                                                             | 280<br>11 1/32                                                                      | 60<br>2 3/8                                                                         | 0,85<br>1.874                                                                         | ✓                                                                                     |

PRODUCT DETAILS

SERIES 696  
ROHRSCHWEISSER-LOCKING PLIERS



The pipe welder locking pliers of the 696 series are used for self-centering clamping when welding round or pipe material in a butt joint in workshops, industry, and the trades. The locking pliers are not only handy and can be operated with one hand; the toggle joint mechanism also allows very high forces to be applied. Thanks to its good vibration absorption, the 696 series enables easier and more flexible clamping, even with round materials.

BENEFITS

- Also ideal for more delicate surfaces
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.
- The one-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 696-280 | -652272                                                                                   | 280<br>11 1/32                                                                               | 90<br>3 9/16                                                                                 | 0,85<br>1.874                                                                                | ✓                                                                                   |

SERIES 697  
KLAMMER-LOCKING PLIERS



The clamping locking pliers of series 697 are used for clamping, holding and gripping profile and flat material in workshops, industry and craftsmanship. The locking pliers are not only handy and can be operated with one hand, but the lever mechanism also allows very high forces to be applied. The series 697 with its special shape can also clamp asymmetrical and bulky workpieces and profiles with high webs.

BENEFITS

- Optimal suited for tensioning behind cross beams with asymmetrical materials
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.
- The one-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 697-280 | -652357                                                                                     | 280<br>11 1/32                                                                                 | 90<br>3 9/16                                                                                   | A:55   B:85   C:95  <br>D:77                                                                   | 0,715<br>1.654                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 698 PARALLEL CLAMP LOCKING PLIERS



The parallel clamp locking pliers of the 698 series are used for clamping and gripping round, profile and flat material in workshops, industry and the trades. The locking pliers are not only handy and can be operated with one hand; thanks to the toggle-joint mechanism, very high forces can also be applied. The 698 series, with its movable jaws with large support plates, provides excellent clamping action even with asymmetrical material.

#### BENEFITS

- Optimal suited for tensioning behind cross beams with asymmetrical materials
- The knurled screw with fine threads allows for precise adjustment of spread and clamping pressure.
- The one-handed quick-release lever with return spring and clamping protection reduces the risk of injury and speeds up the work process.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 698-280 | -652432                                                                           | 280<br>11 1/32                                                                    | 90<br>3 9/16                                                                      | A:55   B:85   C:95  <br>D:77                                                      | 0,785<br>1.731                                                                      | ✓                                                                                   |

### SERIES 699 BENCH LOCKING PLIERS



The table locking pliers of series 699 are suitable for clamping and securing workpieces on workbenches with grooves. They offer an adjustable spread of up to 85 mm and a robust construction made from high-strength special steel, with wear-resistant chrome-vanadium steel jaws. The quick adjustment mechanism allows for swift fixing. The locking pliers are not only handy and can be operated with one hand.

#### BENEFITS

- Quick fixing: Quick clamping mechanism enables fast clamping and releasing of workpieces
- High tension force: Adjustable spread up to 85 mm for versatile workpieces
- One-handed operation: Handy and ergonomic for comfortable one-handed use
- Versatile use: Ideal for workbenches with slot, ensures a secure hold when working

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 699-280 | -012518                                                                             | 280<br>11 1/32                                                                      | 85<br>3 3/8                                                                         | 0,63<br>1.389                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

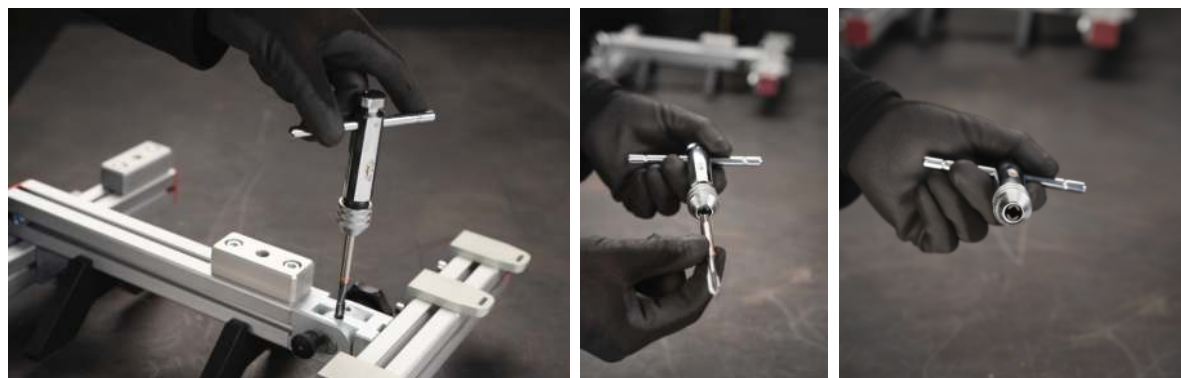
### SERIES 280 TOOL AND DRILL HOLDER WITH RATCHET



The tool and drill holders with ratchet of the 280 series are ideal for holding taps, reamers, and screw extractors, and enable efficient thread cutting and reaming. Thanks to the integrated ratchet function with clockwise rotation, counterclockwise rotation, and center position, they offer maximum flexibility and precise control in use. The tool holders are available in four different sizes. The long versions (280-250 and 280-300) are ideal for particularly hard-to-reach areas.

#### BENEFITS

- Switchable for left and right operation as well as rigid locking
- Two-jaw chuck for securely clamping square shafts
- Adjustable cross handle with notches at the ends



#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>DIN 352 | <br>DIN 206 | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 280-085 | -910938                                                                                     | 85<br>3 3/8                                                                                    | M2 - M8                                                                                        | 2,5 - 6,5                                                                                      | 2 - 5,5<br>1/16-3/16                                                                            | 0,175<br>0.386                                                                                 | ✓                                                                                     |
| 280-100 | -910945                                                                                     | 110<br>4 5/16                                                                                  | M5 - M12                                                                                       | 4-8                                                                                            | 4,5 - 8<br>3/16-5/16                                                                            | 0,28<br>0.617                                                                                  | ✓                                                                                     |
| 280-250 | -910952                                                                                     | 250<br>9 13/16                                                                                 | M1 - M10                                                                                       | 2,5 - 6,5                                                                                      | 2 - 5,5<br>1/16-3/16                                                                            | 0,26<br>0.573                                                                                  | ✓                                                                                     |
| 280-300 | -910969                                                                                     | 300<br>11 13/16                                                                                | M5 - M12                                                                                       | 5,5 - 10                                                                                       | 4,5 - 8<br>3/16-5/16                                                                            | 0,415<br>0.915                                                                                 | ✓                                                                                     |



SERIES 315  
TOOL HOLDER

The tool holders of series 315 are used for holding various tools for universal use in craft, industry, and workshop. Series 315 is drilled.



BENEFITS

- Suitable for a variety of tools and applications in different industries
- Ensures stable support and high concentricity



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 315-801 | -701284                                                                                   | 80<br>3 1/8                                                                                  | 0 - 1<br>0 - 1/32                                                                            | 0,03<br>0.662                                                                               | ✓                                                                                   |
| 315-802 | -701369                                                                                   | 80<br>3 1/8                                                                                  | 1 - 2<br>1/32 - 1/16                                                                         | 0,06<br>1.323                                                                               | ✓                                                                                   |



PRODUCT DETAILS

SERIES W-3132/K2  
RIVET MACHINES



The W-3132 series riveter is suitable for all riveting work, especially for brake and clutch linings, etc., and even with complicated jaws featuring longitudinal and height ribs. It is a manual tool for riveting and unriveting with a long lever for energy-saving operation. The riveting is done from below, and the unriveting from above.

BENEFITS

- Simple and practical to handle
- The riveting machine can be clamped in the vise as well as attached to the wall with screws.
- The shape of the rivet inserts allows for the use of solid and hollow rivets.
- Due to the favorable leverage ratios, only a small amount of pressure is required even with full rivets.
- The rivet inserts are replaceable by loosening two knob screws.



TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| W-3132/K2 | -555662                                                                                    | 10<br>3/8                                                                                     | 9,395<br>20.716                                                                             | ✓                                                                                    |

SERIES 721  
CLAMP WITH NON-SLIP HAND PROTECTION



The chisel holders made of PVC from the series 721 are used for protection during chisel work and similar activities in crafts, industry, and workshops. The shape and construction of the green holder protect the user and prevent hand injuries in everyday work. Ideal for oval chisels from 20x12 mm to 26x13 mm as well as 8-sided chisels 16-20 mm.

BENEFITS

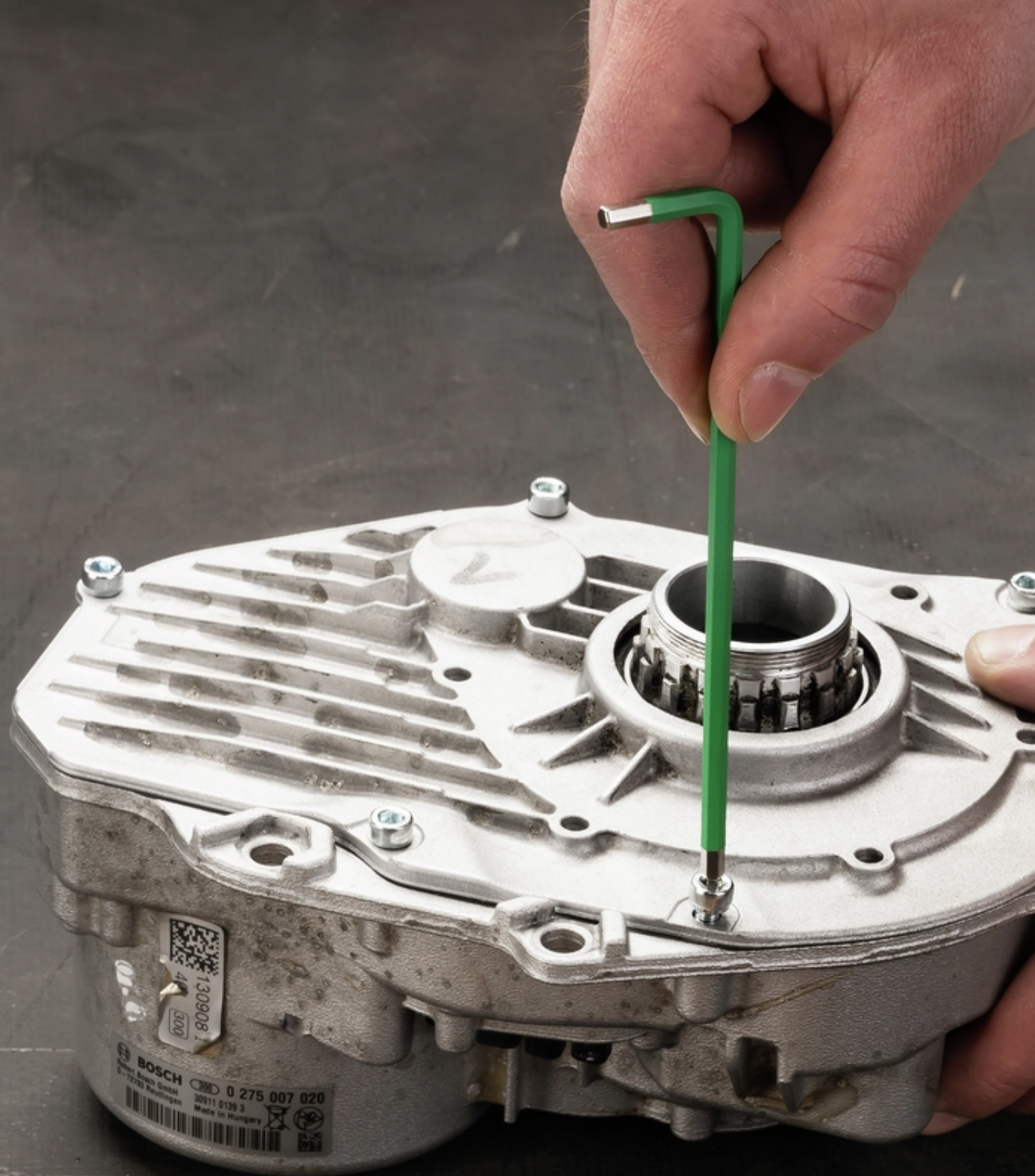
- The grippy and secure shape reduces fatigue and increases safety.
- Elliptical shape prevents rolling away
- For all measuring tools from 250 mm length
- Double, enlarged protective plate guarantees maximum operational safety



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Chisel pick-up                  |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|
| 721-1 | -344367                                                                                     | 120<br>4 3/4                                                                                   | 40<br>1 9/16                                                                                   | 103<br>4 1/16                                                                                  | 20x12 - 26x13,<br>26x7, 16 - 20 | ✓                                                                                     |









# SCREW & DRIVE

Whether it's for delicate work in watchmaking, for pressing together and holding multiple workpieces, or for operating hard-to-reach screw heads - KUKKO offers the perfect solution for every application.

Activities under Screw & Drive include:

- Watchmaker's screwdrivers
- European wrenches
- Impact wrenches



KUKKO // Pull forward



# SCREW & DRIVE



| TIRE INFORMATION                        |  |                                         |                                      |
|-----------------------------------------|--|-----------------------------------------|--------------------------------------|
| TIRE PRESSURES:                         |  | FRONT                                   | 250kPa / 2.50kg/cm <sup>2</sup> 30mm |
| [ DRIVER AND PASSENGER ]                |  | REAR                                    | 250kPa / 2.50kg/cm <sup>2</sup> 42mm |
| [ DRIVER ONLY ]                         |  | FRONT                                   | 250kPa / 2.50kg/cm <sup>2</sup> 30mm |
|                                         |  | REAR                                    | 250kPa / 2.50kg/cm <sup>2</sup> 42mm |
| TIRE SIZE :                             |  | FRONT                                   | 120/100R16                           |
|                                         |  | REAR                                    | 160/250R17                           |
| TIRE BRAND :                            |  | FRONT                                   | REAR                                 |
| MAXIMUM LOAD :                          |  | 65kg (143lb)                            | 65kg (143lb)                         |
| MAXIMUM SPEED :                         |  | 120km/h (75mph)                         | 120km/h (75mph)                      |
| REAR RECOMMEND FOR CENTER TREAD DEPTH : |  | MIN. 1.5mm (0.06in) REAR 2.0mm (0.08in) |                                      |
| *SEE OWNER'S MANUAL                     |  |                                         |                                      |

# APPLICATION

For the activity “Screw & Drive”, KUKKO offers a variety of tools. The range extends from allen keys (hexagon or Torxx) to impact wrenches and watchmaker screwdrivers. The perfect solution is found for every application.

## FEATURES OF THE SERIES

### SERIES 291



The ISO 2936 allen keys of series 201 are used for operating hard-to-reach screw heads. Hardness and torque comply with the ISO standard. The sales and workshop stands serve for proper storage.

### SERIES 294



The Tamper TX allen keys of series 211 are used for operating hard-to-reach screw heads. Unlike hex keys, the Torx profile engages at the center, making work easier and reducing wear.

### SERIES 295



The color-coded TX allen keys with ball head of series 212 make selecting the required size easier and are used for operating hard-to-reach screw heads.

### SERIES 1900



The european of series 1900 is used to compress and hold several workpieces. Thanks to the adjustable wrench with double-ended jaw, both metallic and round or polygonal bodies can be easily fixed.

### SERIES 250



The slotted watchmaker screwdrivers of series 250 are used for sensitive work and meet the highest requirements in crafts and watchmaking. The screwdrivers with rotatable hexagonal head and knurled fine-screw handle allow for the controlled transmission of high torques.

### SERIES 133 | 406



The impact open-end wrenches (DIN 133) of series 133 are used in the fields of commercial vehicles, pipe industry, tank cleaning, petrochemical industry, steel and mining, etc. They enable effortless operation of hexagon or square screw heads or nuts.



## EXAMPLES OF APPLICATION



Removing a Torx screw from an electric motor with an allen key from series 212



The allen keys from the SERIES 291 sales and workshop stand during the disassembly of a punching tool



A screwdriver from the watchmaker screwdriver set 250-600 when screwing work on a mobile phone



The european 1900-30 when tightening or loosening a nut on a machine

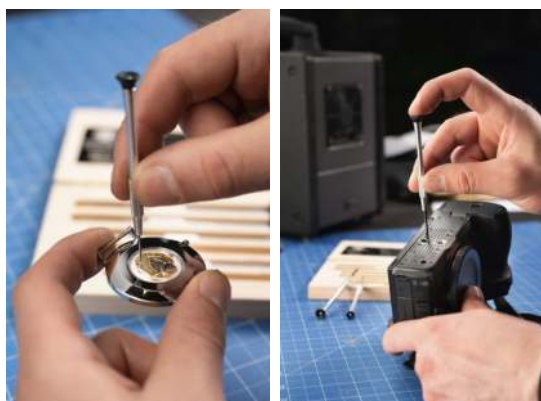
## PRODUCT DETAILS

### SERIES 250-000 SLOTTED WATCHMAKER SCREWDRIVER

The slot screwdrivers of series 250 are used for precise work meeting the highest standards in craftsmanship and watchmaking. The screwdrivers with a rotatable hexagonal head and knurled fine grip allow for the measured transfer of high torque. The screwdrivers of series 250-0 are designed for slotted profiles.

#### BENEFITS

- Also suitable for other areas of technology
- High-quality material and hardened execution
- Various designs enable the use with different profiles.



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 250-010 | -597580                                                                             | 80<br>3 1/8                                                                         | 5<br>3/16                                                                           | 1<br>1/32                                                                           | 0,20<br>1/64                                                                        | 0,005<br>1.103                                                                        | ✓                                                                                     |
| 250-012 | -529863                                                                             | 84<br>3 5/16                                                                        | 5<br>3/16                                                                           | 1,2<br>1/32                                                                         | 0,25<br>1/64                                                                        | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 250-014 | -529870                                                                             | 84<br>3 5/16                                                                        | 5<br>3/16                                                                           | 1,4<br>1/32                                                                         | 0,25<br>1/64                                                                        | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 250-015 | -597665                                                                             | 84<br>3 5/16                                                                        | 5<br>3/16                                                                           | 1,5<br>1/32                                                                         | 0,23<br>1/64                                                                        | 0,0009<br>1.985                                                                       | ✓                                                                                     |
| 250-020 | -597740                                                                             | 100<br>3 15/16                                                                      | 6<br>1/4                                                                            | 2<br>1/16                                                                           | 0,40<br>1/64                                                                        | 0,2<br>0.441                                                                          | ✓                                                                                     |
| 250-025 | -597825                                                                             | 100<br>3 15/16                                                                      | 6<br>1/4                                                                            | 2,5<br>1/16                                                                         | 0,40<br>1/64                                                                        | 0,2<br>0.441                                                                          | ✓                                                                                     |
| 250-030 | -597900                                                                             | 112<br>4 7/16                                                                       | 8<br>5/16                                                                           | 3<br>1/8                                                                            | 0,50<br>1/64                                                                        | 0,03<br>0.662                                                                         | ✓                                                                                     |
| 250-035 | -598082                                                                             | 112<br>4 7/16                                                                       | 8<br>5/16                                                                           | 3,5<br>1/8                                                                          | 0,60<br>1/32                                                                        | 0,036<br>0.794                                                                        | ✓                                                                                     |

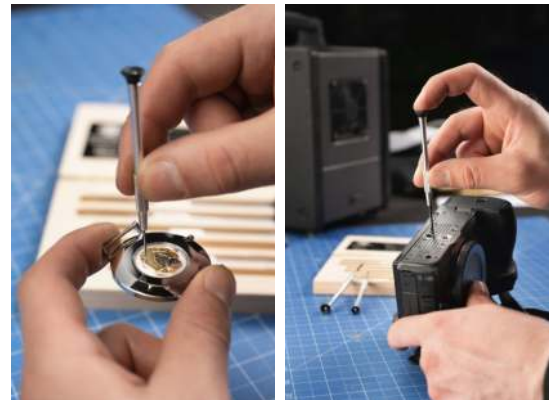


SERIES 250-100  
SCREWDRIVER FOR WATCHMAKERS WITH  
INTERCHANGEABLE BLADES IN THE  
MAGAZINE

The precision screwdrivers with interchangeable blades in the magazine of the series 250 are used for delicate work for the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotating hexagonal head and knurled fine grip allow the controlled transmission of high torque. The screwdrivers of series 250-1 are suitable for various profile types thanks to their interchangeable blades.

BENEFITS

- Replacement blades allow the use with slotted and cross profiles.
- Also suitable for other areas of technology
- High-quality material and hardened execution
- Various designs allow for use with different profiles.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 250-120 | -598815                                                                                     | 115<br>4 1/2                                                                                   | 8,5<br>5/16                                                                                    | 1,5; 2; 2,5; 3<br>1/32; 1/16; 1/16; 1/8                                                        | 0,03<br>0.662                                                                                  | ✓                                                                                     |
| 250-130 | -712099                                                                                     | 115<br>4 1/2                                                                                   | 8,5<br>5/16                                                                                    | PH0; PH00; PH000; PH0000                                                                       | 0,15<br>0.331                                                                                  | ✓                                                                                     |
| 250-140 | -712174                                                                                     | 115<br>4 1/2                                                                                   | 8,5<br>5/16                                                                                    | 1,5; 2,0; 2,5; 3,0; PH00                                                                       | 0,35<br>0.772                                                                                  | ✓                                                                                     |



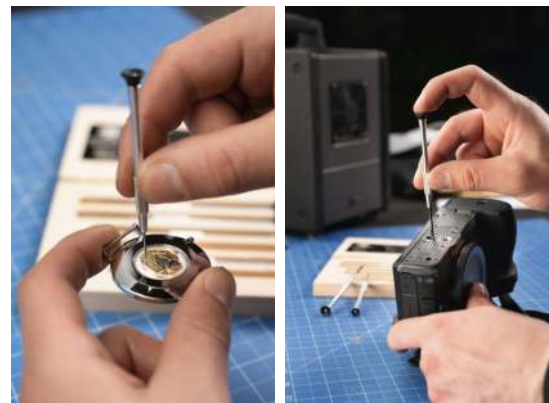
PRODUCT DETAILS

SERIES 250-PH  
PHILLIPS WATCHMAKER SCREWDRIVER



The Phillips watchmaker's screwdrivers of series 250 are used for sensitive work for the highest demands in craftsmanship and watchmaking. The screwdrivers with rotatable hexagonal head and fluted precision screw grip allow the controlled transmission of strong torques. The screwdrivers of series 250-PH are designed for various Phillips profiles.

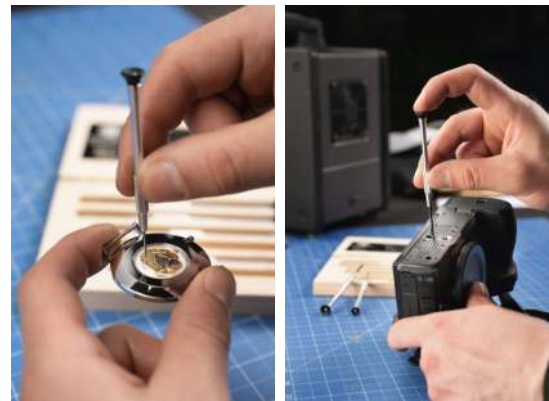
- BENEFITS**
- Also suitable for other areas of technology
  - High-quality material and hardened execution
  - Various designs allow for use with different profiles



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch |  |  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 250-042 | -711672                                                                                     | 84<br>3 5/16                                                                                   | 5<br>3/16                                                                                      | PH0000                                                                              | red                                                                                 | 0,01<br>0.221                                                                                  | ✓                                                                                     |
| 250-043 | -711757                                                                                     | 100<br>3 15/16                                                                                 | 6<br>1/4                                                                                       | PH000                                                                               | white                                                                               | 0,015<br>0.331                                                                                 | ✓                                                                                     |
| 250-044 | -711832                                                                                     | 100<br>3 15/16                                                                                 | 6<br>1/4                                                                                       | PH00                                                                                | blue                                                                                | 0,005<br>0.441                                                                                 | ✓                                                                                     |
| 250-045 | -711917                                                                                     | 112<br>4 7/16                                                                                  | 8<br>5/16                                                                                      | PH0                                                                                 | brown                                                                               | 0,035<br>0.772                                                                                 | ✓                                                                                     |
| 250-046 | -925734                                                                                     | 112<br>4 7/16                                                                                  | 8<br>5/16                                                                                      | PH1                                                                                 | turquoise                                                                           | 0,1<br>0.221                                                                                   | ✓                                                                                     |

SERIES 250-500  
WATCHMAKER SCREWDRIVER SETS



The clockmaker's screwdriver sets of series 250 are used for precise work with the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotating hexagon head and knurled fine screw grip allow for the controlled transmission of strong torques. Depending on the needs, the set contains screwdrivers for various profile sizes and types.

BENEFITS

- Application-oriented assembly for universal use
- Also suitable for other areas of technology
- High-quality material and hardened execution
- Various designs allow for application with different profiles.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch |  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 250-500 | -598730                                                                                     |                                                                                                | PH000; PH00;<br>PH0                                                                 | 1,265<br>2.789                                                                                 | ✓                                                                                     |
| 250-520 | -713409                                                                                     | 1,0; 1,5; 2,0; 3,0<br>1/32;1/32;1/16;1/8                                                       | PH00; PH0                                                                           | 0,135<br>0.298                                                                                 | ✓                                                                                     |
| 250-540 | -701444                                                                                     | 1,0; 1,5; 2,0; 2,5; 3,0; 3,5<br>1/32;1/32;1/16;1/16;1/8;1/8                                    | -                                                                                   | 0,125<br>0.276                                                                                 | ✓                                                                                     |
| 250-545 | -713577                                                                                     | 1,0; 1,5; 1,8; 2,3; 2,9<br>1/32;1/32;1/32;1/16;1/16                                            | -                                                                                   | 0,7<br>1.544                                                                                   | ✓                                                                                     |

SERIES 250-550  
WATCHMAKER SCREWDRIVER SETS IN  
WOODEN BOX



The watchmaker screwdriver sets in the wooden box of series 250 are used for precision work for the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotatable hexagon head and knurled fine screw grip allow for the precise transmission of high torque.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the wooden box, the completeness of the set can be easily overviewed.
- Also suitable for other areas of technology
- High-quality material and hardened design
- Different designs allow for use with various profiles



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/<br>inch | <br>mm/inch | <br>PH0000;<br>PH000; PH00;<br>PH0 | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 250-550 | -713652                                                                                     | 84-112<br>3 5/16-4 7/16                                                                        | 5-8<br>3/16 -<br>5/16                                                                              |                                                                                                |                                                                                                                        | 0,26<br>0.573                                                                                  | ✓                                                                                     |
| 250-560 | -599072                                                                                     | 80-112<br>3 1/8-4 7/16                                                                         | 5-8<br>3/16 -<br>5/16                                                                              | 1,0, 1,5, 2,0, 2,5, 3,0, 3,5<br>1/32, 1/32, 1/16, 1/16, 1/8, 1/8                               | -                                                                                                                      | 0,345<br>0.761                                                                                 | ✓                                                                                     |
| 250-570 | -713737                                                                                     | 80-112<br>3 1/8-4 7/16                                                                         | 5-8<br>3/16 -<br>5/16                                                                              | 1,0; 1,5; 2,0; 3,0<br>1/32;1/32;1/16;1/8                                                       | PH0; PH00                                                                                                              | 0,36<br>0.794                                                                                  | ✓                                                                                     |

SERIES 250-600  
WATCHMAKER SCREWDRIVER SETS IN  
WOODEN STAND

The watchmaker screwdriver sets in the wooden stand of series 250 are used for precision work to meet the highest demands in craftsmanship and watchmaking. The screwdrivers with a rotating hexagonal head and knurled fine grip allow for the controlled transmission of high torque.

BENEFITS

- Application-oriented assembly for universal use
- By storing it in the wooden stand, the completeness of the set can be easily overviewed.
- Also suitable for other areas of technology
- High-quality material and hardened design
- Different designs allow for use with various profiles



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/<br>inch | <br>mm/inch | <br>PH0; PH00 | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 250-600 | -529894                                                                                     | 80-112<br>3 1/8-4 7/16                                                                         | 5-8<br>3/16 -<br>5/16                                                                              | 1,0; 1,5; 2,0; 3,0<br>1/32;1/32;1/16;1/8                                                       | PH0; PH00                                                                                         | 0,36<br>0.794                                                                                  | ✓                                                                                     |

## SERIES 291 HEXAGONAL ALLEN KEY, SHORT



Short hex allen key versions made of chrome-vanadium steel from the 291-000 series enable easy and precise tightening and loosening of hex socket screws. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with ISO standards. These short allen key versions are ideal for work in very tight spaces and allow precise engagement when space is limited.

### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in narrow or hard-to-reach areas
- High force transmission thanks to the stable hexagonal shape
- Chamfered forehead edges

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Profil  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |         | kg/lb                                                                               |                                                                                     |
| 291-015 | -010071                                                                           | 1,5<br>1/32                                                                       | 15,5<br>9/16                                                                      | 46,5<br>1 13/16                                                                   | Hexagon | 0,015<br>0.033                                                                      | ✓                                                                                   |
| 291-020 | -010095                                                                           | 2<br>1/16                                                                         | 18<br>11/16                                                                       | 52<br>2 1/16                                                                      | Hexagon | 0,02<br>0.044                                                                       | ✓                                                                                   |
| 291-025 | -010101                                                                           | 2,5<br>1/16                                                                       | 20,5<br>13/16                                                                     | 58,5<br>2 5/16                                                                    | Hexagon | 0,06<br>0.132                                                                       | ✓                                                                                   |
| 291-030 | -010118                                                                           | 3<br>1/8                                                                          | 23<br>7/8                                                                         | 66<br>2 5/8                                                                       | Hexagon | 0,09<br>0.198                                                                       | ✓                                                                                   |
| 291-040 | -010125                                                                           | 4<br>3/16                                                                         | 29<br>1 1/8                                                                       | 74<br>2 15/16                                                                     | Hexagon | 0,019<br>0.042                                                                      | ✓                                                                                   |
| 291-050 | -010132                                                                           | 5<br>3/16                                                                         | 33<br>1 5/16                                                                      | 85<br>3 3/8                                                                       | Hexagon | 0,033<br>0.073                                                                      | ✓                                                                                   |
| 291-060 | -010149                                                                           | 6<br>1/4                                                                          | 38<br>1 1/2                                                                       | 96<br>3 3/4                                                                       | Hexagon | 0,054<br>0.119                                                                      | ✓                                                                                   |
| 291-080 | -010156                                                                           | 8<br>5/16                                                                         | 44<br>1 3/4                                                                       | 108<br>4 1/4                                                                      | Hexagon | 0,105<br>0.232                                                                      | ✓                                                                                   |
| 291-100 | -010170                                                                           | 10<br>3/8                                                                         | 50<br>1 15/16                                                                     | 122<br>4 13/16                                                                    | Hexagon | 0,148<br>0.326                                                                      | ✓                                                                                   |
| 291-120 | -010187                                                                           | 12<br>1/2                                                                         | 57<br>2 1/4                                                                       | 137<br>5 3/8                                                                      | Hexagon | 0,295<br>0.650                                                                      | ✓                                                                                   |
| 291-140 | -010194                                                                           | 14<br>9/16                                                                        | 70<br>2 3/4                                                                       | 154<br>6 1/16                                                                     | Hexagon | 0,46<br>1.014                                                                       | ✓                                                                                   |
| 291-170 | -010200                                                                           | 17<br>11/16                                                                       | 80<br>3 1/8                                                                       | 177<br>6 15/16                                                                    | Hexagon | 0,75<br>1.654                                                                       | ✓                                                                                   |
| 291-190 | -010217                                                                           | 19<br>3/4                                                                         | 89<br>3 1/2                                                                       | 199<br>7 13/16                                                                    | Hexagon | 1,1<br>2.426                                                                        | ✓                                                                                   |





PRODUCT DETAILS

SERIES 291/9  
HEXAGON ALLEN KEY SET IN PLASTIC CLIP



The 9-piece hex allen key set made of chrome-vanadium steel in a plastic clip of series 291/9 enables easy and precise tightening and loosening of hex socket screws. The nickel-plated surface protects against corrosion and ensures long service life. Hardness and torque comply with the ISO standard. The short allen keys are ideal for work in very confined spaces and allow precise positioning where space is limited.

BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission due to a stable hexagonal profile
- Practical plastic clip for neat and quick access to all screwdrivers
- Chamfered forehead edges

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 291-A/9 | -010224                                                                                     | 1,5, 2, 2,5, 3, 4,<br>5, 6, 8, 10<br>1/32                                                      | 15,5 - 50<br>9/16-1 15/16                                                                      | 46,5 - 122<br>1 13/16-4<br>13/16                                                               | Hexagon | 0,26<br>0.573                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 292 HEX ALLEN KEY SET WITH BALL END



The hex allen keys with ball end made of chrome-vanadium steel from series 292-000 enable easy and precise tightening and loosening of hex socket screws, even at oblique angles. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. The ball-end allen keys allow screwing even with angled engagement, making access to hard-to-reach areas easier.

#### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission due to a stable hexagonal shape
- Ball head for screws at hard-to-reach angles
- Chamfered forehead edges

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Profil  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |         | kg/lb                                                                               |                                                                                     |
| 292-015 | -010231                                                                           | 1,5<br>1/32                                                                       | 15,5<br>9/16                                                                      | 91,5<br>3 9/16                                                                    | Hexagon | 0,002<br>0.004                                                                      | ✓                                                                                   |
| 292-020 | -010255                                                                           | 2<br>1/16                                                                         | 18<br>11/16                                                                       | 102<br>4 1/64                                                                     | Hexagon | 0,004<br>0.009                                                                      | ✓                                                                                   |
| 292-025 | -010262                                                                           | 2,5<br>1/16                                                                       | 20,5<br>13/16                                                                     | 114,5<br>4 1/2                                                                    | Hexagon | 0,006<br>0.013                                                                      | ✓                                                                                   |
| 292-030 | -010279                                                                           | 3<br>1/8                                                                          | 23<br>7/8                                                                         | 129<br>5 1/16                                                                     | Hexagon | 0,009<br>0.020                                                                      | ✓                                                                                   |
| 292-040 | -010286                                                                           | 4<br>3/16                                                                         | 29<br>1 1/8                                                                       | 144<br>5 11/16                                                                    | Hexagon | 0,019<br>0.042                                                                      | ✓                                                                                   |
| 292-050 | -010293                                                                           | 5<br>3/16                                                                         | 33<br>1 5/16                                                                      | 165<br>6 1/2                                                                      | Hexagon | 0,033<br>0.073                                                                      | ✓                                                                                   |
| 292-060 | -010309                                                                           | 6<br>1/4                                                                          | 38<br>1 1/2                                                                       | 186<br>7 5/16                                                                     | Hexagon | 0,054<br>0.119                                                                      | ✓                                                                                   |
| 292-080 | -010316                                                                           | 8<br>5/16                                                                         | 44<br>1 3/4                                                                       | 208<br>8 3/16                                                                     | Hexagon | 0,105<br>0.232                                                                      | ✓                                                                                   |
| 292-100 | -010330                                                                           | 10<br>3/8                                                                         | 50<br>1 15/16                                                                     | 234<br>9 3/16                                                                     | Hexagon | 0,185<br>0.408                                                                      | ✓                                                                                   |



SERIES 292/9  
HEXAGON ALLEN KEY SET WITH BALL END IN  
PLASTIC HOLDER



The 9-piece hex allen key set made of chrome vanadium steel with ball end in a plastic holder of series 292/9 enables easy and precise tightening and loosening of hex socket screws, even at angled positions. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. Ball-end allen keys allow working even when applied at an angle, making access to hard-to-reach areas easier.

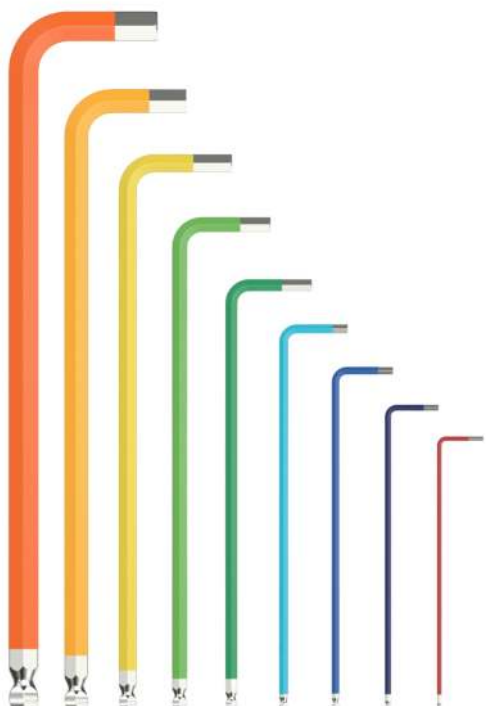
BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High power transmission due to a stable hexagonal shape
- Practical plastic holder for organized and quick access to all screwdrivers
- Chamfered forehead edges

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 292-A/9 | -010347                                                                                     | 1,5, 2, 2,5, 3, 4,<br>5, 6, 8, 10<br>1/16, 1/16, 1/8,<br>1/8, 3/16, 3/16,<br>1/4, 5/16, 3/8    | 15,5 - 50<br>9/16-1 15/16                                                                      | 91,5 - 234<br>3 9/16-9 3/16                                                                    | Hexagon | 0,435<br>0.838                                                                                 | ✓                                                                                     |

## SERIES 293 HEX ALLEN KEY WITH BALL END AND COLOR CODING



The color-coded hex allen keys made of chrome-vanadium steel with a ball end, series 293-000, enable easy and precise tightening and loosening of hex socket screws, even at angled positions. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. The color coding makes it easier to find the right size. The allen keys with ball end allow working even when applied at an angle, making access to hard-to-reach areas easier.

### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in narrow or hard-to-reach areas
- High force transmission through a stable hexagonal shape
- Ball end for screws at hard-to-reach angles
- Color coding simplifies the search for the right size



### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 293-015 | -010354                                                                                     | 1,5<br>1/32                                                                                    | 15,5<br>9/16                                                                                   | 91,5<br>3 9/16                                                                                 | Hexagon | 0,002<br>0.004                                                                                 | ✓                                                                                     |
| 293-020 | -010361                                                                                     | 2<br>1/16                                                                                      | 18<br>11/16                                                                                    | 102<br>4 1/64                                                                                  | Hexagon | 0,004<br>0.009                                                                                 | ✓                                                                                     |
| 293-025 | -010378                                                                                     | 2,5<br>1/16                                                                                    | 20,5<br>13/16                                                                                  | 114,5<br>4 1/2                                                                                 | Hexagon | 0,006<br>0.013                                                                                 | ✓                                                                                     |
| 293-030 | -010385                                                                                     | 3<br>1/8                                                                                       | 23<br>7/8                                                                                      | 129<br>5 1/16                                                                                  | Hexagon | 0,009<br>0.020                                                                                 | ✓                                                                                     |
| 293-040 | -010392                                                                                     | 4<br>3/16                                                                                      | 29<br>1 1/8                                                                                    | 144<br>5 11/16                                                                                 | Hexagon | 0,019<br>0.042                                                                                 | ✓                                                                                     |
| 293-050 | -010415                                                                                     | 5<br>3/16                                                                                      | 33<br>1 5/16                                                                                   | 165<br>6 1/2                                                                                   | Hexagon | 0,033<br>0.073                                                                                 | ✓                                                                                     |
| 293-060 | -010422                                                                                     | 6<br>1/4                                                                                       | 38<br>1 1/2                                                                                    | 186<br>7 5/16                                                                                  | Hexagon | 0,054<br>0.119                                                                                 | ✓                                                                                     |
| 293-080 | -010439                                                                                     | 8<br>5/16                                                                                      | 44<br>1 3/4                                                                                    | 208<br>8 3/16                                                                                  | Hexagon | 0,105<br>0.232                                                                                 | ✓                                                                                     |
| 293-100 | -010446                                                                                     | 10<br>3/8                                                                                      | 50<br>1 15/16                                                                                  | 234<br>9 3/16                                                                                  | Hexagon | 0,185<br>0.408                                                                                 | ✓                                                                                     |

SERIES 293/9  
HEXAGONAL ALLEN KEY SET WITH BALL END  
AND COLOR CODING IN PLASTIC HOLDER



The 9-piece, color-coded hex allen key set made of chrome vanadium steel with ball end in a plastic holder of the 293/9 series enables easy and precise tightening and loosening of hex socket screws, even at an angle. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with ISO standards. The color coding makes it easy to find the right size. The allen keys with ball end allow fastening even when applied at an angle, facilitating access to hard-to-reach areas.

BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows working in confined or hard-to-reach areas
- High force transmission thanks to a stable hexagonal profile
- Ball end for screwdriving at hard-to-reach angles
- Color coding simplifies the search for the right size

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 293-A/9 | -010453                                                                                     | 1,5, 2, 2,5, 3, 4,<br>5, 6, 8, 10<br>1/16, 1/16, 1/8,<br>1/8, 3/16, 3/16,<br>1/4, 5/16, 3/8    | 15,5 - 50<br>9/16-1 15/16                                                                      | 91,5 - 234<br>3 9/16-9 3/16                                                                    | Hexagon | 0,435<br>0.838                                                                                 | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 294 HEXAGONAL ALLEN KEY, BENT



The bent hex allen keys made of chrome-vanadium steel from series 294-000 enable easy and precise tightening and loosening of internal hex screws. The nickel-plated surface protects against corrosion and ensures long service life. Hardness and torque conform to the ISO standard. The bent allen keys allow high torque transmission and access to hard-to-reach screws.

#### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission thanks to a robust hexagonal profile
- Chamfered forehead edges

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Profil  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |         | kg/lb                                                                               |                                                                                     |
| 294-015 | -010460                                                                           | 1,5<br>1/32                                                                       | 7,5<br>1/4                                                                        | 90<br>3 9/16                                                                      | Hexagon | 0,2<br>0.441                                                                        | ✓                                                                                   |
| 294-020 | -010477                                                                           | 2<br>1/16                                                                         | 8<br>5/16                                                                         | 100<br>3 15/16                                                                    | Hexagon | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 294-025 | -010484                                                                           | 2,5<br>1/16                                                                       | 10,5<br>3/8                                                                       | 112<br>4 7/16                                                                     | Hexagon | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 294-030 | -010491                                                                           | 3<br>1/8                                                                          | 13<br>1/2                                                                         | 127<br>5                                                                          | Hexagon | 0,8<br>1.764                                                                        | ✓                                                                                   |
| 294-040 | -010507                                                                           | 4<br>3/16                                                                         | 15<br>9/16                                                                        | 144<br>5 11/16                                                                    | Hexagon | 0,16<br>0.353                                                                       | ✓                                                                                   |
| 294-050 | -010514                                                                           | 5<br>3/16                                                                         | 18<br>11/16                                                                       | 165<br>6 1/2                                                                      | Hexagon | 0,28<br>0.617                                                                       | ✓                                                                                   |
| 294-060 | -010521                                                                           | 6<br>1/4                                                                          | 22<br>7/8                                                                         | 185<br>7 5/16                                                                     | Hexagon | 0,46<br>1.014                                                                       | ✓                                                                                   |
| 294-080 | -010538                                                                           | 8<br>5/16                                                                         | 27<br>1 1/16                                                                      | 208<br>8 3/16                                                                     | Hexagon | 0,95<br>2.095                                                                       | ✓                                                                                   |
| 294-100 | -010545                                                                           | 10<br>3/8                                                                         | 32<br>1 1/4                                                                       | 232<br>9 1/8                                                                      | Hexagon | 0,16<br>0.353                                                                       | ✓                                                                                   |



PRODUCT DETAILS

SERIES 294/9  
HEX ALLEN KEY SET IN PLASTIC CLIP



The 9-piece hex allen key set made of chrome-vanadium steel in a plastic clip of series 294/9 enables easy and precise tightening and loosening of hex socket screws. The nickel-plated surface protects against corrosion and ensures long service life. Hardness and torque comply with the ISO standard. The bent allen keys enable high force application and access to hard-to-reach screws.

BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission thanks to the stable hexagonal profile
- Chamfered forehead edges
- Convenient plastic clip for organized, quick access to all screwdrivers

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 294-A/9 | -010552                                                                                     | 1,5, 2, 2,5, 3, 4,<br>5, 6, 8, 10<br>1/16, 1/16, 1/8,<br>1/8, 3/16, 3/16,<br>1/4, 5/16, 3/8    | 7,5 - 32<br>1/4-1 1/4                                                                          | 90 - 232<br>3 9/16-9 1/8                                                                       | Hexagon | 0,38<br>0.838                                                                                  | ✓                                                                                     |

SERIES 295  
HEXAGON ALLEN KEY WITH BALL END AND  
RETAINING BALL



The hex allen keys made of chrome-vanadium steel with ball end and holding ball of series 295-000 allow easy and precise tightening and loosening of hex socket screws, even at an angle. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. The holding ball and ball end provide a secure hold on the screw and flexible operation, even when engaging at an angle.

BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission due to the stable hexagonal shape
- Ball end for screws at hard-to-reach angles
- Chamfered forehead edges

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 295-010 | -010569                                                                                   | 10<br>3/8                                                                                    | 50<br>1 15/16                                                                                | 234<br>9 3/16                                                                                | Hexagon | 0,185<br>0.408                                                                               | ✓                                                                                   |
| 295-030 | -010583                                                                                   | 3<br>1/8                                                                                     | 23<br>7/8                                                                                    | 129<br>5 1/16                                                                                | Hexagon | 0,9<br>1.985                                                                                 | ✓                                                                                   |
| 295-040 | -010590                                                                                   | 4<br>3/16                                                                                    | 29<br>1 1/8                                                                                  | 144<br>5 11/16                                                                               | Hexagon | 0,19<br>0.419                                                                                | ✓                                                                                   |
| 295-050 | -010606                                                                                   | 5<br>3/16                                                                                    | 33<br>1 5/16                                                                                 | 165<br>6 1/2                                                                                 | Hexagon | 0,33<br>0.728                                                                                | ✓                                                                                   |
| 295-060 | -010613                                                                                   | 6<br>1/4                                                                                     | 38<br>1 1/2                                                                                  | 186<br>7 5/16                                                                                | Hexagon | 0,54<br>1.191                                                                                | ✓                                                                                   |
| 295-080 | -010620                                                                                   | 8<br>5/16                                                                                    | 44<br>1 3/4                                                                                  | 208<br>8 3/16                                                                                | Hexagon | 0,15<br>0.331                                                                                | ✓                                                                                   |



SERIES 295/9  
HEX ALLEN KEY SET WITH BALL END AND  
RETAINING BALL IN PLASTIC HOLDER



The 9-piece hex allen key set made of chrome vanadium steel with ball end and retaining ball in the plastic holder of series 295/9 enables easy and precise tightening and loosening of internal hexagon screws, even at angled positions. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque conform to the ISO standard. The retaining ball and ball end provide a secure hold on the screw and allow flexible working even when applied at an angle.

BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in narrow or hard-to-reach areas
- High force transmission thanks to a stable hexagonal shape
- Chamfered forehead edges
- Practical plastic holder for neat and quick access to all screwdrivers

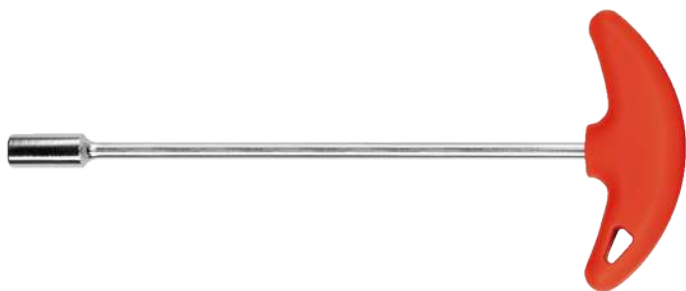
TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 295-A/9 | -010637                                                                                     | 1,5, 2, 2,5, 3, 4,<br>5, 6, 8, 10<br>1/16, 1/16, 1/8,<br>1/8, 3/16, 3/16,<br>1/4, 5/16, 3/8    | 15,5 - 50<br>9/16-1 15/16                                                                      | 91,5 - 234<br>3 9/16-9 3/16                                                                    | Hexagon | 0,435<br>0.904                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 236 HEX SOCKET WRENCH WITH T-HANDLE

The hexagonal socket wrenches with T-handle of series 236 are used for operating screw heads in workshops, industry, and crafts. Hardness and torque comply with ISO standards. Series 236 is affordable and compact.



#### BENEFITS

- The handle made of impact-resistant polypropylene (PPN) allows for easy and safe working.
- Various designs allow use with different hex sizes

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  | Profil  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |         | kg/lb                                                                               |                                                                                     |
| 236-050 | -000974                                                                           | 5<br>3/16                                                                         | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,14<br>0.309                                                                       | ✓                                                                                   |
| 236-055 | -000981                                                                           | 5,5<br>3/16                                                                       | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,11<br>0.243                                                                       | ✓                                                                                   |
| 236-060 | -000998                                                                           | 6<br>1/4                                                                          | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,115<br>0.254                                                                      | ✓                                                                                   |
| 236-070 | -001063                                                                           | 7<br>1/4                                                                          | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 236-080 | -001070                                                                           | 8<br>5/16                                                                         | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,14<br>0.309                                                                       | ✓                                                                                   |
| 236-090 | -001087                                                                           | 9<br>3/8                                                                          | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,155<br>0.342                                                                      | ✓                                                                                   |
| 236-100 | -001094                                                                           | 10<br>3/8                                                                         | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,145<br>0.320                                                                      | ✓                                                                                   |
| 236-110 | -001100                                                                           | 11<br>7/16                                                                        | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,19<br>0.419                                                                       | ✓                                                                                   |
| 236-120 | -001117                                                                           | 12<br>1/2                                                                         | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,215<br>0.474                                                                      | ✓                                                                                   |
| 236-130 | -001124                                                                           | 13<br>1/2                                                                         | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,19<br>0.419                                                                       | ✓                                                                                   |
| 236-140 | -000530                                                                           | 14<br>9/16                                                                        | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,18<br>0.397                                                                       | ✓                                                                                   |
| 236-150 | -117399                                                                           | 15<br>9/16                                                                        | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,19<br>0.419                                                                       | ✓                                                                                   |
| 236-160 | -117405                                                                           | 16<br>5/8                                                                         | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,21<br>0.463                                                                       | ✓                                                                                   |
| 236-170 | -001131                                                                           | 17<br>11/16                                                                       | 270<br>10 5/8                                                                     | 110<br>4 5/16                                                                     | 230<br>9 1/16                                                                     | Hexagon | 0,215<br>0.474                                                                      | ✓                                                                                   |





SERIES 297  
HEX KEY WITH 1-COMPONENT T-HANDLE



The hex key with 1K T-handle of the 297-000 series offers high torque transmission and fatigue-free work thanks to its ergonomic design. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard.

BENEFITS

- Various designs allow use with different hex sizes
- Ergonomic handle for comfortable, low-fatigue work
- High force transmission due to a stable hexagonal profile

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 297-020 | -010644                                                                                     | 2<br>1/16                                                                                      | 125<br>4 15/16                                                                                 | 100<br>3 15/16                                                                                 | 70<br>2 3/4                                                                                     | 0,21<br>0.463                                                                                  | ✓                                                                                     |
| 297-025 | -010668                                                                                     | 2,5<br>1/16                                                                                    | 125<br>4 15/16                                                                                 | 100<br>3 15/16                                                                                 | 70<br>2 3/4                                                                                     | 0,24<br>0.529                                                                                  | ✓                                                                                     |
| 297-030 | -010675                                                                                     | 3<br>1/8                                                                                       | 125<br>4 15/16                                                                                 | 100<br>3 15/16                                                                                 | 70<br>2 3/4                                                                                     | 0,24<br>0.529                                                                                  | ✓                                                                                     |
| 297-040 | -010682                                                                                     | 4<br>3/16                                                                                      | 175<br>6 7/8                                                                                   | 150<br>5 7/8                                                                                   | 70<br>2 3/4                                                                                     | 0,47<br>1.036                                                                                  | ✓                                                                                     |
| 297-050 | -010699                                                                                     | 5<br>3/16                                                                                      | 182<br>7 3/16                                                                                  | 150<br>5 7/8                                                                                   | 90<br>3 9/16                                                                                    | 0,06<br>1.323                                                                                  | ✓                                                                                     |
| 297-060 | -010705                                                                                     | 6<br>1/4                                                                                       | 232<br>9 1/8                                                                                   | 200<br>7 7/8                                                                                   | 90<br>3 9/16                                                                                    | 0,084<br>1.852                                                                                 | ✓                                                                                     |
| 297-080 | -010712                                                                                     | 8<br>5/16                                                                                      | 232<br>9 1/8                                                                                   | 200<br>7 7/8                                                                                   | 90<br>3 9/16                                                                                    | 0,125<br>0.276                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 297/7  
HEX KEY SET WITH 1K T-HANDLE IN  
WORKSHOP STAND



The 7-piece allen key set with 1K T-handle in the workshop stand of the 297/7 series offers high torque transmission and fatigue-free working thanks to ergonomic handling. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard.

BENEFITS

- Various designs allow use with different hex sizes
- Ergonomic handle for comfortable, low-effort work
- High force transmission thanks to a sturdy hexagonal shape
- Practical workshop stand for organized and quick access to all screwdrivers



TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 297-A/7 | -010729                                                                             | 2, 2,5, 3, 4, 5, 6, 8<br>1/16                                                       | 232<br>9 1/8                                                                        | 200<br>7 7/8                                                                        | 1<br>2.205                                                                            | ✓                                                                                     |
| 297-B/7 | -010743                                                                             |                                                                                     |                                                                                     |                                                                                     | 0,615<br>1.356                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 301 HEX ALLEN KEY



The hex allen key made of chrome-vanadium steel from series 301-000 enables easy and precise tightening and loosening of hex socket screws. The nickel-plated surface protects against corrosion and ensures long service life. Hardness and torque comply with the ISO standard.

#### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in narrow or hard-to-reach areas
- High force transmission through stable hexagonal shape
- Chamfered forehead edges

## TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Profil  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |         | kg/lb                                                                               |                                                                                     |
| 301-159 | -774935                                                                           | 1,59<br>1/16                                                                      | 16<br>5/8                                                                         | 47<br>1 7/8                                                                       | Hexagon | 0,001<br>0.221                                                                      | ✓                                                                                   |
| 301-198 | -774942                                                                           | 1,98<br>5/64                                                                      | 18<br>11/16                                                                       | 52<br>2 1/16                                                                      | Hexagon | 0,2<br>0.441                                                                        | ✓                                                                                   |
| 301-238 | -774959                                                                           | 2,38<br>3/32                                                                      | 20<br>13/16                                                                       | 58<br>2 5/16                                                                      | Hexagon | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 301-318 | -774966                                                                           | 3,18<br>1/8                                                                       | 23<br>7/8                                                                         | 66<br>2 5/8                                                                       | Hexagon | 0,5<br>1.103                                                                        | ✓                                                                                   |
| 301-397 | -774973                                                                           | 3,97<br>5/32                                                                      | 29<br>1 1/8                                                                       | 74<br>2 15/16                                                                     | Hexagon | 0,1<br>0.221                                                                        | ✓                                                                                   |
| 301-476 | -774980                                                                           | 4,76<br>3/16                                                                      | 33<br>1 5/16                                                                      | 85<br>3 3/8                                                                       | Hexagon | 0,18<br>0.397                                                                       | ✓                                                                                   |
| 301-635 | -774997                                                                           | 6,35<br>1/4                                                                       | 38<br>1 1/2                                                                       | 96<br>3 3/4                                                                       | Hexagon | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 301-794 | -775000                                                                           | 7,94<br>5/16                                                                      | 44<br>1 3/4                                                                       | 108<br>4 1/4                                                                      | Hexagon | 0,59<br>1.301                                                                       | ✓                                                                                   |
| 301-953 | -775017                                                                           | 9,53<br>3/8                                                                       | 50<br>1 15/16                                                                     | 122<br>4 13/16                                                                    | Hexagon | 0,13<br>0.287                                                                       | ✓                                                                                   |

PRODUCT DETAILS

SERIES 301/9  
HEXAGONAL ALLEN KEY SET IN PLASTIC CLIP



The 9-piece hex allen key set made of chrome vanadium steel in the plastic clip of the 301/9 series allows easy and precise tightening and loosening of hex socket screws. The nickel-plated surface protects against corrosion and ensures long service life. Hardness and torque comply with the ISO standard.

BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows working in tight or hard-to-reach areas
- High force transmission thanks to a stable hexagonal shape
- Chamfered forehead edges
- Practical plastic clip for organized, quick access to all screwdrivers

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch                           | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 301-A/9 | -775024                                                                                     | 1,59, 1,98, 2,38,<br>3,18, 3,97, 4,76,<br>6,35, 7,94, 9,53<br>1/16, 5/64,<br>3/32, 1/8, 5/32,<br>3/16, 1/4, 5/16,<br>3/8 | 16 - 50<br>5/8-1 15/16                                                                         | 47 - 122<br>1 7/8-4 13/16                                                                      | Hexagon | 0,266<br>0.587                                                                                 | ✓                                                                                     |



## SERIES 302 HEXAGONAL ALLEN KEY, EXTRA LONG



The extra-long hex allen keys made of chrome-vanadium steel of the 302-000 series enable easy and precise tightening and loosening of internal hex screws. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. The extra-long allen keys allow access to recessed screws and provide more torque thanks to the longer lever.

### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission through a stable hexagonal profile
- Extra-long screwdrivers can even reach recessed screws
- Chamfered forehead edges

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  | Profil  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |         | kg/lb                                                                               |                                                                                     |
| 302-127 | -775031                                                                           | 1,27<br>0,05                                                                      | 13<br>1/2                                                                         | 81<br>3 3/16                                                                      | Hexagon | 0,001<br>0.221                                                                      | ✓                                                                                   |
| 302-159 | -775048                                                                           | 1,59<br>1/16                                                                      | 16<br>5/8                                                                         | 92<br>3 5/8                                                                       | Hexagon | 0,2<br>0.441                                                                        | ✓                                                                                   |
| 302-198 | -775055                                                                           | 1,98<br>5/64                                                                      | 18<br>11/16                                                                       | 102<br>4 1/64                                                                     | Hexagon | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 302-238 | -775062                                                                           | 2,38<br>3/32                                                                      | 20<br>13/16                                                                       | 114<br>4 1/2                                                                      | Hexagon | 0,6<br>1.323                                                                        | ✓                                                                                   |
| 302-277 | -775079                                                                           | 2,77<br>7/64                                                                      | 23<br>7/8                                                                         | 129<br>5 1/16                                                                     | Hexagon | 0,009<br>1.985                                                                      | ✓                                                                                   |
| 302-318 | -775086                                                                           | 3,18<br>1/8                                                                       | 23<br>7/8                                                                         | 129<br>5 1/16                                                                     | Hexagon | 0,9<br>1.985                                                                        | ✓                                                                                   |
| 302-357 | -775093                                                                           | 3,57<br>9/64                                                                      | 26<br>1 1/32                                                                      | 140<br>5 1/2                                                                      | Hexagon | 0,14<br>0.309                                                                       | ✓                                                                                   |
| 302-397 | -775109                                                                           | 3,97<br>5/32                                                                      | 29<br>1 1/8                                                                       | 144<br>5 11/16                                                                    | Hexagon | 0,19<br>0.419                                                                       | ✓                                                                                   |
| 302-476 | -775116                                                                           | 4,76<br>3/16                                                                      | 33<br>1 5/16                                                                      | 165<br>6 1/2                                                                      | Hexagon | 0,32<br>0.706                                                                       | ✓                                                                                   |
| 302-556 | -775123                                                                           | 5,56<br>7/32                                                                      | 36<br>1 7/16                                                                      | 176<br>6 15/16                                                                    | Hexagon | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 302-635 | -775130                                                                           | 6,35<br>1/4                                                                       | 38<br>1 1/2                                                                       | 186<br>7 5/16                                                                     | Hexagon | 0,56<br>1.235                                                                       | ✓                                                                                   |
| 302-794 | -775147                                                                           | 7,94<br>5/16                                                                      | 44<br>1 3/4                                                                       | 208<br>8 3/16                                                                     | Hexagon | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 302-953 | -775154                                                                           | 9,53<br>3/8                                                                       | 50<br>1 15/16                                                                     | 234<br>9 3/16                                                                     | Hexagon | 0,183<br>0.404                                                                      | ✓                                                                                   |

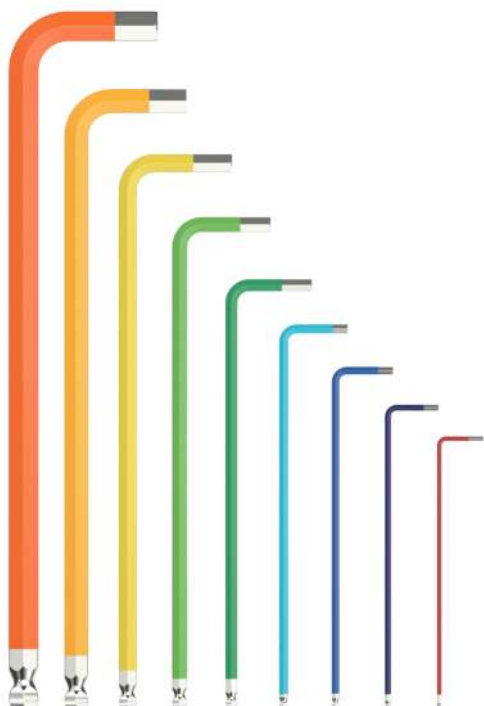


PRODUCT DETAILS

SERIES 302/13  
HEXAGONAL ALLEN KEY SET IN PLASTIC CLIP



## SERIES 303 HEXAGONAL ALLEN KEY WITH COLOR CODING, EXTRA LONG



The extra-long, color-coded hex allen keys made of chrome vanadium steel of the 303-000 series enable easy and precise tightening and loosening of hex socket screws. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. The extra-long allen keys allow access to deep-set screws and provide more torque thanks to the longer lever. The color coding makes it easier to find the right size.

### BENEFITS

- Various designs allow use with different hex sizes
- Angled design allows work in tight or hard-to-reach areas
- High force transmission through a sturdy hexagonal profile
- Color coding simplifies the search for the right size
- Extra-long screwdrivers also reach recessed screws

### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 303-127 | -775178                                                                                     | 1,27<br>0,05                                                                                   | 13<br>1/2                                                                                      | 81<br>3 3/16                                                                                   | Hexagon | 0,1<br>0.221                                                                                   | ✓                                                                                     |
| 303-159 | -775185                                                                                     | 1,59<br>1/16                                                                                   | 16<br>5/8                                                                                      | 92<br>3 5/8                                                                                    | Hexagon | 0,2<br>0.441                                                                                   | ✓                                                                                     |
| 303-198 | -775192                                                                                     | 1,98<br>5/64                                                                                   | 18<br>11/16                                                                                    | 102<br>4 1/64                                                                                  | Hexagon | 0,4<br>0.882                                                                                   | ✓                                                                                     |
| 303-238 | -775208                                                                                     | 2,38<br>3/32                                                                                   | 20<br>13/16                                                                                    | 114<br>4 1/2                                                                                   | Hexagon | 0,6<br>1.323                                                                                   | ✓                                                                                     |
| 303-277 | -775215                                                                                     | 2,77<br>7/64                                                                                   | 23<br>7/8                                                                                      | 129<br>5 1/16                                                                                  | Hexagon | 0,009<br>1.985                                                                                 | ✓                                                                                     |
| 303-318 | -775222                                                                                     | 3,18<br>1/8                                                                                    | 23<br>7/8                                                                                      | 129<br>5 1/16                                                                                  | Hexagon | 0,009<br>1.985                                                                                 | ✓                                                                                     |
| 303-357 | -775239                                                                                     | 3,57<br>9/64                                                                                   | 26<br>1 1/32                                                                                   | 140<br>5 1/2                                                                                   | Hexagon | 0,14<br>0.309                                                                                  | ✓                                                                                     |
| 303-397 | -775246                                                                                     | 3,97<br>5/32                                                                                   | 29<br>1 1/8                                                                                    | 144<br>5 11/16                                                                                 | Hexagon | 0,019<br>0.419                                                                                 | ✓                                                                                     |
| 303-476 | -775253                                                                                     | 4,76<br>3/16                                                                                   | 33<br>1 5/16                                                                                   | 165<br>6 1/2                                                                                   | Hexagon | 0,032<br>0.706                                                                                 | ✓                                                                                     |
| 303-556 | -775260                                                                                     | 5,56<br>7/32                                                                                   | 36<br>1 7/16                                                                                   | 176<br>6 15/16                                                                                 | Hexagon | 0,045<br>0.992                                                                                 | ✓                                                                                     |
| 303-635 | -775277                                                                                     | 6,35<br>1/4                                                                                    | 38<br>1 1/2                                                                                    | 186<br>7 5/16                                                                                  | Hexagon | 0,056<br>1.235                                                                                 | ✓                                                                                     |
| 303-794 | -775284                                                                                     | 7,94<br>5/16                                                                                   | 44<br>1 3/4                                                                                    | 208<br>8 3/16                                                                                  | Hexagon | 0,105<br>0.331                                                                                 | ✓                                                                                     |
| 303-953 | -775291                                                                                     | 9,53<br>3/8                                                                                    | 50<br>1 15/16                                                                                  | 234<br>9 3/16                                                                                  | Hexagon | 0,183<br>0.404                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 401-TX  
TX ALLEN KEY, SHORT



The short TX allen keys made of chrome-vanadium steel with ball end of the 401-TX series enable easy and precise tightening and loosening of screws with TX profile. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. Unlike with hex keys, the Torx profile engages centrally, making work easier and reducing wear. The short TX allen keys are ideal for work in very tight spaces and allow precise placement in confined spaces.

BENEFITS

- Various sizes for Application with different TX profiles
- The wavy profile results in a large contact area between the tool and the screw

TECHNICAL ATTRIBUTES

| #        |  |  |  |  | Profil |  |  |
|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |        | kg/lb                                                                               |                                                                                     |
| 401-TX09 | -774645                                                                           | TX9                                                                               | 19<br>3/4                                                                         | 67<br>2 5/8                                                                       | TORX®  | 0,005<br>1.103                                                                      | ✓                                                                                   |
| 401-TX10 | -774652                                                                           | TX10                                                                              | 20<br>13/16                                                                       | 76<br>2 1                                                                         | TORX®  | 0,005<br>1.103                                                                      | ✓                                                                                   |
| 401-TX15 | -774669                                                                           | TX15                                                                              | 20,5<br>13/16                                                                     | 86,5<br>3 3/8                                                                     | TORX®  | 0,007<br>1.544                                                                      | ✓                                                                                   |
| 401-TX20 | -774676                                                                           | TX20                                                                              | 22<br>7/8                                                                         | 98<br>3 7/8                                                                       | TORX®  | 0,011<br>0.243                                                                      | ✓                                                                                   |
| 401-TX25 | -774683                                                                           | TX25                                                                              | 22,5<br>7/8                                                                       | 100,5<br>3 15/16                                                                  | TORX®  | 0,014<br>0.309                                                                      | ✓                                                                                   |
| 401-TX27 | -774690                                                                           | TX27                                                                              | 25,5<br>1                                                                         | 111,5<br>4 3/8                                                                    | TORX®  | 0,023<br>0.507                                                                      | ✓                                                                                   |
| 401-TX30 | -774706                                                                           | TX30                                                                              | 30<br>1 3/16                                                                      | 125<br>4 15/16                                                                    | TORX®  | 0,03<br>0.662                                                                       | ✓                                                                                   |
| 401-TX40 | -774713                                                                           | TX40                                                                              | 33<br>1 5/16                                                                      | 139<br>5 1/2                                                                      | TORX®  | 0,047<br>1.036                                                                      | ✓                                                                                   |



SERIES 401/8  
TX ALLEN KEY SET IN PLASTIC CLIP



The 8-piece TX allen key set from series 401/8, made of chrome vanadium steel and supplied in a plastic clip, enables easy and precise tightening and loosening of screws with TX profile. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque are in accordance with the ISO standard. Unlike hex keys, the Torx profile engages centrally, making work easier and reducing wear. The short TX allen keys are ideal for work in very tight spaces and allow precise positioning in confined areas.

BENEFITS

- Various sizes for Application with different TX profiles
- The wavy profile creates a large contact area between the tool and the screw
- Practical plastic clip for organized, quick access to all screwdrivers

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 401-A/8 | -774638                                                                                     | TX9, TX10,<br>TX15, TX20,<br>TX25, TX27,<br>TX30, TX40                                         | 19 - 33<br>3/4-1 5/16                                                                          | 67 - 139<br>2 5/8-5 1/2                                                                        | TORX®  | 0,165<br>0.573                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 402-TX TX-ALLEN KEY, EXTRA LONG



The extra-long TX allen keys made of chrome-vanadium steel of the 402-TX series enable easy and precise tightening and loosening of screws with a TX profile. The nickel-plated surface protects against corrosion and ensures a long service life. Hardness and torque comply with the ISO standard. Unlike hex keys, the Torx profile engages centrally, making work easier and reducing wear. The extra-long TX allen keys make it possible to reach deeply recessed screws and, thanks to the longer lever, provide more torque.

#### BENEFITS

- Various sizes for Application with different TX profiles
- The wavy profile results in a large contact area between the tool and the screw
- Extra-long screwdrivers reach even deeply recessed screws

#### TECHNICAL ATTRIBUTES

| #        |  |  |  |  | Profil |  |  |
|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           |        | kg/lb                                                                               |                                                                                     |
| 402-TX10 | -774737                                                                           | TX10                                                                              | 23<br>7/8                                                                         | 121<br>4 3/4                                                                      | TORX®  | 0,006<br>1.323                                                                      | ✓                                                                                   |
| 402-TX15 | -774744                                                                           | TX15                                                                              | 27<br>1 1/16                                                                      | 136<br>5 3/8                                                                      | TORX®  | 0,009<br>1.985                                                                      | ✓                                                                                   |
| 402-TX20 | -774751                                                                           | TX20                                                                              | 29<br>1 1/8                                                                       | 148<br>5 13/16                                                                    | TORX®  | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 402-TX25 | -774768                                                                           | TX25                                                                              | 33<br>1 5/16                                                                      | 163<br>6 7/16                                                                     | TORX®  | 0,017<br>0.375                                                                      | ✓                                                                                   |
| 402-TX27 | -774775                                                                           | TX27                                                                              | 36<br>1 7/16                                                                      | 170<br>6 11/16                                                                    | TORX®  | 0,024<br>0.529                                                                      | ✓                                                                                   |
| 402-TX30 | -774782                                                                           | TX30                                                                              | 38<br>1 1/2                                                                       | 178<br>7 1/64                                                                     | TORX®  | 0,04<br>0.882                                                                       | ✓                                                                                   |
| 402-TX40 | -774805                                                                           | TX40                                                                              | 43<br>1 11/16                                                                     | 188<br>7 3/8                                                                      | TORX®  | 0,059<br>1.301                                                                      | ✓                                                                                   |
| 402-TX45 | -774812                                                                           | TX45                                                                              | 46<br>1 13/16                                                                     | 195<br>7 11/16                                                                    | TORX®  | 0,093<br>2.051                                                                      | ✓                                                                                   |
| 402-TX50 | -774829                                                                           | TX50                                                                              | 50<br>1 15/16                                                                     | 200<br>7 7/8                                                                      | TORX®  | 0,13<br>0.287                                                                       | ✓                                                                                   |





PRODUCT DETAILS

SERIES 403-TR  
ALLEN KEY FOR TAMPER-RESISTANT TORX



The extra-long allen keys for Tamper-Torx made of chrome-vanadium steel of the 403-TR series enable the safe loosening of security Torx screws with a central pin. The extra-long allen keys allow reaching deeply recessed screws and, thanks to the longer lever, provide more torque.

BENEFITS

- Various sizes for Application with different TX profiles
- Angled design allows working in tight or hard-to-reach spaces
- TX profile for high torque transmission and secure connection

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Profil   | <br>kg/lb |  |
|----------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 403-TR10 | -774843                                                                                   | TR10                                                                                         | 23<br>7/8                                                                                    | 121<br>4 3/4                                                                                 | TR TORX® | 0,006<br>1.323                                                                               | ✓                                                                                   |
| 403-TR15 | -774850                                                                                   | TR15                                                                                         | 27<br>1 1/16                                                                                 | 136<br>5 3/8                                                                                 | TR TORX® | 0,009<br>1.985                                                                               | ✓                                                                                   |
| 403-TR20 | -774867                                                                                   | TR20                                                                                         | 29<br>1 1/8                                                                                  | 148<br>5 13/16                                                                               | TR TORX® | 0,012<br>0.265                                                                               | ✓                                                                                   |
| 403-TR25 | -774874                                                                                   | TR25                                                                                         | 33<br>1 5/16                                                                                 | 163<br>6 7/16                                                                                | TR TORX® | 0,017<br>0.375                                                                               | ✓                                                                                   |
| 403-TR27 | -774881                                                                                   | TR27                                                                                         | 36<br>1 7/16                                                                                 | 170<br>6 11/16                                                                               | TR TORX® | 0,024<br>0.529                                                                               | ✓                                                                                   |
| 403-TR30 | -774898                                                                                   | TR30                                                                                         | 38<br>1 1/2                                                                                  | 178<br>7 1/64                                                                                | TR TORX® | 0,04<br>0.882                                                                                | ✓                                                                                   |
| 403-TR40 | -774904                                                                                   | TR40                                                                                         | 43<br>1 11/16                                                                                | 188<br>7 3/8                                                                                 | TR TORX® | 0,059<br>1.301                                                                               | ✓                                                                                   |
| 403-TR45 | -774911                                                                                   | TR45                                                                                         | 46<br>1 13/16                                                                                | 195<br>7 11/16                                                                               | TR TORX® | 0,093<br>2.051                                                                               | ✓                                                                                   |
| 403-TR50 | -774928                                                                                   | TR50                                                                                         | 50<br>1 15/16                                                                                | 200<br>7 7/8                                                                                 | TR TORX® | 0,13<br>0.287                                                                                | ✓                                                                                   |

SERIES 1900  
EUROPEAN



The European of the series 1900 is used for compressing and holding multiple workpieces in crafts, industry, and workshop. With the adjustable wrench featuring a double-sided jaw, both metallic and round or polygonal bodies can be easily fixed. It is an advancement of the “Frenchman” and “Englishman.” Beyond its holding capability, it can also be utilized for clamping, fixing, turning screws, or loosening.

BENEFITS

- No uncontrolled adjustment due to locking mechanism
- Single-sided diamond mouth for improved application possibilities
- Removable grippy soft plastic caps particularly protect metallic objects.
- Locked-Unlocked-System prevents slipping



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1900-30 | -000355                                                                                     | 150<br>5 7/8                                                                                   | 30<br>1 3/16                                                                                   | 14<br>9/16                                                                                     | 0,455<br>1.003                                                                                 | ✓                                                                                     |
| 1900-50 | -000362                                                                                     | 175<br>6 7/8                                                                                   | 50<br>1 15/16                                                                                  | 15<br>9/16                                                                                     | 0,48<br>1.058                                                                                  | ✓                                                                                     |
| 1900-75 | -000416                                                                                     | 260<br>10 1/4                                                                                  | 88<br>3 7/16                                                                                   | 20<br>13/16                                                                                    | 1,74<br>3.837                                                                                  | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 133 IMPACT WRENCH (DIN 133)



The impact wrenches (DIN 133) of series 133 are used in application areas such as commercial vehicles, pipe industry, tank cleaning, petrochemical industry, steel and mining, etc. They can easily operate hexagon or square screw heads or nuts. The series 133 is characterized by its variety of designs. Numerous sizes allow use with different screw sizes.

#### BENEFITS

- Up to a length of 525 mm made of forged carbon steel
- Until key width 120
- Various designs enable use with different square and hex sizes

#### TECHNICAL ATTRIBUTES

| #       |  GTIN |  mm/inch |  mm/inch |  kg/lb |  |
|---------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 133-24  | -865213                                                                                | 160<br>6 5/16                                                                             | 24<br>1 5/16                                                                              | 0,305<br>0.772                                                                            | ✓                                                                                   |
| 133-27  | -854804                                                                                | 180<br>7 1/16                                                                             | 27<br>1 1/16                                                                              | 0,411<br>0.906                                                                            | -                                                                                   |
| 133-30  | -854989                                                                                | 190<br>7 1/2                                                                              | 30<br>1 3/16                                                                              | 0,55<br>1.213                                                                             | -                                                                                   |
| 133-32  | -855061                                                                                | 195<br>7 11/16                                                                            | 32<br>1 1/4                                                                               | 0,6333<br>1.396                                                                           | -                                                                                   |
| 133-34  | -904394                                                                                | 195<br>7 11/16                                                                            | 34<br>1 5/16                                                                              | 0,76<br>1.676                                                                             | ✓                                                                                   |
| 133-36  | -855146                                                                                | 210<br>8 1/4                                                                              | 36<br>1 7/16                                                                              | 0,625<br>1.378                                                                            | -                                                                                   |
| 133-41  | -855221                                                                                | 225<br>8 7/8                                                                              | 41<br>1 5/8                                                                               | 1,125<br>2.481                                                                            | -                                                                                   |
| 133-46  | -855306                                                                                | 255<br>10 1/32                                                                            | 46<br>1 13/16                                                                             | 1,45<br>3.197                                                                             | -                                                                                   |
| 133-50  | -855481                                                                                | 280<br>11 1/32                                                                            | 50<br>1 15/16                                                                             | 1,8<br>3.969                                                                              | -                                                                                   |
| 133-55  | -855559                                                                                | 310<br>12 3/16                                                                            | 55<br>2 3/16                                                                              | 2,425<br>5.347                                                                            | -                                                                                   |
| 133-60  | -855634                                                                                | 320<br>12 5/8                                                                             | 60<br>2 3/8                                                                               | 2,6<br>5.733                                                                              | -                                                                                   |
| 133-65  | -855719                                                                                | 350<br>13 3/4                                                                             | 65<br>2 9/16                                                                              | 3,32<br>7.321                                                                             | -                                                                                   |
| 133-70  | -855894                                                                                | 370<br>14 9/16                                                                            | 70<br>2 3/4                                                                               | 4,6667<br>10.290                                                                          | -                                                                                   |
| 133-75  | -855979                                                                                | 400<br>15 3/4                                                                             | 75<br>2 15/16                                                                             | 6,25<br>13.781                                                                            | -                                                                                   |
| 133-80  | -856051                                                                                | 405<br>15 15/16                                                                           | 80<br>3 1/8                                                                               | 5<br>11.025                                                                               | -                                                                                   |
| 133-85  | -856136                                                                                | 405<br>15 15/16                                                                           | 85<br>3 3/8                                                                               | 6,16<br>13.583                                                                            | -                                                                                   |
| 133-90  | -856211                                                                                | 455<br>17 15/16                                                                           | 90<br>3 9/16                                                                              | 8,26<br>18.213                                                                            | -                                                                                   |
| 133-95  | -856396                                                                                | 455<br>17 15/16                                                                           | 95<br>3 3/4                                                                               | 8,19<br>18.059                                                                            | ✓                                                                                   |
| 133-100 | -856471                                                                                | 500<br>19 11/16                                                                           | 100<br>3 15/16                                                                            | 11,185<br>24.663                                                                          | -                                                                                   |

PRODUCT DETAILS

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 133-105 | -865176                                                                                   | 500<br>19 11/16                                                                              | 105<br>4 1/8                                                                                 | 11,335<br>24.994                                                                             | -                                                                                   |
| 133-110 | -865183                                                                                   | 500<br>19 11/16                                                                              | 110<br>4 5/16                                                                                | 15,64<br>34.486                                                                              | -                                                                                   |
| 133-115 | -865190                                                                                   | 525<br>20 11/16                                                                              | 115<br>4 1/2                                                                                 | 15,45<br>34.067                                                                              | ✓                                                                                   |
| 133-120 | -865206                                                                                   | 525<br>20 11/16                                                                              | 120<br>4 3/4                                                                                 | 17,54<br>38.676                                                                              | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 406 IMPACT RING (DIN 7444)



The impact rings (DIN 7444) of series 406 are used in applications such as commercial vehicles, pipe industry, tank cleaning, petrochemical industry, steel and mining, etc. They do not slip off as easily as open-end wrenches and allow for a greater force transmission; however, an open access to the screw is required. The series 406 stands out for its variety of designs. Numerous sizes enable use with different screw sizes.

#### BENEFITS

- Up to a length of 480 mm made of forged carbon steel
- Until key width 120
- Various designs allow for use with different square and hexagonal sizes.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 406-24  | -856549                                                                           | 160<br>6 5/16                                                                     | 24<br>1 5/16                                                                      | 0,23<br>0.507                                                                       | ✓                                                                                   |
| 406-27  | -856624                                                                           | 180<br>7 1/16                                                                     | 27<br>1 1/16                                                                      | 0,3333<br>0.735                                                                     | -                                                                                   |
| 406-30  | -856709                                                                           | 190<br>7 1/2                                                                      | 30<br>1 3/16                                                                      | 0,395<br>0.871                                                                      | -                                                                                   |
| 406-32  | -856884                                                                           | 195<br>7 11/16                                                                    | 32<br>1 1/4                                                                       | 0,45<br>0.992                                                                       | -                                                                                   |
| 406-34  | -904431                                                                           | 195<br>7 11/16                                                                    | 34<br>1 5/16                                                                      | 0,44<br>0.970                                                                       | -                                                                                   |
| 406-36  | -856969                                                                           | 205<br>8 1/16                                                                     | 36<br>1 7/16                                                                      | 0,585<br>1.290                                                                      | ✓                                                                                   |
| 406-38  | -865961                                                                           | 205<br>8 1/16                                                                     | 38<br>1 1/2                                                                       | 0,715<br>1.577                                                                      | -                                                                                   |
| 406-41  | -857041                                                                           | 225<br>8 7/8                                                                      | 41<br>1 5/8                                                                       | 0,795<br>1.753                                                                      | -                                                                                   |
| 406-46  | -857126                                                                           | 240<br>9 7/16                                                                     | 46<br>1 13/16                                                                     | 1,75<br>3.859                                                                       | ✓                                                                                   |
| 406-50  | -857201                                                                           | 250<br>9 13/16                                                                    | 50<br>1 15/16                                                                     | 1,2143<br>2.678                                                                     | -                                                                                   |
| 406-55  | -857386                                                                           | 270<br>10 5/8                                                                     | 55<br>2 3/16                                                                      | 1,5833<br>3.491                                                                     | -                                                                                   |
| 406-60  | -857461                                                                           | 270<br>10 5/8                                                                     | 60<br>2 3/8                                                                       | 1,9<br>4.190                                                                        | -                                                                                   |
| 406-65  | -857539                                                                           | 290<br>11 7/16                                                                    | 65<br>2 9/16                                                                      | 1,83<br>4.035                                                                       | -                                                                                   |
| 406-70  | -857614                                                                           | 320<br>12 5/8                                                                     | 70<br>2 3/4                                                                       | 3<br>6.615                                                                          | -                                                                                   |
| 406-75  | -857799                                                                           | 325<br>12 13/16                                                                   | 75<br>2 15/16                                                                     | 3,8333<br>8.452                                                                     | -                                                                                   |
| 406-80  | -857874                                                                           | 345<br>13 9/16                                                                    | 80<br>3 1/8                                                                       | 3,75<br>8.269                                                                       | -                                                                                   |
| 406-85  | -857959                                                                           | 360<br>14 3/16                                                                    | 85<br>3 3/8                                                                       | 3<br>6.615                                                                          | -                                                                                   |
| 406-90  | -858031                                                                           | 400<br>15 3/4                                                                     | 90<br>3 9/16                                                                      | 4,78<br>10.540                                                                      | -                                                                                   |
| 406-95  | -858116                                                                           | 400<br>15 3/4                                                                     | 95<br>3 3/4                                                                       | 5,115<br>11.279                                                                     | -                                                                                   |
| 406-100 | -858291                                                                           | 400<br>15 3/4                                                                     | 100<br>3 15/16                                                                    | 6,58<br>14.509                                                                      | -                                                                                   |
| 406-105 | -858376                                                                           | 435<br>17 1/8                                                                     | 105<br>4 1/8                                                                      | 6,595<br>14.542                                                                     | -                                                                                   |



PRODUCT DETAILS

| #       |  |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 406-110 | -858451                                                                           | 435<br>17 1/8                                                                     | 110<br>4 5/16                                                                     | 8,985<br>19.812                                                                     | -                                                                                   |
| 406-115 | -858529                                                                           | 435<br>17 1/8                                                                     | 115<br>4 1/2                                                                      | 7,655<br>16.879                                                                     | -                                                                                   |
| 406-120 | -858604                                                                           | 480<br>18 7/8                                                                     | 120<br>4 3/4                                                                      | 11,4<br>25.137                                                                      | -                                                                                   |

SERIES W-8800  
UNLOCKING KEY

The emergency unlocking keys of the W-8800 series are used for unlocking elevator doors, lifts, or other doors. Ideally suited for elevator doors of almost all makes.



TECHNICAL ATTRIBUTES

| #        |  |  |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             |                                                                                     |                                                                                     | kg                                                                                    |                                                                                       |
| W-880010 | -061424                                                                             |                                                                                     | -                                                                                   | 9,6 x 8,7                                                                           | 0,50                                                                                  | ✓                                                                                     |
| W-880020 | -061431                                                                             | 4<br>3/16                                                                           | -                                                                                   | -                                                                                   | 1,15                                                                                  | ✓                                                                                     |
| W-880030 | -061448                                                                             | 4<br>3/16                                                                           | -                                                                                   | -                                                                                   | 0,20                                                                                  | ✓                                                                                     |
| W-880040 | -061455                                                                             |                                                                                     | -                                                                                   | 9,6 x 8,7                                                                           | 0,06                                                                                  | ✓                                                                                     |
| W-880050 | -061462                                                                             | 12<br>1/2                                                                           | -                                                                                   | -                                                                                   | 0,12                                                                                  | ✓                                                                                     |
| W-880060 | -061479                                                                             | 8<br>5/16                                                                           | M6 x 1.0                                                                            | -                                                                                   | 0,30                                                                                  | ✓                                                                                     |
| W-880080 | -061509                                                                             | 8<br>5/16                                                                           | M6 x 1.0                                                                            | -                                                                                   | 0,30                                                                                  | ✓                                                                                     |
| W-880090 | -061516                                                                             | 14<br>9/16                                                                          | -                                                                                   | -                                                                                   | 0,13                                                                                  | ✓                                                                                     |

## SERIES 76 HOOK SPANNER



The Hook spanners with cold protection grip of the 76 series are used for loosening or tightening Lock nuts. These nuts often have recesses or notches that were developed specifically for the use of Hook spanners. The Hook spanners engage in these recesses and thus enable a rotary movement. The Hook spanners from KUKKO contain a marking with a clear assignment indicating which spanner is compatible with which nuts. Suitable for N-, AN-, KMK-, KMFE- and KMT nuts as well as for all nuts according to DIN 1804.

### BENEFITS

- Optimal fit prevents damage to lock nut and shaft
- Dirt-resistant plastic handle guarantees perfect grip
- The hole in the handle is suitable for hanging the tool.
- High torque transmission



### TECHNICAL ATTRIBUTES

| #         |  |  |  |  |  |  |  | Included in the set |  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------|
|           | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                    |                     |                                                                                       |
| 76-1 New  | -997570                                                                             | 110<br>4 5/16                                                                       | 100<br>3 15/16                                                                      | 12-14<br>1/2-9/16                                                                   | 1,5<br>1/16                                                                         | 1,2<br>1/16                                                                         | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-2 New  | -784934                                                                             | 110<br>4 5/16                                                                       | 100<br>3 15/16                                                                      | 16-20<br>5/8-13/16                                                                  | 2<br>1/16                                                                           | 1,5<br>1/16                                                                         | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-3 New  | -785016                                                                             | 136<br>5 3/8                                                                        | 120<br>4 3/4                                                                        | 25-28<br>1-1 1/8                                                                    | 2,5<br>1/8                                                                          | 2<br>1/16                                                                           | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-4 New  | -785191                                                                             | 136<br>5 3/8                                                                        | 120<br>4 3/4                                                                        | 30-32<br>1 3/16-1 1/4                                                               | 2,5<br>1/8                                                                          | 2<br>1/16                                                                           | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-5 New  | -182310                                                                             | 170<br>6 11/16                                                                      | 150<br>5 7/8                                                                        | 38-45<br>1 1/2-1 3/4                                                                | 3<br>1/8                                                                            | 2,5<br>1/8                                                                          | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-6 New  | -182327                                                                             | 206<br>8 1/8                                                                        | 180<br>7 1/16                                                                       | 40-42<br>2 1/16-2 3/16                                                              | 3<br>1/8                                                                            | 2,5<br>1/8                                                                          | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-7 New  | -182334                                                                             | 206<br>9 7/16                                                                       | 180<br>8 1/4                                                                        | 45-50<br>2 5/16-2 7/16                                                              | 3,5<br>3/16                                                                         | 3<br>1/8                                                                            | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-8 New  | -182358                                                                             | 206<br>9 7/16                                                                       | 180<br>8 1/4                                                                        | 52-55<br>2 11/16-2 15/16                                                            | 3,5<br>3/16                                                                         | 3<br>1/8                                                                            | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-9 New  | -182365                                                                             | 240<br>11 1/32                                                                      | 210<br>9 7/16                                                                       | 58-62<br>3 1/8-3 9/16                                                               | 4<br>3/16                                                                           | 3,5<br>3/16                                                                         | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-10 New | -997792                                                                             | 240<br>11 1/32                                                                      | 210<br>9 7/16                                                                       | 68-75<br>3 5/8                                                                      | 4<br>3/16                                                                           | 3,5<br>3/16                                                                         | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-11 New | -998546                                                                             | 280<br>11 1/32                                                                      | 240<br>9 7/16                                                                       | 80-90<br>3 3/4-3 15/16                                                              | 5<br>3/16                                                                           | 4<br>3/16                                                                           | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-12 New | -024061                                                                             | 280<br>11 1/32                                                                      | 240<br>9 7/16                                                                       | 95-100<br>3 3/4-3 15/16                                                             | 5<br>3/16                                                                           | 4<br>3/16                                                                           | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-13 New | -999185                                                                             | 290<br>11 7/16                                                                      | 240<br>9 7/16                                                                       | 98-105<br>4 1/8                                                                     | 5<br>3/16                                                                           | 4<br>3/16                                                                           | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |
| 76-14 New | -999390                                                                             | 335<br>13 3/16                                                                      | 280<br>11 1/32                                                                      | 110-115<br>4 5/16-4 1/2                                                             | 5<br>3/16                                                                           | 4<br>3/16                                                                           | 1,00                                                                                  | K-76-1/14           | ✓                                                                                     |

## PRODUCT DETAILS

| #                |  |  |  |  |  |  |  | Included in the set |  |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------|
|                  | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | kg                                                                                  |                     |                                                                                     |
| <b>76-15 New</b> | -104169                                                                           | 335<br>13 3/16                                                                    | 280<br>11 1/32                                                                    | 120-130<br>4 3/4-5 1/8                                                            | 5<br>3/16                                                                         | 4<br>3/16                                                                         | 1,00                                                                                | -                   | ✓                                                                                   |
| <b>76-16 New</b> | -104176                                                                           | 385<br>15 3/16                                                                    | 320<br>12 5/8                                                                     | 135-145<br>5 5/16-5 11/16                                                         | 6<br>1/4                                                                          | 5<br>3/16                                                                         | 1,00                                                                                | -                   | ✓                                                                                   |
| <b>76-17 New</b> | -104183                                                                           | 165<br>6 1/2                                                                      | 145<br>5 11/16                                                                    | 20-35<br>13/16-1 3/8                                                              | 2,5<br>1/8                                                                        | 2<br>1/16                                                                         | 1,00                                                                                | -                   | ✓                                                                                   |
| <b>76-18 New</b> | -104190                                                                           | 210<br>8 1/4                                                                      | 180<br>7 1/16                                                                     | 35-60<br>1 3/8-2 3/8                                                              | 3,5<br>1/8                                                                        | 3<br>1/8                                                                          | 1,00                                                                                | -                   | ✓                                                                                   |
| <b>76-19 New</b> | -104206                                                                           | 280<br>11 1/32                                                                    | 240<br>9 7/16                                                                     | 60-90<br>2 3/8-3 9/16                                                             | 5<br>3/16                                                                         | 4<br>3/16                                                                         | 1,00                                                                                | -                   | ✓                                                                                   |

## SERIES K-76 HOOK SPANNER



The 14-piece Hook spanner set from the K-76 series is used for loosening and tightening Lock nuts with recesses or notches. The included Hook spanners engage securely in these grooves and enable precise rotary movement. Thanks to the cold-insulating handles, the tools offer a high level of operating comfort even during longer applications. Clear marking on each spanner makes it easier to assign it to the respectively compatible nuts. The set is suitable for N-, AN-, KMK-, KMFE- and KMT nuts as well as for all nuts according to DIN 1804.

### BENEFITS

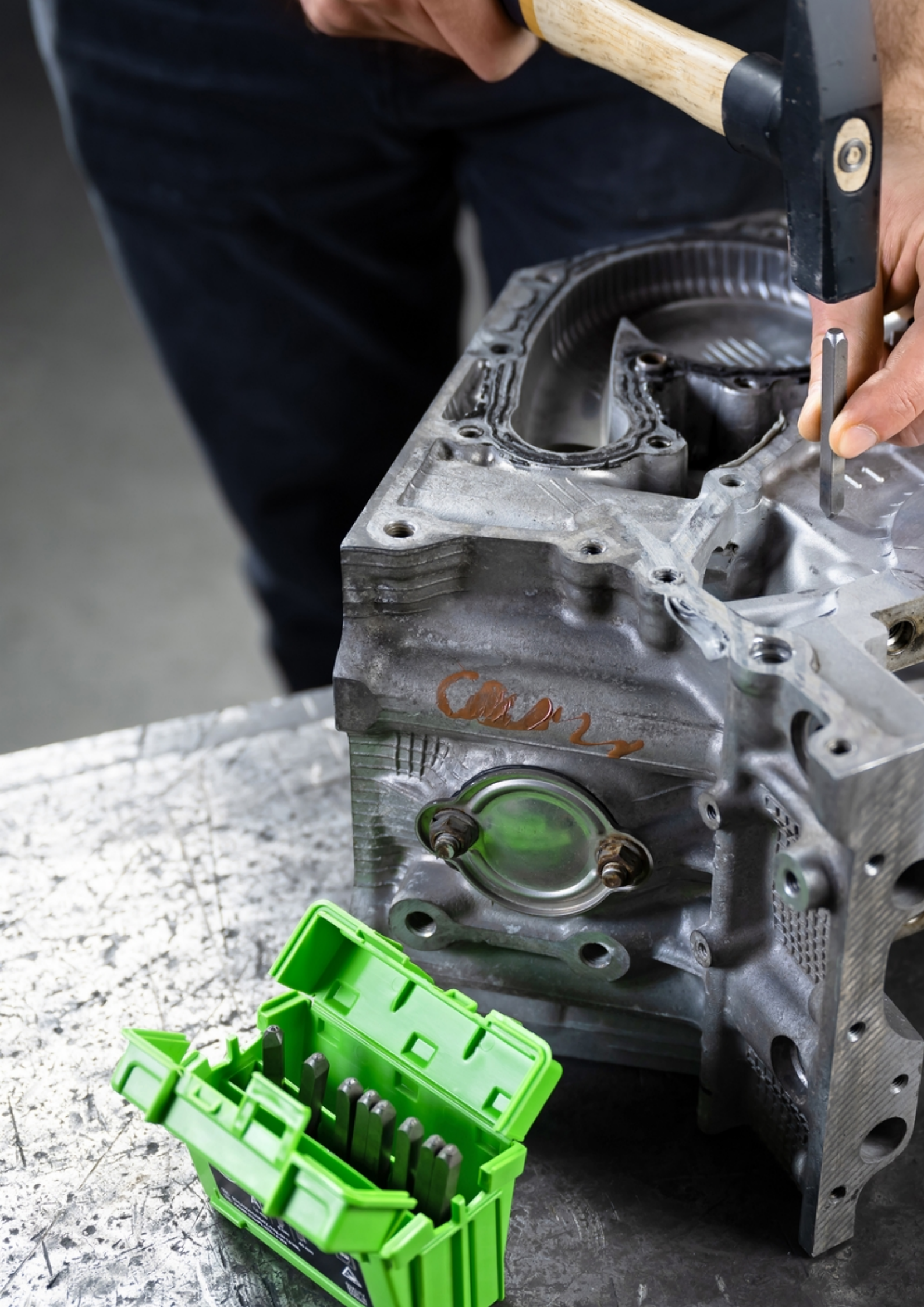
- Optimal fit prevents damage to lock nut and shaft
- Dirt-resistant plastic handle guarantees perfect grip
- The hole in the handle is suitable for hanging the tool.
- High torque transmission



## TECHNICAL ATTRIBUTES

| #                    |  |  |  | Consists of                                                                                         |  |
|----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                      | GTIN                                                                                | mm/inch                                                                             | kg                                                                                  |                                                                                                     |                                                                                       |
| <b>K-76-1/14 New</b> | -012563                                                                             | 12-115<br>1/2-4 1/2                                                                 | 1,00                                                                                | 76-1, 76-2, 76-3,<br>76-4, 76-5, 76-6,<br>76-7, 76-8, 76-9,<br>76-10, 76-11, 76-12,<br>76-13, 76-14 | ✓                                                                                     |









# SIGNING & MARKING

Whether for marking workpieces, labeling boxes or parking spaces, engraving multiple digits, or sealing - KUKKO offers the perfect solution for every application.

Activities related to Signing & Marking include:

- Number punches
- Letter punches
- Stencils
- Type holder sets
- Hand punch stamps
- Wheel punch stamps
- Sealing tools



KUKKO // *Pull forward*



# SIGNING & MARKING



## APPLICATION

For the activity „Signing & Marking“, KUKKO offers a variety of tools. The range includes letter punches, number punches, hand punch stamps, hand punch stamps, and marking stencils. For every application, the perfect solution can be found.

## THE RANGE AT A GLANCE

### Letter punches SERIES 329 | 331



The 27-piece letter punch set is used for easy marking of workpieces. The set contains a standardized typeface according to DIN 1451 and a hardness at the engraving of between 58 and 61 HRC.

### Number punches SERIES 328 | 330



The 9-piece standard number punch set is used for easy marking of workpieces. The set contains a standardized typeface according to DIN 1451 and a hardness at the engraving of between 58 and 61 HRC.

### Hand punch stamps SERIES 300



The hand punch stamps of the 300 series are used for easy marking of workpieces. Each hand punch stamp is individually manufactured according to your requirements.

### Seal tools SERIES 334



The side cutter seal pliers of series 334 are used for cutting sealing wire and sealing with only one tool in craft, industry, and workshop.

### Marking stencils SERIES 327



The professional marking stencil set, letters with plug mechanism of series 327, is used for marking shipping boxes, wooden crates, parking lots, etc., using marking paint and a marking roller.



## SETS

The sets of letter punches and stamps consist of many small individual parts that must be safely stored. For ideal storage and the best possible overview, the marking tools are available in practical plastic boxes, displays, or cases.



331-012

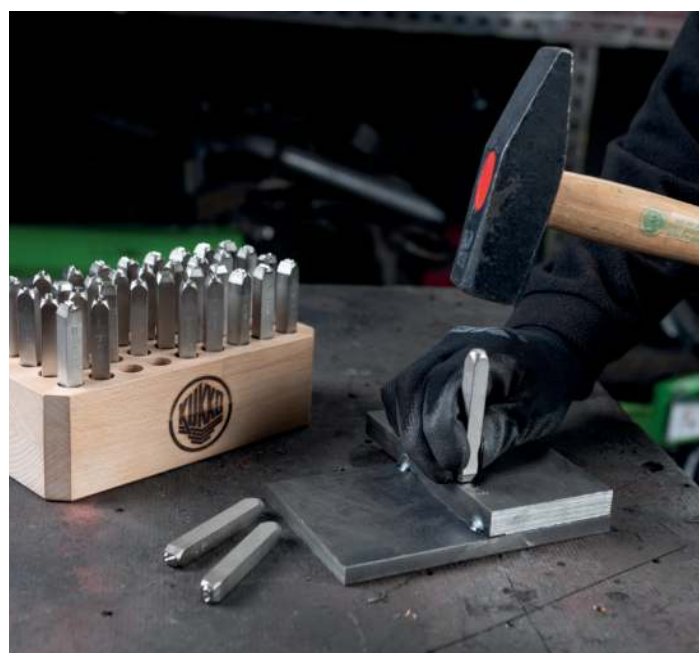


330-331

## APPLICATION EXAMPLES



Marking stencils of series 327 in use



Marking with the punch stamp set 330-331-C

Marking a punching tool with number punches of series 328

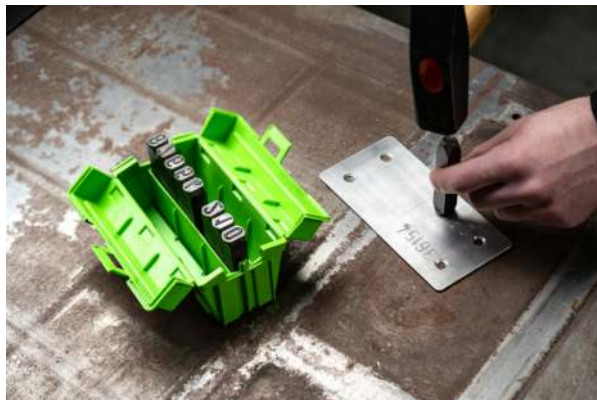
## SERIES 328 9-PIECE STANDARD PUNCH SET DIN 1451



The 9-piece standard number punch set of the 328 series is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry and workshops. The set features a standardized typeface in accordance with DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The number punch set includes the digits 0 to 9. The digit 6 is designed so that when turned over it can also be used as a 9.

### BENEFITS

- Special durability through production in the cold forming process, where the fiber structure of the material is not interrupted.
- To get a better overview, packed in our tried and tested, shatterproof plastic container.
- A side-ground visible edge enables precise operation.
- Dimensions of the different sizes can be found on the product label
- Each stamp is labeled with: visible engraving, font height, "Made in Germany" and the "Wear safety glasses" logo



### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 328-101  | -266141                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1<br>1/32                                                                            | 0,17<br>0.375                                                                         | ✓                                                                                     |
| 328-1015 | -926274                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1,5<br>1/16                                                                          | 0,17<br>0.375                                                                         | ✓                                                                                     |
| 328-102  | -688257                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 2<br>1/16                                                                            | 0,17<br>0.375                                                                         | ✓                                                                                     |
| 328-1025 | -919320                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 2,5<br>1/8                                                                           | 0,17<br>0.375                                                                         | ✓                                                                                     |
| 328-103  | -688332                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 3<br>1/8                                                                             | 0,17<br>0.375                                                                         | ✓                                                                                     |
| 328-104  | -688417                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 7<br>1/4                                                                            | 4<br>3/16                                                                            | 0,245<br>0.540                                                                        | ✓                                                                                     |
| 328-105  | -688585                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 8<br>5/16                                                                           | 5<br>3/16                                                                            | 0,295<br>0.650                                                                        | ✓                                                                                     |
| 328-106  | -692520                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 9<br>3/8                                                                            | 6<br>1/4                                                                             | 0,41<br>0.904                                                                         | ✓                                                                                     |
| 328-107  | -804565                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 7<br>1/4                                                                             | 0,535<br>1.180                                                                        | ✓                                                                                     |
| 328-108  | -688660                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 11<br>7/16                                                                          | 8<br>5/16                                                                            | 0,64<br>1.411                                                                         | ✓                                                                                     |

PRODUCT DETAILS

| #       |  |  | Hardness |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | HRC      | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 328-110 | -688745                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 10<br>3/8                                                                          | 0,835<br>1.841                                                                      | ✓                                                                                   |
| 328-112 | -688820                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 12<br>1/2                                                                          | 1,135<br>2.503                                                                      | ✓                                                                                   |
| 328-115 | -010072                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 15<br>9/16                                                                         | 1,6<br>3.528                                                                        | ✓                                                                                   |
| 328-120 | -010096                                                                           | 100<br>3 15/16                                                                    | 58 - 61  | 20<br>13/16                                                                       | 20<br>13/16                                                                        | 2,755<br>6.075                                                                      | ✓                                                                                   |





## SERIES 330-000 NICKEL-PLATED 9-PIECE LETTER PUNCH SETS DIN 1451 WITH EXTRA HEAVY QUALITY

The bright nickel-plated 9-piece number punch set in extra-heavy quality from the 330 series is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The number punch set includes the digits 0 to 9. The digit 6 is designed so that it can also be used as a 9 by turning it over.

### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft provides a better grip.
- Dimensions of the various sizes are located on the product label



### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 330-001  | -224868                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1<br>1/32                                                                            | 0,245<br>0.540                                                                        | ✓                                                                                     |
| 330-0015 | -031718                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1,5<br>1/16                                                                          | 0,245<br>0.540                                                                        | ✓                                                                                     |
| 330-002  | -626617                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,24<br>0.529                                                                         | ✓                                                                                     |
| 330-0025 | -224875                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2,5<br>1/8                                                                           | 0,245<br>0.540                                                                        | ✓                                                                                     |
| 330-003  | -626792                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 3<br>1/8                                                                             | 0,26<br>0.573                                                                         | ✓                                                                                     |
| 330-004  | -626877                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 8<br>5/16                                                                           | 4<br>3/16                                                                            | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 330-005  | -626952                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 9<br>3/8                                                                            | 5<br>3/16                                                                            | 0,42<br>0.926                                                                         | ✓                                                                                     |
| 330-006  | -627034                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 6<br>1/4                                                                             | 0,54<br>1.191                                                                         | ✓                                                                                     |
| 330-007  | -799106                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 7<br>1/4                                                                             | 0,54<br>1.191                                                                         | ✓                                                                                     |

PRODUCT DETAILS

| #       |  |  | Hardness |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | HRC      | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 330-008 | -627119                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 8<br>5/16                                                                          | 0,84<br>1.852                                                                       | ✓                                                                                   |
| 330-010 | -627294                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 10<br>3/8                                                                          | 1,135<br>2.455                                                                      | ✓                                                                                   |
| 330-012 | -627379                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 12<br>1/2                                                                          | 1,665<br>3.671                                                                      | ✓                                                                                   |
| 330-015 | -627454                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 15<br>9/16                                                                         | 1,645<br>3.627                                                                      | ✓                                                                                   |
| 330-020 | -627522                                                                           | 100<br>3 15/16                                                                    | 58 - 61  | 20<br>13/16                                                                       | 20<br>13/16                                                                        | 2,745<br>6.053                                                                      | ✓                                                                                   |



SERIES 330-500  
9-PIECE LETTER PUNCH SET DIN 1451 WITH  
EXTRA HEAVY QUALITY



The 9-piece number punch set in extra-heavy quality from the 330 series is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The number punch set includes the digits 0 to 9. The digit 6 is designed so that it can also be used as 9 by turning it over.

BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- Dimensions of the various sizes can be found on the product label



TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | Hardness<br>HRC | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 330-501  | -158200                                                                                     | 70<br>2 3/4                                                                                    | 58 - 61         | 7<br>1/4                                                                                       | 1<br>1/32                                                                                       | 0,245<br>0.540                                                                                 | ✓                                                                                     |
| 330-5015 | -158217                                                                                     | 70<br>2 3/4                                                                                    | 58 - 61         | 7<br>1/4                                                                                       | 1,5<br>1/16                                                                                     | 0,245<br>0.540                                                                                 | ✓                                                                                     |
| 330-502  | -928315                                                                                     | 70<br>2 3/4                                                                                    | 58 - 61         | 7<br>1/4                                                                                       | 2<br>1/16                                                                                       | 0,245<br>0.540                                                                                 | ✓                                                                                     |
| 330-5025 | -224899                                                                                     | 75<br>2 15/16                                                                                  | 58 - 61         | 8<br>5/16                                                                                      | 2,5<br>1/8                                                                                      | 0,295<br>0.650                                                                                 | ✓                                                                                     |
| 330-503  | -224905                                                                                     | 75<br>2 15/16                                                                                  | 58 - 61         | 8<br>5/16                                                                                      | 3<br>1/8                                                                                        | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| 330-504  | -928346                                                                                     | 75<br>2 15/16                                                                                  | 58 - 61         | 9<br>3/8                                                                                       | 4<br>3/16                                                                                       | 0,41<br>0.904                                                                                  | ✓                                                                                     |
| 330-505  | -928353                                                                                     | 75<br>2 15/16                                                                                  | 58 - 61         | 10<br>3/8                                                                                      | 5<br>3/16                                                                                       | 0,535<br>1.180                                                                                 | ✓                                                                                     |
| 330-506  | -928360                                                                                     | 80<br>3 1/8                                                                                    | 58 - 61         | 12<br>1/2                                                                                      | 6<br>1/4                                                                                        | 0,835<br>1.841                                                                                 | ✓                                                                                     |
| 330-508  | -011314                                                                                     | 80<br>3 1/8                                                                                    | 58 - 61         | 14<br>9/16                                                                                     | 8<br>5/16                                                                                       | 1,13<br>2.492                                                                                  | ✓                                                                                     |

PRODUCT DETAILS

| #       |  |  | Hardness |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | HRC      | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 330-510 | -928384                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 10<br>3/8                                                                          | 1,5<br>3.308                                                                        | ✓                                                                                   |
| 330-512 | -928391                                                                           | 95<br>3 3/4                                                                       | 58 - 61  | 18<br>11/16                                                                       | 12<br>1/2                                                                          | 2,2<br>4.851                                                                        | ✓                                                                                   |
| 330-515 | -928407                                                                           | 95<br>3 3/4                                                                       | 58 - 61  | 18<br>11/16                                                                       | 15<br>9/16                                                                         | 2,195<br>4.840                                                                      | ✓                                                                                   |
| 330-520 | -928414                                                                           | 100<br>3 15/16                                                                    | 58 - 61  | 20<br>13/16                                                                       | 20<br>13/16                                                                        | 2,755<br>6.075                                                                      | ✓                                                                                   |

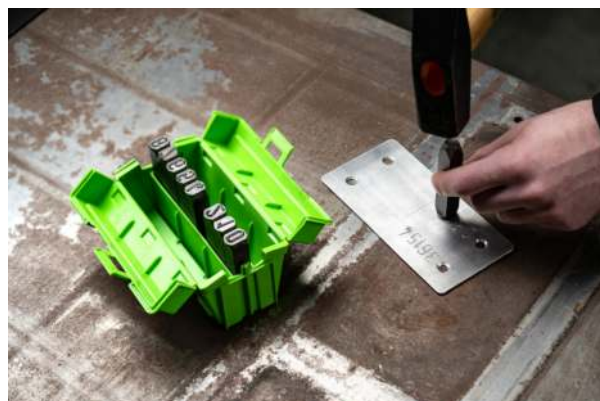


## SERIES 330-P DOTTED 9-PIECE STRIKING NUMBER SETS DIN 1451 WITH EXTRA HEAVY QUALITY

The dotted 9-piece number punch set in extra heavy-duty quality from series 330 is used for straightforward marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The number punch set includes the digits 0 to 9. The digit 6 is designed so that it can also be used as a 9 by turning it over.

### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft ensures a better grip.
- Dimensions of the various sizes are located on the product label



### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 330-003P | -928155                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 330-004P | -928179                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 9<br>3/8                                                                            | 4<br>3/16                                                                            | 0,45<br>0.992                                                                         | ✓                                                                                     |
| 330-005P | -928193                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 5<br>3/16                                                                            | 0,54<br>1.191                                                                         | ✓                                                                                     |
| 330-006P | -928216                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 12<br>1/2                                                                           | 6<br>1/4                                                                             | 0,835<br>1.841                                                                        | ✓                                                                                     |
| 330-008P | -010102                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 8<br>5/16                                                                            | 1,14<br>2.514                                                                         | ✓                                                                                     |
| 330-010P | -928254                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 10<br>3/8                                                                            | 1,67<br>3.682                                                                         | ✓                                                                                     |





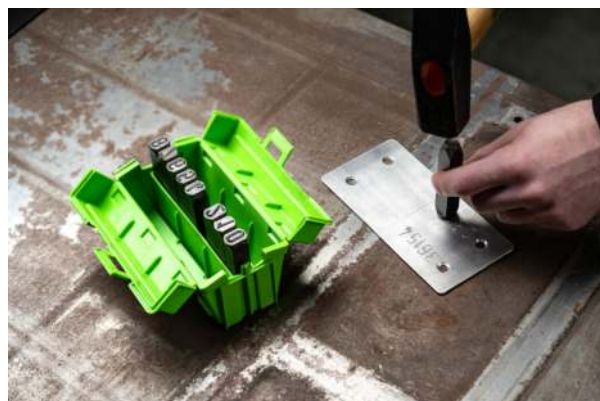
## SERIES 330-R RECHTS-ENGRAVED 9-PIECE PUNCH LETTER SETS DIN 1451 WITH EXTRA HEAVY QUALITY



The right-engraved 9-piece number punch set in extra-heavy quality from series 330 is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The number punch set includes the digits 0 to 9. The digit 6 is designed so that it can also be used as a 9 by turning it over.

### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- To get a better overview, packed in our tried and tested, shatterproof plastic container.
- A side-ground viewing edge enables precise operation.
- Dimensions for the different sizes are located on the product label.



### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 330-001R | -928124                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 1<br>1/32                                                                            | 0,245<br>0.540                                                                        | ✓                                                                                     |
| 330-002R | -801700                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,245<br>0.540                                                                        | ✓                                                                                     |
| 330-003R | -801717                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,295<br>0.650                                                                        | ✓                                                                                     |
| 330-004R | -801335                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 9<br>3/8                                                                            | 4<br>3/16                                                                            | 0,405<br>0.992                                                                        | ✓                                                                                     |
| 330-005R | -801724                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 5<br>3/16                                                                            | 0,53<br>1.169                                                                         | ✓                                                                                     |
| 330-006R | -802097                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 12<br>1/2                                                                           | 6<br>1/4                                                                             | 0,835<br>1.841                                                                        | ✓                                                                                     |
| 330-008R | -802110                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 8<br>5/16                                                                            | 1,13<br>2.492                                                                         | ✓                                                                                     |
| 330-010R | -011352                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 10<br>3/8                                                                            | 1,67<br>3.682                                                                         | ✓                                                                                     |

## SERIES 330-V DINGBATTED 9-PIECE LETTER PUNCH SETS DIN 1451 WITH EXTRA HEAVY QUALITY



The striking-head tempered 9-piece number punch set in extra heavy-duty quality is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The number punch set includes the digits 0 to 9. The digit 6 is designed so that it can also be used as a 9 by turning it over.

### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft ensures a better grip.
- Dimensions of the various sizes can be found on the product label



### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 330-001V | -928131                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 1<br>1/32                                                                            | 0,26<br>0.573                                                                         | ✓                                                                                     |
| 330-002V | -928148                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,24<br>0.529                                                                         | ✓                                                                                     |
| 330-003V | -928162                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 330-004V | -928186                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 9<br>3/8                                                                            | 4<br>3/16                                                                            | 0,45<br>0.992                                                                         | ✓                                                                                     |
| 330-005V | -928209                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 5<br>3/16                                                                            | 0,535<br>1.180                                                                        | ✓                                                                                     |
| 330-006V | -928223                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 12<br>1/2                                                                           | 6<br>1/4                                                                             | 0,835<br>1.841                                                                        | ✓                                                                                     |
| 330-008V | -158194                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 8<br>5/16                                                                            | 1,13<br>2.492                                                                         | ✓                                                                                     |
| 330-010V | -928261                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 10<br>3/8                                                                            | 1,5<br>3.308                                                                          | ✓                                                                                     |
| 330-012V | -928285                                                                             | 95<br>3 3/4                                                                         | 58 - 61  | 18<br>11/16                                                                         | 12<br>1/2                                                                            | 2,2<br>4.851                                                                          | ✓                                                                                     |

## SERIES 329

### 27-PIECE STANDARD LETTER PUNCH SET DIN 1451

The 27-piece standard letter punch set of the 329 series is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry, and workshops. The set features a standardized typeface in accordance with DIN 1451 and a hardness at the engraving between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

#### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The dimensions of the different sizes can be found on the product label
- Each stamp is marked with: visible engraving, character height, "Made in Germany" and the "Wear safety glasses" logo



#### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 329-201  | -266493                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1<br>1/32                                                                            | 0,72<br>1.588                                                                         | ✓                                                                                     |
| 329-2015 | -027605                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1,5<br>1/16                                                                          | 0,51<br>1.125                                                                         | ✓                                                                                     |
| 329-202  | -688905                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 2<br>1/16                                                                            | 0,505<br>1.213                                                                        | ✓                                                                                     |
| 329-2025 | -919337                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 2,5<br>1/8                                                                           | 0,51<br>1.125                                                                         | ✓                                                                                     |
| 329-203  | -692605                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 3<br>1/8                                                                             | 0,5<br>1.103                                                                          | ✓                                                                                     |
| 329-204  | -689087                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 7<br>1/4                                                                            | 4<br>3/16                                                                            | 0,715<br>1.577                                                                        | ✓                                                                                     |
| 329-205  | -689162                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 8<br>5/16                                                                           | 5<br>3/16                                                                            | 0,87<br>1.918                                                                         | ✓                                                                                     |
| 329-206  | -689247                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 9<br>3/8                                                                            | 6<br>1/4                                                                             | 1,205<br>2.756                                                                        | ✓                                                                                     |
| 329-207  | -804572                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 10<br>3/8                                                                           | 7<br>1/4                                                                             | 1,575<br>3.473                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

| #       |  |  | Hardness |  |  |  |  |
|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|         | GTIN                                                                              | mm/inch                                                                           | HRC      | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 329-208 | -689322                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 11<br>7/16                                                                        | 8<br>5/16                                                                          | 1,905<br>4.300                                                                      | ✓                                                                                   |
| 329-210 | -689407                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 10<br>3/8                                                                          | 2,45<br>5.402                                                                       | ✓                                                                                   |
| 329-212 | -689575                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 12<br>1/2                                                                          | 3,355<br>7.398                                                                      | ✓                                                                                   |
| 329-215 | -002220                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 15<br>9/16                                                                         | 4,96<br>10.937                                                                      | ✓                                                                                   |
| 329-216 | -039707                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 16<br>5/8                                                                          | 6,7<br>14.774                                                                       | ✓                                                                                   |
| 329-220 | -002237                                                                           | 100<br>3 15/16                                                                    | 58 - 61  | 20<br>13/16                                                                       | 20<br>13/16                                                                        | 8,21<br>18.103                                                                      | ✓                                                                                   |



PRODUCT DETAILS

SERIES 331-000  
GLOSSY NICKEL-PLATED 27-PIECE LETTER  
PUNCH SET DIN 1451 WITH EXTRA HEAVY  
QUALITY



The glossy nickel-plated, 27-piece letter punch set in extra-heavy quality is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft ensures a better grip.
- The dimensions of the various sizes can be found on the product label.

TECHNICAL ATTRIBUTES

|  | #       |  |  | Hardness |  |  |  |  |
|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   |         | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
|                                                                                   | 331-001 | -917012                                                                             | 65<br>2 9/16                                                                        | 58 - 61  | 6<br>1/4                                                                            | 1<br>1/32                                                                            | 0,72<br>1.588                                                                         | ✓                                                                                     |
|                                                                                   | 331-002 | -627607                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,72<br>1.588                                                                         | ✓                                                                                     |
|                                                                                   | 331-003 | -627782                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 3<br>1/8                                                                             | 0,72<br>1.588                                                                         | ✓                                                                                     |
|                                                                                   | 331-004 | -627867                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 8<br>5/16                                                                           | 4<br>3/16                                                                            | 0,875<br>1.929                                                                        | ✓                                                                                     |
|                                                                                   | 331-005 | -627942                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 9<br>3/8                                                                            | 5<br>3/16                                                                            | 1,2<br>2.646                                                                          | ✓                                                                                     |
|                                                                                   | 331-006 | -628024                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 6<br>1/4                                                                             | 1,58<br>3.484                                                                         | ✓                                                                                     |
|                                                                                   | 331-007 | -911065                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 7<br>1/4                                                                             | 1,6<br>3.528                                                                          | ✓                                                                                     |
|                                                                                   | 331-008 | -628109                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 12<br>1/2                                                                           | 8<br>5/16                                                                            | 2,48<br>5.468                                                                         | ✓                                                                                     |
|                                                                                   | 331-010 | -628284                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 10<br>3/8                                                                            | 3,375<br>7.442                                                                        | ✓                                                                                     |
|                                                                                   | 331-012 | -628369                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 12<br>1/2                                                                            | 4,92<br>10.849                                                                        | ✓                                                                                     |
|                                                                                   | 331-015 | -628444                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 15<br>9/16                                                                           | 4,95<br>10.915                                                                        | ✓                                                                                     |
|                                                                                   | 331-020 | -628512                                                                             | 100<br>3 15/16                                                                      | 58 - 61  | 20<br>13/16                                                                         | 20<br>13/16                                                                          | 8,2<br>18.081                                                                         | ✓                                                                                     |



## SERIES 331-500 27-PIECE LETTER PUNCH SET DIN 1451 WITH EXTRA HEAVY QUALITY



The 27-piece letter punch set in extra heavy-duty quality from the 331 series is used for trouble-free marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft ensures a better grip.
- Dimensions of the various sizes can be found on the product label.

### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|          | GTIN                                                                               | mm/inch                                                                            | HRC      | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                                |                                                                                      |
| 331-501  | -928643                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 7<br>1/4                                                                           | 1<br>1/32                                                                           | 0,24<br>0.529                                                                        | ✓                                                                                    |
| 331-5015 | -928650                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 7<br>1/4                                                                           | 1,5<br>1/16                                                                         | 0,715<br>1.577                                                                       | ✓                                                                                    |
| 331-502  | -928667                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 7<br>1/4                                                                           | 2<br>1/16                                                                           | 0,72<br>1.588                                                                        | ✓                                                                                    |
| 331-5025 | -928674                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 8<br>5/16                                                                          | 2,5<br>1/8                                                                          | 0,87<br>1.918                                                                        | ✓                                                                                    |
| 331-503  | -928681                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 8<br>5/16                                                                          | 3<br>1/8                                                                            | 0,93<br>2.051                                                                        | ✓                                                                                    |
| 331-504  | -928698                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 9<br>3/8                                                                           | 4<br>3/16                                                                           | 1,205<br>2.756                                                                       | ✓                                                                                    |
| 331-505  | -928704                                                                            | 75<br>2 15/16                                                                      | 58 - 61  | 10<br>3/8                                                                          | 5<br>3/16                                                                           | 0,59<br>1.301                                                                        | ✓                                                                                    |
| 331-506  | -928711                                                                            | 80<br>3 1/8                                                                        | 58 - 61  | 12<br>1/2                                                                          | 6<br>1/4                                                                            | 2,445<br>5.391                                                                       | ✓                                                                                    |
| 331-508  | -928728                                                                            | 80<br>3 1/8                                                                        | 58 - 61  | 14<br>9/16                                                                         | 8<br>5/16                                                                           | 3,38<br>7.453                                                                        | ✓                                                                                    |
| 331-510  | -928735                                                                            | 90<br>3 9/16                                                                       | 58 - 61  | 16<br>5/8                                                                          | 10<br>3/8                                                                           | 4,5<br>9.923                                                                         | ✓                                                                                    |
| 331-512  | -928742                                                                            | 95<br>3 3/4                                                                        | 58 - 61  | 18<br>11/16                                                                        | 12<br>1/2                                                                           | 6,3<br>13.892                                                                        | ✓                                                                                    |
| 331-515  | -928759                                                                            | 95<br>3 3/4                                                                        | 58 - 61  | 18<br>11/16                                                                        | 15<br>9/16                                                                          | 6,485<br>14.299                                                                      | ✓                                                                                    |
| 331-520  | -928766                                                                            | 100<br>3 15/16                                                                     | 58 - 61  | 20<br>13/16                                                                        | 20<br>13/16                                                                         | 8,15<br>17.971                                                                       | ✓                                                                                    |

SERIES 331-K  
27-PIECE LETTER PUNCH SET IN LOWERCASE  
DIN 1451 WITH EXTRA HEAVY QUALITY



The 27-piece letter punch set with extra heavy-duty quality and lowercase letters is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft ensures a better grip.
- Dimensions of the various sizes can be found on the product label

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | Hardness<br>HRC | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 331-001K | -918439                                                                                    | 70<br>2 3/4                                                                                   | 58 - 61         | 7<br>1/4                                                                                      | 1<br>1/32                                                                                      | 0,78<br>1.720                                                                                 | ✓                                                                                    |
| 331-002K | -915735                                                                                    | 70<br>2 3/4                                                                                   | 58 - 61         | 7<br>1/4                                                                                      | 2<br>1/16                                                                                      | 0,715<br>1.577                                                                                | ✓                                                                                    |
| 331-003K | -909284                                                                                    | 75<br>2 15/16                                                                                 | 58 - 61         | 8<br>5/16                                                                                     | 3<br>1/8                                                                                       | 0,885<br>1.951                                                                                | ✓                                                                                    |
| 331-004K | -916718                                                                                    | 75<br>2 15/16                                                                                 | 58 - 61         | 9<br>3/8                                                                                      | 4<br>3/16                                                                                      | 1,25<br>2.756                                                                                 | ✓                                                                                    |
| 331-005K | -909291                                                                                    | 75<br>2 15/16                                                                                 | 58 - 61         | 10<br>3/8                                                                                     | 5<br>3/16                                                                                      | 1,57<br>3.462                                                                                 | ✓                                                                                    |
| 331-006K | -918040                                                                                    | 80<br>3 1/8                                                                                   | 58 - 61         | 12<br>1/2                                                                                     | 6<br>1/4                                                                                       | 2,47<br>5.446                                                                                 | ✓                                                                                    |
| 331-008K | -928551                                                                                    | 80<br>3 1/8                                                                                   | 58 - 61         | 14<br>9/16                                                                                    | 8<br>5/16                                                                                      | 3,365<br>7.420                                                                                | ✓                                                                                    |
| 331-010K | -928582                                                                                    | 90<br>3 9/16                                                                                  | 58 - 61         | 16<br>5/8                                                                                     | 10<br>3/8                                                                                      | 4,945<br>10.904                                                                               | ✓                                                                                    |
| 331-012K | -928612                                                                                    | 95<br>3 3/4                                                                                   | 58 - 61         | 18<br>11/16                                                                                   | 12<br>1/2                                                                                      | 6,3<br>13.892                                                                                 | ✓                                                                                    |

SERIES 331-P  
PUNCTUATED 27-PIECE LETTER PUNCH SETS  
DIN 1451 WITH EXTRA HEAVY QUALITY



The dotted, 27-piece letter punch set in extra-heavy quality from series 331 is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features standardized lettering in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft ensures a better grip.
- Dimensions of the various sizes are located on the product label

TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|          | GTIN                                                                               | mm/inch                                                                            | HRC      | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                                |                                                                                      |
| 331-003P | -006297                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 8<br>5/16                                                                          | 3<br>1/8                                                                            | 0,88<br>1.940                                                                        | ✓                                                                                    |
| 331-004P | -928490                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 9<br>3/8                                                                           | 4<br>3/16                                                                           | 1,2<br>2.646                                                                         | ✓                                                                                    |
| 331-005P | -928513                                                                            | 75<br>2 15/16                                                                      | 58 - 61  | 10<br>3/8                                                                          | 5<br>3/16                                                                           | 1,58<br>3.484                                                                        | ✓                                                                                    |
| 331-006P | -928537                                                                            | 80<br>3 1/8                                                                        | 58 - 61  | 12<br>1/2                                                                          | 6<br>1/4                                                                            | 2,48<br>5.468                                                                        | ✓                                                                                    |
| 331-008P | -928568                                                                            | 80<br>3 1/8                                                                        | 58 - 61  | 14<br>9/16                                                                         | 8<br>5/16                                                                           | 3,37<br>7.431                                                                        | ✓                                                                                    |
| 331-010P | -928599                                                                            | 90<br>3 9/16                                                                       | 58 - 61  | 16<br>5/8                                                                          | 10<br>3/8                                                                           | 4,94<br>10.893                                                                       | ✓                                                                                    |

SERIES 331-R  
RECHTSGRAVIERTE 27-PIECE LETTER PUNCH  
SET DIN 1451 WITH EXTRA HEAVY QUALITY



The right-engraved, 27-piece letter punch set in extra heavy-duty quality is used for easy marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface in accordance with DIN 1451 and a hardness between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft provides a better grip.
- Dimensions for the various sizes are located on the product label.

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | Hardness<br>HRC | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|----------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 331-001R | -928445                                                                                    | 70<br>2 3/4                                                                                   | 58 - 61         | 7<br>1/4                                                                                      | 1<br>1/32                                                                                      | 0,71<br>1.566                                                                                 | ✓                                                                                    |
| 331-002R | -918446                                                                                    | 70<br>2 3/4                                                                                   | 58 - 61         | 7<br>1/4                                                                                      | 2<br>1/16                                                                                      | 0,71<br>1.566                                                                                 | ✓                                                                                    |
| 331-003R | -802127                                                                                    | 75<br>2 15/16                                                                                 | 58 - 61         | 8<br>5/16                                                                                     | 3<br>1/8                                                                                       | 0,87<br>1.918                                                                                 | ✓                                                                                    |
| 331-004R | -802134                                                                                    | 75<br>2 15/16                                                                                 | 58 - 61         | 9<br>3/8                                                                                      | 4<br>3/16                                                                                      | 1,195<br>2.635                                                                                | ✓                                                                                    |
| 331-005R | -802141                                                                                    | 75<br>2 15/16                                                                                 | 58 - 61         | 10<br>3/8                                                                                     | 5<br>3/16                                                                                      | 1,57<br>3.462                                                                                 | ✓                                                                                    |
| 331-006R | -811785                                                                                    | 80<br>3 1/8                                                                                   | 58 - 61         | 12<br>1/2                                                                                     | 6<br>1/4                                                                                       | 2,47<br>5.446                                                                                 | ✓                                                                                    |
| 331-008R | -802158                                                                                    | 80<br>3 1/8                                                                                   | 58 - 61         | 14<br>9/16                                                                                    | 8<br>5/16                                                                                      | 3,365<br>7.420                                                                                | ✓                                                                                    |
| 331-010R | -918453                                                                                    | 90<br>3 9/16                                                                                  | 58 - 61         | 16<br>5/8                                                                                     | 10<br>3/8                                                                                      | 4,93<br>10.871                                                                                | ✓                                                                                    |

## PRODUCT DETAILS

### SERIES 331-V IMPACT LETTERING SET 27-PIECE DIN 1451 WITH EXTRA HEAVY QUALITY



The strike-head tempered, 27-piece letter punch set in extra-heavy quality is used for effortless marking of almost all materials such as steel, iron, brass, wood, hard rubber, leather, plastic, etc., with a strength of up to 1300 N/mm<sup>2</sup> (42 HRC). The set features a standardized typeface according to DIN 1451 and a hardness between 58 and 61 HRC. The set includes the letters A to Z as well as an ampersand (&).

#### BENEFITS

- Special durability through production using the cold forming process, where the fiber orientation of the material remains uninterrupted.
- Packed in our proven, shatterproof plastic container for overview.
- A side-ground viewing edge enables precise operation.
- The larger shaft provides a better grip.
- Dimensions of the various sizes are shown on the product label

## TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|          | GTIN                                                                               | mm/inch                                                                            | HRC      | mm/inch                                                                            | mm/inch                                                                             | kg/lb                                                                                |                                                                                      |
| 331-001V | -006273                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 7<br>1/4                                                                           | 1<br>1/32                                                                           | 0,78<br>1.720                                                                        | ✓                                                                                    |
| 331-002V | -006280                                                                            | 70<br>2 3/4                                                                        | 58 - 61  | 7<br>1/4                                                                           | 2<br>1/16                                                                           | 0,24<br>0.529                                                                        | ✓                                                                                    |
| 331-003V | -006303                                                                            | 75<br>2 15/16                                                                      | 58 - 61  | 8<br>5/16                                                                          | 3<br>1/8                                                                            | 0,885<br>1.951                                                                       | ✓                                                                                    |
| 331-004V | -928506                                                                            | 75<br>2 15/16                                                                      | 58 - 61  | 9<br>3/8                                                                           | 4<br>3/16                                                                           | 1,25<br>2.756                                                                        | ✓                                                                                    |
| 331-005V | -928520                                                                            | 75<br>2 15/16                                                                      | 58 - 61  | 10<br>3/8                                                                          | 5<br>3/16                                                                           | 1,58<br>3.484                                                                        | ✓                                                                                    |
| 331-006V | -928544                                                                            | 85<br>3 3/8                                                                        | 58 - 61  | 12<br>1/2                                                                          | 6<br>1/4                                                                            | 2,244<br>4.948                                                                       | ✓                                                                                    |
| 331-008V | -928575                                                                            | 80<br>3 1/8                                                                        | 58 - 61  | 14<br>9/16                                                                         | 8<br>5/16                                                                           | 3,385<br>7.464                                                                       | ✓                                                                                    |
| 331-010V | -928605                                                                            | 90<br>3 9/16                                                                       | 58 - 61  | 16<br>5/8                                                                          | 10<br>3/8                                                                           | 4,5<br>9.923                                                                         | ✓                                                                                    |
| 331-012V | -928636                                                                            | 95<br>3 3/4                                                                        | 58 - 61  | 18<br>1 1/16                                                                       | 12<br>1/2                                                                           | 6,3<br>13.892                                                                        | ✓                                                                                    |





PRODUCT DETAILS

SERIES 327-B  
PROFI-SIGNING TEMPLATES (LETTERS) WITH  
PLUG-IN MECHANISM

The professional lettering template set with plug-in mechanism of the series 327 is used for marking shipping boxes, wooden crates, parking spaces, etc. with marking paint and marking rollers in crafts, industry, and workshops. The set features a standardized font according to DIN 1451 and is reusable. Thanks to the innovative plug-in system, connecting multiple characters is no problem.

BENEFITS

- Made of very durable and flexible special sheet metal.
- Up to a size of 100 mm, the signing templates are bent up on the bottom side, making it easy to pick them up without smudging the color.



TECHNICAL ATTRIBUTES

|  | #         |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   |           | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |
|                                                                                   | 327-020-B | -006075                                                                             | 20<br>13/16                                                                         | 0,15                                                                                | 0,08<br>1.764                                                                         |
|                                                                                   | 327-040-B | -006099                                                                             | 40<br>1 9/16                                                                        | 0,15                                                                                | 0,11<br>0.243                                                                         |
|                                                                                   | 327-050-B | -006129                                                                             | 50<br>1 15/16                                                                       | 0,15                                                                                | 0,15<br>0.331                                                                         |
|                                                                                   | 327-070-B | -006204                                                                             | 70<br>2 3/4                                                                         | 0,15                                                                                | 0,215<br>0.474                                                                        |
|                                                                                   | 327-100-B | -006419                                                                             | 100<br>3 15/16                                                                      | 0,15                                                                                | 0,48<br>1.058                                                                         |
|                                                                                   | 327-150-B | -006594                                                                             | 150<br>5 7/8                                                                        | 0,3<br>1/64                                                                         | 0,91<br>2.007                                                                         |
|                                                                                   | 327-200-B | -006624                                                                             | 200<br>7 7/8                                                                        | 0,3<br>1/64                                                                         | 1,415<br>3.120                                                                        |
|                                                                                   | 327-300-B | -006921                                                                             | 300<br>11 13/16                                                                     | 0,3<br>1/64                                                                         | 3,3<br>7.277                                                                          |

## PRODUCT DETAILS

### SERIES 327-Z PROFI-SIGNATURE TEMPLATE SETS (NUMBERS) WITH PLUG MECHANISM



The professional sign stamping template set numbers with plug-in mechanism of series 327 is used for marking shipping boxes, wooden crates, parking spaces, etc. with marking paint and marking roller in crafts, industry, and workshops. The set has a standardized font according to DIN 1451 and is reusable. Thanks to the innovative plug-in system, chaining multiple characters is no problem.

#### BENEFITS

- Made of very resilient and flexible special sheet metal
- Up to a size of 100 mm, the marking templates are bent up on the underside, making it easy to lift them without smudging the paint.

#### TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|-----------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 327-020-Z | -006082                                                                                    | 20<br>13/16                                                                                   | 0,15                                                                                          | 0,035<br>0.772                                                                                |
| 327-040-Z | -006105                                                                                    | 40<br>1 9/16                                                                                  | 0,15                                                                                          | 0,05<br>1.103                                                                                 |
| 327-050-Z | -006136                                                                                    | 50<br>1 15/16                                                                                 | 0,15                                                                                          | 0,065<br>1.433                                                                                |
| 327-070-Z | -006389                                                                                    | 70<br>2 3/4                                                                                   | 0,15                                                                                          | 0,1<br>0.221                                                                                  |
| 327-100-Z | -006440                                                                                    | 100<br>3 15/16                                                                                | 0,15                                                                                          | 0,17<br>0.375                                                                                 |
| 327-150-Z | -006600                                                                                    | 150<br>5 7/8                                                                                  | 0,3<br>1/64                                                                                   | 0,34<br>0.750                                                                                 |
| 327-200-Z | -006907                                                                                    | 200<br>7 7/8                                                                                  | 0,3<br>1/64                                                                                   | 1,08<br>3.969                                                                                 |
| 327-300-Z | -006945                                                                                    | 300<br>11 13/16                                                                               | 0,3<br>1/64                                                                                   | 1,8<br>3.969                                                                                  |



## PRODUCT DETAILS

### SERIES 300H HAND PUNCH STAMP



The hand punch stamps of series 300 are used for easy marking of workpieces with a strength of up to  $900 \text{ N/mm}^2$  (27 HRC) in crafts, industry, and workshops. The stamps have a hardness of the engraving between 58 and 61 HRC. Each hand punch stamp is manufactured individually according to your wishes. Special characters, numbers, and letters can also be combined as needed and are available framed upon request.

#### BENEFITS

- Custom fabrication for personal use
- To enable a precise strike, the stamp is ground down on all sides up to the engraving.
- Milled with highest precision thanks to CNC technology

## TECHNICAL ATTRIBUTES

| #        |  | Hardness |  |  |  |
|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | HRC      | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 300H1010 | -010065                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0802 | -039769                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,168<br>0.370                                                                      | ✓                                                                                   |
| 300H0801 | -039752                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,175<br>0.386                                                                      | ✓                                                                                   |
| 300H0610 | -039745                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0609 | -039738                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0608 | -039721                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,625<br>1.378                                                                      | ✓                                                                                   |
| 300H0607 | -039714                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0606 | -039691                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,16<br>0.353                                                                       | ✓                                                                                   |
| 300H0605 | -039684                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0604 | -039677                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,145<br>0.320                                                                      | ✓                                                                                   |
| 300H0603 | -039660                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,23<br>0.507                                                                       | ✓                                                                                   |
| 300H0602 | -039653                                                                           | 58 - 61  | 6<br>1/4                                                                          | 1,7<br>3.749                                                                        | ✓                                                                                   |
| 300H0601 | -039646                                                                           | 58 - 61  | 6<br>1/4                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0510 | -039639                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0508 | -039608                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0507 | -039592                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |

## PRODUCT DETAILS

| #        |  | Hardness |  |  |  |
|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | HRC      | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 300H0803 | -039776                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 300H0804 | -039783                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1009 | -010058                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1008 | -010041                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1007 | -010034                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1006 | -010027                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1005 | -010010                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,76<br>1.676                                                                       | ✓                                                                                   |
| 300H1004 | -010003                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1003 | -009991                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H1002 | -009984                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,29<br>0.639                                                                       | ✓                                                                                   |
| 300H1001 | -009977                                                                           | 58 - 61  | 10<br>3/8                                                                         | 0,17<br>0.375                                                                       | ✓                                                                                   |
| 300H0810 | -009960                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0809 | -009953                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0808 | -009946                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0807 | -039813                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0806 | -039806                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,16<br>0.353                                                                       | ✓                                                                                   |
| 300H0805 | -039790                                                                           | 58 - 61  | 8<br>5/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0506 | -039585                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,31<br>0.684                                                                       | ✓                                                                                   |
| 300H0505 | -039578                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 300H0307 | -057312                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,25<br>0.551                                                                       | ✓                                                                                   |
| 300H0305 | -057299                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,9<br>1.985                                                                        | ✓                                                                                   |
| 300H0306 | -057305                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,23<br>0.507                                                                       | ✓                                                                                   |
| 300H0304 | -057275                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,85<br>1.874                                                                       | ✓                                                                                   |
| 300H0303 | -057268                                                                           | 58 - 61  | 3<br>1/8                                                                          | 1,115<br>2.459                                                                      | ✓                                                                                   |
| 300H0302 | -057251                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 300H0301 | -057244                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0210 | -057237                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |



## PRODUCT DETAILS

| #        |  | Hardness |  |  |  |
|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|          | GTIN                                                                              | HRC      | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
| 300H0209 | -057220                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,115<br>0.254                                                                      | ✓                                                                                   |
| 300H0208 | -057213                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,175<br>0.386                                                                      | ✓                                                                                   |
| 300H0207 | -057206                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0206 | -057190                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0205 | -057183                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300H0204 | -057176                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0203 | -057169                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0202 | -057152                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 300H0308 | -057329                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0309 | -057336                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 300H0504 | -039561                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,185<br>0.408                                                                      | ✓                                                                                   |
| 300H0503 | -039554                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,18<br>0.397                                                                       | ✓                                                                                   |
| 300H0502 | -039530                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,7<br>1.544                                                                        | ✓                                                                                   |
| 300H0501 | -039523                                                                           | 58 - 61  | 5<br>3/16                                                                         | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300H0410 | -039516                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0409 | -039509                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,16<br>0.353                                                                       | ✓                                                                                   |
| 300H0408 | -057435                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300H0407 | -057428                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 300H0406 | -057411                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,11<br>0.243                                                                       | ✓                                                                                   |
| 300H0405 | -057404                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,225<br>0.496                                                                      | ✓                                                                                   |
| 300H0404 | -057398                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 300H0403 | -057381                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,15<br>0.331                                                                       | ✓                                                                                   |
| 300H0402 | -057374                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,9<br>1.985                                                                        | ✓                                                                                   |
| 300H0401 | -057350                                                                           | 58 - 61  | 4<br>3/16                                                                         | 0,25<br>0.551                                                                       | ✓                                                                                   |
| 300H0310 | -057343                                                                           | 58 - 61  | 3<br>1/8                                                                          | 0,225<br>0.496                                                                      | ✓                                                                                   |
| 300H0201 | -057145                                                                           | 58 - 61  | 2<br>1/16                                                                         | 0,33<br>0.728                                                                       | ✓                                                                                   |



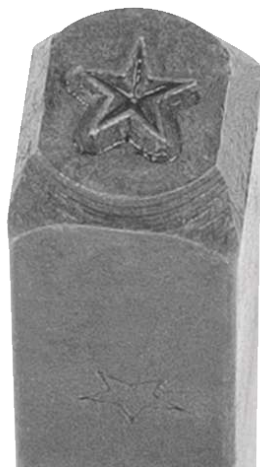
## PRODUCT DETAILS

### SERIES 300H-S5 HAND PUNCH STAMP WITH STAR

The hand punch stamps with star of series 300 are used for the problem-free marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in crafts, industry, and workshops. The stamps have a hardness at the engraving between 58 and 61 HRC. The stamps are particularly suitable for limiting texts and serial numbers on nameplates.

#### BENEFITS

- Text height adapted to the font image
- To enable a precisely accurate strike, the stamp is ground on all sides up to the engraving.
- Thanks to CNC technology with the highest precision milled



#### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 300H02S5 | -222321                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,025<br>0.551                                                                        | ✓                                                                                     |
| 300H03S5 | -222338                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,35<br>0.772                                                                         | ✓                                                                                     |
| 300H04S5 | -222369                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 9<br>3/8                                                                            | 4<br>3/16                                                                            | 0,45<br>0.992                                                                         | ✓                                                                                     |
| 300H05S5 | -222383                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 5<br>3/16                                                                            | 0,55<br>1.213                                                                         | ✓                                                                                     |
| 300H06S5 | -023454                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 12<br>1/2                                                                           | 6<br>1/4                                                                             | 0,9<br>1.985                                                                          | ✓                                                                                     |
| 300H07S5 | -222413                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 7<br>1/4                                                                             | 0,12<br>0.265                                                                         | ✓                                                                                     |
| 300H08S5 | -222444                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 8<br>5/16                                                                            | 0,09<br>1.985                                                                         | ✓                                                                                     |
| 300H10S5 | -023522                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 10<br>3/8                                                                            | 0,18<br>0.397                                                                         | ✓                                                                                     |



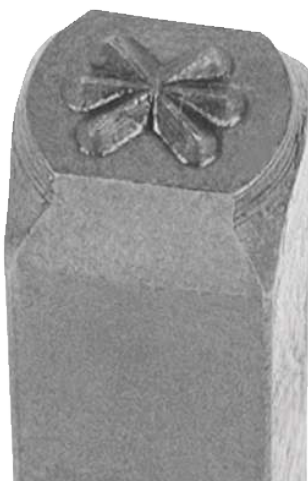
## PRODUCT DETAILS

### SERIES 300H-S6 HAND PUNCH STAMP WITH 6-STRIPE STAR

The hand punch stamps with 6-stripe star of the series 300 are used for easy marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in craftsmanship, industry, and workshop. The stamps have a hardness at the engraving between 58 and 61 HRC. The stamps are particularly suitable for the delimitation of texts and serial numbers on nameplates.

#### BENEFITS

- Text height adjusted to the letter design
- To enable a precisely accurate strike, the stamp is ground on all sides up to the engraving.
- Thanks to CNC technology with the highest precision milled



#### TECHNICAL ATTRIBUTES

| #        |  |  | Hardness |  |  |  |  |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|          | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 300H02S6 | -023379                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,025<br>0.551                                                                        | ✓                                                                                     |
| 300H03S6 | -222345                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,25<br>0.551                                                                         | ✓                                                                                     |
| 300H04S6 | -222376                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 9<br>3/8                                                                            | 4<br>3/16                                                                            | 0,45<br>0.992                                                                         | ✓                                                                                     |
| 300H05S6 | -222390                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 10<br>3/8                                                                           | 5<br>3/16                                                                            | 0,6<br>1.323                                                                          | ✓                                                                                     |
| 300H06S6 | -222406                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 12<br>1/2                                                                           | 6<br>1/4                                                                             | 0,9<br>1.985                                                                          | ✓                                                                                     |
| 300H07S6 | -222437                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 7<br>1/4                                                                             | 0,12<br>0.265                                                                         | ✓                                                                                     |
| 300H08S6 | -222451                                                                             | 80<br>3 1/8                                                                         | 58 - 61  | 14<br>9/16                                                                          | 8<br>5/16                                                                            | 0,12<br>0.265                                                                         | ✓                                                                                     |
| 300H10S6 | -222468                                                                             | 90<br>3 9/16                                                                        | 58 - 61  | 16<br>5/8                                                                           | 10<br>3/8                                                                            | 0,18<br>0.397                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 300SZ HAND PUNCH STAMP WITH SPECIAL CHARACTERS



The hand punch stamps with special characters from the 300 series are used for easy marking of workpieces with a strength of up to 900 N/mm<sup>2</sup> (27 HRC) in trades, industry, and workshops. The stamps have a hardness at the engraving between 58 and 61 HRC. Special characters such as grounding symbols, diameter symbols, etc. can be easily ordered with a fixed item number.

#### BENEFITS

- Text height adjusted to the letter design
- To enable a precisely accurate strike, the stamp is ground on all sides up to the engraving.
- Thanks to CNC technology with the highest precision milled

## TECHNICAL ATTRIBUTES

| #         |  |  | Hardness |  |  |  |  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|           | GTIN                                                                                | mm/inch                                                                             | HRC      | mm/inch                                                                             | mm/inch                                                                              | kg/lb                                                                                 |                                                                                       |
| 300SZ0201 | -464202                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,25<br>0.551                                                                         | ✓                                                                                     |
| 300SZ0202 | -464219                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0203 | -464226                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,03<br>0.662                                                                         | ✓                                                                                     |
| 300SZ0204 | -464233                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0205 | -464240                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0206 | -464257                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0207 | -464264                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0208 | -464271                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0209 | -464288                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0210 | -464295                                                                             | 70<br>2 3/4                                                                         | 58 - 61  | 7<br>1/4                                                                            | 2<br>1/16                                                                            | 0,2<br>0.441                                                                          | ✓                                                                                     |
| 300SZ0301 | -464301                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,33<br>0.728                                                                         | ✓                                                                                     |
| 300SZ0302 | -464318                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 300SZ0303 | -464325                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,3<br>0.662                                                                          | ✓                                                                                     |
| 300SZ0304 | -464332                                                                             | 75<br>2 15/16                                                                       | 58 - 61  | 8<br>5/16                                                                           | 3<br>1/8                                                                             | 0,3<br>0.662                                                                          | ✓                                                                                     |

## PRODUCT DETAILS

| #         |  |  | Hardness |  |  |  |  |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | GTIN                                                                              | mm/inch                                                                           | HRC      | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 300SZ0305 | -464349                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0306 | -464356                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 300SZ0307 | -464363                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0308 | -464370                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 300SZ0309 | -464387                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 300SZ0310 | -464394                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0311 | -568672                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 8<br>5/16                                                                         | 3<br>1/8                                                                           | 0,3<br>0.662                                                                        | ✓                                                                                   |
| 300SZ0401 | -464400                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0402 | -464417                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0403 | -464424                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 300SZ0404 | -464431                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 300SZ0405 | -464448                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 300SZ0406 | -464455                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0407 | -464462                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0408 | -464479                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0409 | -464486                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 300SZ0410 | -464493                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 300SZ0411 | -568689                                                                           | 75<br>2 15/16                                                                     | 58 - 61  | 9<br>3/8                                                                          | 4<br>3/16                                                                          | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0501 | -464509                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0502 | -464516                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0503 | -464523                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0504 | -464530                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0505 | -464547                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,055<br>1.213                                                                      | ✓                                                                                   |
| 300SZ0506 | -464554                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0507 | -464561                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |
| 300SZ0508 | -464578                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0509 | -464585                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,45<br>0.992                                                                       | ✓                                                                                   |

## PRODUCT DETAILS

| #         |  |  | Hardness |  |  |  |  |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | GTIN                                                                              | mm/inch                                                                           | HRC      | mm/inch                                                                           | mm/inch                                                                            | kg/lb                                                                               |                                                                                     |
| 300SZ0510 | -464592                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0511 | -568696                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0512 | -005931                                                                           | 70<br>2 3/4                                                                       | 58 - 61  | 10<br>3/8                                                                         | 5<br>3/16                                                                          | 0,55<br>1.213                                                                       | ✓                                                                                   |
| 300SZ0601 | -464608                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0602 | -464615                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0603 | -464622                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0604 | -464639                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,04<br>0.882                                                                       | ✓                                                                                   |
| 300SZ0605 | -464646                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0606 | -464653                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0607 | -464660                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0608 | -464677                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0609 | -464684                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0610 | -464691                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,4<br>0.882                                                                        | ✓                                                                                   |
| 300SZ0611 | -568702                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,09<br>1.985                                                                       | ✓                                                                                   |
| 300SZ0612 | -005948                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 12<br>1/2                                                                         | 6<br>1/4                                                                           | 0,085<br>1.874                                                                      | ✓                                                                                   |
| 300SZ0801 | -464707                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,115<br>0.254                                                                      | ✓                                                                                   |
| 300SZ0802 | -464714                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,115<br>0.254                                                                      | ✓                                                                                   |
| 300SZ0803 | -464721                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,12<br>0.265                                                                       | ✓                                                                                   |
| 300SZ0804 | -464738                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,1154<br>0.254                                                                     | ✓                                                                                   |
| 300SZ0805 | -464745                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,18<br>0.397                                                                       | ✓                                                                                   |
| 300SZ0806 | -464752                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,11<br>0.243                                                                       | ✓                                                                                   |
| 300SZ0807 | -464769                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,115<br>0.254                                                                      | ✓                                                                                   |
| 300SZ0808 | -464776                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,11<br>0.243                                                                       | ✓                                                                                   |
| 300SZ0809 | -464783                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0810 | -464790                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,33<br>0.728                                                                       | ✓                                                                                   |
| 300SZ0811 | -568719                                                                           | 80<br>3 1/8                                                                       | 58 - 61  | 14<br>9/16                                                                        | 8<br>5/16                                                                          | 0,11<br>0.243                                                                       | ✓                                                                                   |
| 300SZ0812 | -005955                                                                           | 90<br>3 9/16                                                                      | 58 - 61  | 16<br>5/8                                                                         | 8<br>5/16                                                                          | 0,18<br>0.397                                                                       | ✓                                                                                   |





SERIES 332  
ROLLING STAMP DEVICES WITH NUMBERS  
0-9



The impact marking stamp device of series 332 is used for problem-free marking of number sequences in workpieces with a strength of up to 1300 N/mm<sup>2</sup> in crafts, industry, and workshops. The set has a hardness at the engraving between 58 and 61 HRC. The impact marking stamps of series 332 are particularly suitable for marking stainless steel due to their nickel-plated surface.

BENEFITS

- The visible edge has been ground, allowing for the reading of the set numbers.
- The space-saving design allows for use in narrow installation situations.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | Hardness<br>HRC | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 332-352 | -928803                                                                                   | 150<br>5 7/8                                                                                 | 58 - 61         | 2<br>1/16                                                                                    | 0,53<br>1.169                                                                                | ✓                                                                                   |
| 332-353 | -928810                                                                                   | 150<br>5 7/8                                                                                 | 58 - 61         | 3<br>1/8                                                                                     | 0,645<br>1.422                                                                               | ✓                                                                                   |
| 332-354 | -928827                                                                                   | 150<br>5 7/8                                                                                 | 58 - 61         | 4<br>3/16                                                                                    | 0,53<br>1.169                                                                                | ✓                                                                                   |



## PRODUCT DETAILS

### SERIES 332-110 STAMPING DIE FOR NUMBERS



The impact stamp for digits of the series 332 is used together with a stamp holder for easy marking of number sequences on workpieces with a strength of up to 1300 N/mm<sup>2</sup> in crafts, industry, and workshops. The set has a hardness at the engraving between 58 and 61 HRC. The impact stamps of the series 332 are particularly suitable for marking stainless steel due to their nickel-plated surface.

#### BENEFITS

- The visible edge, after being ground, allows for the readout of the set numbers.
- Durable due to robust and high-quality material

## TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | Hardness<br>HRC | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 332-102 | -918804                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 2<br>1/16                                                                                      | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| 332-103 | -918811                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 3<br>1/8                                                                                       | 0,185<br>0.408                                                                                 | ✓                                                                                     |
| 332-104 | -804695                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 4<br>3/16                                                                                      | 0,215<br>0.474                                                                                 | ✓                                                                                     |
| 332-105 | -918828                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 5<br>3/16                                                                                      | 0,25<br>0.551                                                                                  | ✓                                                                                     |
| 332-106 | -803742                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 6<br>1/4                                                                                       | 0,28<br>0.617                                                                                  | ✓                                                                                     |
| 332-108 | -918835                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 8<br>5/16                                                                                      | 0,345<br>0.761                                                                                 | ✓                                                                                     |
| 332-110 | -803308                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 10<br>3/8                                                                                      | 0,41<br>0.904                                                                                  | ✓                                                                                     |
| 332-112 | -924690                                                                                     | 73<br>2 7/8                                                                                   | 58 - 61         | 10<br>3/8                                                                                      | 12<br>1/2                                                                                      | 0,47<br>1.036                                                                                  | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 332-120 LETTER PUNCH STAMP FOR LETTERS



The letter punch for the 332 series is used together with a punch holder for the easy marking of number sequences on workpieces with a strength of up to 1300 N/mm<sup>2</sup> in craft, industry, and workshop. The set has a hardness at the engraving between 58 and 61 HRC. The letter punches of the 332 series are particularly suitable for marking stainless steel due to their nickel-plated surface.

#### BENEFITS

- The visible edge, after being ground, allows for the readout of the set numbers.
- Durable due to robust and high-quality material

#### TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | Hardness<br>HRC | <br>mm/inch | <br>kg/lb |  |
|---------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 332-122 | -918859                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 2<br>1/16                                                                                     | 0,3<br>0.662                                                                                  | ✓                                                                                    |
| 332-123 | -918866                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 3<br>1/8                                                                                      | 0,63<br>1.389                                                                                 | ✓                                                                                    |
| 332-124 | -918873                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 4<br>3/16                                                                                     | 0,65<br>1.433                                                                                 | ✓                                                                                    |
| 332-125 | -918880                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 5<br>3/16                                                                                     | 0,74<br>1.632                                                                                 | ✓                                                                                    |
| 332-126 | -918897                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 6<br>1/4                                                                                      | 0,835<br>1.841                                                                                | ✓                                                                                    |
| 332-128 | -918903                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 8<br>5/16                                                                                     | 0,39<br>0.860                                                                                 | ✓                                                                                    |
| 332-130 | -918910                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 10<br>3/8                                                                                     | 1,16<br>2.558                                                                                 | ✓                                                                                    |
| 332-132 | -924706                                                                                    | 73<br>2 7/8                                                                                   | 10<br>3/8                                                                                     | 58 - 61         | 12<br>1/2                                                                                     | 1,14<br>2.514                                                                                 | ✓                                                                                    |

## PRODUCT DETAILS

### SERIES 332-100 HOLDER FOR PUNCH STAMP WITH DISTANCE SLEEVES

The holder for impact stamps of the series 332 is used as a universal tool holder for impact stamps in crafts, industry, and workshops. Thanks to the supplied distance sleeves, the holder is able to accommodate various sizes of impact stamps. The impact stamps of the series 332 are particularly suitable for marking stainless steel due to their nickel-plated surface.



#### BENEFITS

- The ergonomic shaft enables particularly safe working.
- Durable due to robust and high-quality material



#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                                 |                                                                                       |
| 332-100 | -997274                                                                             | 183<br>7 3/16                                                                       | 2-6<br>1/16-1/4                                                                     | 1,45<br>3.197                                                                         | ✓                                                                                     |

### SERIES 334-900 UNIVERSAL SIDE CUTTER SEAL PLIERS

The wire cutting and sealing pliers of series 334 are used for cutting seal wire and sealing with just one tool in crafts, industry, and workshops. The precisely manufactured combination of sealing pliers and wire cutters is capable of combining multiple tasks into a single tool, thereby ensuring a faster workflow.



#### BENEFITS

- Time savings, as the tool does not need to be switched between work steps
- The interchangeable stamp is available with your desired engraving.

#### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                | mm/inch                                                                             | kg/lb                                                                               |                                                                                       |
| 334-900 | -928926                                                                             | 155<br>6 1/8                                                                        | 0,165<br>0.364                                                                      | ✓                                                                                     |

PRODUCT DETAILS

SERIES 334-910  
LEAD SEAL PLIERS



The lead seal pliers of the series 334 are used for universal sealing in crafts, industry, and workshops. The lead seal pliers, available in various sizes, can seal workpieces universally and are an all-rounder in their application.

BENEFITS

- Easy operation by translating the lever
- The interchangeable stamp is available from us in your desired engraving.

TECHNICAL ATTRIBUTES

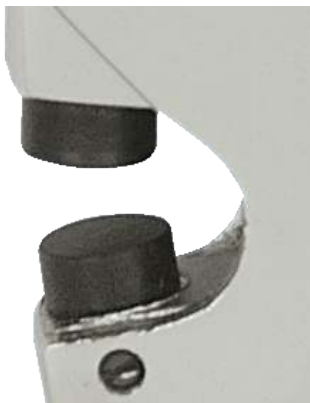
|                                                                                   |         |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | #       |  |  |  |  |  |
|                                                                                   |         | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | kg/lb                                                                               |                                                                                     |
|                                                                                   | 334-908 | -928933                                                                           | 130<br>5 1/8                                                                      | 8<br>5/16                                                                         | 0,245<br>0.540                                                                      | ✓                                                                                   |
|                                                                                   | 334-910 | -928940                                                                           | 160<br>5 1/8                                                                      | 10<br>3/8                                                                         | 0,49<br>1.080                                                                       | ✓                                                                                   |



PRODUCT DETAILS

SERIES 334S  
STAMP FOR SEALING PLIERS

The stamps for seal pliers of the series 334 are replacement stamps for marking seal pliers of the series 334. Upon request, we can manufacture custom seal stamps with your logo or a unique embossing.



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 334-918 | -928957                                                                                     | 8<br>5/16                                                                                      | 0,1<br>0.221                                                                                 | ✓                                                                                     |
| 334S918 | -121280                                                                                     | 8<br>5/16                                                                                      | 0,1<br>0.221                                                                                 | ✓                                                                                     |
| 334-920 | -928964                                                                                     | 10<br>3/8                                                                                      | 0,005<br>1.103                                                                               | ✓                                                                                     |

PRODUCT DETAILS

SERIES 334-928  
LEAD SEALS



The lead seals of series 334 are used for universal sealing in crafts, industry, and workshops. Thanks to the lead seals available in different sizes, workpieces can be universally sealed.

BENEFITS

- Flexible and mobile usable
- Especially suitable for small products like fuel canisters

TECHNICAL ATTRIBUTES

|  | #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                   |         |                                                                                           |                                                                                              |                                                                                            |                                                                                     |
|                                                                                   | 334-928 | -998394                                                                                   | 8<br>5/16                                                                                    | 1,005<br>3.308                                                                             | ✓                                                                                   |
|                                                                                   | 334-930 | -334932                                                                                   | 10<br>3/8                                                                                    | 1,02<br>2.646                                                                              | ✓                                                                                   |

PRODUCT DETAILS

SERIES 334-929  
GALVANIZED SEALING WIRE, ON SPOOL



The galvanized seal wire, on spool, of the series 334 is used for universal sealing in crafts, industry, and workshops. The seal wire consists of a core and outer cord, and the galvanized iron ensures a good price-performance ratio when sealing.

BENEFITS

- Flexible and mobile use
- Common execution enables universal application

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 334-929 | -998400                                                                                   | 200000<br>7874 1/64                                                                          | 0,5 x 0,3<br>1/64 x 1/64                                                                      | 0,53<br>1.169                                                                                 | ✓                                                                                    |
| 334-931 | -334314                                                                                   | 400000<br>15748 1/32                                                                         | 0,5 x 0,3<br>1/64 x 1/64                                                                      | 1,35<br>2.977                                                                                 | ✓                                                                                    |



PRODUCT DETAILS

SERIES 334-933  
GALVANIZED PLOMBING WIRE, IN BUNDLES



The galvanized sealing wire, in bundles, of the series 334 is used for universal sealing in crafts, industry, and workshops. The sealing wire consists of a core and outer cord, and the galvanized iron provides a good price-performance ratio for sealing. The wires are conveniently packaged in bundles of uniform length.

BENEFITS

- Flexible and mobile usable
- The common execution enables universal application.

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|---------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 334-933 | -334338                                                                                   | 120<br>4 3/4                                                                                 | 0,5 x 0,3<br>1/64 x 1/64                                                                     | 0,528<br>1.164                                                                               | ✓                                                                                   |
| 334-934 | -334345                                                                                   | 180<br>7 1/16                                                                                | 0,5 x 0,3<br>1/64 x 1/64                                                                     | 0,47<br>1.036                                                                                | ✓                                                                                   |

SERIES 334-030  
TOOL BRANDS



The tool tags of the 334 series are used for marking and labeling tools in trades, industry, and workshops. The tool tags made of brass or aluminum feature an embossed pearl edge and a hole for connection with the workpiece to be marked. Upon request, the tags can also be labeled with your individual symbols.

BENEFITS

- Simple brands for a diverse application
- Labeling helps to organize tools and prevent them from being mixed up.
- Optional also e.g. laser engravable

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 334-030 | -334307                                                                                     | 27<br>1 1/16                                                                                   | 0,0095<br>2.095                                                                              | ✓                                                                                     |
| 334-031 | -143305                                                                                     | 27<br>1 1/16                                                                                   | 0,0016<br>0.353                                                                              | ✓                                                                                     |











# SETS & PRESENTATION

Whether for organized storage, safe transport, or sales-enhancing presentation of tools – KUKKO offers the perfect solution for every application.

The activity Sets & Presentation includes:

- Empty cases
- Workshop trolley KUKKO-Cube
- Workbenches
- Tool cabinets
- Compartment cabinets with power connection
- Wall panels
- Sales walls



KUKKO // Pull forward



# SETS & PRESENTATION





## APPLICATION

The king class of puller tools demands an optimal and unique form of storage. From the compact To-GO solution in the set case to permanently installed walls, KUKKO offers the entire spectrum of transport and presentation options for pullers and other accessories.

## CONSTRUCTION OF A CUBE WORKSHOP TROLLEY

Work and storage surface with  
non-slip rubber mat

Sturdy handle for  
pushing and pulling

Robust slide-in  
compartments  
for several KUKKO  
L-Boxxes (variable)

Swivel casters  
with locking brakes



# FEATURES OF THE SERIES

## SERIES 20-ST



The sales display is indeed the smallest form of sales presentation, but its compactness makes it a real eye-catcher on any counter and has done so for over 100 years. KUKKO is considered the first tool manufacturer to have presented its products for sales promotion on a sales stand.

## SERIES K-2030



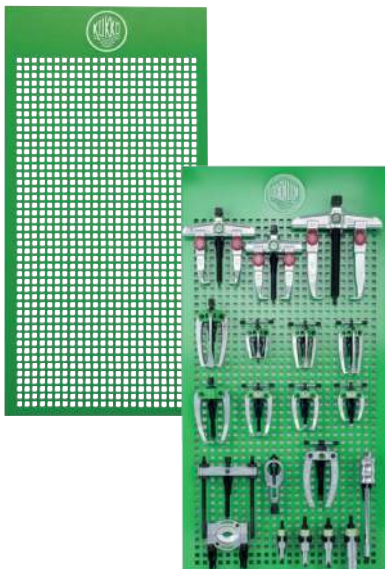
One of KUKKO's bestsellers are the portable, fully equipped case sets. In a portable medium size, they contain all the necessary tools to solve the required repair task according to the application or industry. The cases are fitted with a special foam that completely embeds the tools, guaranteeing safe storage.

## SERIES EVLW



The massive sales wall presents the KUKKO tools with maximum assortment breadth and product variety. The wall can be equipped individually depending on the application focus or industry. Thanks to generous placement options, the entire tool assortment can be presented opulently and at the same time efficiently.

## SERIES WT



The attention-grabbing wall panel in the distinctive KUKKO green is the eye-catcher in any workshop. Like a modern dashboard, it offers a compactly assembled selection of tools and accessories in a manageable space.

## SERIES K-CUBE



The KUKKO-Cube workshop trolley is the smart solution for all jobs that place special demands on transport and storage. Rolling, they offer everything needed for mobile use directly at the place of application in the fastest way. Pull-out drawers offer space for up to four L-Boxx cases.

## SERIES X-MW



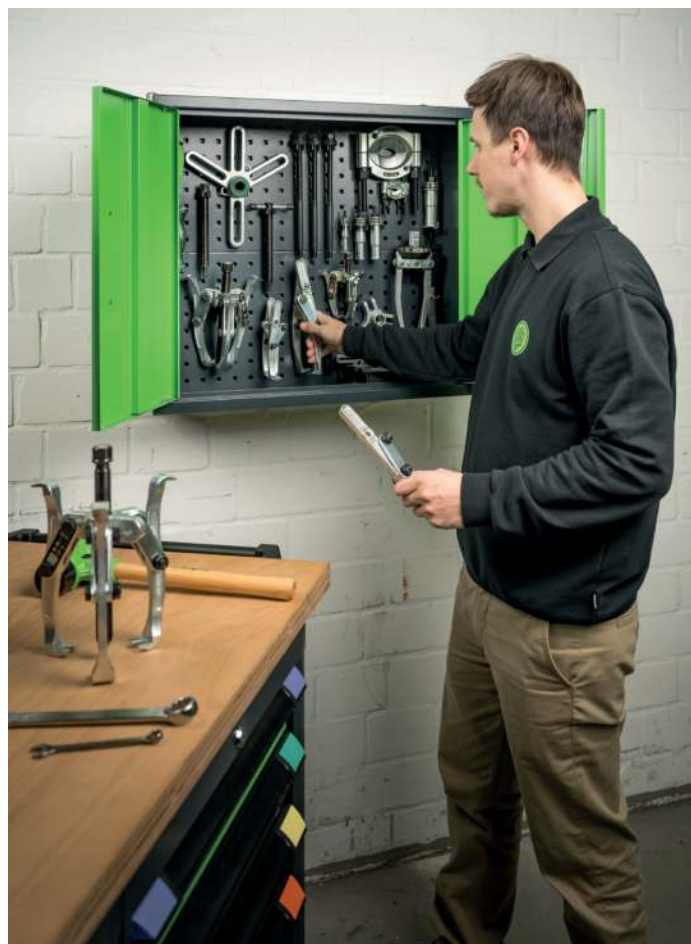
The mobile workbench from KUKKO combines the advantages of clear and secure storage with the provision of a multifunctional working surface for daily needs. The workbench has five heavy-duty drawers.



## APPLICATION EXAMPLES



KUKKO Cube with pull-out drawer compartments



The practical tool cabinet of the X-SB series for ideal storage



The mobile workbench of the X-MW series



Case sets guarantee protection of the tools and ideal storage

SERIES K-2030-KIT  
SPARE PARTS SET FOR THE 2030 SERIES



The K-2030-A-KIT spare parts set includes an extensive selection of spare parts for the universal puller of series 20 and 30 and is ideal for replacing or supplementing existing components. The scope of delivery includes four 2-jaw crossbars, two 3-jaw crossbars, eight extensions in various sizes, six spindles, twelve sliding pieces, twelve standard jaws, ten narrow jaws, and a Quadrobox with the matching screws, nuts, and spring washers.

BENEFITS

- High flexibility: Extensive selection of crossbars, spindles, jaws, and extensions for a wide range of applications
- Quick replacement: Worn components can be replaced without prolonged downtime
- Ideal for workshop and service: Perfect for maintenance, repair, and adding to existing puller sets

TECHNICAL ATTRIBUTES

|                                                                                   |         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                          |                          |                                                                                      |                                                                                                                                                                            |                                                                                       |                                                                                       |
|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | #       |  |  |  |  |  | Max.<br>tensile<br>force | Max.<br>tension<br>force |  | Consists<br>of                                                                                                                                                             |  |  |
|                                                                                   | GTIN    | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kN                                                                                  | t/US t.<br>sh.           | kg/lb                    |                                                                                      |                                                                                                                                                                            |                                                                                       |                                                                                       |
| K-2030-A-KIT <b>New</b>                                                           | -034909 | 0 - 130<br>0 - 5 1/8                                                                | 350<br>13 3/4                                                                       | 95 - 160<br>3 3/4 - 6<br>5/16                                                       | 17<br>11/16                                                                         | 450                                                                                 | 4.5<br>4.96              | 13,2<br>29.106           | 20-10-T,<br>30-10-T,<br>1-V-100-P, 1-<br>V-150-P,<br>614160,<br>1-90-P,<br>1-91-P    | 20-10,<br>20-10-2,<br>20-10-25,<br>20-10-4,<br>20-10-P3,<br>20-10-S,<br>20-10-SP,<br>30-10,<br>30-10-2,<br>30-10-P3,<br>30-10-S,<br>30-10-SP,<br>K-2030-10,<br>K-2030-10-S | ✓                                                                                     |                                                                                       |

## PRODUCT DETAILS

### SERIES K-L-BOXX K-L-BOXX (EMPTY BOX FROM SORTIMO)



K-L-BOXX-136



K-L-BOXX-238



K-L-BOXX-XL



K-L+BOXX



K-i-BOXX



K-L-BOXX-MINI



L-Schloss-45/35

The portable KUKKO empty box of the K-L-BOXX series from Sortimo offers enough space for a range of tools. For ideal handling and transport, the case is equipped with 2 handles. Particularly practical is the click system, which allows any number of L-BOXXes to be stacked and subsequently transported. With just the push of a button, the L-BOXXes can be quickly separated from each other. Thus, the cases are the perfect mobility and storage solution for craftwork, workshops, and industry.

#### BENEFITS

- Integrable and combinable with all common Sortimo L-Boxxes
- Thanks to a click system, the suitcases can be connected to each other and thus transported more easily.
- Special foam protects the tool and provides a special organization system

#### TECHNICAL ATTRIBUTES

| #               | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|-----------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-L-BOXX-L-136  | -023132                                                                                     | 442<br>17 3/8                                                                                  | 357<br>14 1/16                                                                                 | 151<br>5 15/16                                                                                 | 25                                                                                         | 2,66<br>5.865                                                                                  | ✓                                                                                     |
| K-L-BOXX-L-238  | -023149                                                                                     | 442<br>17 3/8                                                                                  | 375<br>14 3/4                                                                                  | 253<br>9 15/16                                                                                 | 25                                                                                         | 3,615<br>7.971                                                                                 | ✓                                                                                     |
| K-XL-BOXX       | -024559                                                                                     | 607<br>23 7/8                                                                                  | 395<br>15 9/16                                                                                 | 179<br>7 1/16                                                                                  | 25                                                                                         | 3,2<br>7.056                                                                                   | ✓                                                                                     |
| K-L+BOXX        | -002076                                                                                     | 442<br>17 3/8                                                                                  | 357<br>14 1/16                                                                                 | 253<br>9 15/16                                                                                 | 25                                                                                         | 4,61<br>10.165                                                                                 | ✓                                                                                     |
| K-i-BOXX        | -002021                                                                                     | 367<br>14 7/16                                                                                 | 316<br>12 7/16                                                                                 | 72<br>2 13/16                                                                                  | 3                                                                                          | 0,985<br>2.172                                                                                 | ✓                                                                                     |
| K-L-BOXX-MINI   | -023156                                                                                     | 255<br>10 1/32                                                                                 | 153<br>6 1/32                                                                                  | 63<br>2 1/2                                                                                    | 1,50                                                                                       | 0,375<br>0.849                                                                                 | ✓                                                                                     |
| L-Schloss-45/35 | -752261                                                                                     |                                                                                                |                                                                                                |                                                                                                | -                                                                                          | 0,8<br>1.764                                                                                   | ✓                                                                                     |



PRODUCT DETAILS

SERIES K-A-KT  
KUKKO SMALL PARTS CASE



The KUKKO small parts case with high-impact polycarbonate lid on a solid base allows safe storage of small parts. The cases can be customized with insert boxes and/or dividers and can be securely connected with a connecting clasp.

BENEFITS

- Transparent lid closes tightly; no mixing of contents
- Impact-resistant lid made of polycarbonate
- Ergonomic, foldable handle
- Innovative side closure enables a secure locking and connection with additional suitcases.

TECHNICAL ATTRIBUTES

| #                  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|--------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| K-A-KT-440-355-76  | -007323                                                                                   | 440<br>17 5/16                                                                               | 355<br>13 1                                                                                  | 76<br>2 1                                                                                    | 36                                                                                       | 2,16<br>4.763                                                                                | ✓                                                                                   |
| K-A-KT-440-355-144 | -007316                                                                                   | 440<br>17 5/16                                                                               | 355<br>13 1                                                                                  | 144<br>5 11/16                                                                               | 36                                                                                       | 2,98<br>0.662                                                                                | ✓                                                                                   |





PRODUCT DETAILS

SERIES K-A-TL  
KUKKO TRANSPORT AND STORAGE BOX



The KUKKO transport and storage box offers ample storage space for tools, various accessories, and other workshop supplies.

BENEFITS

- The circulating edge acts locking and self-centering.
- Through the Euromass possibility, logistical advantages are optimally utilized.
- The container is securely sealable and can be used with a padlock.
- Very high chemical resistance as well as high rigidity and strength

TECHNICAL ATTRIBUTES

| #                  | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |  |
|--------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-A-TL-600-400-185 | -007330                                                                                     | 600<br>23 5/8                                                                                  | 400<br>15 3/4                                                                                  | 185<br>7 5/16                                                                                  | 17                                                                                         | 0,3<br>0.662                                                                                   | ✓                                                                                     |





SERIES K-CUBEBOXX  
EMPTY WORKSHOP TROLLEY KUKKO-CUBE



The KUKKO-Cube workshop cart is the smart solution for all transport and storage problems and is used in the fields of craftsmanship, workshops, and industry. Equipped with four drawers, the workshop cart can be individually stocked with Sortimo® L-Boxxes. The L-Boxxes are securely stored in the KUKKO-Cube, ensuring ideal storage. The perfect working height of the workshop cart is suitable for assembly work directly on-site. Smooth-rolling and stable load wheels ensure effortless transportation without significant effort.

BENEFITS

- Smooth-rolling extracts as well as self-clamping of the pull-out trays
- Torque-resistant and stable construction of the workshop cart
- Individually customizable with L-Boxxes
- Smooth rolling and stable load rollers
- Non-slip rubber mat for assembly work



TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| K-CubeBoxx | -909986                                                                                     | 620<br>24 7/16                                                                                 | 560<br>22 1/16                                                                                 | 1035<br>40 3/4                                                                                   | 43<br>94.815                                                                                   |

SERIES X-MPK  
TRANSPORT CART



The robust, lightweight plastic platform cart of the X-MPK series is ideal for the fast and safe transport of loads up to 200 kg. With 2 swivel casters and 2 fixed casters as well as a swiveling safety bar, the load remains reliably secured. At only 6.8 kg, the cart is effortless to handle without losing stability. Low-noise elastomer rollers and a grid base ensure quiet rolling and protect the floor from marks. Thanks to the foldable design, it can be stored upright to save space – perfect for the office, workshop, warehouse, or retail.

BENEFITS

- Safe transport: Swiveling safety bar prevents the load from falling off
- Sturdy construction: High load capacity combined with easy handling
- Space-saving: foldable and can be stored upright
- Lightweight and handy: weighs only 6.8 kg and is easy to maneuver
- Safe transport: swiveling safety bracket prevents the load from falling off

TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | <br>kg/lb |
|-----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| X-MPK-780 | -300109                                                                                     | 780<br>30 11/16                                                                                | 490<br>19 5/16                                                                                 | 900<br>6 3/8                                                                                   | 200                                                                                         | 6,8<br>14.994                                                                                  |



PRODUCT DETAILS

SERIES X-MW  
MOBILE WORKBENCH WITH FIVE HEAVY-DUTY DRAWERS



The KUKKO mobile workbench combines the advantages of clear and secure storage with the provision of a multifunctional workspace for everyday needs. The workbench features five heavy-duty drawers, an additional storage space with a 9-way adjustable intermediate shelf and permanently mounted door, a replaceable worktop, and a robust back wall. The perforated grid on the back wall provides ample space for tool holders. A centrally located lock secures both the drawers and the door.

BENEFITS

- Mobile workbench on wheels for on-site deployment
- Complete extraction of the drawers with ball bearing telescopic rails
- Heavy-duty drawers with a load capacity of up to 40 kg
- Cable pass-through on the back wall for connecting electronic devices
- Loch grids provide enough space for attaching tool holders.

TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  |  |  |  |  |  |  | Number of doors |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------|
| GTIN       |                                                                                     | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | kg                                                                                  | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                         | mm/<br>inch                                                                          | mm/<br>inch                                                                           | mm/<br>inch                                                                           |                 | kg/lb                                                                                 |
| X-MW-179-5 | -202803                                                                             | 1590<br>62 5/8                                                                      | 700<br>27 9/16                                                                      | 1730<br>68 1/8                                                                      | 600                                                                                 | 500<br>19<br>11/16                                                                  | 100, 300<br>3 15/16,<br>11 13/16                                                    | 600<br>23 5/8                                                                       | 600<br>23 5/8                                                                        | 1590<br>62 5/8                                                                        | 5                                                                                     | 1               | 16<br>35.280                                                                          |

PRODUCT DETAILS

SERIES X-SW  
STATIONARY WORKBENCH WITH SIX HEAVY-DUTY DRAWERS



The stationary workbench from KUKKO combines the advantages of clear and safe storage with the provision of a multifunctional workspace for daily needs. The workbench features seven heavy-duty drawers, additional storage with a 9-fold adjustable intermediate shelf and a fixed-mounted door, a replaceable work surface, and a robust back wall. The perforated grid on the back wall provides ample space for attaching tool holders. A centrally arranged lock simultaneously locks the drawers and the door.

BENEFITS

- Mobile workbench on wheels for on-site deployment
- Complete extraction of the drawers with ball bearing telescopic rails
- Heavy-duty drawers with a load capacity of up to 40 kg
- Cable pass-through on the back wall for connecting electronic devices
- Loch grids provide enough space for attaching tool holders.

TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|            | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/<br>inch                                                                         | mm/inch                                                                             | mm/<br>inch                                                                          | mm/<br>inch                                                                           | mm/<br>inch                                                                           |                                                                                       | kg/lb                                                                                 |                                                                                       |
| X-SW-179-6 | -202810                                                                             | 1530<br>60 1/4                                                                      | 700<br>27 9/16                                                                      | 1640<br>64 9/16                                                                     | 1.500                                                                               | 500<br>19<br>11/16                                                                  | 100, 200<br>3 15/16, 7<br>7/8                                                       | 600<br>23 5/8                                                                        | 600<br>23 5/8                                                                         | 1500<br>59<br>1/16                                                                    | 6                                                                                     | 12<br>26.460                                                                          |                                                                                       |

## PRODUCT DETAILS

### SERIES X-LS BATTERY CHARGING CABINET



Whether for organized storage, safe transport, or sales-enhancing presentation of tools – KUKKO offers the perfect solution for every application.

The activity Sets & Presentation includes:

- Empty cases
- Workshop trolley KUKKO-Cube
- Workbenches
- Tool cabinets
- Compartment cabinets with power connection
- Wall panels
- Sales walls

#### BENEFITS

- Flexible application possibilities with charging options for battery-operated electric machines, BDE devices, laptops, tablets, smartphones, or e-bikes
- Thoughtful ventilation optimal air circulation through front and rear ventilation openings.
- High variety of execution with sockets
- Convincing safety CE compliant
- Secure Lockable Devices remain locked at all times and are protected from unauthorized access.

## TECHNICAL ATTRIBUTES

| #                                                                                         |  GTIN |  mm/inch |  mm/inch |  mm/inch |  |  kg/lb |  |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  X-LS-10 | -080227                                                                                  | 410<br>16 1/8                                                                               | 500<br>19 11/16                                                                             | 1790<br>70 1/2                                                                              | 10                                                                                  | 74<br>163.170                                                                               | ✓                                                                                     |



SERIES X-SB  
TOOL CABINET WITH PERFORATED SHEET  
METAL

The tool cabinet from the X-SB series made of stable sheet metal is used for the safe and organized storage of tools. The perforated grid on the back wall provides enough space for attaching tool holders. The tool cabinet features lockable doors with a cylinder lock as well as a maximum load capacity of 50 kg. The high-quality steel cabinets can be flexibly integrated into various work environments, thus adapting to individual requirements.



BENEFITS

- Robust construction from solid sheet metal guarantees high stability and durability
- Secure storage thanks to lockable doors
- Clear organization ensures quick access
- High load capacity up to 50 kg



TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg | Number of<br>doors | <br>kg/lb |  |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| X-SB-65x75 | -042058                                                                                     | 750<br>29 1/2                                                                                  | 225<br>8 7/8                                                                                   | 650<br>25 9/16                                                                                 | 50                                                                                        | 2                  | 19<br>0.662                                                                                    | ✓                                                                                     |                                                                                       |

## PRODUCT DETAILS

### SERIES X-SB-224 OPERATING EQUIPMENT



The universal puller sets in the tool cabinet of the X-SB-224 series are available in various assortments, equipped with puller and pulling devices, a sliding hammer device, external pullers, as well as internal extractors with a matching counter stay. This makes the sets suitable for external extraction, internal extraction, and for separation pulling of bearings, gears, pulleys, and similar components.

#### BENEFITS

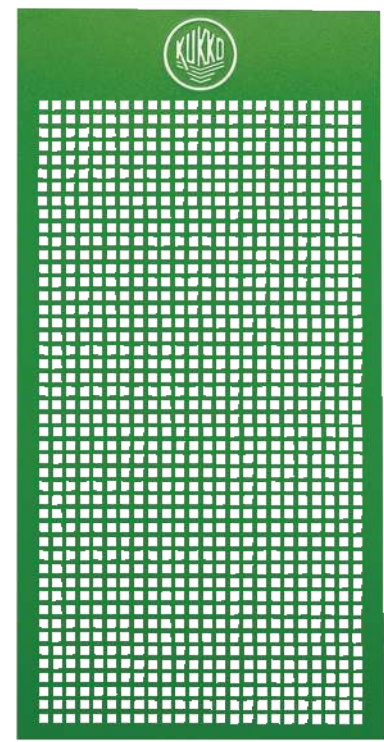
- Safe and clear storage in the lockable tool cabinet
- Application-oriented configuration for universal pulling



#### TECHNICAL ATTRIBUTES

| #                     |  |  |  |  |  | Number of doors |  | Consists of                                                                                                                  |  |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  |                 | kg/lb                                                                                 |                                                                                                                              |                                                                                       |
| <b>224-676</b><br>New | -042072                                                                             | 750<br>29 1/2                                                                       | 225<br>8 7/8                                                                        | 650<br>25 9/16                                                                      | 50                                                                                  | 2               | 42,8<br>94.374                                                                        | 022-206,<br>22-0-17,<br>15-00, 15-2,<br>203-1, 203-2,<br>21-2, 21-4,<br>21-5, 21-6,<br>68-0, 68-2,<br>GA7-10, X-<br>SB-65x75 | ✓                                                                                     |
| <b>224-677</b><br>New | -141584                                                                             | 750<br>29 1/2                                                                       | 225<br>8 7/8                                                                        | 650<br>25 9/16                                                                      | 50                                                                                  | 2               | 45<br>99.225                                                                          | 203-2, 221-G,<br>X-SB-65x75                                                                                                  | ✓                                                                                     |
| <b>224-678</b><br>New | -141614                                                                             | 750<br>29 1/2                                                                       | 225<br>8 7/8                                                                        | 650<br>25 9/16                                                                      | 50                                                                                  | 2               | 48<br>105.840                                                                         | 18-1, 18-2,<br>15-2, 15-1,<br>221-G, 203-1,<br>203-2, 19-2-<br>P, X-<br>SB-65x75                                             | ✓                                                                                     |

SERIES WT-000  
WALL BOARD, UNASSEMBLED



The unfurnished wall board of the series WT is used for clean and tidy storage of KUKKO products in industry and workshops. The board can be stocked in various ways and can be ideally used for organization and overview.

BENEFITS

- Central availability of the products for every employee
- Through the storage at the wall panel, the completeness of the range is clearly visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-000 | -890550                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 4,055<br>10.033                                                                                | ✓                                                                                     |



PRODUCT DETAILS

SERIES WT-220  
BLACKBOARDS



The puller assortment Universal WT-220 is a wall panel equipped with matching tools for application and storage in workshops and industries. The assortment includes a 3-jaw tab puller with oscillating, height adjustable jaws and combination crossbar (series 207) as well as 2-jaw and 3-jaw pullers with conical self-tightening and sliding hammer.

BENEFITS

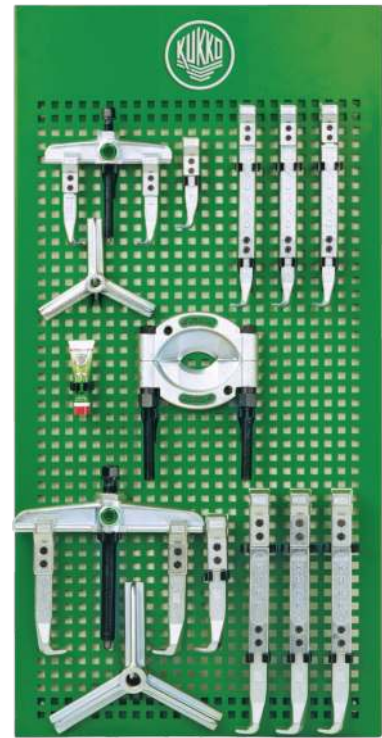
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|  | #       |  |  |  |  | Consists of |  |
|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
|                                                                                   | GTIN    | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                               |                                                                                     |             |                                                                                       |
| WT-220                                                                            | -023255 | 500<br>19 11/16                                                                     | 1000<br>39 3/8                                                                      | 10,855<br>4.090                                                                     | 220-2, 221-4,<br>207-2, 22-0+17,<br>699915, WT-000                                  | ✓           |                                                                                       |

PRODUCT DETAILS

SERIES 30-20-T  
PULLER SET - INDUSTRY - BASIC



The BASIC puller range for industry is a wall panel equipped with suitable tools for application and storage. The range is suitable for external extraction, internal extraction, and bearing separation, making it ideal for versatile use in the industry.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

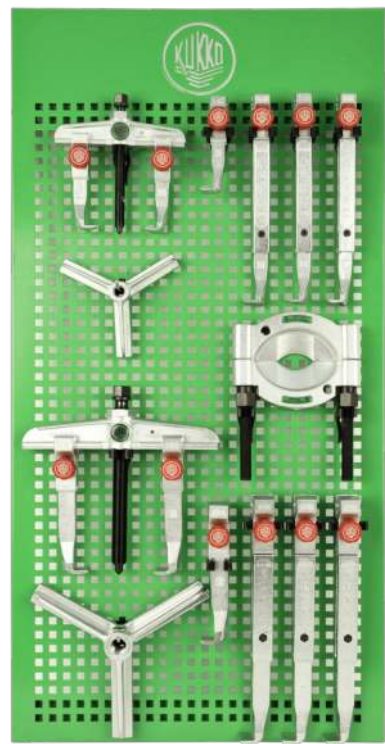
| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                    |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 30-20-T | -875717                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 24,02<br>53.361                                                                              | 20-10, 20-20,<br>15-2, 1-190-S,<br>2-300-S, 2-150-E,<br>WT-000 | ✓                                                                                     |





PRODUCT DETAILS

SERIES 30-20+T  
PULLER RANGE - INDUSTRY - BASIC+



The BASIC+ puller range for the industry is a wall panel equipped with suitable tools for application and storage. The range is suitable for external extraction, internal extraction, and bearing separation, making it ideal for versatile use in industry.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|  | #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                     |  |
|-----------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   | 30-20+T | -141454                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 25,03<br>55.787                                                                              | 1-92-E, WT-000,<br>1-192-S, 15-2,<br>20-10+, 20-20+,<br>2-302-S | ✓                                                                                     |

SERIES WT-002  
PULLER SET - HYDRAULIC EXTERNAL  
EXTRACTION - TOP



The TOP puller selection for hydraulic external extraction is a wall panel stocked with suitable tools for use and storage in workshops and industry. The selection includes various 2-jaw and 3-jaw crossbars and hooks that can be combined into different external pullers for various applications, thanks to the KUKKO modular principle. This allows for the removal of any components that sit on a shaft and are accessible from the outside. The included hydraulic spindle also enables the easy and controlled removal of particularly stubborn parts.

BENEFITS

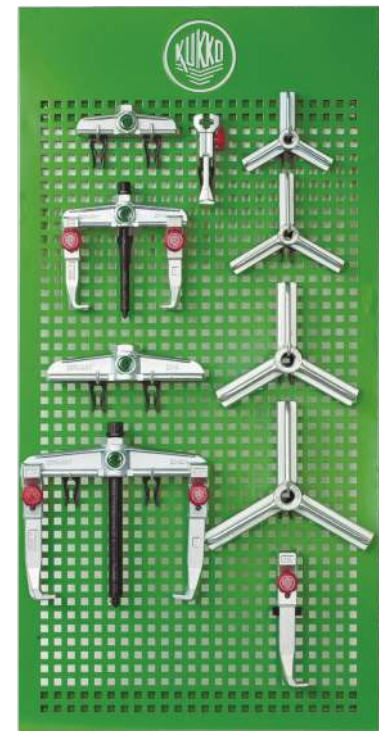
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                       |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|
| WT-002 | -890567                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 16<br>35.280                                                                                 | 20-10+, 20-20+,<br>1-92-E, WT-000 | ✓                                                                                     |



SERIES WT-003  
PULLER SET - EXTERNAL EXTRACTION - BASIC



The BASIC puller assortment for external extraction is a wall panel equipped with suitable tools for use and storage in workshops and industry. The assortment includes various 2-jaw and 3-jaw crossbars and hooks that can be combined into different external pullers for various applications, thanks to the KUKKO modular system. This allows for the loosening of any component sitting on a shaft and accessible from the outside.

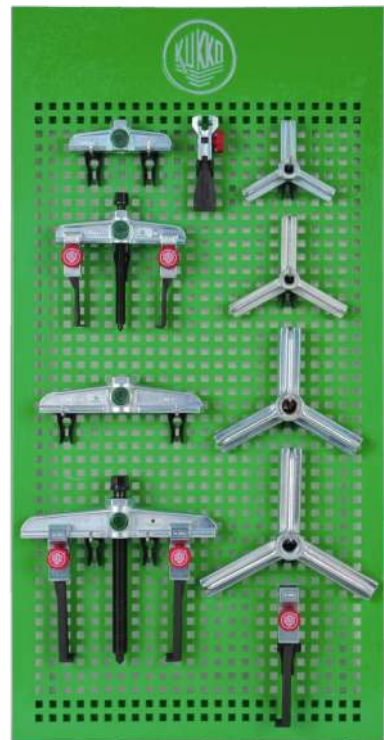
BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|  | #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                       |  |
|-----------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   | WT-003 | -890574                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 19,65<br>43.328                                                                              | 20-10+, 20-20+,<br>1-92-E, WT-000 | ✓                                                                                     |

SERIES WT-003+S  
PULLER RANGE - EXTERNAL EXTRACTION -  
BASIC+



The BASIC+ puller range for external extraction is a wall panel equipped with suitable tools for use and storage in workshops and industry. The range includes various 2-jaw and 3-jaw crossbars and hooks that can be combined into different external pullers for various applications due to the KUKKO modular concept. This allows for the removal of any component that is mounted on a shaft and is freely accessible from the outside. The narrow pulling jaws ensure that tight and hard-to-reach gaps can also be accessed.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                 |  |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-003+S | -141461                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 19,39<br>42.755                                                                              | 20-10+S,<br>20-20+S, WT-000 | ✓                                                                                     |                                                                                       |

SERIES WT-004  
PULLER ASSORTMENT - AUTOMOTIVE - BASIC



The BASIC puller range for the automotive is a wall panel stocked with suitable tools for application and storage in workshops and industry. The range includes 2-jaw universal pullers and 3-jaw crossbars and hooks that can be combined into various external pullers for different applications thanks to the KUKKO modular principle. Additionally, specifically designed for use in the automotive sector are nut splitters, ball joint removers, oil filter wrenches, and separator forks.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

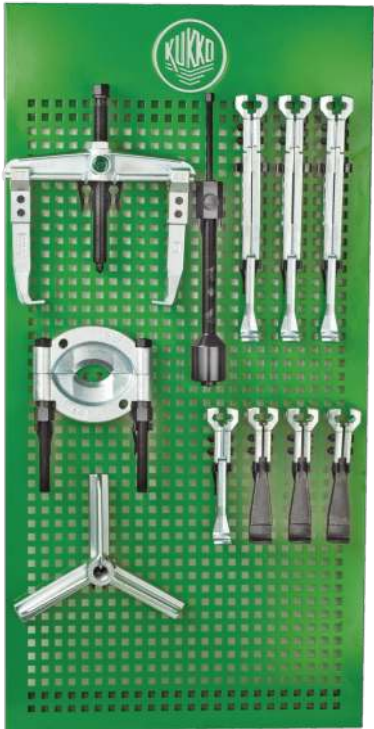
TECHNICAL ATTRIBUTES

|  | #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                              |  |
|-----------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   | WT-004 | -890581                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 9,4<br>20.727                                                                                | 30-1-T, 20-1+,<br>1-92-S, 1-92-E,<br>108-1, 129-1,<br>135-2, 43-1, 50-2,<br>55-1, WT-000 | ✓                                                                                     |



PRODUCT DETAILS

SERIES WT-008  
PULLER RANGE - COMMERCIAL VEHICLES -  
BASIC



The BASIC Puller assortment for Commercial Vehicles is a Wall panel equipped with suitable tools for use and storage in workshop and industry. The assortment includes 2- and 3-jaw crossbars and hooks as well as universal pullers, which, thanks to the KUKKO modular system, can be combined into various external pullers for different applications. Specifically for Commercial Vehicles, a pulling device and a long hydraulic spindle are included to effectively remove even particularly tight-fitting parts.

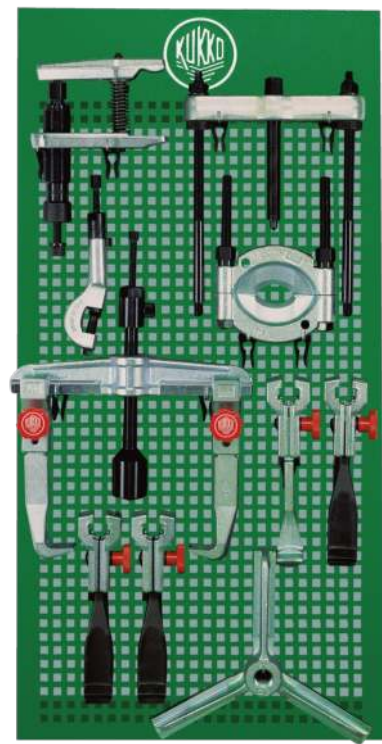
BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                   |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-008 | -890604                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 18,1<br>39.911                                                                               | 20-20, 8-0-621,<br>15-2, 20-20+,<br>2-300-S, 2-151-S,<br>2-302-S, 2-153-S,<br>2-150-E, WT-000 | ✓                                                                                     |

SERIES WT-010  
PULLER SET - NFZ - TOP



The TOP puller range for Commercial Vehicles is a Wall panel equipped with suitable tools for use and storage in workshops and industry. The range includes universal pullers, hooks and a 3-jaw crossbar that can be combined into various external pullers for different applications thanks to the KUKKO modular system. Specifically for Commercial Vehicles, it includes a pulling device and a puller, as well as a short hydraulic spindle, Nut splitters and a heavy-duty Ball joint press for effectively removing even particularly seized parts.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|  | #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                         |  |
|-----------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   | WT-010 | -890628                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 39,5<br>87.098                                                                               | 18-2, 20-3+, 800,<br>56-1, 129-4,<br>3-203-S, WT-000,<br>15-2, 8-02 | ✓                                                                                     |

SERIES WT-014  
PULLER SET - AUTOMOTIVE - CHASSIS



The puller range for chassis in the automotive industry is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes the 2-jaw separator “Cobra” with adjustable reach. Additionally, the assortment features separating forks, spreaders, ball joint extractors, and ball joint pullers in various sizes, specifically designed for work on the chassis.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                           |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-014 | -890635                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 15,3<br>33.737                                                                               | 210-1, 129-0,<br>129-0-25, 129-1,<br>129-4, 128-1,<br>128-2, 128-3,<br>135-1, 145-2,<br>145-3, WT-000 | ✓                                                                                     |

SERIES WT-017  
PULLER SET - INTERNAL EXTRACTOR - BASIC



The BASIC puller range for internal extraction is a wall panel equipped with suitable tools for application and storage in workshops and industries. The range includes numerous 2-jaw internal extractors, as well as internal extractors with segmented gripping edges, sliding hammers, and counter stays in various sizes, along with two retaining ring pliers. Internal parts of various sizes can be safely and versatily extracted.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|  | #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                             |  |
|-----------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   | WT-017 | -141478                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 20,93<br>6.461                                                                               | 22-0-05, 22-0-17,<br>22-1, 22-2, 21-1,<br>21-2, 21-3, 21-4,<br>21-5, 21-6, 21-7,<br>21-8, 21-1-E,<br>21-2-E, 21-3-E,<br>21-4-E, 21-5-E,<br>728K-A2, 729K-<br>J2, WT-000 | ✓                                                                                     |

SERIES WT-018  
PULLER RANGE - INTERNAL EXTRACTOR - TOP



The TOP puller assortment for internal extraction is a Wall panel equipped with suitable tools for use and storage in workshops and industry. The assortment includes numerous two-shell internal extractors in 8 different sizes, as well as counter stays and universal pullers in various sizes, puller chucks for deep-groove ball bearing inner rings, and a hydraulic additional press. Even particularly tight-fitting internal parts of various sizes can thus be extracted safely and flexibly.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                    |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-018 | -141485                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 22,735<br>50.131                                                                             | 43-1, 22-1, 22-2,<br>21-1, 21-2, 21-3,<br>21-4, 21-5, 21-6,<br>21-7, 21-8, 23,<br>WT-000, 20-1+,<br>20-2+, 9-1 | ✓                                                                                     |





SERIES WT-019  
PULLER SET - BEARING SEPERATOR



The puller range for separation pulling is a wall panel equipped with suitable tools for application and storage in workshops and industry. The range includes the 2-jaw bearing puller “Cobra” in two different sizes, as well as several separation and pulling devices. This allows parts to be gently separated from the seat before they can then be pulled out from the outside.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|  | #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                        |  |
|-----------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                   | WT-019 | -141492                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 22,68<br>50.009                                                                              | 204-0, 17-1, 17-2,<br>18-1, 18-2, 210-1,<br>WT-000 | ✓                                                                                     |

SERIES WT-020  
CLAMPING ASSORTMENT - ALL-STEEL -  
PREMIUM



The premium all-steel clamping range is a wall panel equipped with matching tools for use and storage in workshops and industry. The range includes various VIRIDIS all-steel screw clamps with a 3K comfort grip, as well as VIRIDIS all-steel lever clamps. With these, multiple workpieces can be held and clamped gently, effortlessly, and safely.

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      |  |  |  |  | Consists of                                                                              |  |  |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|        | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                               |                                                                                          |                                                                                       |                                                                                       |
| WT-020 | -141508                                                                             | 500<br>19 11/16                                                                     | 1000<br>39 3/8                                                                      | 27,7<br>61.079                                                                      | 469+0160-080,<br>469+0250-100,<br>469+0250-120,<br>469+0300-140,<br>472H0200-100, WT-000 | ✓                                                                                     |                                                                                       |

SERIES WT-021  
CLAMPING RANGE - DUCTILE IRON -  
PREMIUM



The premium malleable cast iron clamp range is a Wall panel equipped with suitable tools for use and storage in workshops and industry. The range includes various VIRIDIS malleable cast iron screw clamps with a 3K comfort handle. These allow multiple workpieces to be held and clamped securely without causing damage.

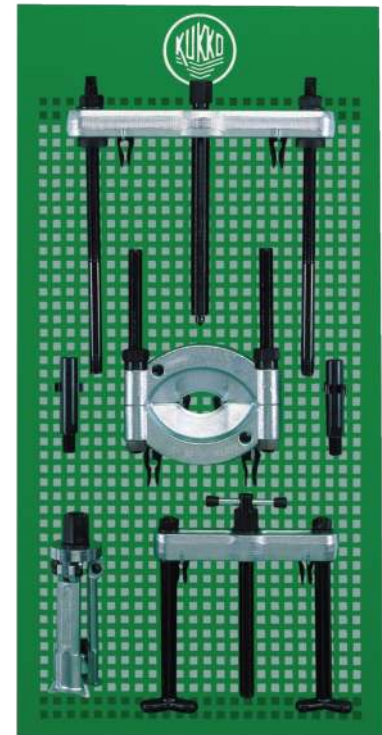
BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

|        |         |  |                 |                |              |                                                                         |   |
|--------|---------|--|-----------------|----------------|--------------|-------------------------------------------------------------------------|---|
|        | #       |  |                 |                |              | Consists of                                                             |   |
|        | GTIN    |  | mm/inch         | mm/inch        | kg/lb        |                                                                         |   |
| WT-021 | -141515 |  | 500<br>19 11/16 | 1000<br>39 3/8 | 0,3<br>0.662 | 490+0160-080,<br>490+0250-100,<br>490+0250-120,<br>490+0300-140, WT-000 | ✓ |

SERIES WT-030  
PULLER SET - AUTOMOTIVE - AXLE



The Puller assortment for axles in the automotive industry is a Wall panel equipped with suitable tools for use and storage in workshops and industry. The assortment includes a puller with a pair of extensions, as well as a matching pulling device, internal extractor and counter stay in large version, specifically for working on axles.

BENEFITS

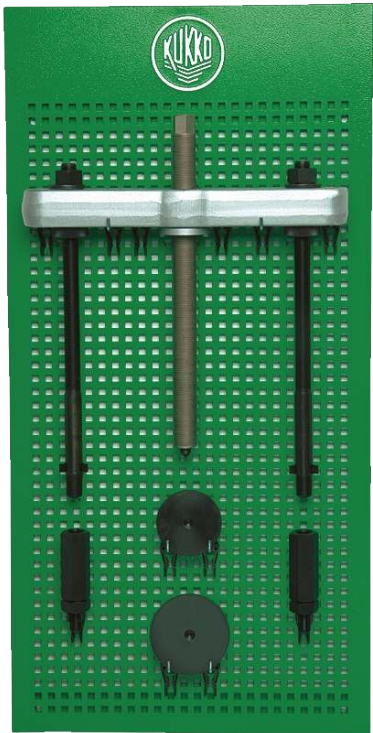
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                             |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------|
| WT-030 | -893490                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 27,91<br>61.542                                                                              | 15-3, 18-3, 19-3-P, 22-4, 21-89, WT-000 | ✓                                                                                     |



SERIES WT-031  
PULLER SET - NFZ - AXLE



The puller assortment for axles in Commercial Vehicles is a Wall panel that is equipped with suitable tools for use and storage in workshops and industry. The assortment includes an extra-large puller specifically for working on axles of Commercial Vehicles, as well as the corresponding pressure pieces, connecting nuts, and spindle inserts.

BENEFITS

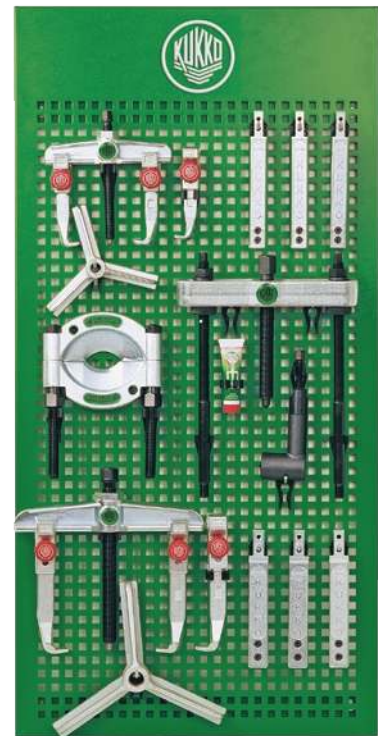
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                         |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-031 | -914584                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 27,96<br>61.652                                                                              | 18-4, VM2215-58,<br>18-4S0117, 18-4S0217,<br>WT-000 | ✓                                                                                     |



SERIES WT-50  
PULLER SET - INDUSTRY - TOP



Whether for organized storage, safe transport, or sales-enhancing presentation of tools – KUKKO offers the perfect solution for every application.

The activity Sets & Presentation includes:

- Empty cases
- Workshop trolley KUKKO-Cube
- Workbenches
- Tool cabinets
- Compartment cabinets with power connection
- Wall panels
- Sales walls

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                           |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-50 | -951114                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 26,44<br>58.300                                                                              | 1-V-150-S, 2-V-150-S, 1-92-E, WT-000, 15-2, 18-2, 20-10+, 20-20+, 9-1 | ✓                                                                                     |



PRODUCT DETAILS

SERIES WT-1-INDUSTRIE  
PULLER RANGE - INDUSTRY



The puller assortment for industry is a Wall panel equipped with suitable tools for use and storage in workshops and industry. The assortment includes various 2-jaw and 3-jaw universal pullers, as well as internal extractors and, to match them, a sliding hammer and counter stay. Together with the included pulling device and a Nut splitter, the assortment is suitable for external extraction, internal extraction, and separating extraction, making it ideal for versatile use in industry.

BENEFITS

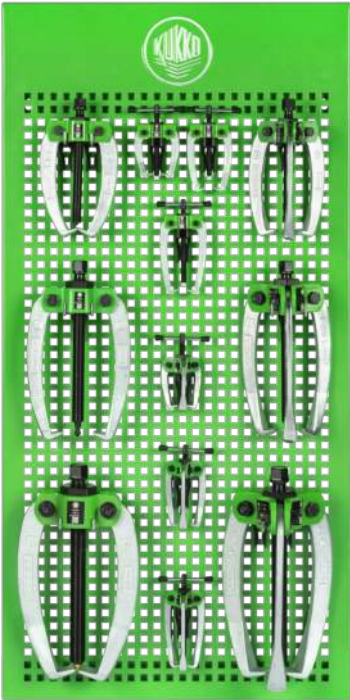
- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES



| #              | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                         |  |
|----------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-1-INDUSTRIE | -003608                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 21,9<br>48.290                                                                               | 20-1+, 20-10+,<br>20-2+, 21-2,<br>21-3, 21-4, 21-5,<br>22-0-05, 22-1,<br>43-1, 43-2, 43-3,<br>43-11, 43-12,<br>43-13, 44-1,<br>45-1, 55-2,<br>WT-000, 15-0,<br>18-0 | ✓                                                                                     |

SERIES WT-43-44-45/12  
BLACKBOARDS



The puller range is a wall panel equipped with matching tools for application and storage in workshops and industry. The range includes a total of 12 handy pullers with force-amplifying and self-centering jaws for universal use. Manual tightening of the spindle guarantees self-centering of the jaws (Autogrip Technology).

BENEFITS

- Assembly based on years of experience for application in various industries
- Central availability of the products for every employee
- Through the storage on the wall board, the completeness of the range is visible at a glance.

TECHNICAL ATTRIBUTES

| #              | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                         |  |
|----------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| WT-43-44-45/12 | -023354                                                                                     | 500<br>19 11/16                                                                                | 1000<br>39 3/8                                                                                 | 17,8<br>0.662                                                                                | 43-1, 43-2,<br>43-3, 44-2,<br>44-3, 44-4,<br>43-11, 43-12,<br>43-13, 45-2,<br>45-3, 45-4,<br>WT-000 | ✓                                                                                     |



SERIES EVLW-INDUSTRIE-BASIC  
SALES WALL INDUSTRY BASIC



Whether for organized storage, safe transport, or sales-enhancing presentation of tools – KUKKO offers the perfect solution for every application.

The activity Sets & Presentation includes:

- Empty cases
- Workshop trolley KUKKO-Cube
- Workbenches
- Tool cabinets
- Compartment cabinets with power connection
- Wall panels
- Sales walls

BENEFITS

- Simple reorder of the sold products through clear labeling
- Complete overview at a glance

TECHNICAL ATTRIBUTES

|                                                                                   |         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                                                                                                          |             |                                                                                       |
|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
|  | #       |  |  |  |  |                                                                                                                                                                                                                                                       | Consists of |  |
|                                                                                   | GTIN    | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                               |                                                                                                                                                                                                                                                                                                                                          |             |                                                                                       |
| EVLW-INDUSTRIE-BASIC                                                              | -123689 | 1030<br>40 9/16                                                                     | 550<br>21 5/8                                                                       | 2250<br>88 9/16                                                                     | 123<br>271.215                                                                      | 8-0-621, 9-1, 12-1, 12-2, 14-3, 17-0, 17-1, 18-0, 18-1, 20-10+, 20-20+, 20-1+S-T, 21-0, 21-01, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 22-0-05, 22-0-17, 22-1, 22-2, 30-1+S, 30-2+S, 41-0, 41-2, 41-3, 42-0, 42-2, 42-3, 43-1, 43-3, 43-11, 44-1, 44-3, 55-0, 55-1, 55-2, 55-3, 55-4, 56-2, 204-0, 204-02, 210-1, 219-1, K-2030-10+S, K-70-C | ✓           |                                                                                       |

SERIES EVLW-2-INDUSTRIE  
SALES WALL INDUSTRY



The sales wall Industry serves the optimal presentation of KUKKO tools in your store. The illuminated sales wall is stocked with an assortment that has been compiled based on years of experience for use in the industry. In addition to pullers, the range also includes internal extractors, sliding hammers, counter stays, separation and puller devices, bearing pullers, and nut splitters. Together with the two case sets, customers in the industry should be able to find the right product for their needs.

BENEFITS

- KUKKO is happy to assist you in building and training your employees on the respective products and pulling principles. Contact us and let us provide you with personalized advice.
- Simple reordering of sold products through clear labeling
- Complete overview at a glance

TECHNICAL ATTRIBUTES

| #                | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                                                                                                                                                                                                                                           |  |
|------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| EVLW-2-INDUSTRIE | -141522                                                                                     | 1030<br>40 9/16                                                                                | 550<br>21 5/8                                                                                  | 2250<br>88 9/16                                                                                | 0,3<br>0.662                                                                                 | 8-0-621, 9-1, 12-1,<br>12-2, 14-3, 17-0, 17-1,<br>18-0, 18-1, 20-10+,<br>20-20+, 20-1+S-T,<br>21-0, 21-01, 21-1,<br>21-2, 21-3, 21-4, 21-5,<br>21-6, 22-0-05,<br>22-0-17, 22-1, 22-2,<br>30-1+S, 30-2+S, 41-0,<br>41-2, 41-3, 42-0, 42-2,<br>42-3, 43-1, 43-3,<br>43-11, 44-1, 44-3,<br>55-0, 55-1, 55-2, 55-3,<br>55-4, 56-2, 204-0,<br>204-02, 210-1, 219-1,<br>K-2030-10+S, K-70-C | ✓                                                                                     |



PRODUCT DETAILS

SERIES EVLW-2-KFZ  
VEHICLE SALES WALL



The sales wall Automotive serves the optimal presentation of KUKKO tools in your store. The illuminated sales wall is equipped with an assembly that has been compiled based on many years of experience for use in the automotive sector.

BENEFITS

- KUKKO is happy to support you in the setup and training of your employees regarding the respective products and pulling principles. Contact us and get personalized advice.
- Simple reorder of the sold products through clear labeling
- Completeness at a glance

TECHNICAL ATTRIBUTES

|  | #       |  |  |  |  |                                                                                                                                                                                                  | Consists of |  |
|-----------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------|
|                                                                                   | GTIN    | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             | kg/lb                                                                               |                                                                                                                                                                                                                                                                                     |             |                                                                                       |
| EVLW-2-KFZ                                                                        | -141539 | 1030<br>40 9/16                                                                     | 550<br>21 5/8                                                                       | 2250<br>88 9/16                                                                     | 11<br>24.255                                                                        | 17-1, 18-1, 20-10+,<br>20-20+, 20-3+,<br>20-1+S-T, 21-1, 21-2,<br>21-3, 21-4, 21-5, 21-6,<br>21-7, 22-0-05,<br>22-0-17, 22-1, 22-2,<br>43-3, 43-13, 48, 54-2,<br>54-3, 128-F-SW, 128-2,<br>128-3, 129-0-25,<br>129-1, 204-0, 204-V,<br>210-1, 210-2,<br>K-2030-10+S, K-22-A,<br>9-1 | ✓           |                                                                                       |

PRODUCT DETAILS

SERIES EVLW-2-NFZ  
SALES WALL NFZ / AUTOMOTIVE /  
AGRICULTURAL MACHINERY



The sales display Automotive / Commercial Vehicles / Agricultural Machinery serves the optimal presentation of KUKKO tools in your store. The illuminated sales display is equipped with an assortment compiled from years of experience specifically for use on commercial vehicles.

BENEFITS

- KUKKO is happy to support you in the setup and training of your employees regarding the respective products and pulling principles. Contact us and get personalized advice.
- Simple reorder of the sold products through clear labeling
- Completeness at a glance

TECHNICAL ATTRIBUTES

| #          | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                                                                                                                                                                  |  |  |
|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| EVLW-2-NFZ | -141546                                                                                     | 1030<br>40 9/16                                                                                | 550<br>21 5/8                                                                                  | 2250<br>88 9/16                                                                                | 0,3<br>0.662                                                                                 | 9-2, 17-1, 18-1,<br>20-10+, 20-20+,<br>20-3+, 20-1+S-T,<br>21-1, 21-2, 21-3,<br>21-4, 21-5, 21-6,<br>21-7, 22-1, 22-2,<br>22-0-05, 22-0-17,<br>43-3, 43-13, 48,<br>54-2, 54-3, 128-F-<br>SW, 128-3, 128-4,<br>128-5, 129-0-25,<br>129-3, 204-V,<br>204-0, 210-1,<br>210-2, 129-5,<br>K-2030-20, K-16,<br>9-1 | ✓                                                                                     |                                                                                       |

## SERIES WTH/5 HOOKS FOR PERFORATED PANELS



The flexibly usable tool holder hooks of the WTH/5 series ensure safe and clearly organized storage of the tools. Thanks to their sturdy design, the tools are held securely on the wall and create an efficient organization system. The innovative click fastening enables the hooks to be inserted quickly and easily. If required, they can be repositioned or rearranged at any time – without any tools. The hooks are available in various shapes and sizes. The set includes five identical tool holder hooks.

### BENEFITS

- Universally applicable: Suitable jaw solution for a wide range of tools
- Robust and durable: High-quality material with high load capacity
- Space-saving: Optimal use of the workshop wall for greater organization and clarity
- Easy assembly: Quickly assembled and ready for immediate use
- Temperature-resistant: dimensionally stable in the temperature range from -10 °C to +60 °C

### TECHNICAL ATTRIBUTES

| #                    |  | External dimensions       | Usable dimensions | Hole spacing     |  |  |
|----------------------|-------------------------------------------------------------------------------------|---------------------------|-------------------|------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                      | GTIN                                                                                | mm/inch                   | mm/inch           | mm/inch          | kg/lb                                                                                 |                                                                                       |
| WTH-300/5 <b>New</b> | -702358                                                                             | 37 x 70,5 x 60<br>1 7/16  | 50<br>1 15/16     | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-301/5 <b>New</b> | -702365                                                                             | 37 x 120,5 x 60<br>1 7/16 | 100<br>3 15/16    | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-302/5 <b>New</b> | -702372                                                                             | 37 x 70,5 x 60<br>1 7/16  | 50<br>1 15/16     | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-303/5 <b>New</b> | -702389                                                                             | 37 x 120,5 x 60<br>1 7/16 | 100<br>3 15/16    | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-304/5 <b>New</b> | -702396                                                                             | 37 x 70,5 x 60<br>1 7/16  | 50<br>1 15/16     | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-305/5 <b>New</b> | -702402                                                                             | 37 x 120,5 x 60<br>1 7/16 | 100<br>3 15/16    | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-306/5 <b>New</b> | -702419                                                                             | 37 x 70,5 x 60<br>1 7/16  | 50<br>1 15/16     | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-307/5 <b>New</b> | -702426                                                                             | 37 x 120,5 x 60<br>1 7/16 | 100<br>3 15/16    | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-308/5 <b>New</b> | -702433                                                                             | 52 x 75,5 x 60<br>2 1/16  | 55<br>2 3/16      | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-309/5 <b>New</b> | -702440                                                                             | 57 x 70,5 x 60<br>2 1/4   | 50<br>1 15/16     | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-310/5 <b>New</b> | -702457                                                                             | 37 x 60 x 60<br>1 7/16    | 25<br>1           | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-311/5 <b>New</b> | -702464                                                                             | 44 x 67 x 60<br>1 3/4     | 32<br>1 1/4       | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |
| WTH-312/5 <b>New</b> | -702471                                                                             | 52 x 75 x 60<br>2 1/16    | 40<br>1 9/16      | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                          | ✓                                                                                     |

## PRODUCT DETAILS

| #                    |  | External dimensions      | Usable dimensions | Hole spacing     |  |  |
|----------------------|-----------------------------------------------------------------------------------|--------------------------|-------------------|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                      | GTIN                                                                              | mm/inch                  | mm/inch           | mm/inch          | kg/lb                                                                               |                                                                                     |
| WTH-313/5 <b>New</b> | -702488                                                                           | 37 x 48,5 x 60<br>1 7/16 | 18<br>11/16       | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                        | ✓                                                                                   |
| WTH-314/5 <b>New</b> | -702495                                                                           | 37 x 55,5 x 60<br>1 7/16 | 24<br>15/16       | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                        | ✓                                                                                   |
| WTH-315/5 <b>New</b> | -702518                                                                           | 37 x 60,5 x 60<br>1 7/16 | 28<br>1 1/8       | 9,2 x 9,2<br>3/8 | 0,3<br>0.662                                                                        | ✓                                                                                   |

## SERIES 999-H DEMO CUBE



The demo cube is suitable for general presentation purposes as well as product training. Due to its hexagonal design, the demo cube is a very special eyecatcher. Whether in the showroom, in the exhibition hall or on the reception counter in the specialist trade – the demo cube provides an eye-catcher. Equipped with different ball bearings and various pullers, the demo cube offers multifunctional application possibilities (external extraction, internal extraction, bearing separator, ball bearing-Removing and ball joint pressing).



## TECHNICAL ATTRIBUTES

| #     |  |  |  |  |  | Number of demos | Pulling principle                                                                           |  | Sample parts                                  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------|
|       | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                                                                                     |                 |                                                                                             | kg/lb                                                                                 |                                               |                                                                                       |
| 999-H | -283543                                                                             | 337<br>13 1/4                                                                       | 332<br>13 1/16                                                                      | 332<br>13 1/16                                                                      | 6306                                                                                | 6               | External extraction, Bearing separator, Internal extractor, Ball bearing puller, Ball joint | 19,88<br>43.835                                                                       | 204-02, 18-1, 15-1, 21-5, 70-3, 70-731, 128-4 | ✓                                                                                     |









# HAMMERS

Whether for precise alignment, processing and positioning of impact-sensitive surfaces or various assembly, repair, and maintenance tasks – KUKKO offers the perfect solution for every application.

Hammers include:

- Soft-face hammers "SELECTHOR"
- Soft-face hammers

KUKKO // *Pull forward*



SERIES SELECTHOR & 343

# SOFT-FACE HAMMERS





## APPLICATION

Soft-face hammers are the ideal choice for precise working, aligning, and positioning of impact-sensitive surfaces. Depending on the surface, various impact inserts made of rubber, plastic, or nylon with different hardness grades can be chosen. The anti-rebound inlay guarantees optimal striking force with minimal stress on the joints. Soft-face hammers are multifunctional and can be used across various industries.

## FEATURES OF THE SERIES

### SERIES SELECTHOR



#### Soft-face hammer with interchangeable impact inserts

##### Description

With the Selecthor KU soft-face hammer featuring plastic impact inserts, impact-sensitive surfaces can be precisely worked, positioned, and aligned. The impact inserts are universal and are primarily used for assembly/repair/maintenance tasks, sheet metal work, prefab construction, carpentry, scaffolding, and tent construction. For even more versatile work, the soft-face hammer can be combined with impact inserts made of rubber and/or nylon. The innovative anti-rebound inlay ensures optimal striking power with minimal strain on the joints.

##### Application area

For precise working, positioning, and aligning of different surfaces.

#### Benefits

- Rebound-free while simultaneously increasing striking energy in sizes D30 - D80
- Joint-friendly due to anti-rebound inlay
- Sturdy and precise fine-cast housing made from high-grade tempered steel
- Ergonomically designed handles made from durable hickory wood
- Oil- and grease-resistant inserts
- No splintering on the inserts

### SERIES 343



#### Rebound-free soft-face hammer Rubber

##### Description

With the rebound-free soft-face hammer, various surfaces can be precisely worked, positioned, and aligned. The soft-face hammer is mainly used for assembly/repair/maintenance of sensitive materials that must not be damaged. The steel ball filling inside the hammer head guarantees optimal striking power with minimal stress on the joints. Made from durable nitrile rubber. The operating temperature range is between -20 °C to 90°C.

##### Application area

For precise working, positioning, and aligning of different surfaces.

#### Benefits

- Knurled surface on the handle guarantees ideal grip
- Completely rebound-free
- Joint-friendly work

# STRUCTURE



## IMPACT INSERTS

### RUBBER INSERT POLYURETHANE (PU)

Hardness grade   
Wear-resistant 



#### Application areas

- Construction/landscaping
- Setting curbstones
- Paving work
- Drywall construction
- Laying floor tiles

### PLASTIC INSERT CELLULOSE ACETATE (CA)

Hardness grade   
Wear-resistant 



#### Application areas

- Tool & machine construction
- Edge-bending & bending work
- Body construction
- Loosening tires/rims
- Positioning workpieces

### NYLON INSERT NYLON POLYAMIDE 6 (PA 6)

Hardness grade   
Wear-resistant 



#### Application areas

- Foundries
- Mold making
- Automobile repair
- Road construction
- Heavy industry

# ANTI-REBOUND PRINCIPLE OF THE SOFT-FACE HAMMERS

## 1. THE IMPACT STROKE PHASE

The micro-fine metal balls in the anti-rebound inlay are moved back by centrifugal force.



## 2. THE IMPACT PHASE

The impact insert strikes the material and the metal balls move in the direction of the impact point.



## 3. THE ANTI-REBOUND EFFECT

Now, the full mass of the anti-rebound inlay is thrust forward, generating 1.5 times the striking energy. At the same time, a rebound of the Selecthor is prevented.



## SET



K-Selecthor



Contents of the K-Selecthor

The set includes various impact inserts made of rubber, plastic, and nylon, allowing them to be combined or exchanged depending on the application. The impact inserts are wear-resistant, dampening, and last longer than a conventional rubber hammer. They are especially used in landscaping/construction, paving work, setting curbstones, brickwork and steps, as well as fencing, scaffolding, tent construction, prefab construction, carpentry, and for maintenance/repair work.

## APPLICATION EXAMPLES



Use of a Selecthor soft-face hammer when laying paving stones



Installation of a gearbox bearing with a Selecthor soft-face hammer in combination with the 71-L



## PRODUCT DETAILS

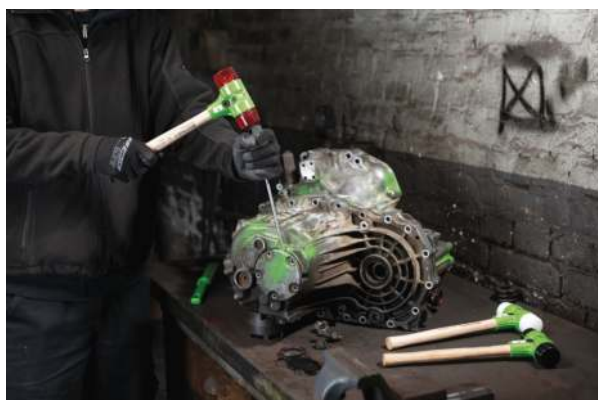
### SERIES 3-KU-KU-1 SCHONHAMMER "SELECTHOR" KU



With the Selecthor KU soft-face hammer with plastic impact inserts, sensitive surfaces can be precisely processed, positioned, and aligned. The impact inserts are universally usable and are particularly used for assembly, repair, and maintenance work.

#### BENEFITS

- Impact-free while simultaneously increasing the impact energy in sizes D30 - D80
- Joint-friendly through anti-kickback inlay
- Stable and precise investment casting housing made of high-quality alloy steel
- Ergonomically designed handles made of durable hickory wood
- High-quality screws with spring washer to prevent accidental loosening



#### TECHNICAL ATTRIBUTES

| #                |  |  |  |  |  |  |  |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             |                                                                                       | kg/lb                                                                                 |                                                                                       |
| 3-030111-KU-KU-1 | -020186                                                                             | 300<br>11 13/16                                                                     | 92<br>3 5/8                                                                         | 0,02                                                                                | 30<br>1 3/16                                                                        | 75                                                                                    | 0,785<br>1.731                                                                        | ✓                                                                                     |
| 3-040111-KU-KU-1 | -020230                                                                             | 330<br>12 63/64                                                                     | 116<br>4 9/16                                                                       | 0,06                                                                                | 40<br>1 9/16                                                                        | 75                                                                                    | 0,762<br>1.680                                                                        | ✓                                                                                     |
| 3-050111-KU-KU-1 | -020278                                                                             | 380<br>14 15/16                                                                     | 138<br>5 7/16                                                                       | 0,14                                                                                | 50<br>1 15/16                                                                       | 75                                                                                    | 1,32<br>2.911                                                                         | ✓                                                                                     |
| 3-060111-KU-KU-1 | -020322                                                                             | 410<br>16 1/8                                                                       | 149<br>5 7/8                                                                        | 0,21                                                                                | 60<br>2 3/8                                                                         | 75                                                                                    | 1,758<br>3.876                                                                        | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 3-GU-GU-1 SCHONHAMMER "SELECTHOR" GU



With the Selecthor GU soft-face hammer featuring rubber impact inserts, sensitive surfaces can be precisely treated, positioned, and aligned. The impact inserts are wear-resistant, dampening, and last longer than a conventional rubber hammer.

#### BENEFITS

- 50 percent more impact power compared to conventional soft-face hammers
- Joint-friendly through anti-rebound inlay
- Stable and precise die-cast housing made of high-quality alloy steel
- Ergonomically designed handles made of durable hickory wood
- High-quality screws with spring washer to prevent accidental loosening



#### TECHNICAL ATTRIBUTES

| #                |  |  |  |  |  |  |  |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             |                                                                                       | kg/lb                                                                                 |                                                                                       |
| 3-030111-GU-GU-1 | -020179                                                                             | 300<br>11 13/16                                                                     | 92<br>3 5/8                                                                         | 0,02                                                                                | 30<br>1 3/16                                                                        | 50                                                                                    | 0,4<br>0.882                                                                          | ✓                                                                                     |
| 3-040111-GU-GU-1 | -020216                                                                             | 330<br>12 63/64                                                                     | 116<br>4 9/16                                                                       | 0,06                                                                                | 40<br>1 9/16                                                                        | 50                                                                                    | 0,76<br>1.676                                                                         | ✓                                                                                     |
| 3-050111-GU-GU-1 | -020261                                                                             | 380<br>14 15/16                                                                     | 138<br>5 7/16                                                                       | 0,14                                                                                | 50<br>1 15/16                                                                       | 50                                                                                    | 1,325<br>2.922                                                                        | ✓                                                                                     |
| 3-060111-GU-GU-1 | -020315                                                                             | 410<br>16 1/8                                                                       | 149<br>5 7/8                                                                        | 0,21                                                                                | 60<br>2 3/8                                                                         | 50                                                                                    | 1,75<br>3.859                                                                         | ✓                                                                                     |
| 3-080111-GU-GU-1 | -020353                                                                             | 500<br>19 11/16                                                                     | 175<br>6 7/8                                                                        | 0,6                                                                                 | 80<br>3 1/8                                                                         | 50                                                                                    | 3,768<br>8.308                                                                        | ✓                                                                                     |
| 3-080112-GU-GU-1 | -003325                                                                             | 900<br>35 7/16                                                                      | 175<br>6 7/8                                                                        | 0,6                                                                                 | 80<br>3 1/8                                                                         | 50                                                                                    | 4,045<br>9.812                                                                        | ✓                                                                                     |

SERIES 3-GU-KU-1  
INTERCHANGEABLE HAMMER HEADS WITH  
REPLACEABLE IMPACT INSERTS



With the Selecthor GU soft-face hammer featuring rubber impact inserts, sensitive surfaces can be precisely treated, positioned, and aligned. The impact inserts are wear-resistant, dampening, and last longer than a conventional rubber hammer.

BENEFITS

- 50 percent more impact power compared to conventional soft-face hammers
- Joint-friendly through anti-rebound inlay
- Stable and precise investment casting housing made of high-quality alloy steel
- Ergonomically designed handles made of durable hickory wood
- High-quality screws with spring washer to prevent accidental loosening

TECHNICAL ATTRIBUTES

| #                |  |  |  |  |  |  |  |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             |                                                                                       | kg/lb                                                                                 |                                                                                       |
| 3-040111-GU-KU-1 | -039508                                                                             | 330<br>12 63/64                                                                     | 116<br>4 9/16                                                                       | 0,06                                                                                | 40<br>1 9/16                                                                        | 50                                                                                    | 0,76<br>1.676                                                                         | ✓                                                                                     |

## PRODUCT DETAILS

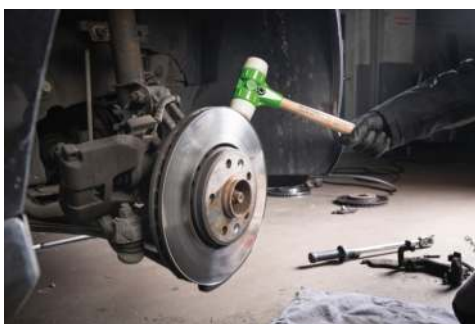
### SERIES 3-NY-NY-1 SCHONHAMMER "SELECTHOR" NY



With the Selecthor NY soft-face hammer featuring nylon impact inserts, sensitive surfaces can be precisely processed, positioned, and aligned. The impact inserts are particularly used in tool and machine construction, during bending and folding work, or for loosening tires/wheels.

#### BENEFITS

- Impact-free while simultaneously increasing the impact energy in sizes D30 - D80
- Joint-friendly through anti-kickback inlay
- Stable and precise investment casting housing made of high-quality alloy steel
- Ergonomically designed handles made of durable hickory wood
- High-quality screws with spring washer against accidental loosening



#### TECHNICAL ATTRIBUTES

| #                |  |  |  |  |  |  |  |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             |                                                                                       | kg/lb                                                                                 |                                                                                       |
| 3-030111-NY-NY-1 | -039492                                                                             | 300<br>11 13/16                                                                     | 92<br>3 5/8                                                                         | 0,02                                                                                | 30<br>1 3/16                                                                        | 85                                                                                    | 0,4<br>0.882                                                                          | ✓                                                                                     |
| 3-040111-NY-NY-1 | -039515                                                                             | 330<br>12 63/64                                                                     | 116<br>4 9/16                                                                       | 0,06                                                                                | 40<br>1 9/16                                                                        | 85                                                                                    | 0,76<br>1.676                                                                         | ✓                                                                                     |
| 3-050111-NY-NY-1 | -039522                                                                             | 380<br>14 15/16                                                                     | 138<br>5 7/16                                                                       | 0,14                                                                                | 50<br>1 15/16                                                                       | 85                                                                                    | 1,32<br>2.911                                                                         | ✓                                                                                     |
| 3-060111-NY-NY-1 | -039553                                                                             | 410<br>16 1/8                                                                       | 149<br>5 7/8                                                                        | 0,21                                                                                | 60<br>2 3/8                                                                         | 85                                                                                    | 1,72<br>3.793                                                                         | ✓                                                                                     |
| 3-080111-NY-NY-1 | -039560                                                                             | 500<br>19 11/16                                                                     | 175<br>6 7/8                                                                        | 0,6                                                                                 | 80<br>3 1/8                                                                         | 85                                                                                    | 3,7<br>8.159                                                                          | ✓                                                                                     |
| 3-080112-NY-NY-1 | -003349                                                                             | 900<br>35 7/16                                                                      | 175<br>6 7/8                                                                        | 0,6                                                                                 | 80<br>3 1/8                                                                         | 85                                                                                    | 3,94<br>8.688                                                                         | ✓                                                                                     |

PRODUCT DETAILS

SERIES 3-NY-NY-0  
PROPOSAL SOFT-FACE HAMMER  
"SELECTHOR"



The striking soft-face hammer "SELECTHOR" of the 3-NY-NY-0 series with replaceable impact inserts is suitable for heavy-duty assembly and repair work. It is used in particular for demolition and removal work, driving in wedges and bolts, alignment work in metalworking and mechanical engineering, as well as for applications in road, garden and landscaping construction. The "SELECTHOR" striking soft-face hammer is available in two different sizes.

BENEFITS

- All components can be exchanged and retrofitted.
- No chipping at the jaws
- Stable and precise die-cast housing made of high-quality alloy steel
- Flexibly applicable impact inserts
- Hammers do not break or split

TECHNICAL ATTRIBUTES

|  | #                |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                  | GTIN             | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             |                                                                                     |                                                                                       | kg/lb                                                                                 |                                                                                       |
|                                                                                  | 3-100111-NY-NY-0 | -003356                                                                             | 1020<br>47 1/4                                                                      | 204<br>8 1/16                                                                       | 0                                                                                   | 100<br>3 15/16                                                                      | 85                                                                                    | 6,19<br>13.649                                                                        | ✓                                                                                     |
|                                                                                  | 3-125111-NY-NY-0 | -003363                                                                             | 1020<br>47 1/4                                                                      | 204<br>8 1/16                                                                       | 0                                                                                   | 125<br>4 15/16                                                                      | 85                                                                                    | 6,37<br>14.046                                                                        | ✓                                                                                     |



SERIES K-SELECTHOR  
SELECTHOR SOFT-FACE HAMMER SET WITH  
REPLACEABLE IMPACT INSERTS



The “SELECTHOR” soft-face sledgehammer from series 3-NY-NY-0 with replaceable impact inserts is suitable for powerful assembly and repair work. It is used in particular for demolition and dismantling work, driving in wedges and bolts, straightening work in metalworking and mechanical engineering, as well as for applications in road construction, gardening, and landscaping. The “SELECTHOR” soft-face sledgehammer is available in two different sizes.

BENEFITS

- Impact-free while simultaneously increasing the impact energy in sizes D30 - D80
- No chipping on the inserts
- Stable and precise investment casting housing made of high-quality alloy steel
- Ergonomically designed handles made of durable hickory wood
- High-quality screws with spring washer to prevent accidental loosening



TECHNICAL ATTRIBUTES

| #              |  |  |  |  |  |  |  | Consists of          |  |
|----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------|
|                | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | kg                                                                                  | mm/inch                                                                             |                                                                                     | kg/lb                                                                                 |                      |                                                                                       |
| K-SELECTHOR-01 | -040320                                                                             | 300<br>11 13/16                                                                     | 116<br>4 9/16                                                                       | 0,01                                                                                | 40<br>1 9/16                                                                        | 45/75/82                                                                            | 4,565<br>10.066                                                                       | 3-040111-<br>GU-KU-1 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 3010-21 GUMMY IMPACT INSERT



The impact insert made of rubber with a hardness of Shore 50D is a very low-wear, damping insert that lasts significantly longer than a conventional rubber hammer. The rubber impact insert is used, among other things, in gardening/landscaping and paving work. The impact inserts are available in sizes D30 to D80.

#### BENEFITS

- Oil and fat resistant
- No chipping

## TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch |  |  | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 30103021 | -021022                                                                                     | 30<br>1 3/16                                                                                   | 3-030111-KU-KU-1,<br>3-030111-NY-NY-1                                               | 50                                                                                  | 0,35<br>0.772                                                                                  | ✓                                                                                     |
| 30104021 | -021039                                                                                     | 40<br>1 9/16                                                                                   | 3-040111-KU-KU-1,<br>3-040111-NY-NY-1                                               | 50                                                                                  | 0,6<br>1.323                                                                                   | ✓                                                                                     |
| 30105021 | -021046                                                                                     | 50<br>1 15/16                                                                                  | 3-050111-KU-KU-1,<br>3-050111-NY-NY-1                                               | 50                                                                                  | 0,1<br>0.221                                                                                   | ✓                                                                                     |
| 30106021 | -021053                                                                                     | 60<br>2 3/8                                                                                    | 3-060111-KU-KU-1,<br>3-060111-NY-NY-1                                               | 50                                                                                  | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| 30108021 | -021060                                                                                     | 80<br>3 1/8                                                                                    | 3-080111-NY-NY-1,<br>3-080112-NY-NY-1                                               | 50                                                                                  | 0,318<br>0.701                                                                                 | ✓                                                                                     |

## PRODUCT DETAILS

### SERIES 3020-21 NYLON IMPACT INSERT

The white impact insert nylon with a hardness of Shore 85D is a very hard, durable insert with very high strength. The nylon impact insert is used in foundries, in mold making, in automotive repairs, in road construction, and in heavy industry. The impact inserts are available in sizes D30 to D125.

#### BENEFITS

- Oil and grease resistant
- No chipping



## TECHNICAL ATTRIBUTES

| #        | <br>GTIN | <br>mm/inch |  |  | <br>kg/lb |  |
|----------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 30203021 | -021077                                                                                     | 30<br>1 3/16                                                                                   | 3-030111-GU-GU-1,<br>3-030111-KU-KU-1, K-<br>SELECTHOR-01                           | 85                                                                                  | 0,03<br>0.662                                                                                  | ✓                                                                                     |
| 30204021 | -021084                                                                                     | 40<br>1 9/16                                                                                   | 3-040111-GU-GU-1,<br>3-040111-KU-KU-1,<br>3-040111-GU-KU-1                          | 85                                                                                  | 0,06<br>1.323                                                                                  | ✓                                                                                     |
| 30205021 | -021091                                                                                     | 50<br>1 15/16                                                                                  | 3-050111-GU-GU-1,<br>3-050111-KU-KU-1                                               | 85                                                                                  | 0,105<br>0.331                                                                                 | ✓                                                                                     |
| 30206021 | -021107                                                                                     | 60<br>2 3/8                                                                                    | 3-060111-GU-GU-1,<br>3-060111-KU-KU-1                                               | 85                                                                                  | 0,18<br>0.397                                                                                  | ✓                                                                                     |
| 30208021 | -021114                                                                                     | 80<br>3 1/8                                                                                    | 3-080111-GU-GU-1,<br>3-080112-GU-GU-1                                               | 85                                                                                  | 0,32<br>0.706                                                                                  | ✓                                                                                     |
| 30210021 | -004759                                                                                     | 100<br>3 15/16                                                                                 | -                                                                                   | 85                                                                                  | 0,665<br>1.466                                                                                 | ✓                                                                                     |
| 30212521 | -004766                                                                                     | 125<br>4 15/16                                                                                 | -                                                                                   | 85                                                                                  | 0,665<br>1.466                                                                                 | ✓                                                                                     |



PRODUCT DETAILS

SERIES 3040-21  
PLASTIC IMPACT INSERT



The impact insert made of plastic with a hardness of Shore 75D has a special strength and is designed for universal use. The plastic impact inserts are used, among other things, in tool and machine engineering. The impact inserts are available in sizes D30 to D60.

BENEFITS

- Oil and grease resistant
- No chipping

TECHNICAL ATTRIBUTES

|  | #        |  |  |  |  |  |  |
|----------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                  |          | GTIN                                                                                | mm/inch                                                                             |                                                                                     |                                                                                     | kg/lb                                                                                 |                                                                                       |
|                                                                                  | 30403021 | -021121                                                                             | 30<br>1 3/16                                                                        | 3-030111-GU-GU-1,<br>3-030111-NY-NY-1, K-<br>SELECTHOR-01                           | 75                                                                                  | 0,2<br>0.441                                                                          | ✓                                                                                     |
|                                                                                  | 30404021 | -021145                                                                             | 40<br>1 9/16                                                                        | 3-040111-GU-GU-1,<br>3-040111-NY-NY-1,<br>3-040111-GU-KU-1                          | 75                                                                                  | 0,065<br>1.433                                                                        | ✓                                                                                     |
|                                                                                  | 30405021 | -021152                                                                             | 50<br>1 15/16                                                                       | 3-050111-GU-GU-1,<br>3-050111-NY-NY-1                                               | 75                                                                                  | 0,115<br>0.254                                                                        | ✓                                                                                     |
|                                                                                  | 30406021 | -021169                                                                             | 60<br>2 3/8                                                                         | 3-060111-GU-GU-1,<br>3-060111-NY-NY-1                                               | 75                                                                                  | 0,28<br>0.617                                                                         | ✓                                                                                     |

SERIES 343  
NON-REBOUND SOFT-FACE HAMMER  
RUBBER



With the recoil-free soft-face hammer, various surfaces can be processed, positioned, and aligned precisely. The soft-face hammer is used for assembly, repair, and maintenance work on sensitive materials that must not be damaged. The steel ball filling inside the hammer head guarantees optimal impact power with minimal strain on the joints. Made of durable nitrile rubber. The operating temperature ranges from -20 °C to 90 °C.

BENEFITS

- Knurling on the handle guarantees ideal grip
- Absolutely impact-free
- Joint-friendly working
- Flexibly applicable impact inserts
- Hammers do not break or split

TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch |  | <br>kg/lb |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 343-050 | -911119                                                                                     | 320<br>12 5/8                                                                                  | 50<br>1 15/16                                                                                  | 85                                                                                  | 0,82<br>1.808                                                                                  | ✓                                                                                     |
| 343-060 | -911126                                                                                     | 360<br>14 3/16                                                                                 | 60<br>2 3/8                                                                                    | 85                                                                                  | 1,265<br>2.789                                                                                 | ✓                                                                                     |











# NON-SPARKING

Non-sparking tools are used in various fields where there is a potential fire and explosion hazard due to sparking (e.g. in metalworking, the chemical industry, mining, the gas industry, and aerospace). The tools made from aluminum bronze are designed so that they do not produce sparks during application.





KUKKO // *Pull forward*

# NON-SPARKING TOOLS



# Occupational safety in ATEX zones - reliable and tested



As one of the leading suppliers of Non-Sparking and non-magnetic tools, we offer you a high-quality product range developed specifically for use in potentially explosive environments. Our tools are made from tested special alloys, aluminum bronze and copper-beryllium.

Both material groups are tested by the Federal Institute for Materials Research and Testing (BAM) and approved for use in ATEX zones 1/21 and 2/22 according to Directive 1999/92/EC.

## Safety instructions for the use of Non-Sparking tools

For the safe use of our tools in potentially explosive areas, please observe the following instructions:

- **Non-Sparking tools do not replace comprehensive safety measures.**  
Using these tools is just one part of your safety concept. Please also observe all regulations of your insurance association as well as national and international directives.
- **Handle with care:**  
Due to their material properties, Non-Sparking tools are softer and more sensitive than conventional tools. Avoid overloading or improper use to prevent damage or premature wear.
- **Special caution when reworking copper-beryllium tools:**  
Grinding, milling, or other mechanical reworking can generate hazardous beryllium dust. Therefore, the following safety precautions are mandatory:
  - Effective extraction or ventilation at the workplace
  - Use suitable respiratory masks
  - Use lubricants to reduce dust generation

Please ensure that you are fully informed about the occupational safety measures required for the processing of beryllium.

- **Safe use during normal operation:**  
When used properly and without mechanical reprocessing, there is no health risk from copper-beryllium tools.



**NEED A CUSTOM SOLUTION? WE ARE HAPPY TO  
OFFER PERSONAL ADVICE:**  
**[info@kukko.com](mailto:info@kukko.com)**



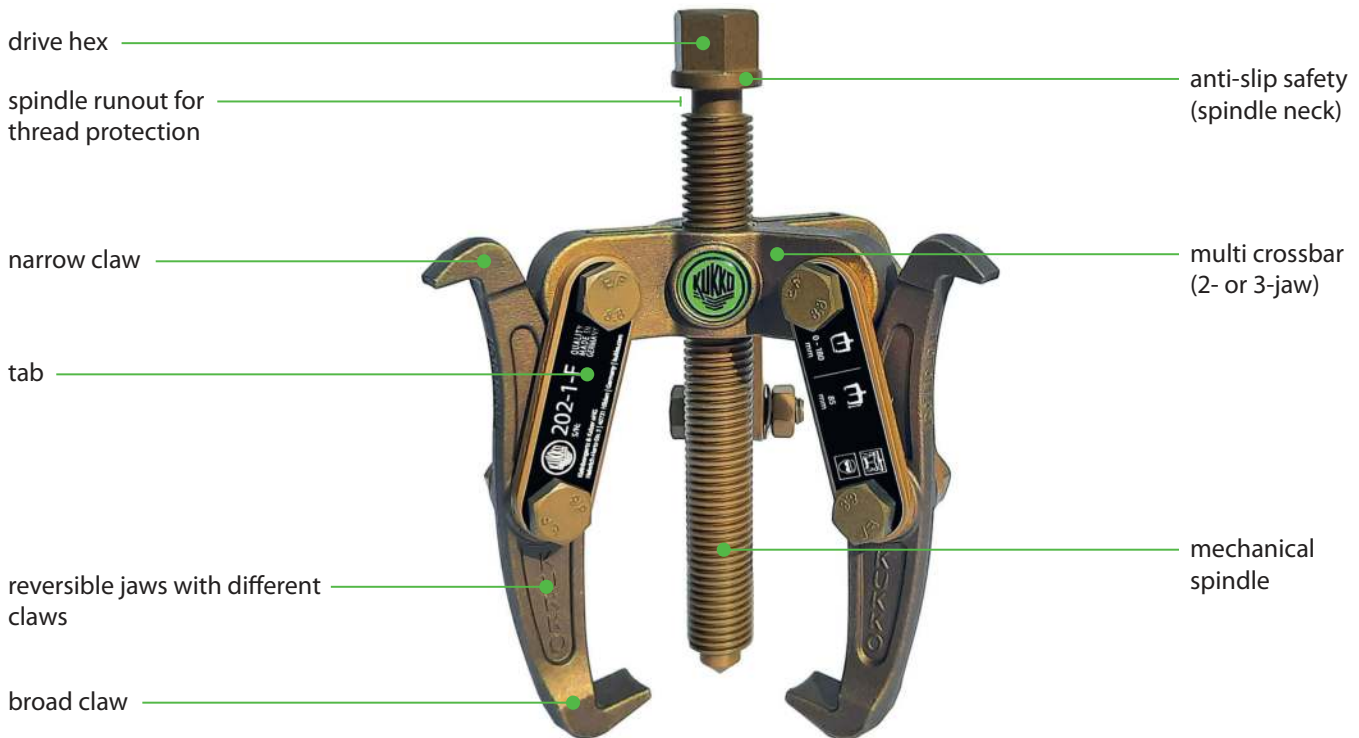
## APPLICATION

Non-Sparking tools made from high-quality special alloys such as copper-beryllium or aluminum bronze are particularly suited for use in potentially explosive areas, as they do not create sparks even in mechanical contact with metal surfaces. The Non-Sparking range from KUKKO includes various hand tools such as pullers, open-end wrenches, screwdrivers and much more. Depending on the application, there are also specially composed suitcase sets (Basic, Metalworker, Spray Booth). Each suitcase set contains a 3-jaw Puller for pulling ball bearings, pulleys, gears, and similar components.

### Benefits

- Safe use in hazardous (ATEX) zones
- Application-oriented composition for universal use
- The set case makes it easy to check completeness

## CONSTRUCTION OF THE NON-SPARKING PULLER 202-1-F



## SETS

### BASIC SET

The 30-piece basic set for metalworking, chemical industry, mining, gas industry, as well as aerospace. Included in the set: a 3-jaw puller, a hammer, an 8-piece allen key set, a ratchet with extension and 9 sockets, 4 screwdrivers, 4 double open-end wrenches and water pump pliers.



K-200-1-F

### METALWORKER SET

The 31-piece Non-Sparking set for metal and metalworker's jobs. The set includes: a 3-jaw puller, a hammer, a wire brush, an 8-piece allen key set, a ratchet with two extensions and 12 sockets, 4 screwdrivers, 5 double open-end wrenches, a side cutter, a spatula, and water pump pliers.



K-201-1-F

### SPRAY BOOTH SET

The 20-piece Non-Sparking spray booth cleaning set. Set includes: a 3-jaw puller, a wire brush, an 8-piece allen key set, a ratchet with extension and 2 sockets, 2 spatulas, 2 double open-end wrenches, a scraper with handle holder, and a cleaning tool.



K-202-1-F



# PRODUCT RANGE OVERVIEW

## PULLERS

Non-Sparking Pullers are used for centric pulling of bearings, gears, and discs



201-F

202-F

## METALWORKER'S HAMMER

The Non-Sparking Metalworker's Hammer is used for driving in nails, straightening sheets, center punching, adjusting as well as loosening and fastening materials



345F

## ADJUSTABLE WRENCH

The Non-Sparking adjustable wrench series 832F is used to tighten or loosen bolted connections



832F250

## RATCHET

The Non-Sparking ratchet series 836F is used for fast and effortless turning of bolts or nuts



836F1125

## OPEN-END WRENCH

The Non-Sparking single open-end wrenches series 1005F are used for tightening and loosening screws and nuts with hexagonal or square heads



1006F

## HEX KEYS

The Non-Sparking hex key set series 106F6 is used for assembly and disassembly of hexagon socket screws



1006F6

## SIDE CUTTER

The Non-Sparking side cutter series 1006FS is used for cutting wires and cables



1006f2224

## WIRE BRUSH

The Non-Sparking wire brush is used for removing rust, paint, dirt, burrs or oxide layers on metal and other materials



1006F2427

## SPATULA

The Non-Sparking spatulas series 1006FSP are used for spatula work in chemically sensitive areas



1006F2528

## SCRAPER WITHOUT HANDLE

The Non-Sparking scraper series 1006FSR is used for cleaning surfaces, removing materials as well as removing coatings



1006F3236

## CLEANING TOOL

The Non-Sparking cleaning tool is used for cleaning machines, systems or surfaces in environments with flammable gases, vapors, liquids or dusts



1006F4146

## SCREWDRIVER

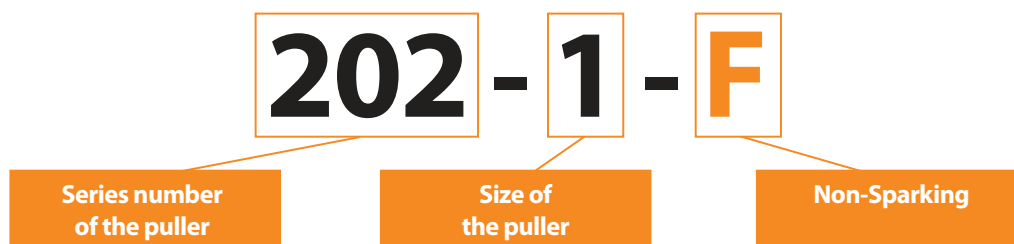
The Non-Sparking screwdrivers series 1006FSD are used for screwing in and removing screws



1006FSD

# EXPLANATION OF ITEM NUMBERS USING 202-1-F AS AN EXAMPLE

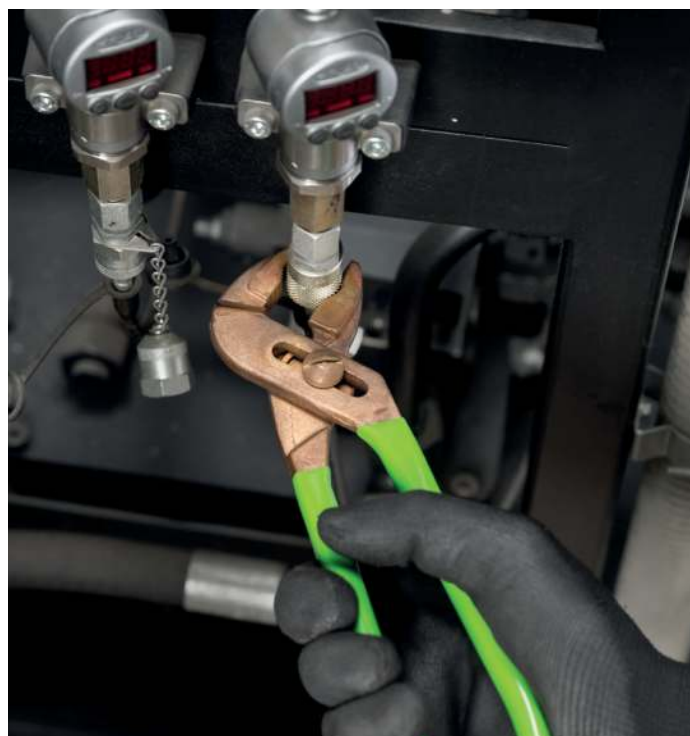
In line with the well-established KUKKO identification system, each Non-Sparking tool is provided with a descriptive item number for immediate and clear identification.



## APPLICATION EXAMPLES



Unscrewing a screw using a Non-Sparking screwdriver



Water pump pliers 721F on a pipe connection



Non-Sparking wire brush in use



Non-Sparking spatula in use on metal surface

# HAZARDOUS WORK ENVIRONMENTS

## THE APPLICATION AREAS FOR NON-SPARKING TOOLS INCLUDE THE FOLLOWING INDUSTRIES/TRADES:

Chemical industry | Oil & gas production | Gas stations | Offshore installations | Shipping | Tank trucks | Shipyards | Power plants | Refineries | Ambulances | Aviation | Sugar factories | Grain and food industry | Fertilizer industry | Grain mills | Pharmaceutical industry | Waste treatment plants | Wood industry

Hazardous work environments are divided into zones according to how often or how long an explosive atmosphere may occur.

### ZONE 0/20

Work environments with explosive atmospheres

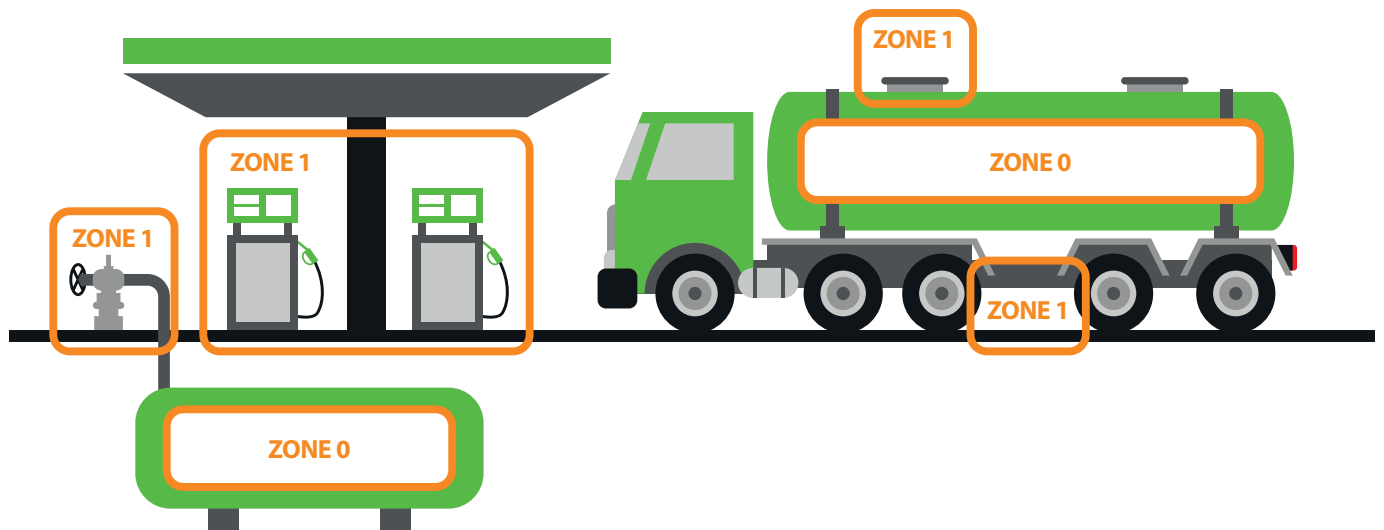
### ZONE 1/21

Work environments where explosive atmospheres are likely to occur

### ZONE 2/22

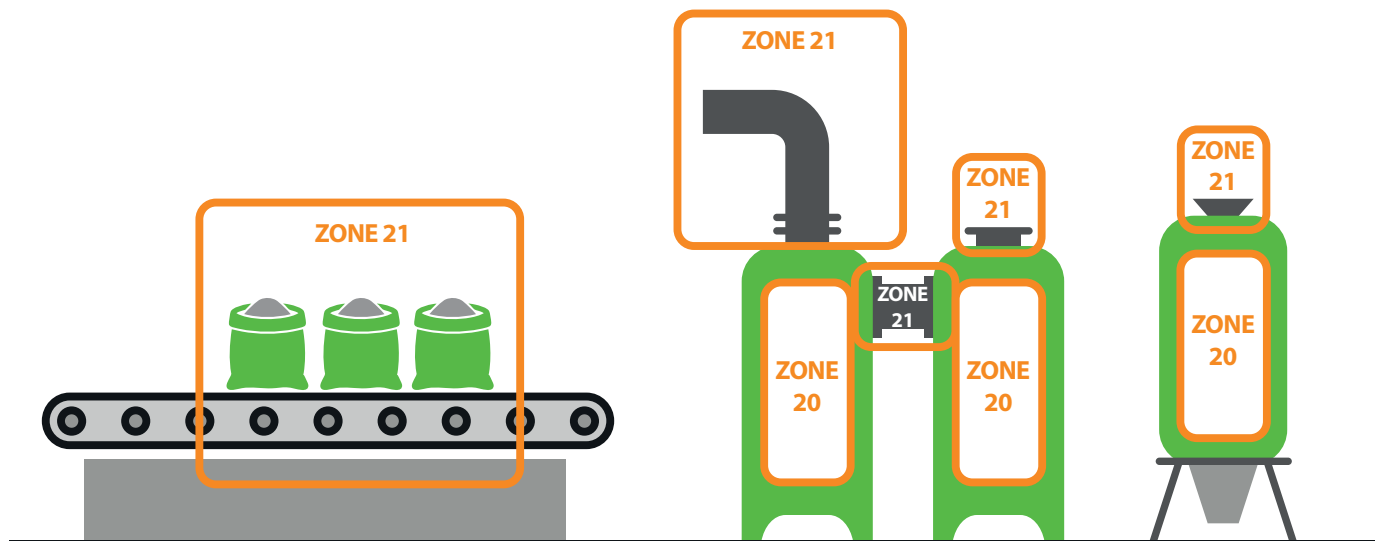
Work environments where explosive atmospheres are likely to occur

## ZONE 2 | GAS



Gruppe II gemäß ATEX und IECEx

## ZONE 22 | DUST



Group II according to ATEX and Group III according to IECEx

## SERIES 201-F NON-SPARKING PULLER



The 2-jaw, Non-Sparking puller with oscillating and reversible jaws of the 201-F series are used for centric pulling of components. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum bronze, Non-Sparking pullers are particularly suitable for use in explosion-hazardous areas. The oscillating jaws with adjustable reach can be used on both sides and therefore offer maximum flexibility during pulling.

The Non-Sparking puller from KUKKO 201-1-F, 201-2-F, 202-1-F and 202-2-F have been tested and certified by the accredited ATEX certification body J.S. Hamilton Poland. The EU-wide recognized certification confirms their suitability for explosion-hazardous areas, for example in mining with methane or coal dust risk. The tested materials prevent spark formation and ensure maximum safety as well as reliability in use according to the highest international standards.

### BENEFITS

- Safe application in explosive areas (ATEX zones)
- Adjustable and 180° rotatable jaws for individual adjustment of the reach
- Oscillating puller jaws offer a variety of adjustment options.
- Spindle outlet for thread protection

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Claw end with slit | Max. tensile force | Max. tension force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                |                                                                                     | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            |                    | kN                 | t/US t. sh.        | kg/lb                                                                                 |                                                                                       |
| 201-1-F | -010873                                                                             | Yes                                                                                 | 0 - 150<br>0 - 5 7/8                                                                | 85<br>3 3/8                                                                         | 17<br>11/16                                                                         | 75<br>55.32                                                                         | No                 | 50                 | 1.5<br>1.65        | 6,775<br>14.939                                                                       | ✓                                                                                     |
| 201-2-F | -010897                                                                             | Yes                                                                                 | 0 - 220<br>0 - 8 11/16                                                              | 130<br>5 1/8                                                                        | 22<br>7/8                                                                           | 150<br>110.64                                                                       | Yes                | 70                 | 7<br>7.72          | 2,45<br>5.402                                                                         | ✓                                                                                     |

## SERIES 202-F NON-SPARKING PULLER



The 3-jaw, non-sparking puller with oscillating and reversible jaws of the 201-F series are used for centric pulling of components. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum bronze, non-sparking puller are particularly suitable for Application in potentially explosive areas. The oscillating jaws with adjustable reach can be used on both sides and therefore offer maximum flexibility when pulling.

The non-sparking puller from KUKKO 201-1-F, 201-2-F, 202-1-F and 202-2-F have been tested and certified by the accredited ATEX certification body J.S. Hamilton Poland. The EU-wide recognized certification confirms their suitability for potentially explosive areas, for example in mining with methane or coal dust risk. The tested materials prevent sparking and ensure maximum safety and reliability in Application to the highest international standards.

### BENEFITS

- Safe application in explosive areas (ATEX zones)
- Adjustable and 180° rotatable jaws for individual adjustment of the reach
- Oscillating puller jaws offer a variety of adjustment options.
- Anti-slip safety (spindle neck) for safe working with wrench
- Spindle outlet for thread protection

### TECHNICAL ATTRIBUTES

| #       |  |  |  |  |  |  | Claw end with slit | Max. tensile force | Max. tension force |  |  |
|---------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|         | GTIN                                                                                |                                                                                     | mm/<br>inch                                                                         | mm/inch                                                                             | mm/inch                                                                             | Nm/ft lb                                                                            |                    | kN                 | t/US t. sh.        | kg/lb                                                                                 |                                                                                       |
| 202-1-F | -010880                                                                             | Yes                                                                                 | 0 - 150<br>0 - 5 7/8                                                                | 85<br>3 3/8                                                                         | 17<br>11/16                                                                         | 75<br>55.32                                                                         | No                 | 50                 | 3<br>3.31          | 6,775<br>14.939                                                                       | ✓                                                                                     |
| 202-2-F | -024603                                                                             | Yes                                                                                 | 0 - 220<br>0 - 8<br>11/16                                                           | 130<br>5 1/8                                                                        | 22<br>7/8                                                                           | 150<br>110.64                                                                       | Yes                | 70                 | 7<br>7.72          | 2,99<br>6.593                                                                         | ✓                                                                                     |



PRODUCT DETAILS

SERIES K-200-F  
NON-SPARKING BASIC KIT



The K-200-F 30-piece Basic Set with non-sparking tools is used in various areas where flying sparks pose potential fire and explosion hazards. A particular highlight is the Set which comes equipped with a 3-jaw, non-sparking puller, ensuring the removal of ball bearings, pulleys, gears, and similar components. The set includes: a 3-jaw puller, a hammer, an 8-piece allen key set for hex keys, a ratchet with extension and 9 sockets, 4 screwdrivers, 4 double open-end wrenches, and water pump pliers.

BENEFITS

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.
- Non-sparking tools enable work in areas with increased explosion risk.

TECHNICAL ATTRIBUTES

| #                                                                                                      | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                                                                                                                                                                     |  |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  K-200-1-F <b>New</b> | -024245                                                                                     | Yes                                                                                | 0 - 180<br>0 - 7 1/16                                                                         | 85<br>3 3/8                                                                                   | 0,3<br>0.662                                                                                | 202-1-F, 1006F1011,<br>1006F1213,<br>1006F1415,<br>1006F1617,<br>1006F2123,<br>1006F4650,<br>1006F4651,<br>1006F4652,<br>1006F4653,<br>1897F1208,<br>1897F1209,<br>1897F1210,<br>1897F1211,<br>1897F1212,<br>1897F1213,<br>1897F1214,<br>1897F1215,<br>1897F1217,<br>345F050, 721F250,<br>836F1224,<br>836F1225 | ✓                                                                                    |

SERIES K-201-F  
NON-SPARKING METALWORKER SET



The 31-piece metalworker set K-200-F with Non-Sparking tools is used in various areas of Application where flying sparks pose a potential fire and explosion hazard. As a special highlight, the Set is equipped with a 3-jaw, Non-Sparking puller that guarantees the Pulling of ball bearings, pulleys, gears, and similar components. Included in the set are: a 3-jaw puller, a hammer, a wire brush, an 8-piece allen key set for internal hex, a ratchet with two extension and 12 sockets, 4 screwdrivers, 5 double open-end wrenches, a side cutter, a scraper, and water pump pliers.

BENEFITS

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.
- Non-sparking tools enable work in areas with increased explosion risk.

TECHNICAL ATTRIBUTES

| #                          | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|----------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| K-201-1-F <span>New</span> | -024269                                                                                    | Yes                                                                                | 0 - 180<br>0 - 7 1/16                                                                         | 85<br>3 3/8                                                                                   | 0,3<br>0.662                                                                                | 202-1-F, 1006F1213,<br>1006F1415,<br>1006F1617,<br>1006F1819,<br>1006F2022,<br>1006F2123,<br>1006F2224,<br>1006F2427,<br>1006F2528,<br>1006F4650,<br>1006F4651,<br>1006F4652,<br>1006F4653,<br>1897F1208,<br>1897F1209,<br>1897F1210,<br>1897F1211,<br>1897F1212,<br>1897F1213,<br>1897F1214,<br>1897F1215,<br>1897F1217,<br>1897F1219,<br>1897F1222,<br>1897F1224,<br>345F100, 721F250,<br>836F1223,<br>836F1224,<br>836F1225 | ✓                                                                                    |



PRODUCT DETAILS

SERIES K-202-F  
SPRAY BOOTH CLEANING KIT NON-SPARKING



The 20-piece paint booth cleaning set K-202-F with non-sparking tools is used in various areas where there is a potential fire and explosion hazard due to sparks. A special highlight is the set equipped with a 3-jaw, non-sparking puller, which guarantees the extraction of ball bearings, pulleys, gears and similar components. The set includes: a 3-jaw puller, a wire brush, an 8-piece allen key set for hexagon socket screws, a ratchet with extension and 2 sockets, 2 spatulas, 2 double open-end wrenches, a scraper with handle holder and a cleaning tool.

BENEFITS

- Application-oriented assembly for universal use
- Through the common storage, the completeness of the set can be well overviewed.
- Non-sparking tools enable work in areas with increased explosion risk.

TECHNICAL ATTRIBUTES

| #                    | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg/lb | Consists of                                                                                                                                                                |  |
|----------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| K-202-1-F <b>New</b> | -024290                                                                                     | Yes                                                                                | 0 - 180<br>0 - 7 1/16                                                                         | 85<br>3 3/8                                                                                   | 0,3<br>0.662                                                                                 | 202-1-F, 1006F1213,<br>1006F1617,<br>1006F2123,<br>1006F2427,<br>1006F2528,<br>1006F3032,<br>1006F3236,<br>1006F4146,<br>1897F1213,<br>1897F1217,<br>836F1224,<br>836F1225 | ✓                                                                                     |

SERIES 345F  
NON-SPARKING METALWORKER'S HAMMER



The non-sparking metalworker hammer from the series 345F is used for driving nails, straightening sheets, aligning punches, adjusting, and securing or fastening materials. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

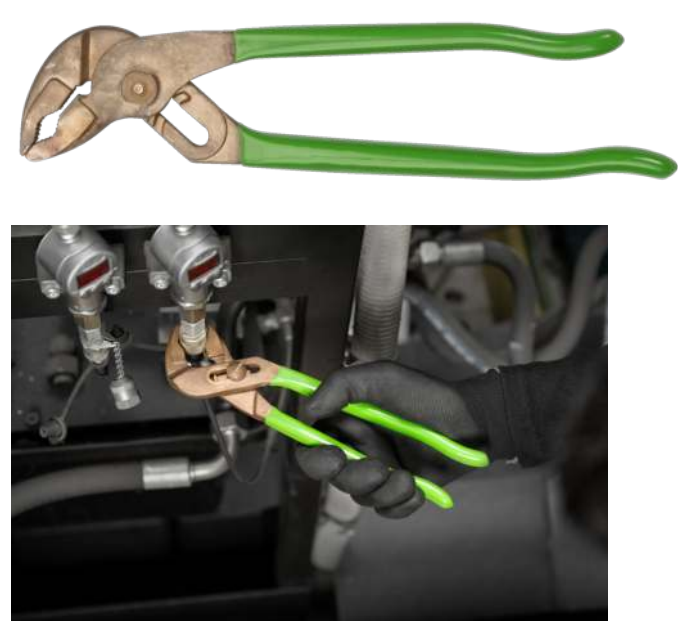
- Safe application in explosive areas (ATEX zones)
- Versatile for metal, wood, and assembly work
- Resistant to wear thanks to robust construction
- Ergonomically shaped handle for perfect handling

TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  | <br>kg |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 345F050 | -044120                                                                                     | Yes                                                                                 | 0,50                                                                                      | ✓                                                                                     |
| 345F100 | -997649                                                                                     | Yes                                                                                 | 1,00                                                                                      | ✓                                                                                     |

PRODUCT DETAILS

SERIES 721F  
NON-SPARKING WATER PUMP PLIERS



The non-sparking pipe wrench of series 721F is used for loosening and tightening pipe connections as well as for holding and gripping workpieces. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

- BENEFITS**
- Safe application in explosive areas (ATEX zones).
  - Adjust jaw head progressively to different workpiece sizes
  - Serrated clamp jaws provide a firm grip
  - Long lever guarantees high force transmission

TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg |  |
|---------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 721F250 | -012402                                                                                    | Yes                                                                                | 250<br>9 13/16                                                                               | 30<br>1 3/16                                                                                  | 0,37                                                                                       | ✓                                                                                    |

SERIES 832F  
NON-SPARKING ADJUSTABLE WRENCH



The non-sparking adjustable wrench of the series 832F is used for tightening or loosening screw connections. Typical application areas include not only sanitary installations but also heating, ventilation, and air conditioning technology. Due to their manufacturing from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

- BENEFITS**
- Safe application in explosive areas (ATEX zones).
  - Universally applicable due to adjustable jaw opening



TECHNICAL ATTRIBUTES

| #       | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg |  |
|---------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 832F380 | -260385                                                                                     | Yes                                                                                 | 380<br>14 15/16                                                                                | 46<br>1 13/16                                                                                  | 1,40                                                                                        | ✓                                                                                     |

SERIES 836F  
NON-SPARKING RATCHET



The non-sparking ratchet of series 836F is used for fast and effortless turning of screws or nuts. The direction of rotation can be adjusted using a lever (tightening or loosening). Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

- Fast work without unnecessary stopping
- Ideally suited for tight spaces
- Switchable between tightening and loosening
- Compatible with various sockets

TECHNICAL ATTRIBUTES

| #        | <br>GTIN |  | <br>mm/inch | Connection<br>dimension<br>inch | <br>kg |  |
|----------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 836F1225 | -775352                                                                                     | Yes                                                                                 | 250<br>9 13/16                                                                                 | 1/2 inch                        | 0,59                                                                                        | ✓                                                                                     |
| 836F1223 | -024412                                                                                     | Yes                                                                                 | 250<br>9 13/16                                                                                 | 1/2 inch                        | 0,36                                                                                        | ✓                                                                                     |
| 836F1224 | -024429                                                                                     | Yes                                                                                 | 100<br>3 15/16                                                                                 | 1/2 inch                        | 0,18                                                                                        | ✓                                                                                     |



SERIES 1005F  
NON-SPARKING OPEN-END WRENCH



The non-sparking open-end wrenches of series 1005F are used for tightening or loosening hexagon or square-head bolts and nuts. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosion-hazardous areas.

- BENEFITS**
- Safe application in explosive areas (ATEX zones)
  - Accessibility even in confined environments
  - Easy handling due to open design
  - Ideal force transmission through leverage

TECHNICAL ATTRIBUTES

| #        | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg |  |
|----------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1005F019 | -011795                                                                                   | Yes                                                                               | 190<br>7 1/2                                                                                 | 19<br>3/4                                                                                    | 0,10                                                                                      | ✓                                                                                   |
| 1005F022 | -011832                                                                                   | Yes                                                                               | 205<br>8 1/16                                                                                | 22<br>7/8                                                                                    | 0,13                                                                                      | ✓                                                                                   |
| 1005F030 | -011900                                                                                   | Yes                                                                               | 250<br>9 13/16                                                                               | 30<br>1 3/16                                                                                 | 0,25                                                                                      | ✓                                                                                   |
| 1005F041 | -011931                                                                                   | Yes                                                                               | 330<br>12 1                                                                                  | 41<br>1 5/8                                                                                  | 0,52                                                                                      | ✓                                                                                   |
| 1005F055 | -011962                                                                                   | Yes                                                                               | 440<br>17 5/16                                                                               | 55<br>2 3/16                                                                                 | 1,05                                                                                      | ✓                                                                                   |



SERIES 1006F  
NON-SPARKING DOUBLE OPEN-END  
WRENCH



The non-sparking double-ended open-end wrenches of series 1006F are used for tightening or loosening screws and nuts with hexagonal or square heads. Each of the two open ends has different jaw openings to accommodate a wide range of screw sizes. Due to their construction from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suited for use in explosive environments.

BENEFITS

- Safe application in explosive areas (ATEX zones)
- Flexible use with different screw sizes
- Accessibility even in confined spaces
- Easy handling due to open design
- Ideal force transmission through leverage

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg |  |
|-----------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1006F1011 | -012037                                                                                   | Yes                                                                               | 140<br>5 1/2                                                                                 | 10 x 11<br>3/8                                                                               | 0,09                                                                                      | ✓                                                                                   |
| 1006F1213 | -012075                                                                                   | Yes                                                                               | 160<br>6 5/16                                                                                | 12 x 13<br>1/2                                                                               | 0,18                                                                                      | ✓                                                                                   |
| 1006F1415 | -012082                                                                                   | Yes                                                                               | 160<br>6 5/16                                                                                | 14 x 15<br>9/16                                                                              | 0,17                                                                                      | ✓                                                                                   |
| 1006F1617 | -012099                                                                                   | Yes                                                                               | 200<br>7 7/8                                                                                 | 16 x 17<br>5/8                                                                               | 0,21                                                                                      | ✓                                                                                   |
| 1006F1819 | -012112                                                                                   | Yes                                                                               | 225<br>8 7/8                                                                                 | 18 x 19<br>11/16                                                                             | 0,32                                                                                      | ✓                                                                                   |
| 1006F2022 | -012129                                                                                   | Yes                                                                               | 240<br>9 7/16                                                                                | 20 x 22<br>13/16                                                                             | 0,44                                                                                      | ✓                                                                                   |



PRODUCT DETAILS

SERIES 1006F6  
NON-SPARKING HEX KEY SET, 8-PIECE



The 8-piece, non-sparking hex key set of series 106F6 is used for the assembly and disassembly of internal hex socket screws. The compact tool set consists of a total of eight allen keys. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

- Safe application in explosive areas (ATEX zones)
- Allows precise work on hexagon socket screws
- Particularly compact and handy

TECHNICAL ATTRIBUTES

| #         |  GTIN |  |  inch | Number of parts |  kg |  |
|-----------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1006F2123 | -012136                                                                                  | Yes                                                                                 | 1/16-1/16-1/8-3/16-3/16-1/4-5/16-3/8                                                     | 8               | 0,25                                                                                     | ✓                                                                                     |



PRODUCT DETAILS

SERIES 1006FD  
NON-SPARKING WIRE HAND BRUSH



The non-sparking wire brush of the 1006FD series is used for removing rust, paint, dirt, burrs, or oxide layers on metal and other materials. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

- Safe application in potentially explosive atmospheres (ATEX zones).
- Suitable for rust removal, paint removal, cleaning, deburring, etc.
- Sensitive and precise work possible without the risk of removing too much material
- Ideal for smaller areas and hard-to-reach spots

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | Number of rows | <br>kg |  |
|-----------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1006F2427 | -015954                                                                                    | Yes                                                                                | 350<br>13 3/4                                                                                 | 4              | 0,21                                                                                       | ✓                                                                                    |

SERIES 1006FR  
NON-SPARKING CLEANING TOOL



The non-sparking cleaning tool of the series 1006FR is used for cleaning machines, systems, or surfaces in environments with flammable gases, vapors, liquids, or dusts. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive areas.

BENEFITS

- Safe application in explosive areas (ATEX zones).
- Longevity thanks to robust construction

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | <br>kg |  |
|-----------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1006F4146 | -012181                                                                                     | Yes                                                                                 | 480<br>18 7/8                                                                                  | 1,20                                                                                        | ✓                                                                                     |

PRODUCT DETAILS

SERIES 1006FS  
NON-SPARKING SIDE CUTTER



The non-sparking side cutter of series 1006FS is used for cutting wires and cables. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

- Safe application in explosive areas (ATEX zones)
- With the diagonally set cutting edges, wires and cables can be cut very precisely and cleanly.
- Ideal for tight spots and delicate tasks

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | <br>kg |  |
|-----------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1006F2224 | -011734                                                                                   | Yes                                                                               | 165<br>6 1/2                                                                                 | 0,20                                                                                      | ✓                                                                                   |





SERIES 1006FSD  
NON-SPARKING SCREWDRIVERS



The non-sparking 6-Phillips profile screwdrivers of series 1006FSD are used for screwing in and out screws with a cross-shaped slot in the screw head. Because they are made from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

- Safe application in explosive areas (ATEX zones).
- Very good power transmission through Phillips profile
- Fast and precise setting up
- Automatically self-centers in the screw head

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg |  |
|-----------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1006F4650 | -012198                                                                                     | Yes                                                                                 | 80<br>3 1/8                                                                                    | 1                                                                                              |                                                                                                | 0,06                                                                                        | ✓                                                                                     |
| 1006F4651 | -024313                                                                                     | Yes                                                                                 | 100<br>3 15/16                                                                                 | 2                                                                                              |                                                                                                | 0,09                                                                                        | ✓                                                                                     |
| 1006F4652 | -024337                                                                                     | Yes                                                                                 | 100<br>3 15/16                                                                                 | -                                                                                              | 4,5<br>3/16                                                                                    | 0,06                                                                                        | ✓                                                                                     |
| 1006F4653 | -024351                                                                                     | Yes                                                                                 | 150<br>5 7/8                                                                                   | -                                                                                              | 8<br>5/16                                                                                      | 0,15                                                                                        | ✓                                                                                     |

SERIES 1006FSP  
NON-SPARKING SPATULA



The Non-Sparking spatulas of the series 1006FSP are used for spatula work in chemically sensitive areas. Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

BENEFITS

- Safe application in potentially explosive atmospheres (ATEX zones).
- Versatile for smoothing, filling, scraping, and applying materials.
- Fast editing of large or small areas

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg |  |
|-----------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1006F2528 | -012150                                                                                     | Yes                                                                                 | 220<br>8 11/16                                                                                 | 50<br>1 15/16                                                                                  | 0,15                                                                                        | ✓                                                                                     |
| 1006F3032 | -012167                                                                                     | Yes                                                                                 | 240<br>9 7/16                                                                                  | 90<br>3 9/16                                                                                   | 0,22                                                                                        | ✓                                                                                     |



PRODUCT DETAILS

SERIES 1006FSR  
NON-SPARKING SCRAPER



The non-sparking scraper from the 1006FSR series is used for cleaning surfaces, removing materials, and stripping coatings. Due to their construction from high-quality special alloys like copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosion-hazardous areas.

BENEFITS

- Safe application in explosive areas (ATEX zones)
- Precise removal of material or residues
- Suitable for various materials

TECHNICAL ATTRIBUTES

| #         | <br>GTIN |  | <br>mm/inch | <br>mm/inch | <br>kg |  |
|-----------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1006F3236 | -012174                                                                                     | Yes                                                                                 | 220<br>8 11/16                                                                                 | 100                                                                                            | 0,83                                                                                        | ✓                                                                                     |



## PRODUCT DETAILS

### SERIES 1897F NON-SPARKING HEX SOCKETS

The non-sparking hexagon socket inserts of series 1897F are tool inserts for sockets or ratchets that fit on screws or nuts with an internal hexagon (Allen key). Due to their manufacture from high-quality special alloys such as copper-beryllium or aluminum-bronze, the non-sparking tools are particularly suitable for use in explosive environments.

#### BENEFITS

- Safe application in explosive areas (ATEX zones)
- Good power transmission thanks to hexagonal internal profile
- Low slippage due to very good fit



## TECHNICAL ATTRIBUTES

| #         |  GTIN |  |  mm/inch |  mm/inch | Connection dimension<br>inch |  kg |  |
|-----------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1897F1208 | -024382                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 8<br>5/16                                                                                 | 1/2 inch                     | 0,05                                                                                   | ✓                                                                                   |
| 1897F1209 | -024399                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 9<br>3/8                                                                                  | 1/2 inch                     | 0,05                                                                                   | ✓                                                                                   |
| 1897F1210 | -012242                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 10<br>3/8                                                                                 | 1/2 inch                     | 0,05                                                                                   | ✓                                                                                   |
| 1897F1211 | -012259                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 11<br>7/16                                                                                | 1/2 inch                     | 0,05                                                                                   | ✓                                                                                   |
| 1897F1212 | -012266                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 12<br>1/2                                                                                 | 1/2 inch                     | 0,05                                                                                   | ✓                                                                                   |
| 1897F1213 | -012273                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 13<br>1/2                                                                                 | 1/2 inch                     | 0,05                                                                                   | ✓                                                                                   |
| 1897F1214 | -012280                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 14<br>9/16                                                                                | 1/2 inch                     | 0,06                                                                                   | ✓                                                                                   |
| 1897F1215 | -024405                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 15<br>9/16                                                                                | 1/2 inch                     | 0,06                                                                                   | ✓                                                                                   |
| 1897F1216 | -012297                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 16<br>5/8                                                                                 | 1/2 inch                     | 0,06                                                                                   | ✓                                                                                   |
| 1897F1217 | -012310                                                                                | Yes                                                                               | 40<br>1 9/16                                                                              | 17<br>11/16                                                                               | 1/2 inch                     | 0,07                                                                                   | ✓                                                                                   |
| 1897F1219 | -012334                                                                                | Yes                                                                               | 42<br>1 5/8                                                                               | 19<br>3/4                                                                                 | 1/2 inch                     | 0,09                                                                                   | ✓                                                                                   |
| 1897F1222 | -012365                                                                                | Yes                                                                               | 43<br>1 11/16                                                                             | 22<br>7/8                                                                                 | 1/2 inch                     | 0,11                                                                                   | ✓                                                                                   |
| 1897F1224 | -014407                                                                                | Yes                                                                               | 43<br>1 11/16                                                                             | 24<br>15/16                                                                               | 1/2 inch                     | 0,13                                                                                   | ✓                                                                                   |
| 1897F1227 | -012372                                                                                | Yes                                                                               | 46<br>1 13/16                                                                             | 27<br>1 1/16                                                                              | 1/2 inch                     | 0,15                                                                                   | ✓                                                                                   |
| 1897F1230 | -012389                                                                                | Yes                                                                               | 46<br>1 13/16                                                                             | 30<br>1 3/16                                                                              | 1/2 inch                     | 0,20                                                                                   | ✓                                                                                   |
| 1897F1232 | -012396                                                                                | Yes                                                                               | 46<br>1 13/16                                                                             | 32<br>1 1/4                                                                               | 1/2 inch                     | 0,24                                                                                   | ✓                                                                                   |







KUKKO  
Safety-First-Label

DE ACHTUNG!

Zur sicheren Verwendung des Werkzeugs  
Muss die Sicherheits- und Gebrauchsin-  
formation des Herstellers gelesen werden.  
Nach Gebrauch des Werkzeugs  
Muss das Werkzeug wieder in die Originalverpackung  
eingelagert werden.

EN ATTENTION!

For safe use of the tool, ALWAYS read  
the instructions of the manufacturer.  
After use of the tool, the tool must be  
stored in the original packaging.

EN ATTENTION!

For safe use of the tool, ALWAYS read  
the instructions of the manufacturer.  
After use of the tool, the tool must be  
stored in the original packaging.





# CARE & SAFETY

Whether for securing the Puller and preventing falls, securing loads in transportation, protecting during Puller operations, or maintaining the spindle under high pulling forces – at KUKKO, safety is paramount.

The tasks of Maintenance & Safety include:

- Fall protection
- Lashing strap
- Accident protection tarp
- Special grease

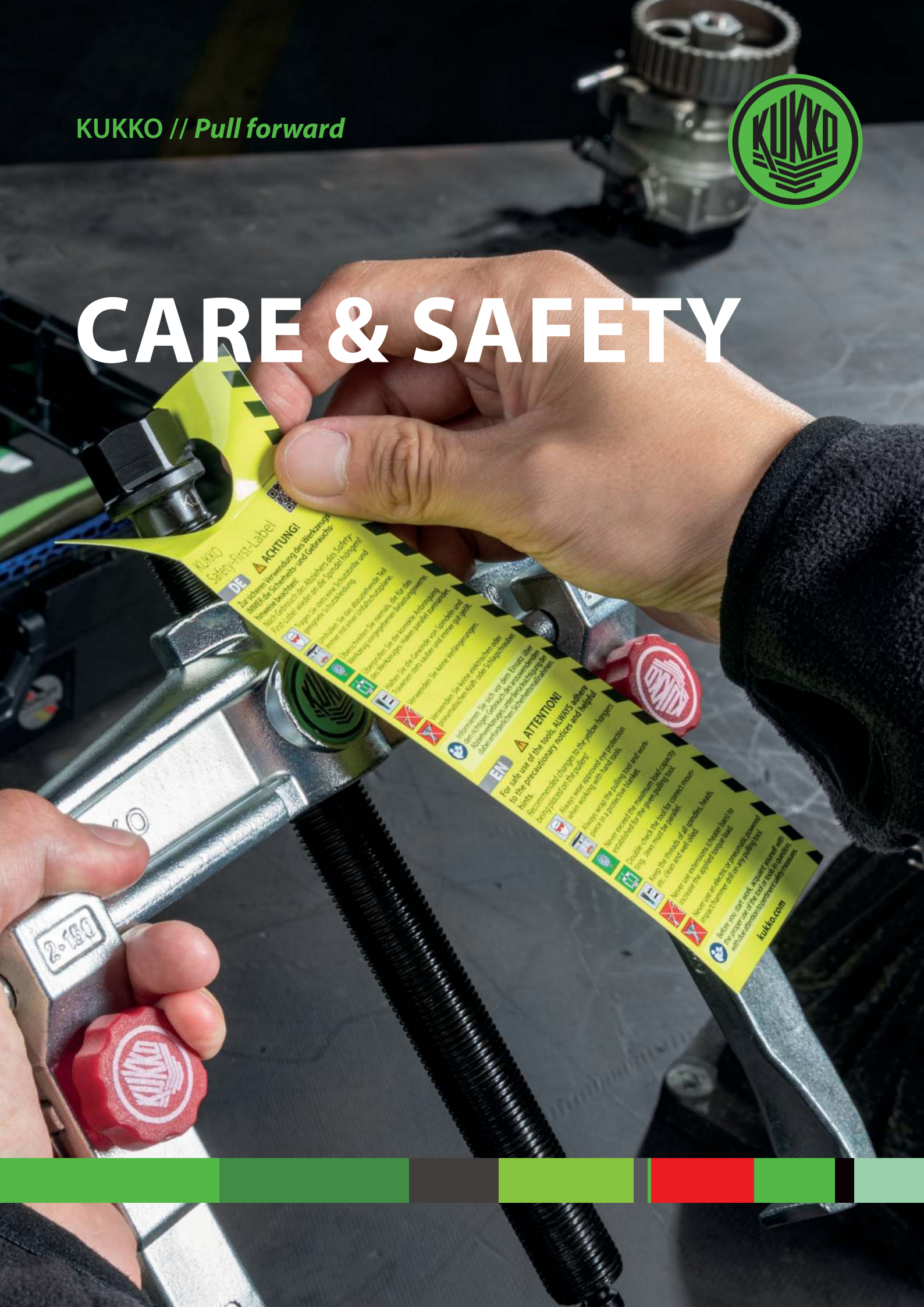




KUKKO // Pull forward



# CARE & SAFETY



KUKKO  
Safety-First-Label

DE ACHTUNG!

Zur sicheren Verwendung des Werkzeuges  
MUST die Sicherheits- und Gebrauchsinstruk-  
tionen gelesen werden.  
Nach Gebrauch die Abzeichen des Safety-  
First-Labels wieder an die Spindelhalterung an-  
bringen.



EN ATTENTION!

For safe use of the tool, ALWAYS adhere  
to the precautionary notices and helpful  
hints.  
Recommended change to the pulley  
being placed on the pulley  
Always wear approved protection  
when working with hand tools.  
Always use the pulling tool and work  
piece in a protective barrel.  
Never exceed the maximum load capacity  
of the pulling tool.  
Double-check the tool for correct reason-  
ing. Jaw must be parallel.  
Keep the threads of all spindles, heads  
and pins clean and well oiled.  
Never use extensions (cheater bars) to  
the handle of the tool or risk of injury.  
Before you start work, always check the  
condition of the tool for safe use.  
Always use the tool for its intended purpose.  
kukko.com

## APPLICATION

Even the best tools require proper handling and care to eliminate the risk of workplace injury. Especially in the field of occupational safety, KUKKO offers important equipment for daily needs.

## FEATURES OF THE SERIES

### SERIES KFS-69



The green KUKKO special grease for spindles protects and maintains spindles in use and is particularly used for high pulling forces in trades, industry, and workshops. Each KUKKO puller comes with a tube of special grease.

### SERIES 660



The Fall protection of Series 660 is used to secure and prevent the puller from falling during application. The carabiner is able to attach the puller to a designated mounting point. The mounting ring prevents the tool from falling.

### SERIES UFP



The accident protection tarpaulins for pulling operations are required for protection and safety when applying large forces. During disassembly and pulling, it may happen that whole parts come loose abruptly or break. The special covers are used to prevent potential accident hazards.

### SERIES USB



The lashing strap is used to secure small to medium loads in transport. The cam buckle has a knurled clamping jaw with a spring mechanism that guarantees a firm hold. If hook eyes are present on the puller, the lashing strap can be used to better secure and hold together the jaws.



# SAFETY INSTRUCTIONS

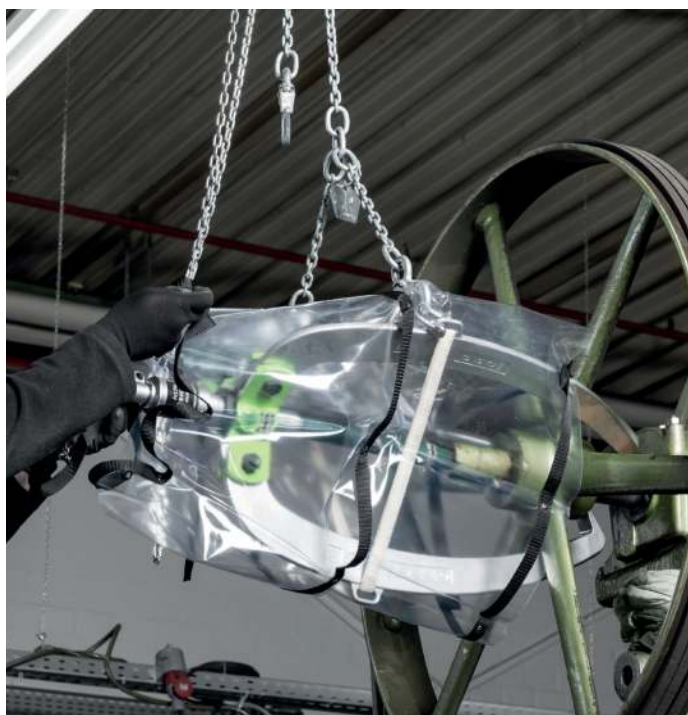
All pullers with spindles are provided with a KUKKO Safety-First-Label. This guarantees that you always have the safety instructions in view before each use of the puller. After use, the label must be reattached to the spindle. All KUKKO tools are equipped with special labels that contain the most important safety instructions and technical attributes.



## APPLICATION EXAMPLES



Lubricating the thread



Accident protection tarpaulin guarantees safe pulling



Load securing with KUKKO lashing strap



Fall protection secures ball joint puller

PRODUCT DETAILS

SERIES KSF-69  
KUKKO SPECIAL GREASE FOR PRESSURE  
SPINDLES

The green KUKKO special grease for pressure spindles protects and maintains applied spindles and is particularly used under high pulling forces in crafts, industry, and workshops. The reduced friction increases the efficiency during pulling and minimizes wear.

BENEFITS

- Increases the longevity of the spindle



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>g | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 699904 | -773518                                                                                     | 4                                                                                        | 0,005<br>0.011                                                                               | ✓                                                                                     |
| 699915 | -019869                                                                                     | 15                                                                                       | 0,02<br>0.044                                                                                | ✓                                                                                     |





PRODUCT DETAILS

SERIES KSF-69-C  
KUKKO SPECIAL GREASE FOR THREADED  
SPINDLES



The green KUKKO special grease for pressure spindles protects and maintains applied spindles and is particularly used in crafts, industry, and workshops under high pulling forces. By reducing friction, the efficiency during pulling is increased and wear is minimized.

BENEFITS

- Increases the longevity of the spindle



TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>g | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 699975 | -019876                                                                                     | 75                                                                                       | 0,1<br>0.221                                                                                 | ✓                                                                                     |

PRODUCT DETAILS

SERIES 699990  
BIO-MULTI-OIL



Whether for securing the Puller and preventing falls, securing loads in transportation, protecting during Puller operations, or maintaining the spindle under high pulling forces – at KUKKO, safety is paramount.

The tasks of Maintenance & Safety include:

- Fall protection
- Lashing strap
- Accident protection tarp
- Special grease

BENEFITS

- Increases the longevity of the spindle

TECHNICAL ATTRIBUTES

| #      | <br>GTIN | <br>g | <br>kg/lb |  |
|--------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 699990 | -333804                                                                                     | 100                                                                                      | 0,12<br>0.265                                                                                | ✓                                                                                     |



SERIES 660  
FALL PROTECTIONS FOR EXTRACTORS



The fall protection devices of the series 660 are used to secure the puller and prevent falls during external extraction in crafts, industry, and workshops. The carabiner hook is capable of attaching the puller to a designated fixing point, and the fixing ring prevents falling.

BENEFITS

- The elastic pull line provides enough space to work and stops the puller from falling.
- The tool is continuously secured during the pulling process.
- Flexible use thanks to variable mounting options



TECHNICAL ATTRIBUTES

| #       | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg |  |
|---------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 660-614 | -006197                                                                                     | 700<br>27 9/16                                                                                 | 19<br>3/4                                                                                      | 20                                                                                          | ✓                                                                                     |
| 660-616 | -006210                                                                                     | 700<br>27 9/16                                                                                 | 21<br>13/16                                                                                    | 20                                                                                          | ✓                                                                                     |
| 660-618 | -006227                                                                                     | 700<br>27 9/16                                                                                 | 23<br>7/8                                                                                      | 20                                                                                          | ✓                                                                                     |
| 660-620 | -006234                                                                                     | 700<br>27 9/16                                                                                 | 25<br>1                                                                                        | 20                                                                                          | ✓                                                                                     |



SERIES UFP  
PULLING SAFETY COVER FOR PULLER  
OPERATIONS



The accident protection tarpaulins for disassembly work of the UFP series are necessary for protection and safety when using large forces. During disassembly and pulling operations, it can happen that entire parts are suddenly loosened or break. The tarpaulins serve to prevent potential accident hazards, with which workpieces and tools can be safely enclosed even before the forces are applied.

BENEFITS

- Highly elastic, tear-resistant, and oil-resistant material
- The tarp is delivered in the suitcase for careful storage.
- The transparent foil enables precise observation, control and monitoring of all pulling and disassembly processes, given the work safety.



TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| UFP-2 | -445293                                                                                     | 1.500<br>59 1/16                                                                               | 670<br>26 3/8                                                                                  | 1,75<br>3.859                                                                                  | ✓                                                                                     |
| UFP-3 | -445378                                                                                     | 4.000<br>157 1/2                                                                               | 1.300<br>51 3/16                                                                               | 7,705<br>17.089                                                                                | ✓                                                                                     |



SERIES USB  
STRAP



The tension strap is used for securing small to medium loads in transportation. The clamp lock features a serrated clamping jaw with a spring mechanism that guarantees a firm grip. If hook eyes are present on the puller, the tension strap can be used for better fixing and holding of the extraction hooks. This ensures an even safer extraction.

BENEFITS

- The grooved clamping jaw ensures ideal grip.
- For tensioning small to medium loads
- To hold puller jaws with hook eyes

TECHNICAL ATTRIBUTES

| #     | <br>GTIN | <br>mm | <br>mm | <br>max. % | <br>daN | <br>kg |  |
|-------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| USB-1 | -041952                                                                                   | 25                                                                                      | 2000                                                                                    | 5 %                                                                                         | 450                                                                                       | 0,12                                                                                      | ✓                                                                                   |











# FOOD & DRINK

Whether for precise cutting, weighing, or chopping fruits and vegetables, fine fish fillets, as well as juicy meat pieces - KUKKO provides the perfect knife for every preparation method. The exclusive knife range from KUKKO includes the following products: chef's knife, meat knife with matching meat fork, bread knife, and Santoku knife in two different sizes. The knives are available in two variants: either with a natural forged surface (series 90-100) or with a noble walnut handle in the "Nature Look" (series 90-200).





KUKKO // *Pull forward*



SERIES

90-100 | 90-200 | 90-190 | 91-160

**FOOD & DRINK**



# APPLICATION

The pioneers of Puller tools have transferred the iconic design of the millions of times sold original crossbar of series 20 and 30 into a forged knife collection. The natural forged surface of the handle makes each knife unique. The unique ergonomic shape of the knife handle ensures perfect handling while cutting.

## Benefits

- Iconic handle design inspired by series 20 and 30 for optimal knife guidance
- Ergonomic handle offers a secure grip and comfortable handling
- Precise cutting results thanks to especially sharp blade
- Versatile use for meat, fish, fruit, and vegetables
- Easy selection of the right knife thanks to the display of meat, bread, or vegetable symbols on the blade
- Ideal storage thanks to a hole in the handle for hanging

## SPECIAL FEATURES OF THE SERIES

### SERIES 90-100

#### Knife with steel handle



The exclusive knife assortment includes: chef's knife, meat knife with matching meat fork, bread knife as well as Santoku knife in two different sizes. The KUKKO proprietary crossbar shape of the handle allows for relaxed resting of the middle and ring finger thanks to the tapered sides. This allows the knife to be guided with effortless ease.

### SERIES 90-200

#### Knife with wooden handle



The natural forged surface of the handle in combination with the unique walnut handles gives the knives an especially high-quality appearance. Thanks to the irregular grain of the wood, each knife becomes unique. The hardness of the wood also ensures high dimensional stability.

### SERIES 90-190

#### Knife sharpener



The KUKKO knife sharpener with a usable length of 270 mm is the ideal tool for sharpening KUKKO knife blades. Equipped with the ergonomic KUKKO Swiss Grip, it offers optimal grip and control during sharpening.

### SERIES 90-160

#### Lobster pliers



With the lobster pliers of series 91-160, enjoying seafood becomes a real pleasure. Whether juicy lobster, tender langoustines, or other crustaceans – these pliers make it possible to effortlessly and elegantly remove the delicious pieces of meat from the hard shells.



## APPLICATION EXAMPLES



Bread knife 90-104-210 when cutting a baguette



Meat knife 90-102-200 and meat fork 90-103-200 when carving



Sharpening knives with the 90-190-270



Lobster pliers 91-90-160 in use

## PRODUCT DETAILS

### SERIES 90-100 KNIFE



The hand-forged knife collection of the 90-100 series is derived from the million-selling original crossbar of the 20 and 30 series. The natural forged surface of the handle makes each knife unique. The unique ergonomic shape of the knife handle ensures perfect handling when cutting. The KUKKO's own crossbar shape of the handle allows for relaxed resting of the middle and ring fingers thanks to its lateral tapering.

#### BENEFITS

- Iconic blade design inspired by the series 20 and 30 for optimal knife guidance
- Ergonomic handle provides secure grip and comfortable handling
- Precise cutting results thanks to especially sharp blade
- Versatile for meat, fish, fruits, and vegetables
- Integrated anti-slip safety (spindle neck) at the blade base



#### TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  |  |  | Manufacturing method |  |  |  |
|------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|            | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | HRC                                                                               |                                                                                   |                      | kg                                                                                  |                                                                                     |                                                                                     |
| 90-101-210 | -011191                                                                           | 48<br>1 7/8                                                                       | 340<br>13 3/8                                                                     | 21<br>13/16                                                                       | 210<br>8 1/4                                                                      | 56-58                                                                             | Steel                                                                             | drop-forged          | 0,38                                                                                | Fruits, salad, vegetables, legumes, meat, poultry, fish                             | ✓                                                                                   |
| 90-102-200 | -011207                                                                           | 38<br>1 1/2                                                                       | 330<br>12 1                                                                       | 21<br>13/16                                                                       | 200<br>7 7/8                                                                      | 56-58                                                                             | Steel                                                                             | drop-forged          | 0,37                                                                                | Meat, poultry, fish                                                                 | ✓                                                                                   |
| 90-103-200 | -011214                                                                           | 38<br>1 1/2                                                                       | 330<br>12 1                                                                       | 21<br>13/16                                                                       | 200<br>7 7/8                                                                      | 56-58                                                                             | Steel                                                                             | drop-forged          | 0,40                                                                                | Meat, poultry, fish                                                                 | ✓                                                                                   |
| 90-104-210 | -011221                                                                           | 39<br>1 9/16                                                                      | 340<br>13 3/8                                                                     | 21<br>13/16                                                                       | 210<br>8 1/4                                                                      | 56-58                                                                             | Steel                                                                             | drop-forged          | 0,38                                                                                | Bread, pastries, cakes, pies                                                        | ✓                                                                                   |
| 90-105-160 | -011320                                                                           | 50<br>1 15/16                                                                     | 290<br>11 7/16                                                                    | 21<br>13/16                                                                       | 160<br>6 5/16                                                                     | 56-58                                                                             | Steel                                                                             | drop-forged          | 0,40                                                                                | Fruits, salad, vegetables, legumes, meat, poultry, fish                             | ✓                                                                                   |
| 90-105-200 | -011658                                                                           | 50<br>1 15/16                                                                     | 330<br>12 1                                                                       | 21<br>13/16                                                                       | 200<br>7 7/8                                                                      | 56-58                                                                             | Steel                                                                             | drop-forged          | 0,40                                                                                | Fruits, salad, vegetables, legumes, meat, poultry, fish                             | ✓                                                                                   |



PRODUCT DETAILS

SERIES 90-200  
KNIFE



The handmade knife collection of series 90-200 is derived from the millions of times sold original crossbar of series 20 and 30. The natural forged surface of the handle combined with the unique walnut grips gives the knives a particularly premium look. Thanks to the irregular grain of the wood, each knife becomes a unique piece. Due to the hardness of the wood, high dimensional stability is also ensured. The unique ergonomic shape of the knife handle guarantees perfect handling when cutting.

BENEFITS

- Noble "Nature Look" and special strength thanks to walnut handle
- Ergonomic handle provides secure grip and comfortable handling
- Precise cutting results thanks to especially sharp blade
- Versatile for meat, fish, fruits, and vegetables
- Integrated anti-slip safety (spindle neck) at the blade base



TECHNICAL ATTRIBUTES

| #          |  |  |  |  |  |  |  | Manufacturing method |  |  |  |
|------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|            | GTIN                                                                              | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | mm/inch                                                                           | HRC                                                                               |                                                                                   |                      | kg                                                                                  |                                                                                     |                                                                                     |
| 90-201-210 | -023774                                                                           | 48<br>1 7/8                                                                       | 340<br>13 3/8                                                                     | 21<br>13/16                                                                       | 210<br>8 1/4                                                                      | 56-58                                                                             | Wood                                                                              | drop forged          | 0,40                                                                                | Fruits, salad, vegetables, legumes, meat, poultry, fish                             | ✓                                                                                   |
| 90-202-200 | -023798                                                                           | 38<br>1 1/2                                                                       | 330<br>12 1                                                                       | 21<br>13/16                                                                       | 200<br>7 7/8                                                                      | 56-58                                                                             | Wood                                                                              | drop-forged          | 0,40                                                                                | Meat, poultry, fish                                                                 | ✓                                                                                   |
| 90-203-200 | -023804                                                                           | 38<br>1 1/2                                                                       | 330<br>12 1                                                                       | 21<br>13/16                                                                       | 200<br>7 7/8                                                                      | 56-58                                                                             | Wood                                                                              | drop-forged          | 0,40                                                                                | Meat, poultry, fish                                                                 | ✓                                                                                   |
| 90-204-210 | -023811                                                                           | 39<br>1 9/16                                                                      | 340<br>13 3/8                                                                     | 21<br>13/16                                                                       | 210<br>8 1/4                                                                      | 56-58                                                                             | Wood                                                                              | drop-forged          | 0,40                                                                                | Bread, pastries, cakes, pies                                                        | ✓                                                                                   |
| 90-205-160 | -023828                                                                           | 50<br>1 15/16                                                                     | 290<br>11 7/16                                                                    | 21<br>13/16                                                                       | 160<br>6 5/16                                                                     | 56-58                                                                             | Wood                                                                              | drop forged          | 0,40                                                                                | Fruits, salad, vegetables, legumes, meat, poultry, fish                             | ✓                                                                                   |
| 90-205-200 | -023835                                                                           | 50<br>1 15/16                                                                     | 330<br>12 1                                                                       | 21<br>13/16                                                                       | 200<br>7 7/8                                                                      | 56-58                                                                             | Wood                                                                              | drop-forged          | 0,40                                                                                | Fruits, salad, vegetables, legumes, meat, poultry, fish                             | ✓                                                                                   |

PRODUCT DETAILS

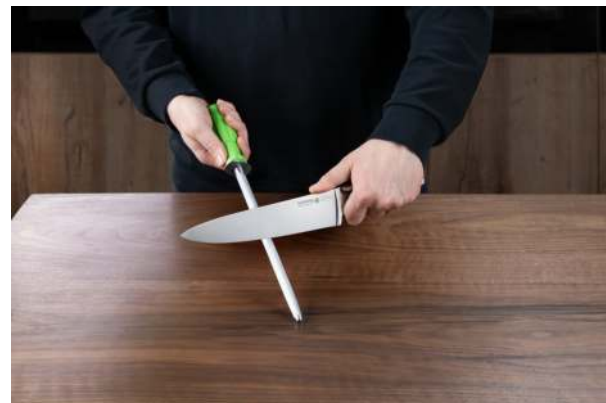
SERIES 90-190  
KNIFE SHARPENER



The KUKKO honing steel with a usable length of 270 mm is the ideal tool for sharpening KUKKO knife blades. Equipped with the ergonomic KUKKO Swiss Grip, it provides optimal hold and control during sharpening.

BENEFITS

- Regular sharpening extends the lifespan of the utility knife
- Versatile for different blade types
- Fast result in just a few seconds



TECHNICAL ATTRIBUTES

| #                     | <br>GTIN | <br>kg/lb |  |
|-----------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 90-190-270 <b>New</b> | -080333                                                                                   | 0,4<br>0.882                                                                               | ✓                                                                                   |





PRODUCT DETAILS

SERIES 90-900  
KNIFE POUCH



The knife bag of the series 90-900 made from high-quality ox leather combines functionality, protection, and timeless elegance. It offers space for up to six knives, which can be stored safely and clearly arranged in separate compartments. This keeps the blades optimally protected and ready to hand at all times. Perfectly suited for the safe transport or stylish storage of high-quality knives.

BENEFITS

- Safe protection for up to 6 knives
- Separate compartments for organization and blade protection
- High-quality, durable oxhide leather
- Ideal for transport and storage

TECHNICAL ATTRIBUTES

| #                | <br>GTIN | <br>mm/inch | <br>mm/inch | Holster width<br>inside<br>dimension<br>mm/inch | Quiver<br>height<br>mm/inch | Total<br>number of<br>quivers | <br>Material | <br>kg/lb |
|------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------|-------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 90-900-06<br>New | -044137                                                                                     | 615<br>24 3/16                                                                                 | 685<br>26 15/16                                                                                | 45, 50, 5,5<br>1 3/4                            | 145, 195,<br>245<br>5 11/16 | 6                             | Green<br>leather                                                                                  | 0,4<br>0.882                                                                                   |





## PRODUCT DETAILS

### SERIES 91-160 LOBSTER CRACKER



With the lobster tongs of the series 91-160, enjoying seafood becomes a real pleasure. Whether juicy lobster, tender langoustine, or other crustaceans – these tongs make it possible to effortlessly and elegantly remove the tasty pieces of meat from the hard shells. Unlike conventional lobster tongs, KUKKO's designers have succeeded in integrating a plain bearing that guarantees particularly smooth operation.

#### BENEFITS

- The pliers lie ergonomically comfortable in the hand thanks to their handy grip and allow a precise handling.
- An internal sliding bearing ensures a special ease of movement
- With the lever function, the pliers can be easily adjusted to the shell to effortlessly free the meat.
- The simple, stylish appearance makes it a real eye-catcher at any feast and complements your table setting perfectly.
- Made from high-quality stainless steel, the pliers are particularly durable and corrosion resistant.



#### TECHNICAL ATTRIBUTES

| #         |  |  | Dishwasher-safe | Material        |  |  |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------|-----------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|           | GTIN                                                                              | mm/inch                                                                           |                 |                 | kg                                                                                   |                                                                                      |
| 91-90-160 | -009969                                                                           | 163<br>6 7/16                                                                     | Yes             | Stainless steel | 0,24                                                                                 | ✓                                                                                    |

### SERIES 404 FONDUE FORKS



The 6-piece set for meat, broth or cheese fondue from the 404 series in its unmistakable screwdriver design combines function and style. The practical barbs hold every piece securely. The classic handles in six different colors make it easy to recognize your own fork. Made from premium stainless steel and equipped with durable handles, this set is the ideal accessories for enjoyable fondue moments.

#### BENEFITS

- Secure hold: barbs prevent meat, vegetables, or cheese from slipping off the fork
- Individual assignment: 6 colored handles – everyone immediately recognizes their own fork
- Stylish design: Eye-catching screwdriver design as a real highlight on the table
- Durable & high-quality: Rust-free stainless steel for a long service life
- Dishwasher-safe: Effortless and quick cleaning without hand washing

#### TECHNICAL ATTRIBUTES

| #               |  |  |  |  | Usage             | Dishwasher-safe | Material        |  |
|-----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------|-----------------|-----------------|---------------------------------------------------------------------------------------|
|                 | GTIN                                                                                | mm/inch                                                                             | mm/inch                                                                             | mm/inch                                                                             |                   |                 |                 | kg/lb                                                                                 |
| 4040 <b>New</b> | -040979                                                                             | 250<br>9 13/16                                                                      | 12<br>1/2                                                                           | 160<br>6 5/16                                                                       | For cheese fondue | Yes             | Stainless steel | 0,3<br>0.662                                                                          |
| 4041 <b>New</b> | -060830                                                                             | 265<br>10 1/4                                                                       | 12<br>1/2                                                                           | 180<br>7 1/16                                                                       | For meat fondue   | Yes             | Stainless steel | 0,265<br>0.584                                                                        |

PRODUCT DETAILS

SERIES 1919-900  
CAPSULE AND LID LIFTER



The bottle opener of the 1919-900 series impresses with its robust workmanship and high functionality. Crown caps can be removed effortlessly – ideal for use in the kitchen, bar, or hospitality. The slim design feels comfortable in the hand and enables quick and easy opening of bottles. The ergonomically shaped 2-component handle (PB Swiss) ensures a secure grip. There is also a combination cap and lid lifter (1919-900-2) that offers even more versatility for everyday use.

BENEFITS

- Effortless opening of bottles without exerting force
- Compact and handy size
- Rugged, durable construction

TECHNICAL ATTRIBUTES

| #                     | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | Dishwasher-safe | Material        | <br>kg/lb |  |
|-----------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------|-----------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1919-900-1 <b>New</b> | -691164                                                                                     | 140<br>5 1/2                                                                                   | 40<br>5 1/2                                                                                    | 21<br>1 9/16                                                                                   | Yes             | Stainless steel | 0,3<br>0.662                                                                                   | ✓                                                                                     |
| 1919-900-2 <b>New</b> | -691171                                                                                     | 145<br>5 11/16                                                                                 | 40<br>1 9/16                                                                                   | 21<br>13/16                                                                                    | Yes             | Stainless steel | 0,3<br>0.132                                                                                   | ✓                                                                                     |













# MERCHANDISING

All fans of the brand can now also style themselves fashionably in the KUKKO look. The new collection includes polo shirts, sweatshirts, and soft shell vests - suitable for both work and leisurewear.





KUKKO // Pull forward



SERIES 1919-200 | 1919-200B

# MARCHANDISE



## APPLICATION

All fans of the brand can now dress fashionably in the KUKKO look. The new collection includes polo shirts, sweatshirts, and softshell vests – suitable for both workwear and casualwear.

### Benefits

- High-quality fabrics and workmanship
- Good fit and high wearing comfort
- Classic and timeless style

## SPECIAL FEATURES OF THE SERIES

### SERIES 1919-200

#### Poloshirt in L or XL



front



back

The black KUKKO polo shirt 1919-200 features a timeless design. The shirt is made from high-quality cotton and offers a comfortable wearing experience. The KUKKO logo is placed at chest height on the front. There is also a logo and the slogan "your global puller brand" on the back. The polo shirt is suitable both as workwear and as a fashionable casual outfit. Particularly noteworthy are the contrast stripes on the collar and sleeves, as well as the 3-button placket, which make the polo shirt a real eye-catcher. The polo shirt is available in men's sizes L and XL.

### SERIES 1919-250

#### Sweatshirt in L or XL



front



back

The black KUKKO sweatshirt 1919-250 features a timeless design. The shirt is made from high-quality cotton and offers a comfortable wearing experience. The KUKKO logo is placed at chest height on the front. There is also a logo and the slogan "your global puller brand" on the back. The sweatshirt is suitable both as workwear and as a fashionable casual outfit. The sweatshirt is available in men's sizes L and XL.

### SERIES 1919-290

#### Softshell vest in L or XL



front



back

The black KUKKO softshell vest 1919-290 features a timeless design. The vest is made of polyester. The comfortable, elastic stretch material ensures pleasant wear. The KUKKO logo is placed at chest height on the front. There is also a logo and the slogan "physics is the limit" on the back. The softshell vest is suitable both as workwear and as a fashionable casual outfit. The vest is available in men's sizes L and XL.



## APPLICATION EXAMPLES



KUKKO polo shirts



KUKKO sweatshirts



KUKKO softshell vests



The KUKKO merchandise range at a glance

## PRODUCT DETAILS

### SERIES 1919-200



The polo shirts, sweatshirts, and softshell vests from KUKKO's series 1919-200 are in a timeless design and offer comfortable wear. The KUKKO logo is located at chest height on the front. There is also a logo and a slogan on the back. The shirts and vests are suitable as workwear as well as a fashionable leisure outfit. Available in men's sizes L and XL.

#### BENEFITS

- Classic look impresses both in the work environment and leisure time
- Pleasant materials and comfortable cut guarantee high wearing comfort.

#### TECHNICAL ATTRIBUTES

| #           |  | Product type   |  |  | Length from shoulder | Jaw length     | 1/2 upper width    | 1/2 hem width      | Fabric                          |  |  |
|-------------|------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------|----------------|--------------------|--------------------|---------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|             | GTIN                                                                               |                |                                                                                    |                                                                                    | mm/inch              | mm/inch        | mm/inch            | mm/inch            |                                 | kg                                                                                   |                                                                                      |
| 1919-200-XS | -024023                                                                            | Polo shirt     | XS                                                                                 | black                                                                              | 610<br>24 1/64       | 190<br>7 1/2   | 430<br>16<br>15/16 | 430<br>16<br>15/16 | 100% cotton                     | 0,15                                                                                 | ✓                                                                                    |
| 1919-200-S  | -024016                                                                            | Polo shirt     | S                                                                                  | black                                                                              | 700<br>27 9/16       | 220<br>8 11/16 | 480<br>18 7/8      | 480<br>18 7/8      | 100% cotton                     | 0,24                                                                                 | ✓                                                                                    |
| 1919-200-L  | -023620                                                                            | Polo shirt     | L                                                                                  | black                                                                              | 740<br>29 1/8        | 240<br>9 7/16  | 560<br>22<br>1/16  | 560<br>22<br>1/16  | 100% cotton                     | 0,30                                                                                 | ✓                                                                                    |
| 1919-200-XL | -023637                                                                            | Polo shirt     | XL                                                                                 | black                                                                              | 760<br>29 15/16      | 250<br>9 13/16 | 600<br>23 5/8      | 600<br>23 5/8      | 100% cotton                     | 0,30                                                                                 | ✓                                                                                    |
| 1919-250-L  | -023644                                                                            | Sweatshirt     | L                                                                                  | black                                                                              | 720<br>28 3/8        | 660<br>25 1    | 600<br>23 5/8      |                    | 80% cotton /<br>20% polyester   | 0,59                                                                                 | ✓                                                                                    |
| 1919-250-XL | -023651                                                                            | Sweatshirt     | XL                                                                                 | black                                                                              | 750<br>29 1/2        | 670<br>26 3/8  | 630<br>24<br>13/16 |                    | 80% cotton /<br>20% polyester   | 0,30                                                                                 | ✓                                                                                    |
| 1919-290-S  | -024030                                                                            | Softshell vest | S                                                                                  | black                                                                              | 640<br>25 3/16       |                | 520<br>20 1/2      | 490<br>19<br>5/16  | 90% polyester /<br>10% elastane | 0,38                                                                                 | ✓                                                                                    |
| 1919-290-M  | -488139                                                                            | Softshell vest | M                                                                                  | black                                                                              | 720<br>28 3/8        |                | 560<br>22<br>1/16  |                    | 90% polyester /<br>10% elastane | 0,40                                                                                 | ✓                                                                                    |
| 1919-290-L  | -023668                                                                            | Softshell vest | L                                                                                  | black                                                                              | 740<br>29 1/8        |                | 600<br>23 5/8      | 570<br>22<br>7/16  | 90% polyester /<br>10% elastane | 0,30                                                                                 | ✓                                                                                    |
| 1919-290-XL | -023675                                                                            | Softshell vest | XL                                                                                 | black                                                                              | 700<br>27 9/16       |                | 640<br>25<br>3/16  | 610<br>24<br>1/64  | 90% polyester /<br>10% elastane | 0,30                                                                                 | ✓                                                                                    |



## PRODUCT DETAILS

### SERIES 1919-200B



The polo shirts, sweatshirts, and softshell vests from KUKKO series 1919-200B feature a timeless design and offer a comfortable fit. The KUKKO logo is located on the front at chest height. A logo and a slogan can also be seen on the back. The shirts and vests are suitable both as workwear and as fashionable leisure outfits. Available in men's sizes L and XL. Depending on the selected set, 5 polo shirts, 5 softshell vests, or 3 sweatshirts are included.

#### BENEFITS

- High-quality materials and workmanship
- Good fit and high wearing comfort
- Classic and timeless style

#### TECHNICAL ATTRIBUTES

| #             | <br>GTIN | Product type   |  |  | Length from shoulder<br>mm/inch | Jaw length<br>mm/inch | 1/2 upper width<br>mm/inch | 1/2 hem width<br>mm/inch | Fabric                       | <br>kg |  |
|---------------|--------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------|-----------------------|----------------------------|--------------------------|------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1919-200-L/5  | -012433                                                                                    | Polo shirt     | L                                                                                  | black                                                                              | 740<br>29 1/8                   | 240<br>9 7/16         | 560<br>22 1/16             | 560<br>22 1/16           | 100% cotton                  | 1,37                                                                                       | ✓                                                                                    |
| 1919-200-XL/5 | -012440                                                                                    | Polo shirt     | XL                                                                                 | black                                                                              | 760<br>29 15/16                 | 250<br>9 13/16        | 600<br>23 5/8              | 600<br>23 5/8            | 100% cotton                  | 1,40                                                                                       | ✓                                                                                    |
| 1919-250-L/3  | -012457                                                                                    | Sweatshirt     | L                                                                                  | black                                                                              | 720<br>28 3/8                   | 660<br>25 1           | 600<br>23 5/8              |                          | 80% cotton / 20% polyester   | 1,78                                                                                       | ✓                                                                                    |
| 1919-250-XL/3 | -012464                                                                                    | Sweatshirt     | XL                                                                                 | black                                                                              | 750<br>29 1/2                   | 670<br>26 3/8         | 630<br>24 13/16            |                          | 80% cotton / 20% polyester   | 1,80                                                                                       | ✓                                                                                    |
| 1919-290-L/5  | -012471                                                                                    | Softshell vest | L                                                                                  | black                                                                              | 740<br>29 1/8                   |                       | 600<br>23 5/8              | 570<br>22 7/16           | 90% polyester / 10% elastane | 2,66                                                                                       | ✓                                                                                    |
| 1919-290-XL/5 | -012495                                                                                    | Softshell vest | XL                                                                                 | black                                                                              | 700<br>27 9/16                  |                       | 640<br>25 3/16             | 610<br>24 1/64           | 90% polyester / 10% elastane | 2,70                                                                                       | ✓                                                                                    |





SERIES 999-SH



The KUKKO outdoor trade fair set of series 999-SH is ideal for outdoor events and combines classic and modern advertising media. It includes a 3x3 m tent with a printed back wall, which provides protection from the weather and is easy to transport. The striking advertising banner with the KUKKO logo ensures maximum visibility. The mobile trade fair counter is quickly set up and offers an appealing place for customer discussions. All elements are robust, easy to assemble, and designed for flexible use.

TECHNICAL ATTRIBUTES

| #         | <br>GTIN | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg/lb |  |
|-----------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 999-SH-01 | -405952                                                                                   | 3100<br>122 1/16                                                                             | 3100<br>122 1/16                                                                             | 3320<br>130 11/16                                                                            | 3<br>6.615                                                                                   | ✓                                                                                   |
| 999-SH-02 | -405969                                                                                   | 100<br>3 15/16                                                                               |                                                                                              | 260<br>10 1/4                                                                                | 25<br>55.125                                                                                 | ✓                                                                                   |
| 999-SH-03 | -405976                                                                                   | 800<br>31 1/2                                                                                | 530<br>20 7/8                                                                                | 1000<br>39 3/8                                                                               | 9<br>19.845                                                                                  | ✓                                                                                   |



PRODUCT DETAILS

SERIES 125  
PROMOTIONAL ITEM

The valve cap driver with KUKKO-Chip from the 125 series is used to remove or secure the valve cap on the tire. With the help of the integrated KUKKO-Chip, the profile of the tires can be determined. Optionally, the chip can also be used for shopping carts.



TECHNICAL ATTRIBUTES

| #                                                                                        | <br>GTIN | Item name                          | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>mm/inch | <br>kg |  |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  125-10 | -023514                                                                                     | Valve cap wrench with KUKKO chip   | 31<br>1 1/4                                                                                    | 75<br>2 15/16                                                                                  | 14<br>9/16                                                                                     |                                                                                                  | 0,40                                                                                        | ✓                                                                                     |
| 125-11                                                                                   | -010750                                                                                     | KUKKO chip with tire profile gauge |                                                                                                |                                                                                                | 2<br>1/16                                                                                      | 23,6<br>15/16                                                                                    | 0,90                                                                                        | ✓                                                                                     |

# Alphabetical Index

(with page reference)



## A

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| Accessories for heating devices .....                                      | 729  |
| Accessories for internal extractor .....                                   | 376  |
| Accident protection tarpaulins .....                                       | 1041 |
| All-steel lever clamp .....                                                | 821  |
| All-steel screw clamps .....                                               | 811  |
| Allen key .....                                                            | 877  |
| Alligator puller with fixed jaws and anti-slip safety (spindle neck) ..... | 313  |

## B

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| Ball bearing puller set with grippers in hemispherical shape ..... | 492 |
| Ball bearing puller with hook claws .....                          | 498 |
| Bearing installation tools .....                                   | 789 |
| Bearing puller with fixed arms and side clamp .....                | 700 |
| Bearing separator Cobra with adjustable reach and side clamp ..... | 351 |

## C

|                                                   |      |
|---------------------------------------------------|------|
| C-clamps .....                                    | 840  |
| Cap and lid lifter .....                          | 1054 |
| Chain / oil filter wrench .....                   | 686  |
| chain tensioner .....                             | 735  |
| Chisel holder .....                               | 865  |
| clamp .....                                       | 165  |
| Clamping tools .....                              | 684  |
| Clothing .....                                    | 1062 |
| Combination puller with self-centering jaws ..... | 288  |
| counter stay .....                                | 397  |

## D

|                                            |     |
|--------------------------------------------|-----|
| DAVID .....                                | 577 |
| Deep-reach malleable cast iron clamp ..... | 833 |
| Demo cube .....                            | 991 |
| Direct pressure ball joint puller .....    | 604 |
| Disc cutter .....                          | 757 |

## E

|                  |     |
|------------------|-----|
| Empty case ..... | 955 |
|------------------|-----|

|                              |     |
|------------------------------|-----|
| Engine conductor .....       | 674 |
| Engine mounting stands ..... | 675 |
| European .....               | 899 |
| Extensions for pullers ..... | 474 |

## F

|                                                                                                  |      |
|--------------------------------------------------------------------------------------------------|------|
| Fall protection .....                                                                            | 1040 |
| flange spreader .....                                                                            | 853  |
| Fondue forks .....                                                                               | 1053 |
| For pulling off ball bearings, roller bearings, inner rings and other tightly seated parts ..... | 568  |

## G

|                   |     |
|-------------------|-----|
| glue clamps ..... | 846 |
|-------------------|-----|

## H

|                                                                                               |     |
|-----------------------------------------------------------------------------------------------|-----|
| hand punch stamp .....                                                                        | 930 |
| Hand-held vises for an especially firm grip .....                                             | 804 |
| Handy puller with force-amplifying self-centering and clamping jaws .....                     | 690 |
| Handy pullers with force-amplifying and self-centering jaws .....                             | 280 |
| Handy pullers with force-amplifying, self-centering jaws and a grease-hydraulic spindle ..... | 299 |
| Heating devices .....                                                                         | 727 |
| Heavy puller with oscillating and height-adjustable jaws .....                                | 240 |
| Heavy-duty malleable iron clamps .....                                                        | 829 |
| Heavy-duty pullers with swiveling jaws and combination crossbar .....                         | 214 |
| Hook spanner .....                                                                            | 904 |
| Hook with toggle joint .....                                                                  | 392 |
| Hooks for perforated panels .....                                                             | 990 |
| hub puller .....                                                                              | 579 |
| Hydraulic accessories .....                                                                   | 592 |
| Hydraulic additional press .....                                                              | 184 |
| Hydraulic cylinders .....                                                                     | 584 |
| Hydraulic spare parts .....                                                                   | 420 |
| hydraulic spindle .....                                                                       | 182 |

## I

|                     |     |
|---------------------|-----|
| Impact wrench ..... | 900 |
|---------------------|-----|

|                                                             |      |                                                                         |      |
|-------------------------------------------------------------|------|-------------------------------------------------------------------------|------|
| internal extractor .....                                    | 567  | Parallel screw clamps .....                                             | 842  |
| <b>J</b>                                                    |      | Picks and hooks .....                                                   | 525  |
| jaws .....                                                  | 63   | Piston pin press .....                                                  | 699  |
| <b>K</b>                                                    |      | Piston ring installation pliers .....                                   | 682  |
| K-2030 .....                                                | 109  | Pneumatic test set .....                                                | 679  |
| K-Cutting / Loosening .....                                 | 717  | POL screw clamps .....                                                  | 839  |
| K-External .....                                            | 655  | power nut .....                                                         | 484  |
| K-Internal .....                                            | 673  | Powerplate .....                                                        | 175  |
| K-Removing .....                                            | 497  | Pressing out and pressing in .....                                      | 791  |
| K-Separation .....                                          | 457  | Pressure pieces .....                                                   | 172  |
| K-Universal .....                                           | 306  | Promotional item .....                                                  | 1064 |
| Knife .....                                                 | 1049 | Puller Economy with oscillating and height-adjustable jaws .....        | 265  |
| knife pouch .....                                           | 1052 | Puller for camshaft sprockets .....                                     | 666  |
| Knife sharpener .....                                       | 1051 | Puller for fan wheels with oscillating and height-adjustable jaws ..... | 270  |
| Knife stands .....                                          | 1063 | Puller for rolling bearings (Swedish model) with cone knob .....        | 323  |
| KUKKO-Rhino .....                                           | 696  | Puller for shoulder bearing inner rings .....                           | 520  |
| <b>L</b>                                                    |      | Puller for VW-AUDI clutch .....                                         | 695  |
| Lever-pressure ball joint puller .....                      | 611  | Puller with conical self-tightening .....                               | 331  |
| Lobster tongs .....                                         | 1053 | Puller with narrow, self-tightening, crossing jaws .....                | 319  |
| Locking claw .....                                          | 689  | puller with oscillating and 180° reversible jaws .....                  | 222  |
| locking pliers .....                                        | 855  | Puller with pump hydraulics and adjustable reach .....                  | 557  |
| <b>M</b>                                                    |      | Puller with self-centering jaws connected with a spring .....           | 357  |
| Malleable cast iron screw clamps .....                      | 822  | Puller with self-tightening, crossing jaws .....                        | 318  |
| Mechanical spindles .....                                   | 168  | Puller without hollow piston cylinder .....                             | 558  |
| Micro puller for small parts and model making .....         | 343  | Pulling jaws extensions .....                                           | 166  |
| Miter welding clamps .....                                  | 845  | Punching and cutting .....                                              | 761  |
| Mobile hydraulic puller GOLIATH with adjustable reach ..... | 574  | <b>R</b>                                                                |      |
| <b>N</b>                                                    |      | Release key .....                                                       | 903  |
| Non-Sparking Sets .....                                     | 1018 | Removing device for angular contact ball bearings .....                 | 507  |
| Non-Sparking tab puller .....                               | 1016 | Removing of spring and grooved pins .....                               | 521  |
| Non-Sparking tools .....                                    | 1020 | Retaining ring pliers .....                                             | 528  |
| Number and letter punches .....                             | 911  | Riveting tools .....                                                    | 864  |
| Nut splitter .....                                          | 716  | <b>S</b>                                                                |      |
| <b>O</b>                                                    |      | Sales displays .....                                                    | 71   |
| Oil hook .....                                              | 391  | Sales walls .....                                                       | 987  |
| One-handed clamping and spreading clamps .....              | 848  | Screw extractor .....                                                   | 747  |
| Operating facilities .....                                  | 960  | screw hole punch .....                                                  | 768  |
| <b>P</b>                                                    |      | Seal ring removing .....                                                | 509  |
|                                                             |      | Seal tools .....                                                        | 946  |
|                                                             |      | Separating forks .....                                                  | 628  |

|                                    |      |                               |     |
|------------------------------------|------|-------------------------------|-----|
| Set of nozzle reamers .....        | 756  | Windshield wiper puller ..... | 652 |
| side screw and extensions .....    | 418  | Workshop press .....          | 793 |
| sliding hammer .....               | 384  | Workshop trolley .....        | 958 |
| Soft scraper .....                 | 759  |                               |     |
| soft-face hammer .....             | 1007 |                               |     |
| Soft-face hammer accessories ..... | 1004 |                               |     |
| Soft-face hammer SELECTHOR .....   | 999  |                               |     |
| Spare parts for 2030 .....         | 954  |                               |     |
| Special grease .....               | 1037 |                               |     |
| Spindle extension .....            | 183  |                               |     |
| spreader .....                     | 626  |                               |     |
| Spring compressor .....            | 647  |                               |     |
| Steering wheel puller .....        | 659  |                               |     |
| stud extractor .....               | 534  |                               |     |

## T

|                                                       |      |
|-------------------------------------------------------|------|
| Templates .....                                       | 928  |
| Tension strap .....                                   | 1042 |
| thread adapter .....                                  | 440  |
| Thread adapter, spindle inserts, connecting nut ..... | 438  |
| Thread files .....                                    | 744  |
| Thread repair .....                                   | 741  |
| Tool for brakes .....                                 | 702  |
| Tool holder .....                                     | 862  |
| Transport cart .....                                  | 959  |

## U

|                                                                                                 |     |
|-------------------------------------------------------------------------------------------------|-----|
| Universal ball bearing extractor devices .....                                                  | 565 |
| Universal puller Economy for agriculture and workshop with a versatile combinable jaw set ..... | 199 |
| Universal puller Techno with hook lock .....                                                    | 194 |
| Universal puller VARIO with spring-loaded Fall protection .....                                 | 189 |
| Universal puller VARIO with spring-loaded jaw lock .....                                        | 188 |
| Universal puller with sliding, always parallel jaws .....                                       | 102 |
| Universal puller with swiveling jaws .....                                                      | 206 |

## V

|             |     |
|-------------|-----|
| Vises ..... | 849 |
|-------------|-----|

## W

|                                |     |
|--------------------------------|-----|
| Wall panels .....              | 967 |
| Watchmaker's screwdriver ..... | 871 |
| Wedge puller pliers .....      | 522 |
| Wheel punch stamps .....       | 938 |



# Index of item numbers

(with page reference)



|                |                 |      |                 |      |               |     |               |     |
|----------------|-----------------|------|-----------------|------|---------------|-----|---------------|-----|
| <b>0</b>       | 1-255-S .....   | 134  | 1006F1011 ..... | 1024 | 105-0 .....   | 687 | 110-1 .....   | 194 |
| 0-75-P .....   | 1-400-P .....   | 63   | 1006F1213 ..... | 1024 | 105-1 .....   | 687 | 110-10 .....  | 194 |
| 0-75-S .....   | 1-400-S .....   | 67   | 1006F1415 ..... | 1024 | 106-180 ..... | 807 | 110-2 .....   | 194 |
| <b>1</b>       | 1-401-P .....   | 84   | 1006F1617 ..... | 1024 | 106-200 ..... | 807 | 110-20 .....  | 194 |
| 1-190-P .....  | 1-401-S .....   | 88   | 1006F1819 ..... | 1024 | 107-200 ..... | 808 | 110-3 .....   | 194 |
| 1-190-S .....  | 1-90-P .....    | 63   | 1006F2022 ..... | 1024 | 108-1 .....   | 688 | 110-4 .....   | 194 |
| 1-191-P .....  | 1-90-S .....    | 67   | 1006F2123 ..... | 1025 | 108-2 .....   | 688 | 112-1 .....   | 323 |
| 1-191-S .....  | 1-91-P .....    | 84   | 1006F2224 ..... | 1027 | 108-3 .....   | 688 | 112-10 .....  | 323 |
| 1-192-P .....  | 1-91-S .....    | 88   | 1006F2427 ..... | 1026 | 109-160 ..... | 809 | 112-125 ..... | 810 |
| 1-192-Px ..... | 1-92-P .....    | 104  | 1006F2528 ..... | 1029 | 109-180 ..... | 809 | 112-150 ..... | 810 |
| 1-192-S .....  | 1-92-Px .....   | 139  | 1006F3032 ..... | 1029 | 109-200 ..... | 809 | 112-2 .....   | 323 |
| 1-192-Sx ..... | 1-92-S .....    | 108  | 1006F3236 ..... | 1030 | 109-250 ..... | 809 | 112-20 .....  | 323 |
| 1-193-P .....  | 1-92-Sx .....   | 144  | 1006F4146 ..... | 1026 | 11-0-A .....  | 156 | 112-3 .....   | 323 |
| 1-193-Px ..... | 1-93-P .....    | 118  | 1006F4650 ..... | 1028 | 11-0-A3 ..... | 156 | 113-115 ..... | 810 |
| 1-193-S .....  | 1-93-Px .....   | 148  | 1006F4651 ..... | 1028 | 11-0-A4 ..... | 156 | 113-116 ..... | 810 |
| 1-193-Sx ..... | 1-93-S .....    | 122  | 1006F4652 ..... | 1028 | 11-0-A5 ..... | 156 | 113-130 ..... | 810 |
| 1-194-P .....  | 1-93-Sx .....   | 151  | 1006F4653 ..... | 1028 | 11-0-AV ..... | 158 | 113-131 ..... | 810 |
| 1-194-S .....  | 1-94-P .....    | 96   | 101-1 .....     | 682  | 11-0-B .....  | 159 | 113-20 .....  | 324 |
| 1-195-P .....  | 1-94-S .....    | 98   | 101-100 .....   | 804  | 11-0-BV ..... | 160 | 113-3 .....   | 324 |
| 1-195-S .....  | 1-95-P .....    | 132  | 101-120 .....   | 804  | 11-1-A .....  | 156 | 114-1 .....   | 288 |
| 1-250-P .....  | 1-95-S .....    | 134  | 101-130 .....   | 804  | 11-1-A3 ..... | 156 | 114-2 .....   | 288 |
| 1-250-S .....  | 1-V-100-P ..... | 166  | 101-145 .....   | 804  | 11-1-A4 ..... | 156 | 114-3 .....   | 288 |
| 1-251-P .....  | 1-V-100-S ..... | 167  | 101-160 .....   | 804  | 11-1-A5 ..... | 156 | 118-0 .....   | 666 |
| 1-251-S .....  | 1-V-150-P ..... | 166  | 101-180 .....   | 804  | 11-1-AV ..... | 158 | 118-1 .....   | 666 |
| 1-252-P .....  | 1-V-150-S ..... | 167  | 101-2 .....     | 682  | 11-1-B .....  | 159 | 12-1 .....    | 313 |
| 1-252-Px ..... | 10-A .....      | 635  | 101-200 .....   | 804  | 11-1-BV ..... | 160 | 12-2 .....    | 313 |
| 1-252-S .....  | 10-G .....      | 635  | 101-3 .....     | 683  | 11-2-A .....  | 156 | 12-3 .....    | 313 |
| 1-252-Sx ..... | 10-M .....      | 634  | 102-0 .....     | 699  | 11-2-A3 ..... | 156 | 12-4 .....    | 314 |
| 1-253-P .....  | 100-1 .....     | 684  | 102-1 .....     | 699  | 11-2-A4 ..... | 156 | 12-5 .....    | 314 |
| 1-253-Px ..... | 100-2 .....     | 684  | 102-120 .....   | 805  | 11-2-A5 ..... | 156 | 12-6 .....    | 314 |
| 1-253-S .....  | 100-3 .....     | 684  | 103-1 .....     | 685  | 11-2-AV ..... | 158 | 12-7 .....    | 314 |
| 1-253-Sx ..... | 1005F019 .....  | 1023 | 103-160 .....   | 806  | 11-2-B .....  | 159 | 120-1 .....   | 188 |
| 1-254-P .....  | 1005F022 .....  | 1023 | 103-180 .....   | 806  | 11-2-BV ..... | 160 | 120-10 .....  | 188 |
| 1-254-S .....  | 1005F030 .....  | 1023 | 103-200 .....   | 806  | 11-3-B .....  | 159 | 120-2 .....   | 188 |
| 1-255-P .....  | 1005F041 .....  | 1023 | 104 .....       | 686  | 110-01 .....  | 194 | 120-20 .....  | 188 |
|                | 1005F055 .....  | 1023 | 104-32 .....    | 687  | 110-02 .....  | 194 | 120-3 .....   | 188 |

|               |     |                  |      |                    |     |               |     |                |     |
|---------------|-----|------------------|------|--------------------|-----|---------------|-----|----------------|-----|
| 120-30 .....  | 188 | 123 .....        | 704  | 129-1-B-1 .....    | 612 | 133-32 .....  | 900 | 15-2 .....     | 455 |
| 120-ST .....  | 190 | 123-2 .....      | 704  | 129-2 .....        | 613 | 133-34 .....  | 900 | 15-3 .....     | 455 |
| 121-182 ..... | 768 | 124-K .....      | 681  | 129-25 .....       | 614 | 133-36 .....  | 900 | 15-4 .....     | 455 |
| 121-184 ..... | 768 | 125-10 .....     | 1064 | 129-3 .....        | 615 | 133-41 .....  | 900 | 15-5 .....     | 455 |
| 121-186 ..... | 768 | 125-11 .....     | 1064 | 129-3-A .....      | 616 | 133-46 .....  | 900 | 15-A .....     | 457 |
| 121-190 ..... | 768 | 126-00 .....     | 703  | 129-3-A-32 .....   | 616 | 133-50 .....  | 900 | 15-B .....     | 457 |
| 121-200 ..... | 768 | 126-01 .....     | 702  | 129-3-A-34 .....   | 616 | 133-55 .....  | 900 | 15-C .....     | 457 |
| 121-225 ..... | 768 | 126-02 .....     | 702  | 129-3-H .....      | 625 | 133-60 .....  | 900 | 15-D .....     | 457 |
| 121-260 ..... | 768 | 126-03 .....     | 702  | 129-4 .....        | 615 | 133-65 .....  | 900 | 15-E .....     | 457 |
| 121-265 ..... | 768 | 126-04 .....     | 702  | 129-4-30 .....     | 617 | 133-70 .....  | 900 | 15-K .....     | 457 |
| 121-266 ..... | 768 | 126-10 .....     | 702  | 129-4-H .....      | 625 | 133-75 .....  | 900 | 16 .....       | 672 |
| 121-282 ..... | 768 | 126-15 .....     | 703  | 129-5 .....        | 618 | 133-80 .....  | 900 | 16-2 .....     | 672 |
| 121-293 ..... | 768 | 127 .....        | 702  | 129-5-45 .....     | 619 | 133-85 .....  | 900 | 16-21 .....    | 672 |
| 121-310 ..... | 768 | 127-2 .....      | 604  | 129-5-45-H10 ..... | 621 | 133-90 .....  | 900 | 16-22 .....    | 672 |
| 121-319 ..... | 768 | 127-3 .....      | 604  | 129-5-45-H20 ..... | 621 | 133-95 .....  | 900 | 16-23 .....    | 672 |
| 121-326 ..... | 768 | 127-4 .....      | 604  | 129-5-50 .....     | 619 | 134-751 ..... | 691 | 160-1-E .....  | 851 |
| 121-389 ..... | 768 | 127-55 .....     | 604  | 129-5-50-H10 ..... | 621 | 134-752 ..... | 691 | 160-1-P .....  | 851 |
| 122-125 ..... | 770 | 127-6296 .....   | 605  | 129-5-50-H20 ..... | 621 | 135-1 .....   | 628 | 160-2-E .....  | 852 |
| 122-152 ..... | 770 | 127-7314 .....   | 605  | 129-5-H .....      | 620 | 135-2 .....   | 628 | 160-2-P .....  | 852 |
| 122-162 ..... | 770 | 127-7503 .....   | 605  | 129-6 .....        | 622 | 135-3 .....   | 628 | 165-E .....    | 853 |
| 122-186 ..... | 770 | 128-1 .....      | 607  | 129-7-36 .....     | 623 | 135-4 .....   | 628 | 17-0 .....     | 459 |
| 122-200 ..... | 770 | 128-2 .....      | 607  | 129-7-36-H .....   | 624 | 135-5 .....   | 628 | 17-1 .....     | 459 |
| 122-205 ..... | 770 | 128-3 .....      | 607  | 129-7-46 .....     | 623 | 139-1 .....   | 522 | 17-2 .....     | 459 |
| 122-220 ..... | 770 | 128-30 .....     | 608  | 129-7-46-H .....   | 624 | 14-01 .....   | 319 | 17-3 .....     | 459 |
| 122-225 ..... | 770 | 128-30-H .....   | 609  | 13-1 .....         | 507 | 14-02 .....   | 319 | 17-A .....     | 460 |
| 122-255 ..... | 770 | 128-4 .....      | 607  | 13-2 .....         | 507 | 14-03 .....   | 319 | 17-B .....     | 460 |
| 122-283 ..... | 770 | 128-40 .....     | 608  | 13-3 .....         | 507 | 14-1 .....    | 318 | 17-C .....     | 460 |
| 122-300 ..... | 770 | 128-40-H .....   | 609  | 13-A .....         | 508 | 14-2 .....    | 318 | 17-K .....     | 460 |
| 122-320 ..... | 770 | 128-5 .....      | 607  | 13-B .....         | 508 | 14-3 .....    | 318 | 177-1 .....    | 525 |
| 122-325 ..... | 770 | 128-50 .....     | 608  | 13-C .....         | 508 | 140-1 .....   | 343 | 177-1/10 ..... | 526 |
| 122-350 ..... | 770 | 128-50-H .....   | 609  | 130-10 .....       | 189 | 140-2 .....   | 343 | 177-2 .....    | 525 |
| 122-370 ..... | 770 | 128-60 .....     | 608  | 130-2 .....        | 189 | 140-3 .....   | 343 | 177-2/10 ..... | 526 |
| 122-405 ..... | 770 | 128-60-H .....   | 609  | 130-20 .....       | 189 | 140-S .....   | 344 | 177-3 .....    | 525 |
| 122-450 ..... | 770 | 128-F-60 .....   | 653  | 130-3 .....        | 189 | 142-1 .....   | 654 | 177-3/10 ..... | 526 |
| 122-470 ..... | 770 | 128-F-SW .....   | 652  | 133-100 .....      | 900 | 142-2 .....   | 654 | 177-4 .....    | 525 |
| 122-505 ..... | 770 | 128-T-4 .....    | 610  | 133-105 .....      | 900 | 142-3 .....   | 654 | 177-4/10 ..... | 526 |
| 122-540 ..... | 770 | 129-0 .....      | 611  | 133-110 .....      | 900 | 142-4 .....   | 654 | 177-5 .....    | 525 |
| 122-600 ..... | 770 | 129-0-25 .....   | 611  | 133-115 .....      | 900 | 145-2 .....   | 626 | 177-5/10 ..... | 526 |
| 122-635 ..... | 770 | 129-0-29 .....   | 611  | 133-120 .....      | 900 | 145-3 .....   | 626 | 177-A .....    | 527 |
| 122-700 ..... | 770 | 129-0-DC-1 ..... | 611  | 133-24 .....       | 900 | 15-0 .....    | 455 | 18-0 .....     | 462 |
| 122-750 ..... | 770 | 129-0-DC-2 ..... | 611  | 133-27 .....       | 900 | 15-00 .....   | 455 | 18-0-AS .....  | 441 |
| 122-800 ..... | 770 | 129-1 .....      | 612  | 133-30 .....       | 900 | 15-1 .....    | 455 | 18-00 .....    | 462 |

|                 |      |                     |      |                 |     |                  |     |                 |     |
|-----------------|------|---------------------|------|-----------------|-----|------------------|-----|-----------------|-----|
| 18-003A .....   | 440  | 1897F1219 .....     | 1031 | 2-152-S .....   | 108 | 20-10-2 .....    | 60  | 20-3+S .....    | 116 |
| 18-004A .....   | 440  | 1897F1222 .....     | 1031 | 2-152-Sx .....  | 144 | 20-10-25 .....   | 60  | 20-3-25 .....   | 60  |
| 18-005A .....   | 440  | 1897F1224 .....     | 1031 | 2-153-P .....   | 118 | 20-10-4 .....    | 60  | 20-3-3 .....    | 60  |
| 18-006A .....   | 440  | 1897F1227 .....     | 1031 | 2-153-Px .....  | 148 | 20-10-P3 .....   | 72  | 20-3-3-B .....  | 76  |
| 18-008A .....   | 440  | 1897F1230 .....     | 1031 | 2-153-S .....   | 122 | 20-10-S .....    | 82  | 20-3-4 .....    | 60  |
| 18-010A .....   | 440  | 1897F1232 .....     | 1031 | 2-153-Sx .....  | 151 | 20-10-S-T .....  | 95  | 20-3-4-B .....  | 76  |
| 18-012A .....   | 440  | 19-00-P .....       | 474  | 2-300-P .....   | 63  | 20-10-SP .....   | 93  | 20-3-5 .....    | 60  |
| 18-016A .....   | 440  | 19-1-P .....        | 474  | 2-300-S .....   | 67  | 20-10-SP-T ..... | 100 | 20-3-5-B .....  | 76  |
| 18-1 .....      | 462  | 19-2-P .....        | 474  | 2-301-P .....   | 84  | 20-10-V .....    | 695 | 20-3-B .....    | 76  |
| 18-2 .....      | 462  | 19-3-P .....        | 474  | 2-301-S .....   | 88  | 20-10x .....     | 137 | 20-3-H .....    | 81  |
| 18-2-AS .....   | 441  | 19-4-P .....        | 474  | 2-302-P .....   | 104 | 20-10xS .....    | 146 | 20-3-S .....    | 82  |
| 18-2-B .....    | 464  | 19-5-P .....        | 474  | 2-302-Px .....  | 139 | 20-10xSP .....   | 154 | 20-30 .....     | 60  |
| 18-208A .....   | 440  | 19-7-P .....        | 474  | 2-302-S .....   | 108 | 20-1x .....      | 137 | 20-30+ .....    | 102 |
| 18-210A .....   | 440  | 1900-30 .....       | 899  | 2-302-Sx .....  | 144 | 20-1xS .....     | 146 | 20-30+B .....   | 112 |
| 18-212A .....   | 440  | 1900-50 .....       | 899  | 2-303-P .....   | 118 | 20-2 .....       | 60  | 20-30+S .....   | 116 |
| 18-214A .....   | 440  | 1900-75 .....       | 899  | 2-303-Px .....  | 148 | 20-2+ .....      | 102 | 20-30+SP .....  | 130 |
| 18-216A .....   | 440  | 1919-200-L .....    | 1061 | 2-303-S .....   | 122 | 20-2+3 .....     | 102 | 20-30-3 .....   | 60  |
| 18-218A .....   | 440  | 1919-200-L/5 .....  | 1062 | 2-303-Sx .....  | 151 | 20-2+B .....     | 112 | 20-30-3-B ..... | 76  |
| 18-3 .....      | 462  | 1919-200-S .....    | 1061 | 2-V-150-P ..... | 166 | 20-2+S .....     | 116 | 20-30-4 .....   | 60  |
| 18-3-AS .....   | 441  | 1919-200-XL .....   | 1061 | 2-V-150-S ..... | 167 | 20-2-3 .....     | 60  | 20-30-4-B ..... | 76  |
| 18-3-B .....    | 464  | 1919-200-XL/5 ..... | 1062 | 20+ST+S .....   | 136 | 20-2-3-B .....   | 76  | 20-30-5 .....   | 60  |
| 18-314A .....   | 440  | 1919-200-XS .....   | 1061 | 20-0 .....      | 60  | 20-2-B .....     | 76  | 20-30-5-B ..... | 76  |
| 18-316A .....   | 440  | 1919-250-L .....    | 1061 | 20-0+ .....     | 102 | 20-2-S .....     | 82  | 20-30-B .....   | 76  |
| 18-318A .....   | 440  | 1919-250-L/3 .....  | 1062 | 20-00 .....     | 60  | 20-20 .....      | 60  | 20-30-H .....   | 81  |
| 18-320A .....   | 440  | 1919-250-XL .....   | 1061 | 20-00+ .....    | 102 | 20-20+ .....     | 102 | 20-30-P3 .....  | 72  |
| 18-322A .....   | 440  | 1919-250-XL/3 ..... | 1062 | 20-00x .....    | 137 | 20-20+B .....    | 112 | 20-30-S .....   | 82  |
| 18-324A .....   | 440  | 1919-290-L .....    | 1061 | 20-0x .....     | 137 | 20-20+S .....    | 116 | 20-30-SP .....  | 93  |
| 18-4 .....      | 462  | 1919-290-L/5 .....  | 1062 | 20-1 .....      | 60  | 20-20+SP .....   | 130 | 20-30x .....    | 137 |
| 18-4-B .....    | 464  | 1919-290-M .....    | 1061 | 20-1+ .....     | 102 | 20-20-3 .....    | 60  | 20-30xS .....   | 146 |
| 18-4SAF .....   | 698  | 1919-290-S .....    | 1061 | 20-1+S .....    | 116 | 20-20-3-B .....  | 76  | 20-30xSP .....  | 154 |
| 18-5 .....      | 462  | 1919-290-XL .....   | 1061 | 20-1+S-T .....  | 131 | 20-20-B .....    | 76  | 20-3x .....     | 137 |
| 18-5-B .....    | 464  | 1919-290-XL/5 ..... | 1062 | 20-1-2 .....    | 60  | 20-20-P2 .....   | 72  | 20-3xS .....    | 146 |
| 1897F1208 ..... | 1031 | 1919-900-1 .....    | 1054 | 20-1-25 .....   | 60  | 20-20-S .....    | 82  | 20-4 .....      | 60  |
| 1897F1209 ..... | 1031 | 1919-900-2 .....    | 1054 | 20-1-4 .....    | 60  | 20-20-SP .....   | 93  | 20-4-3 .....    | 60  |
| 1897F1210 ..... | 1031 | 2                   |      | 20-1-S .....    | 82  | 20-20x .....     | 137 | 20-4-3-B .....  | 76  |
| 1897F1211 ..... | 1031 | 2-150-P .....       | 63   | 20-1-S-T .....  | 95  | 20-20xS .....    | 146 | 20-4-4 .....    | 60  |
| 1897F1212 ..... | 1031 | 2-150-S .....       | 67   | 20-10 .....     | 60  | 20-20xSP .....   | 154 | 20-4-4-B .....  | 76  |
| 1897F1213 ..... | 1031 | 2-151-P .....       | 84   | 20-10+ .....    | 102 | 20-2x .....      | 137 | 20-4-5 .....    | 60  |
| 1897F1214 ..... | 1031 | 2-151-S .....       | 88   | 20-10+2 .....   | 102 | 20-2xS .....     | 146 | 20-4-5-B .....  | 76  |
| 1897F1215 ..... | 1031 | 2-152-P .....       | 104  | 20-10+S .....   | 116 | 20-3 .....       | 60  | 20-4-AV .....   | 73  |
| 1897F1216 ..... | 1031 | 2-152-Px .....      | 139  | 20-10+S-T ..... | 131 | 20-3+ .....      | 102 | 20-4-B .....    | 76  |
| 1897F1217 ..... | 1031 |                     |      | 20-10+SP .....  | 130 | 20-3+B .....     | 112 | 20-4-H .....    | 81  |

|                 |      |                |     |                  |     |                  |     |                |     |
|-----------------|------|----------------|-----|------------------|-----|------------------|-----|----------------|-----|
| 20-40 .....     | 60   | 204-2 .....    | 350 | 208-2-B .....    | 265 | 210-2 .....      | 351 | 224-0-10 ..... | 391 |
| 20-40-4 .....   | 60   | 204-3 .....    | 350 | 209-0 .....      | 266 | 210-3 .....      | 351 | 224-1 .....    | 407 |
| 20-40-4-B ..... | 76   | 204-V .....    | 700 | 209-01 .....     | 266 | 219-1 .....      | 165 | 224-178 .....  | 336 |
| 20-40-5 .....   | 60   | 205-00 .....   | 234 | 209-02 .....     | 266 | 22-0+05 .....    | 385 | 224-2 .....    | 407 |
| 20-40-5-B ..... | 76   | 205-01 .....   | 234 | 209-2-B .....    | 266 | 22-0+10 .....    | 385 | 224-675 .....  | 337 |
| 20-40-AV .....  | 73   | 205-02 .....   | 234 | 20x-TK-13 .....  | 141 | 22-0+17 .....    | 385 | 224-676 .....  | 964 |
| 20-40-B .....   | 76   | 205-02-B ..... | 236 | 21-0 .....       | 371 | 22-0-05 .....    | 384 | 224-677 .....  | 964 |
| 20-40-H .....   | 81   | 205-1 .....    | 234 | 21-0-E .....     | 373 | 22-0-10 .....    | 384 | 224-678 .....  | 964 |
| 20-5 .....      | 60   | 205-1-B .....  | 236 | 21-00 .....      | 371 | 22-0-17 .....    | 384 | 225 .....      | 360 |
| 20-5-AV .....   | 73   | 205-2 .....    | 234 | 21-00-E .....    | 373 | 22-0-2-100 ..... | 394 | 225-1 .....    | 357 |
| 20-5-H .....    | 81   | 205-2-B .....  | 236 | 21-01 .....      | 371 | 22-0-50 .....    | 384 | 225-1-G .....  | 356 |
| 20-ST .....     | 71   | 205-3 .....    | 234 | 21-01-E .....    | 373 | 22-1 .....       | 397 | 225-2 .....    | 357 |
| 20-ST+ .....    | 111  | 205-3-B .....  | 236 | 21-02 .....      | 371 | 22-1-AS .....    | 443 | 225-2-G .....  | 356 |
| 20-ST+S .....   | 129  | 205-4 .....    | 234 | 21-1 .....       | 371 | 22-2 .....       | 397 | 225-3 .....    | 357 |
| 20-ST-S .....   | 92   | 205-40 .....   | 234 | 21-1-E .....     | 373 | 22-3 .....       | 397 | 225-3-G .....  | 356 |
| 20-STx .....    | 140  | 205-5 .....    | 234 | 21-2 .....       | 371 | 22-4 .....       | 397 | 225-SK .....   | 359 |
| 20-STxS .....   | 153  | 206-00 .....   | 237 | 21-2-E .....     | 373 | 22-5 .....       | 397 | 225-SK-G ..... | 358 |
| 200-1 .....     | 199  | 206-01 .....   | 237 | 21-3 .....       | 371 | 220+ .....       | 333 | 226-4/11 ..... | 643 |
| 201-0 .....     | 222  | 206-02 .....   | 237 | 21-3-E .....     | 373 | 220-1 .....      | 331 | 229-01 .....   | 392 |
| 201-1 .....     | 222  | 206-02-B ..... | 239 | 21-4 .....       | 371 | 220-2 .....      | 331 | 229-1 .....    | 641 |
| 201-1-F .....   | 1016 | 206-1 .....    | 237 | 21-4-E .....     | 373 | 220-3 .....      | 331 | 229-1-1 .....  | 638 |
| 201-2 .....     | 222  | 206-1-B .....  | 239 | 21-4-E-180 ..... | 378 | 220-4 .....      | 331 | 229-1-2 .....  | 639 |
| 201-2-F .....   | 1016 | 206-2 .....    | 237 | 21-40 .....      | 375 | 2200 .....       | 760 | 229-2 .....    | 640 |
| 201-3 .....     | 222  | 206-2-B .....  | 239 | 21-41 .....      | 375 | 2200-1 .....     | 759 | 229-3 .....    | 640 |
| 201-4 .....     | 222  | 206-3 .....    | 237 | 21-42 .....      | 375 | 2200-2 .....     | 759 | 23 .....       | 520 |
| 201-5 .....     | 270  | 206-3-B .....  | 239 | 21-44-E .....    | 373 | 2200-3 .....     | 759 | 230-l .....    | 642 |
| 202-0 .....     | 223  | 206-4 .....    | 237 | 21-5 .....       | 371 | 2200-4 .....     | 759 | 236-050 .....  | 887 |
| 202-1 .....     | 223  | 206-40 .....   | 237 | 21-5-E .....     | 373 | 221-1 .....      | 332 | 236-055 .....  | 887 |
| 202-1-F .....   | 1017 | 206-5 .....    | 237 | 21-6 .....       | 371 | 221-2 .....      | 332 | 236-060 .....  | 887 |
| 202-2 .....     | 223  | 207-00 .....   | 240 | 21-6-E .....     | 373 | 221-3 .....      | 332 | 236-070 .....  | 887 |
| 202-2-F .....   | 1017 | 207-01 .....   | 240 | 21-7 .....       | 371 | 221-4 .....      | 332 | 236-080 .....  | 887 |
| 202-3 .....     | 223  | 207-02 .....   | 240 | 21-7-E .....     | 373 | 221-G .....      | 406 | 236-090 .....  | 887 |
| 202-4 .....     | 223  | 207-02-B ..... | 242 | 21-8 .....       | 371 | 222-1 .....      | 509 | 236-100 .....  | 887 |
| 202-5 .....     | 271  | 207-1 .....    | 240 | 21-89 .....      | 371 | 222-S .....      | 509 | 236-110 .....  | 887 |
| 203-0 .....     | 225  | 207-1-B .....  | 242 | 21-9 .....       | 371 | 222-U .....      | 509 | 236-120 .....  | 887 |
| 203-1 .....     | 225  | 207-2 .....    | 240 | 21-90 .....      | 371 | 223 .....        | 408 | 236-130 .....  | 887 |
| 203-2 .....     | 225  | 207-2-B .....  | 242 | 21-V-0 .....     | 377 | 223-1 .....      | 521 | 236-140 .....  | 887 |
| 203-3 .....     | 225  | 207-3 .....    | 240 | 21-V-040 .....   | 376 | 223-2 .....      | 521 | 236-150 .....  | 887 |
| 203-4 .....     | 225  | 207-3-B .....  | 242 | 21-V-060 .....   | 376 | 223-3 .....      | 521 | 236-160 .....  | 887 |
| 204-0 .....     | 349  | 208-0 .....    | 265 | 21-V-080 .....   | 376 | 223-G .....      | 447 | 236-170 .....  | 887 |
| 204-02 .....    | 349  | 208-01 .....   | 265 | 21-V-310 .....   | 376 | 223-K .....      | 447 | 24-A .....     | 399 |
| 204-1 .....     | 350  | 208-02 .....   | 265 | 210-1 .....      | 351 | 224-0-05 .....   | 391 | 24-B .....     | 399 |

|               |     |               |     |                            |      |                            |      |                  |     |
|---------------|-----|---------------|-----|----------------------------|------|----------------------------|------|------------------|-----|
| 24-C .....    | 399 | 291-020 ..... | 877 | 294-A/9 .....              | 884  | 3-125111-NY-<br>NY-0 ..... | 1002 | 3-501-P .....    | 84  |
| 245-004 ..... | 756 | 291-025 ..... | 877 | 295-010 .....              | 885  | 3-200-P .....              | 63   | 3-501-S .....    | 88  |
| 25-A .....    | 398 | 291-030 ..... | 877 | 295-030 .....              | 885  | 3-200-S .....              | 67   | 3-502-P .....    | 104 |
| 25-B .....    | 398 | 291-040 ..... | 877 | 295-040 .....              | 885  | 3-201-P .....              | 84   | 3-502-Px .....   | 139 |
| 25-C .....    | 398 | 291-050 ..... | 877 | 295-050 .....              | 885  | 3-201-S .....              | 88   | 3-502-S .....    | 108 |
| 25-D .....    | 398 | 291-060 ..... | 877 | 295-060 .....              | 885  | 3-202-P .....              | 104  | 3-502-Sx .....   | 144 |
| 25-K .....    | 398 | 291-080 ..... | 877 | 295-080 .....              | 885  | 3-202-Px .....             | 139  | 3-503-P .....    | 118 |
| 250-010 ..... | 871 | 291-100 ..... | 877 | 295-A/9 .....              | 886  | 3-202-S .....              | 108  | 3-503-Px .....   | 148 |
| 250-012 ..... | 871 | 291-120 ..... | 877 | 297-020 .....              | 888  | 3-202-Sx .....             | 144  | 3-503-S .....    | 122 |
| 250-014 ..... | 871 | 291-140 ..... | 877 | 297-025 .....              | 888  | 3-203-P .....              | 118  | 3-503-Sx .....   | 151 |
| 250-015 ..... | 871 | 291-170 ..... | 877 | 297-030 .....              | 888  | 3-203-Px .....             | 148  | 30-0 .....       | 65  |
| 250-020 ..... | 871 | 291-190 ..... | 877 | 297-040 .....              | 888  | 3-203-S .....              | 122  | 30-00 .....      | 65  |
| 250-025 ..... | 871 | 291-A/9 ..... | 878 | 297-050 .....              | 888  | 3-203-Sx .....             | 151  | 30-00x .....     | 142 |
| 250-030 ..... | 871 | 292-015 ..... | 879 | 297-060 .....              | 888  | 3-250-P .....              | 63   | 30-0x .....      | 142 |
| 250-035 ..... | 871 | 292-020 ..... | 879 | 297-080 .....              | 888  | 3-250-S .....              | 67   | 30-1 .....       | 65  |
| 250-042 ..... | 873 | 292-025 ..... | 879 | 297-A/7 .....              | 889  | 3-300-P .....              | 63   | 30-1+ .....      | 106 |
| 250-043 ..... | 873 | 292-030 ..... | 879 | 297-B/7 .....              | 889  | 3-300-S .....              | 67   | 30-1+S .....     | 120 |
| 250-044 ..... | 873 | 292-040 ..... | 879 | <b>3</b>                   |      | 3-301-P .....              | 84   | 30-1+S-T .....   | 133 |
| 250-045 ..... | 873 | 292-050 ..... | 879 | 3-030111-GU-GU-1           | 999  | 3-301-S .....              | 88   | 30-1-2 .....     | 65  |
| 250-046 ..... | 873 | 292-060 ..... | 879 | 3-030111-KU-KU-1           | 998  | 3-302-P .....              | 104  | 30-1-S .....     | 86  |
| 250-120 ..... | 872 | 292-080 ..... | 879 | 3-030111-NY-<br>NY-1 ..... | 1001 | 3-302-Px .....             | 139  | 30-1-S-T .....   | 97  |
| 250-130 ..... | 872 | 292-100 ..... | 879 | 3-040111-GU-GU-1           | 999  | 3-302-S .....              | 108  | 30-10 .....      | 65  |
| 250-140 ..... | 872 | 292-A/9 ..... | 880 | 3-040111-GU-<br>KU-1 ..... | 1000 | 3-302-Sx .....             | 144  | 30-10+ .....     | 106 |
| 250-500 ..... | 874 | 293-015 ..... | 881 | 3-040111-KU-KU-1           | 998  | 3-303-P .....              | 118  | 30-10+S .....    | 120 |
| 250-520 ..... | 874 | 293-020 ..... | 881 | 3-040111-NY-<br>NY-1 ..... | 1001 | 3-303-Px .....             | 148  | 30-10+S-T .....  | 133 |
| 250-540 ..... | 874 | 293-025 ..... | 881 | 3-050111-GU-GU-1           | 999  | 3-303-S .....              | 122  | 30-10-2 .....    | 65  |
| 250-545 ..... | 874 | 293-030 ..... | 881 | 3-050111-KU-KU-1           | 998  | 3-303-Sx .....             | 151  | 30-10-P3 .....   | 75  |
| 250-550 ..... | 875 | 293-040 ..... | 881 | 3-050111-NY-<br>NY-1 ..... | 1001 | 3-400-P .....              | 63   | 30-10-S .....    | 86  |
| 250-560 ..... | 875 | 293-050 ..... | 881 | 3-060111-GU-GU-1           | 999  | 3-400-S .....              | 67   | 30-10-S-T .....  | 97  |
| 250-570 ..... | 875 | 293-060 ..... | 881 | 3-060111-KU-KU-1           | 998  | 3-401-P .....              | 84   | 30-10-SP .....   | 94  |
| 250-600 ..... | 876 | 293-080 ..... | 881 | 3-060111-NY-<br>NY-1 ..... | 1001 | 3-401-S .....              | 88   | 30-10-SP-T ..... | 101 |
| 27-A .....    | 389 | 293-100 ..... | 881 | 3-080111-GU-GU-1           | 999  | 3-402-P .....              | 104  | 30-10x .....     | 142 |
| 28-A .....    | 387 | 293-A/9 ..... | 882 | 3-080111-NY-<br>NY-1 ..... | 1001 | 3-402-Px .....             | 139  | 30-10xS .....    | 150 |
| 28-B .....    | 387 | 294-015 ..... | 883 | 3-080111-KU-KU-1           | 998  | 3-402-S .....              | 108  | 30-10xSP .....   | 155 |
| 28-C .....    | 404 | 294-020 ..... | 883 | 3-080111-NY-<br>NY-1 ..... | 1001 | 3-402-Sx .....             | 144  | 30-1x .....      | 142 |
| 28-D .....    | 404 | 294-025 ..... | 883 | 3-100111-GU-GU-1           | 999  | 3-403-P .....              | 118  | 30-1xS .....     | 150 |
| 280-085 ..... | 862 | 294-030 ..... | 883 | 3-100112-GU-GU-1           | 999  | 3-403-Px .....             | 148  | 30-2 .....       | 65  |
| 280-100 ..... | 862 | 294-040 ..... | 883 | 3-080111-NY-<br>NY-1 ..... | 1001 | 3-403-S .....              | 122  | 30-2+ .....      | 106 |
| 280-250 ..... | 862 | 294-050 ..... | 883 | 3-100111-NY-<br>NY-0 ..... | 1002 | 3-403-Sx .....             | 151  | 30-2+B .....     | 113 |
| 280-300 ..... | 862 | 294-060 ..... | 883 |                            |      | 3-500-P .....              | 63   | 30-2+S .....     | 120 |
| 29-A-69 ..... | 514 | 294-080 ..... | 883 |                            |      | 3-500-S .....              | 67   | 30-2-3 .....     | 65  |
| 291-015 ..... | 877 | 294-100 ..... | 883 |                            |      |                            |      | 30-2-3-B .....   | 78  |



|                 |     |                |     |                |     |                 |     |                 |     |
|-----------------|-----|----------------|-----|----------------|-----|-----------------|-----|-----------------|-----|
| 30-2-B .....    | 78  | 30-3xS .....   | 150 | 300H0501 ..... | 930 | 300H1006 .....  | 930 | 300SZ0504 ..... | 935 |
| 30-2-S .....    | 86  | 30-3xSP .....  | 155 | 300H0502 ..... | 930 | 300H1007 .....  | 930 | 300SZ0505 ..... | 935 |
| 30-20 .....     | 65  | 30-4 .....     | 65  | 300H0503 ..... | 930 | 300H1008 .....  | 930 | 300SZ0506 ..... | 935 |
| 30-20+ .....    | 106 | 30-40 .....    | 65  | 300H0504 ..... | 930 | 300H1009 .....  | 930 | 300SZ0507 ..... | 935 |
| 30-20+B .....   | 113 | 30-5 .....     | 65  | 300H0505 ..... | 930 | 300H1010 .....  | 930 | 300SZ0508 ..... | 935 |
| 30-20+S .....   | 120 | 300-1 .....    | 201 | 300H0506 ..... | 930 | 300H10S5 .....  | 933 | 300SZ0509 ..... | 935 |
| 30-20+T .....   | 968 | 300H0201 ..... | 930 | 300H0507 ..... | 930 | 300H10S6 .....  | 934 | 300SZ0510 ..... | 935 |
| 30-20-3 .....   | 65  | 300H0202 ..... | 930 | 300H0508 ..... | 930 | 300SZ0201 ..... | 935 | 300SZ0511 ..... | 935 |
| 30-20-3-B ..... | 78  | 300H0203 ..... | 930 | 300H0510 ..... | 930 | 300SZ0202 ..... | 935 | 300SZ0512 ..... | 935 |
| 30-20-B .....   | 78  | 300H0204 ..... | 930 | 300H05S5 ..... | 933 | 300SZ0203 ..... | 935 | 300SZ0601 ..... | 935 |
| 30-20-P2 .....  | 75  | 300H0205 ..... | 930 | 300H05S6 ..... | 934 | 300SZ0204 ..... | 935 | 300SZ0602 ..... | 935 |
| 30-20-S .....   | 86  | 300H0206 ..... | 930 | 300H0601 ..... | 930 | 300SZ0205 ..... | 935 | 300SZ0603 ..... | 935 |
| 30-20-SP .....  | 94  | 300H0207 ..... | 930 | 300H0602 ..... | 930 | 300SZ0206 ..... | 935 | 300SZ0604 ..... | 935 |
| 30-20-T .....   | 967 | 300H0208 ..... | 930 | 300H0603 ..... | 930 | 300SZ0207 ..... | 935 | 300SZ0605 ..... | 935 |
| 30-20x .....    | 142 | 300H0209 ..... | 930 | 300H0604 ..... | 930 | 300SZ0208 ..... | 935 | 300SZ0606 ..... | 935 |
| 30-20xS .....   | 150 | 300H0210 ..... | 930 | 300H0605 ..... | 930 | 300SZ0209 ..... | 935 | 300SZ0607 ..... | 935 |
| 30-20xSP .....  | 155 | 300H02S5 ..... | 933 | 300H0606 ..... | 930 | 300SZ0210 ..... | 935 | 300SZ0608 ..... | 935 |
| 30-2x .....     | 142 | 300H02S6 ..... | 934 | 300H0607 ..... | 930 | 300SZ0301 ..... | 935 | 300SZ0609 ..... | 935 |
| 30-2xS .....    | 150 | 300H0301 ..... | 930 | 300H0608 ..... | 930 | 300SZ0302 ..... | 935 | 300SZ0610 ..... | 935 |
| 30-3 .....      | 65  | 300H0302 ..... | 930 | 300H0609 ..... | 930 | 300SZ0303 ..... | 935 | 300SZ0611 ..... | 935 |
| 30-3+ .....     | 106 | 300H0303 ..... | 930 | 300H0610 ..... | 930 | 300SZ0304 ..... | 935 | 300SZ0612 ..... | 935 |
| 30-3+B .....    | 113 | 300H0304 ..... | 930 | 300H06S5 ..... | 933 | 300SZ0305 ..... | 935 | 300SZ0801 ..... | 935 |
| 30-3+S .....    | 120 | 300H0305 ..... | 930 | 300H06S6 ..... | 934 | 300SZ0306 ..... | 935 | 300SZ0802 ..... | 935 |
| 30-3-25 .....   | 65  | 300H0306 ..... | 930 | 300H07S5 ..... | 933 | 300SZ0307 ..... | 935 | 300SZ0803 ..... | 935 |
| 30-3-3 .....    | 65  | 300H0307 ..... | 930 | 300H07S6 ..... | 934 | 300SZ0308 ..... | 935 | 300SZ0804 ..... | 935 |
| 30-3-3-B .....  | 78  | 300H0308 ..... | 930 | 300H0801 ..... | 930 | 300SZ0309 ..... | 935 | 300SZ0805 ..... | 935 |
| 30-3-4 .....    | 65  | 300H0309 ..... | 930 | 300H0802 ..... | 930 | 300SZ0310 ..... | 935 | 300SZ0806 ..... | 935 |
| 30-3-4-B .....  | 78  | 300H0310 ..... | 930 | 300H0803 ..... | 930 | 300SZ0311 ..... | 935 | 300SZ0807 ..... | 935 |
| 30-3-5 .....    | 65  | 300H03S5 ..... | 933 | 300H0804 ..... | 930 | 300SZ0401 ..... | 935 | 300SZ0808 ..... | 935 |
| 30-3-5-B .....  | 78  | 300H03S6 ..... | 934 | 300H0805 ..... | 930 | 300SZ0402 ..... | 935 | 300SZ0809 ..... | 935 |
| 30-3-B .....    | 78  | 300H0401 ..... | 930 | 300H0806 ..... | 930 | 300SZ0403 ..... | 935 | 300SZ0810 ..... | 935 |
| 30-3-P3 .....   | 75  | 300H0402 ..... | 930 | 300H0807 ..... | 930 | 300SZ0404 ..... | 935 | 300SZ0811 ..... | 935 |
| 30-3-S .....    | 86  | 300H0403 ..... | 930 | 300H0808 ..... | 930 | 300SZ0405 ..... | 935 | 300SZ0812 ..... | 935 |
| 30-3-SP .....   | 94  | 300H0404 ..... | 930 | 300H0809 ..... | 930 | 300SZ0406 ..... | 935 | 301-159 .....   | 890 |
| 30-30 .....     | 65  | 300H0405 ..... | 930 | 300H0810 ..... | 930 | 300SZ0407 ..... | 935 | 301-198 .....   | 890 |
| 30-30+ .....    | 106 | 300H0406 ..... | 930 | 300H08S5 ..... | 933 | 300SZ0408 ..... | 935 | 301-238 .....   | 890 |
| 30-30+B .....   | 113 | 300H0407 ..... | 930 | 300H08S6 ..... | 934 | 300SZ0409 ..... | 935 | 301-318 .....   | 890 |
| 30-30-B .....   | 78  | 300H0408 ..... | 930 | 300H1001 ..... | 930 | 300SZ0410 ..... | 935 | 301-397 .....   | 890 |
| 30-30x .....    | 142 | 300H0409 ..... | 930 | 300H1002 ..... | 930 | 300SZ0411 ..... | 935 | 301-476 .....   | 890 |
| 30-30xS .....   | 150 | 300H0410 ..... | 930 | 300H1003 ..... | 930 | 300SZ0501 ..... | 935 | 301-635 .....   | 890 |
| 30-30xSP .....  | 155 | 300H04S5 ..... | 933 | 300H1004 ..... | 930 | 300SZ0502 ..... | 935 | 301-794 .....   | 890 |
| 30-3x .....     | 142 | 300H04S6 ..... | 934 | 300H1005 ..... | 930 | 300SZ0503 ..... | 935 | 301-953 .....   | 890 |

|                |      |                |      |               |     |                 |     |                |     |
|----------------|------|----------------|------|---------------|-----|-----------------|-----|----------------|-----|
| 301-A/9 .....  | 891  | 30405021 ..... | 1006 | 326-028 ..... | 761 | 327-020-B ..... | 928 | 329-215 .....  | 920 |
| 30103021 ..... | 1004 | 30406021 ..... | 1006 | 326-029 ..... | 761 | 327-020-Z ..... | 929 | 329-216 .....  | 920 |
| 30104021 ..... | 1004 | 31-1 .....     | 659  | 326-030 ..... | 761 | 327-040-B ..... | 928 | 329-220 .....  | 920 |
| 30105021 ..... | 1004 | 31-2 .....     | 659  | 326-031 ..... | 761 | 327-040-Z ..... | 929 | 33 .....       | 661 |
| 30106021 ..... | 1004 | 315-801 .....  | 863  | 326-032 ..... | 761 | 327-050-B ..... | 928 | 330-001 .....  | 913 |
| 30108021 ..... | 1004 | 315-802 .....  | 863  | 326-033 ..... | 761 | 327-050-Z ..... | 929 | 330-0015 ..... | 913 |
| 302-127 .....  | 892  | 32-1 .....     | 660  | 326-034 ..... | 761 | 327-070-B ..... | 928 | 330-001R ..... | 918 |
| 302-159 .....  | 892  | 32-2 .....     | 660  | 326-035 ..... | 761 | 327-070-Z ..... | 929 | 330-001V ..... | 919 |
| 302-198 .....  | 892  | 321-200 .....  | 757  | 326-036 ..... | 761 | 327-100-B ..... | 928 | 330-002 .....  | 913 |
| 302-238 .....  | 892  | 321-400 .....  | 757  | 326-037 ..... | 761 | 327-100-Z ..... | 929 | 330-0025 ..... | 913 |
| 302-277 .....  | 892  | 321-600 .....  | 757  | 326-038 ..... | 761 | 327-150-B ..... | 928 | 330-002R ..... | 918 |
| 302-318 .....  | 892  | 321-800 .....  | 757  | 326-039 ..... | 761 | 327-150-Z ..... | 929 | 330-002V ..... | 919 |
| 302-357 .....  | 892  | 322-200 .....  | 758  | 326-040 ..... | 761 | 327-200-B ..... | 928 | 330-003 .....  | 913 |
| 302-397 .....  | 892  | 322-400 .....  | 758  | 326-041 ..... | 761 | 327-200-Z ..... | 929 | 330-003P ..... | 917 |
| 302-476 .....  | 892  | 322-600 .....  | 758  | 326-042 ..... | 761 | 327-300-B ..... | 928 | 330-003R ..... | 918 |
| 302-556 .....  | 892  | 322-800 .....  | 758  | 326-043 ..... | 761 | 327-300-Z ..... | 929 | 330-003V ..... | 919 |
| 302-635 .....  | 892  | 326-002 .....  | 761  | 326-044 ..... | 761 | 328-101 .....   | 911 | 330-004 .....  | 913 |
| 302-794 .....  | 892  | 326-003 .....  | 761  | 326-045 ..... | 761 | 328-1015 .....  | 911 | 330-004P ..... | 917 |
| 302-953 .....  | 892  | 326-004 .....  | 761  | 326-046 ..... | 761 | 328-102 .....   | 911 | 330-004R ..... | 918 |
| 302-A/13 ..... | 893  | 326-005 .....  | 761  | 326-047 ..... | 761 | 328-1025 .....  | 911 | 330-004V ..... | 919 |
| 30203021 ..... | 1005 | 326-006 .....  | 761  | 326-048 ..... | 761 | 328-103 .....   | 911 | 330-005 .....  | 913 |
| 30204021 ..... | 1005 | 326-007 .....  | 761  | 326-049 ..... | 761 | 328-104 .....   | 911 | 330-005P ..... | 917 |
| 30205021 ..... | 1005 | 326-008 .....  | 761  | 326-050 ..... | 761 | 328-105 .....   | 911 | 330-005R ..... | 918 |
| 30206021 ..... | 1005 | 326-009 .....  | 761  | 326-055 ..... | 761 | 328-106 .....   | 911 | 330-005V ..... | 919 |
| 30208021 ..... | 1005 | 326-010 .....  | 761  | 326-060 ..... | 761 | 328-107 .....   | 911 | 330-006 .....  | 913 |
| 30210021 ..... | 1005 | 326-011 .....  | 761  | 326-065 ..... | 761 | 328-108 .....   | 911 | 330-006P ..... | 917 |
| 30212521 ..... | 1005 | 326-012 .....  | 761  | 326-070 ..... | 761 | 328-110 .....   | 911 | 330-006R ..... | 918 |
| 303-127 .....  | 894  | 326-013 .....  | 761  | 326-075 ..... | 761 | 328-112 .....   | 911 | 330-006V ..... | 919 |
| 303-159 .....  | 894  | 326-014 .....  | 761  | 326-080 ..... | 761 | 328-115 .....   | 911 | 330-007 .....  | 913 |
| 303-198 .....  | 894  | 326-015 .....  | 761  | 326-085 ..... | 761 | 328-120 .....   | 911 | 330-008 .....  | 913 |
| 303-238 .....  | 894  | 326-016 .....  | 761  | 326-090 ..... | 761 | 329-201 .....   | 920 | 330-008P ..... | 917 |
| 303-277 .....  | 894  | 326-017 .....  | 761  | 326-095 ..... | 761 | 329-2015 .....  | 920 | 330-008R ..... | 918 |
| 303-318 .....  | 894  | 326-018 .....  | 761  | 326-100 ..... | 761 | 329-202 .....   | 920 | 330-008V ..... | 919 |
| 303-357 .....  | 894  | 326-019 .....  | 761  | 326-109 ..... | 764 | 329-2025 .....  | 920 | 330-010 .....  | 913 |
| 303-397 .....  | 894  | 326-020 .....  | 761  | 326-119 ..... | 764 | 329-203 .....   | 920 | 330-010P ..... | 917 |
| 303-476 .....  | 894  | 326-021 .....  | 761  | 326-120 ..... | 764 | 329-204 .....   | 920 | 330-010R ..... | 918 |
| 303-556 .....  | 894  | 326-022 .....  | 761  | 326-130 ..... | 764 | 329-205 .....   | 920 | 330-010V ..... | 919 |
| 303-635 .....  | 894  | 326-023 .....  | 761  | 326-230 ..... | 765 | 329-206 .....   | 920 | 330-012 .....  | 913 |
| 303-794 .....  | 894  | 326-024 .....  | 761  | 326-320 ..... | 766 | 329-207 .....   | 920 | 330-012V ..... | 919 |
| 303-953 .....  | 894  | 326-025 .....  | 761  | 326-330 ..... | 766 | 329-208 .....   | 920 | 330-015 .....  | 913 |
| 30403021 ..... | 1006 | 326-026 .....  | 761  | 326-350 ..... | 766 | 329-210 .....   | 920 | 330-020 .....  | 913 |
| 30404021 ..... | 1006 | 326-027 .....  | 761  | 326-360 ..... | 766 | 329-212 .....   | 920 | 330-501 .....  | 915 |

|          |     |          |     |          |      |          |      |         |     |
|----------|-----|----------|-----|----------|------|----------|------|---------|-----|
| 330-5015 | 915 | 331-008K | 924 | 332-130  | 940  | 401-TX15 | 895  | 406-60  | 902 |
| 330-502  | 915 | 331-008P | 925 | 332-132  | 940  | 401-TX20 | 895  | 406-65  | 902 |
| 330-5025 | 915 | 331-008R | 926 | 332-352  | 938  | 401-TX25 | 895  | 406-70  | 902 |
| 330-503  | 915 | 331-008V | 927 | 332-353  | 938  | 401-TX27 | 895  | 406-75  | 902 |
| 330-504  | 915 | 331-010  | 922 | 332-354  | 938  | 401-TX30 | 895  | 406-80  | 902 |
| 330-505  | 915 | 331-010K | 924 | 334-030  | 946  | 401-TX40 | 895  | 406-85  | 902 |
| 330-506  | 915 | 331-010P | 925 | 334-031  | 946  | 402-TX10 | 897  | 406-90  | 902 |
| 330-508  | 915 | 331-010R | 926 | 334-820  | 772  | 402-TX15 | 897  | 406-95  | 902 |
| 330-510  | 915 | 331-010V | 927 | 334-900  | 941  | 402-TX20 | 897  | 41-0    | 206 |
| 330-512  | 915 | 331-012  | 922 | 334-908  | 942  | 402-TX25 | 897  | 41-1    | 206 |
| 330-515  | 915 | 331-012K | 924 | 334-910  | 942  | 402-TX27 | 897  | 41-2    | 206 |
| 330-520  | 915 | 331-012V | 927 | 334-918  | 943  | 402-TX30 | 897  | 41-3    | 206 |
| 331-001  | 922 | 331-015  | 922 | 334-920  | 943  | 402-TX40 | 897  | 41-4    | 206 |
| 331-001K | 924 | 331-020  | 922 | 334-928  | 944  | 402-TX45 | 897  | 41-5    | 206 |
| 331-001R | 926 | 331-501  | 923 | 334-929  | 945  | 402-TX50 | 897  | 41-5-B  | 207 |
| 331-001V | 927 | 331-5015 | 923 | 334-930  | 944  | 403-TR10 | 898  | 42-0    | 208 |
| 331-002  | 922 | 331-502  | 923 | 334-931  | 945  | 403-TR15 | 898  | 42-1    | 208 |
| 331-002K | 924 | 331-5025 | 923 | 334-933  | 946  | 403-TR20 | 898  | 42-2    | 208 |
| 331-002R | 926 | 331-503  | 923 | 334-934  | 946  | 403-TR25 | 898  | 42-3    | 208 |
| 331-002V | 927 | 331-504  | 923 | 334S918  | 943  | 403-TR27 | 898  | 42-4    | 208 |
| 331-003  | 922 | 331-505  | 923 | 34-0     | 662  | 403-TR30 | 898  | 42-5    | 208 |
| 331-003K | 924 | 331-506  | 923 | 34-1     | 662  | 403-TR40 | 898  | 42-5-B  | 209 |
| 331-003P | 925 | 331-508  | 923 | 343-050  | 1007 | 403-TR45 | 898  | 420-028 | 841 |
| 331-003R | 926 | 331-510  | 923 | 343-060  | 1007 | 403-TR50 | 898  | 420-053 | 841 |
| 331-003V | 927 | 331-512  | 923 | 345F050  | 1020 | 4040     | 1053 | 420-078 | 841 |
| 331-004  | 922 | 331-515  | 923 | 345F100  | 1020 | 4041     | 1053 | 420-130 | 841 |
| 331-004K | 924 | 331-520  | 923 | 365-050  | 840  | 406-100  | 902  | 420-155 | 841 |
| 331-004P | 925 | 332-100  | 941 | 365-075  | 840  | 406-105  | 902  | 420-206 | 841 |
| 331-004R | 926 | 332-102  | 939 | 365-100  | 840  | 406-110  | 902  | 43-0-1  | 279 |
| 331-004V | 927 | 332-103  | 939 | 365-150  | 840  | 406-115  | 902  | 43-0-11 | 279 |
| 331-005  | 922 | 332-104  | 939 | 365-200  | 840  | 406-120  | 902  | 43-1    | 277 |
| 331-005K | 924 | 332-105  | 939 | 365-250  | 840  | 406-24   | 902  | 43-11   | 278 |
| 331-005P | 925 | 332-106  | 939 | 38       | 636  | 406-27   | 902  | 43-12   | 278 |
| 331-005R | 926 | 332-108  | 939 | 4        |      | 406-30   | 902  | 43-13   | 278 |
| 331-005V | 927 | 332-110  | 939 | 4-SP-P   | 74   | 406-32   | 902  | 43-2    | 277 |
| 331-006  | 922 | 332-112  | 939 | 4-SP-S   | 164  | 406-34   | 902  | 43-3    | 277 |
| 331-006K | 924 | 332-122  | 940 | 40-3     | 637  | 406-36   | 902  | 430-028 | 842 |
| 331-006P | 925 | 332-123  | 940 | 40-5     | 637  | 406-38   | 902  | 430-040 | 842 |
| 331-006R | 926 | 332-124  | 940 | 401-A/8  | 896  | 406-41   | 902  | 430-055 | 842 |
| 331-006V | 927 | 332-125  | 940 | 401-TX09 | 895  | 406-46   | 902  | 430-070 | 842 |
| 331-007  | 922 | 332-126  | 940 | 401-TX10 | 895  | 406-50   | 902  | 430-105 | 842 |
| 331-008  | 922 | 332-128  | 940 |          |      | 406-55   | 902  | 431-001 | 843 |

|              |     |                |     |                |     |              |     |              |     |
|--------------|-----|----------------|-----|----------------|-----|--------------|-----|--------------|-----|
| 431-002      | 843 | 469-0200-050   | 811 | 469P0300-050   | 813 | 475K0250-120 | 818 | 49-9         | 745 |
| 431-003      | 843 | 469-0200-060   | 811 | 469P0300-060   | 813 | 475K0300-140 | 818 | 49-A         | 747 |
| 431-004      | 843 | 469-0200-080   | 811 | 469P0300-080   | 813 | 475K0500-140 | 818 | 49-B         | 747 |
| 431-006      | 843 | 469-0200-100   | 811 | 469P0300-100   | 813 | 475K0800-140 | 818 | 49-C         | 747 |
| 431-009      | 843 | 469-0250-100   | 811 | 469P0300-120   | 813 | 475K1000-120 | 818 | 49-T-1       | 751 |
| 431-010      | 843 | 469-0250-120   | 811 | 469P0300-140   | 813 | 475K1250-120 | 818 | 49-T-2       | 751 |
| 431-012      | 843 | 469-0300-050   | 811 | 469P0400-080   | 813 | 475K1500-120 | 818 | 49-T-3       | 751 |
| 432-001      | 844 | 469-0300-060   | 811 | 469P0400-100   | 813 | 476K0300-140 | 819 | 49-T-4       | 751 |
| 432-002      | 844 | 469-0300-080   | 811 | 469P0400-120   | 813 | 48           | 690 | 49-T-5       | 751 |
| 432-003      | 844 | 469-0300-100   | 811 | 469P0400-120-S | 813 | 480K0300-175 | 820 | 49-T-A       | 752 |
| 432-004      | 844 | 469-0300-120   | 811 | 469P0500-120   | 813 | 480K0400-175 | 820 | 49-U-11      | 754 |
| 432-006      | 844 | 469-0300-140   | 811 | 469P0600-120   | 813 | 480K0500-175 | 820 | 49-U-12      | 754 |
| 44-1         | 280 | 469-0400-100   | 811 | 469P0600-120-S | 813 | 480K0600-175 | 820 | 49-U-13      | 754 |
| 44-2         | 280 | 469-0400-120   | 811 | 469P0800-120   | 813 | 480K0800-175 | 820 | 49-U-14      | 754 |
| 44-3         | 280 | 469-0400-120-S | 811 | 469P1000-120   | 813 | 480K1000-175 | 820 | 49-U-15      | 754 |
| 44-4         | 280 | 469-0500-120   | 811 | 469P1250-120   | 813 | 480K1250-175 | 820 | 49-U-B       | 755 |
| 44-5         | 280 | 469-0600-120   | 811 | 469P1500-120   | 813 | 480K1500-175 | 820 | 490-0100-050 | 822 |
| 44-6         | 280 | 469-0600-120-S | 811 | 469PU0200-100  | 816 | 482-1        | 292 | 490-0120-065 | 822 |
| 44-7         | 280 | 469-0800-120   | 811 | 469PU0250-120  | 816 | 482-2        | 292 | 490-0120-080 | 822 |
| 44-8         | 280 | 469-1000-120   | 811 | 469PU0300-140  | 816 | 482-3        | 292 | 490-0150-050 | 822 |
| 440-150      | 839 | 469-1250-120   | 811 | 469PU0400-120  | 816 | 482-4        | 292 | 490-0160-080 | 822 |
| 440-156      | 839 | 469-1500-120   | 811 | 469PU0600-120  | 816 | 482-5        | 292 | 490-0200-050 | 822 |
| 440-158      | 839 | 469K0160-080   | 815 | 47-1-A         | 216 | 483-2        | 293 | 490-0200-065 | 822 |
| 45-1         | 282 | 469K0200-100   | 815 | 47-1-B         | 217 | 483-3        | 293 | 490-0200-080 | 822 |
| 45-2         | 282 | 469K0250-120   | 815 | 47-2-A         | 216 | 483-4        | 293 | 490-0200-100 | 822 |
| 45-3         | 282 | 469K0300-140   | 815 | 47-2-B         | 217 | 483-5        | 293 | 490-0200-120 | 822 |
| 45-4         | 282 | 469K0400-120   | 815 | 472H0120-060   | 821 | 49-0-S       | 750 | 490-0250-080 | 822 |
| 45-5         | 282 | 469K0500-120   | 815 | 472H0160-080   | 821 | 49-01        | 749 | 490-0250-100 | 822 |
| 45-6         | 282 | 469K0600-120   | 815 | 472H0200-100   | 821 | 49-02        | 749 | 490-0250-120 | 822 |
| 45-7         | 282 | 469K0800-120   | 815 | 472H0250-120   | 821 | 49-03        | 749 | 490-0300-065 | 822 |
| 45-8         | 282 | 469K1000-120   | 815 | 472H0300-140   | 821 | 49-04        | 749 | 490-0300-080 | 822 |
| 450-050      | 845 | 469K1250-120   | 815 | 472H0400-120   | 821 | 49-05        | 749 | 490-0300-100 | 822 |
| 450-100      | 845 | 469K1500-120   | 815 | 472H0500-120   | 821 | 49-06        | 749 | 490-0300-120 | 822 |
| 450-260      | 845 | 469P0100-050   | 813 | 472H0600-120   | 821 | 49-1         | 745 | 490-0300-140 | 822 |
| 451-1        | 689 | 469P0120-060   | 813 | 472H0800-120   | 821 | 49-10        | 745 | 490-0400-080 | 822 |
| 46-1-A       | 214 | 469P0160-080   | 813 | 472H1000-120   | 821 | 49-2         | 745 | 490-0400-100 | 822 |
| 46-1-B       | 215 | 469P0200-050   | 813 | 473K0200-120   | 817 | 49-3         | 745 | 490-0400-120 | 822 |
| 46-2-A       | 214 | 469P0200-060   | 813 | 473K0250-120   | 817 | 49-4         | 745 | 490-0400-140 | 822 |
| 46-2-B       | 215 | 469P0200-080   | 813 | 473K0300-120   | 817 | 49-5         | 745 | 490-0400-175 | 822 |
| 469-0100-050 | 811 | 469P0200-100   | 813 | 473K0400-120   | 817 | 49-6         | 745 | 490-0500-080 | 822 |
| 469-0120-060 | 811 | 469P0250-100   | 813 | 473K0500-120   | 817 | 49-7         | 745 | 490-0500-100 | 822 |
| 469-0160-080 | 811 | 469P0250-120   | 813 | 473K0600-120   | 817 | 49-8         | 745 | 490-0500-120 | 822 |

|              |     |              |     |              |     |           |     |           |     |
|--------------|-----|--------------|-----|--------------|-----|-----------|-----|-----------|-----|
| 490-0500-140 | 822 | 490P0400-100 | 825 | 493P0800-120 | 830 | 507-100   | 833 | 525-125   | 850 |
| 490-0500-175 | 822 | 490P0400-120 | 825 | 493P1000-120 | 830 | 507K040   | 837 | 525-125-G | 850 |
| 490-0600-080 | 822 | 490P0400-140 | 825 | 493P1250-120 | 830 | 507K060   | 837 | 525-125-R | 850 |
| 490-0600-120 | 822 | 490P0400-175 | 825 | 493P1500-120 | 830 | 507K080   | 837 | 525-150   | 850 |
| 490-0600-140 | 822 | 490P0500-100 | 825 | 493P1800-120 | 830 | 507K100   | 837 | 525-150-G | 850 |
| 490-0600-175 | 822 | 490P0500-120 | 825 | 493P2000-120 | 830 | 507P040   | 835 | 525-150-R | 850 |
| 490-0800-120 | 822 | 490P0500-140 | 825 | 493P2200-120 | 830 | 507P060   | 835 | 525-175   | 850 |
| 490-0800-140 | 822 | 490P0500-175 | 825 | 493P2500-120 | 830 | 507P080   | 835 | 525-175-G | 850 |
| 490-0800-175 | 822 | 490P0600-120 | 825 | 493P3000-120 | 830 | 507P100   | 835 | 525-175-R | 850 |
| 490-1000-120 | 822 | 490P0600-140 | 825 | 5            |     | 51-1      | 535 | 53-10     | 537 |
| 490-1000-140 | 822 | 490P0600-175 | 825 | 5-SP-P       | 74  | 51-2      | 535 | 53-12     | 537 |
| 490-1000-175 | 822 | 490P0800-120 | 825 | 50-1         | 534 | 51-3      | 535 | 53-14     | 537 |
| 490-1250-120 | 822 | 490P0800-140 | 825 | 50-2         | 534 | 511-200   | 847 | 53-16     | 537 |
| 490-1500-120 | 822 | 490P0800-175 | 825 | 50-3         | 534 | 511-300   | 847 | 53-18     | 537 |
| 490K0160-080 | 828 | 490P1000-120 | 825 | 505-040      | 833 | 511-400   | 847 | 53-20     | 537 |
| 490K0200-100 | 828 | 490P1000-140 | 825 | 505-060      | 833 | 511-600   | 847 | 53-22     | 537 |
| 490K0250-120 | 828 | 490P1000-175 | 825 | 505-080      | 833 | 511-800   | 847 | 53-24     | 537 |
| 490K0300-120 | 828 | 493-0400-120 | 829 | 505-100      | 833 | 516-110   | 846 | 53-30     | 537 |
| 490K0300-140 | 828 | 493-0500-120 | 829 | 505K040      | 837 | 516-155   | 846 | 53-5      | 537 |
| 490K0400-120 | 828 | 493-0600-120 | 829 | 505K060      | 837 | 516-200   | 846 | 53-6      | 537 |
| 490K0400-175 | 828 | 493-0800-120 | 829 | 505K080      | 837 | 516-300   | 846 | 53-7      | 537 |
| 490K0500-120 | 828 | 493-1000-120 | 829 | 505K100      | 837 | 517-150K  | 848 | 53-8      | 537 |
| 490K0600-120 | 828 | 493-1250-120 | 829 | 505P040      | 835 | 517-300K  | 848 | 53-A      | 539 |
| 490K0800-120 | 828 | 493-1500-120 | 829 | 505P060      | 835 | 517-450K  | 848 | 54-2      | 716 |
| 490K1000-120 | 828 | 493-1800-120 | 829 | 505P080      | 835 | 517-600K  | 848 | 54-3      | 716 |
| 490P0100-050 | 825 | 493-2000-120 | 829 | 505P100      | 835 | 52        | 536 | 55-0      | 718 |
| 490P0120-065 | 825 | 493-2200-120 | 829 | 506-040      | 833 | 520-080   | 849 | 55-1      | 718 |
| 490P0150-050 | 825 | 493-2500-120 | 829 | 506-060      | 833 | 520-100   | 849 | 55-2      | 718 |
| 490P0160-080 | 825 | 493-3000-120 | 829 | 506-080      | 833 | 520-100-G | 849 | 55-2-C    | 722 |
| 490P0200-050 | 825 | 493K0400-120 | 832 | 506-100      | 833 | 520-100-R | 849 | 55-3      | 718 |
| 490P0200-065 | 825 | 493K0500-120 | 832 | 506K040      | 837 | 520-125   | 849 | 55-4      | 718 |
| 490P0200-080 | 825 | 493K0600-120 | 832 | 506K060      | 837 | 520-125-G | 849 | 56-1      | 720 |
| 490P0200-100 | 825 | 493K0800-120 | 832 | 506K080      | 837 | 520-125-R | 849 | 56-2      | 720 |
| 490P0250-080 | 825 | 493K1000-120 | 832 | 506K100      | 837 | 520-150   | 849 | 56-3      | 720 |
| 490P0250-100 | 825 | 493K1250-120 | 832 | 506P040      | 835 | 520-150-G | 849 | 58-1      | 732 |
| 490P0250-120 | 825 | 493K1500-120 | 832 | 506P060      | 835 | 520-150-R | 849 | 58-2      | 732 |
| 490P0300-065 | 825 | 493K2000-120 | 832 | 506P080      | 835 | 520-175   | 849 | 59-0      | 736 |
| 490P0300-080 | 825 | 493K2500-120 | 832 | 506P100      | 835 | 520-175-G | 849 | 59-1      | 733 |
| 490P0300-100 | 825 | 493K3000-120 | 832 | 507-040      | 833 | 520-175-R | 849 | 59-1-1    | 734 |
| 490P0300-120 | 825 | 493P0400-120 | 830 | 507-060      | 833 | 525-100   | 850 | 59-1-2    | 734 |
| 490P0300-140 | 825 | 493P0500-120 | 830 | 507-080      | 833 | 525-100-G | 850 | 6         |     |
| 490P0400-080 | 825 | 493P0600-120 | 830 |              |     | 525-100-R | 850 |           |     |



|          |     |         |      |          |       |          |         |                |              |
|----------|-----|---------|------|----------|-------|----------|---------|----------------|--------------|
| 600-17   | 172 | 626300  | 168  | 69-A     | 492   | 70-722   | 495     | 76-3           | 904          |
| 606-1-18 | 175 | 626400  | 168  | 69-B     | 492   | 70-731   | 495     | 76-4           | 904          |
| 606-2-28 | 175 | 626500  | 168  | 69-C     | 492   | 70-732   | 495     | 76-5           | 904          |
| 606-3-38 | 175 | 633400  | 168  | 690+004  | 856   | 70-A     | 497     | 76-6           | 904          |
| 606-4-48 | 175 | 633500  | 168  | 690-180  | 856   | 70-B     | 497     | 76-7           | 904          |
| 606-5-58 | 175 | 633600  | 168  | 690-250  | 856   | 70-K     | 497     | 76-8           | 904          |
| 606-A    | 176 | 637350  | 168  | 690-300  | 856   | 71       | 789     | 76-9           | 904          |
| 608080   | 168 | 637500  | 168  | 691+005  | 857   | 721-1    | 865     | 78-1100        | 729          |
| 608130   | 168 | 637600  | 168  | 691-180  | 857   | 721F250  | 1021    | 78-12-A        | 729          |
| 609087   | 168 | 638300  | 168  | 691-250  | 857   | 728K-729 | 532     | 78-12-M08-35   | 729          |
| 609105   | 168 | 65-0    | 647  | 692-250  | 858   | 728K-A0  | 528     | 78-12-M10-35   | 729          |
| 610070   | 168 | 65-1    | 647  | 693-250  | 858   | 728K-A01 | 529     | 78-12-M10-35-2 | 729          |
| 610094   | 168 | 65-2    | 647  | 694-275  | 859   | 728K-A1  | 528     | 78-12-M12-35   | 729          |
| 610110   | 168 | 66-1    | 648  | 695-280  | 859   | 728K-A11 | 529     | 78-12-M16-35   | 729          |
| 610120   | 168 | 66-2    | 648  | 696-280  | 860   | 728K-A2  | 528     | 78-12-M20-35   | 729          |
| 612080   | 168 | 66-3    | 648  | 697-280  | 860   | 728K-A21 | 529     | 78-12-M24-25   | 729          |
| 612110   | 168 | 660-614 | 1040 | 698-280  | 861   | 728K-A3  | 528     | 78-2-B/6       | 729          |
| 612130   | 168 | 660-616 | 1040 | 699-280  | 861   | 728K-A31 | 529     | 78-2000        | 729          |
| 612150   | 168 | 660-618 | 1040 | 699904   | 1037  | 729K-J0  | 530     | 78-2500        | 729          |
| 612200   | 168 | 660-620 | 1040 | 699915   | 1037  | 729K-J01 | 531     | 78-2X-M10-55   | 729          |
| 614135   | 168 | 670817  | 484  | 699975   | 1038  | 729K-J1  | 530     | 78-2X-M12-55   | 729          |
| 614160   | 168 | 671017  | 484  | 699990   | 1039  | 729K-J11 | 531     | 78-2X-M16-55   | 729          |
| 614200   | 168 | 671217  | 484  | 7        |       | 729K-J2  | 530     | 78-2X-M20-55   | 729          |
| 614242   | 168 | 671224  | 484  |          |       | 729K-J21 | 531     | 78-2X-M24-55   | 729          |
| 614250   | 168 | 671317  | 484  |          | 70-01 | 498      | 729K-J3 | 530            | 78-2X-M30-25 |
| 616220   | 168 | 671519  | 484  | 70-011-S | 499   | 729K-J31 | 531     | 78-2X-M30-55   | 729          |
| 616270   | 168 | 671624  | 484  | 70-012-S | 499   | 730-1    | 533     | 78-3-15        | 729          |
| 616325   | 168 | 671827  | 484  | 70-02    | 498   | 730-2    | 533     | 78-3-20        | 729          |
| 618068   | 168 | 671924  | 484  | 70-021-S | 499   | 750-220  | 773     | 78-3000        | 729          |
| 618105   | 168 | 672032  | 484  | 70-022-S | 499   | 750-250  | 773     | 78-3500        | 729          |
| 618175   | 168 | 672132  | 484  | 70-1     | 494   | 76-1     | 904     | 78-40          | 729          |
| 618210   | 168 | 672432  | 484  | 70-2     | 494   | 76-10    | 904     | 78-50          | 729          |
| 621130   | 168 | 672646  | 484  | 70-3     | 494   | 76-11    | 904     | 78-60          | 729          |
| 621170   | 168 | 673046  | 484  | 70-4     | 494   | 76-12    | 904     | 78-6600        | 729          |
| 621220   | 168 | 673655  | 484  | 70-4730  | 495   | 76-13    | 904     | 8              |              |
| 621300   | 168 | 68-0    | 512  | 70-4731  | 495   | 76-14    | 904     |                |              |
| 621355   | 168 | 68-1    | 512  | 70-4733  | 495   | 76-15    | 904     |                | 8-0-621      |
| 623150   | 168 | 68-10   | 512  | 70-4734  | 495   | 76-16    | 904     | 8-0-626        | 178          |
| 623170   | 168 | 68-2    | 512  | 70-711   | 495   | 76-17    | 904     | 8-1-B          | 179          |
| 623230   | 168 | 68-3    | 512  | 70-712   | 495   | 76-18    | 904     | 8-1-F          | 179          |
| 623260   | 168 | 689-150 | 855  | 70-713   | 495   | 76-19    | 904     | 8-2-K          | 179          |
| 623325   | 168 | 689-230 | 855  | 70-721   | 495   | 76-2     | 904     | 8-2-M          | 179          |

|                 |      |                  |      |                            |      |                   |     |                     |      |
|-----------------|------|------------------|------|----------------------------|------|-------------------|-----|---------------------|------|
| 8-HP-621 .....  | 180  | 845-855 .....    | 306  | 980-250 .....              | 777  | GA12-1/2 .....    | 436 | GE2015-1615 .....   | 438  |
| 8-HP-623 .....  | 180  | 845-858 .....    | 307  | 980-275 .....              | 777  | GA12-1/4 .....    | 436 | GE22-1815 .....     | 438  |
| 8-HP-626 .....  | 180  | 880-800 .....    | 791  | 980-300 .....              | 777  | GA12-10 .....     | 436 | GE2215-1815 .....   | 438  |
| 8-HP-633 .....  | 180  | 880-801 .....    | 791  | 981-300 .....              | 777  | GA12-101 .....    | 436 | GE24-1815 .....     | 438  |
| 8-HP-637 .....  | 180  | 880-802 .....    | 791  | 982-250 .....              | 778  | GA12-121 .....    | 436 | GE3-10 .....        | 438  |
| 8-HP-800 .....  | 180  | 890-EVO1 .....   | 792  | 982-251 .....              | 778  | GA12-1515 .....   | 436 | GE4-10 .....        | 438  |
| 800 .....       | 182  | <b>9</b>         |      | 982-275 .....              | 778  | GA12-1815 .....   | 436 | GE5-10 .....        | 438  |
| 800-050 .....   | 183  | 9-1 .....        | 184  | 982-276 .....              | 778  | GA12-3 .....      | 436 | GE5-5 .....         | 438  |
| 800-100 .....   | 183  | 9-2 .....        | 184  | 982-300 .....              | 778  | GA12-3/8 .....    | 436 | GE6-10 .....        | 438  |
| 800-150 .....   | 183  | 9-3 .....        | 184  | 982-301 .....              | 778  | GA12-34 .....     | 436 | GE8-10 .....        | 438  |
| 800-626 .....   | 170  | 90-101-210 ..... | 1049 | 983-260 .....              | 778  | GA12-4 .....      | 436 | GE8-1415 .....      | 438  |
| 801 .....       | 182  | 90-102-200 ..... | 1049 | 983-261 .....              | 778  | GA12-5 .....      | 436 | GE8-1815 .....      | 438  |
| 802 .....       | 182  | 90-103-200 ..... | 1049 | 983-280 .....              | 778  | GA12-5/16 .....   | 436 | GE81-1615 .....     | 438  |
| 804 .....       | 182  | 90-104-210 ..... | 1049 | 983-281 .....              | 778  | GA12-6 .....      | 436 | Goliath-200 .....   | 576  |
| 818-0 .....     | 411  | 90-105-160 ..... | 1049 | 986-180 .....              | 779  | GA12-7/16 .....   | 436 | Goliath-218 .....   | 575  |
| 818-021 .....   | 409  | 90-105-200 ..... | 1049 | 986-181 .....              | 779  | GA12-8 .....      | 436 | Goliath-256 .....   | 574  |
| 818-100 .....   | 465  | 90-190-270 ..... | 1051 | 987-180 .....              | 779  | GA12-81 .....     | 436 | Goliath-300 .....   | 576  |
| 818-150 .....   | 466  | 90-201-210 ..... | 1050 | 987-181 .....              | 779  | GA1415-12 .....   | 436 | Goliath-318 .....   | 575  |
| 818-215 .....   | 309  | 90-202-200 ..... | 1050 | 988-180 .....              | 780  | GA1516-12 .....   | 436 | Goliath-356 .....   | 574  |
| 818-250 .....   | 418  | 90-203-200 ..... | 1050 | 988-181 .....              | 780  | GA1615-21 .....   | 436 | Goliath-500 .....   | 576  |
| 818-250-P ..... | 419  | 90-204-210 ..... | 1050 | 993-140 .....              | 780  | GA7-10 .....      | 436 | Goliath-518 .....   | 575  |
| 818-280 .....   | 418  | 90-205-160 ..... | 1050 | 993-190 .....              | 780  | GE10-10 .....     | 438 | Goliath-556 .....   | 574  |
| 818-280-P ..... | 419  | 90-205-200 ..... | 1050 | 995-175 .....              | 781  | GE10-1415 .....   | 438 | <b>K</b>            |      |
| 820-0 .....     | 308  | 90-205-200 ..... | 1050 | 995-200 .....              | 781  | GE10-1815 .....   | 438 | K-127-A/6 .....     | 606  |
| 832F380 .....   | 1021 | 90-900-06 .....  | 1052 | 995-225 .....              | 781  | GE101-1615 .....  | 438 | K-142/4 .....       | 655  |
| 836F1223 .....  | 1022 | 91-90-160 .....  | 1053 | 995-250 .....              | 781  | GE12-10 .....     | 438 | K-142/6 .....       | 655  |
| 836F1224 .....  | 1022 | 97-1 .....       | 744  | 997-150 .....              | 781  | GE12-1415 .....   | 438 | K-16-A .....        | 673  |
| 836F1225 .....  | 1022 | 97-2 .....       | 744  | 999-H .....                | 991  | GE12-1815 .....   | 438 | K-16-B .....        | 673  |
| 844-1-B .....   | 299  | 97-3 .....       | 744  | 999-SH-01 .....            | 1063 | GE14-10 .....     | 438 | K-20-1+S-T .....    | 128  |
| 844-2-B .....   | 299  | 97-4 .....       | 744  | 999-SH-02 .....            | 1063 | GE14-1415 .....   | 438 | K-20-1-2+B .....    | 114  |
| 844-3-B .....   | 299  | 970-260 .....    | 774  | 999-SH-03 .....            | 1063 | GE14-1815 .....   | 438 | K-20-15 .....       | 115  |
| 844-4-B .....   | 299  | 970-261 .....    | 774  | <b>E</b>                   |      | GE1415-1615 ..... | 438 | K-200-1 .....       | 200  |
| 844-5-B .....   | 299  | 971-240 .....    | 774  | EVLW-2-INDUSTRIE .....     | 987  | GE142-1615 .....  | 438 | K-200-1-F .....     | 1018 |
| 844-626 .....   | 171  | 971-241 .....    | 774  | EVLW-2-KFZ .....           | 988  | GE16-10 .....     | 438 | K-201-1-F .....     | 1019 |
| 845-1-B .....   | 301  | 971-242 .....    | 774  | EVLW-2-NFZ .....           | 989  | GE16-1415 .....   | 438 | K-202-1-F .....     | 1020 |
| 845-150 .....   | 303  | 972-260 .....    | 775  | EVLW-2-NFZ .....           | 989  | GE16-1815 .....   | 438 | K-2030-1+A .....    | 110  |
| 845-2-B .....   | 301  | 972-261 .....    | 775  | EVLW-INDUSTRIE-BASIC ..... | 986  | GE1615-1615 ..... | 438 | K-2030-10 .....     | 69   |
| 845-250 .....   | 304  | 973-241 .....    | 775  | <b>G</b>                   |      | GE162-1615 .....  | 438 | K-2030-10+ .....    | 109  |
| 845-3-B .....   | 301  | 974-260 .....    | 776  | G-22 .....                 | 393  | GE18-10 .....     | 438 | K-2030-10+S .....   | 124  |
| 845-3-B .....   | 301  | 974-261 .....    | 776  | GA10-1516 .....            | 436  | GE18-1415 .....   | 438 | K-2030-10+S-T ..... | 135  |
| 845-4-B .....   | 301  | 974-HSL .....    | 776  |                            |      | GE18-1815 .....   | 438 | K-2030-10-S .....   | 90   |
| 845-5-B .....   | 301  | 974-HSR .....    | 776  |                            |      | GE20-1815 .....   | 438 |                     |      |
| 845-851 .....   | 305  |                  |      |                            |      |                   |     |                     |      |

|                     |     |                              |      |                   |      |                      |     |                     |     |
|---------------------|-----|------------------------------|------|-------------------|------|----------------------|-----|---------------------|-----|
| K-2030-10-S-T ..... | 99  | K-71-L-D .....               | 790  | UFP-2 .....       | 1041 | WT-003+S .....       | 971 | Y-03-17 .....       | 594 |
| K-2030-20 .....     | 70  | K-76-1/14 .....              | 905  | UFP-3 .....       | 1041 | WT-004 .....         | 972 | Y-04-17 .....       | 594 |
| K-2030-20+S .....   | 125 | K-78-12-A .....              | 728  | USB-1 .....       | 1042 | WT-008 .....         | 973 | Y-05-17 .....       | 594 |
| K-2030-20+S+B ..... | 126 | K-78-20-A .....              | 728  | <b>V</b>          |      | WT-010 .....         | 974 | Y-06-17 .....       | 594 |
| K-2030-20-B .....   | 80  | K-78-23-A .....              | 728  | VM10-10 .....     | 442  | WT-014 .....         | 975 | Y-07-17 .....       | 594 |
| K-2030-20-S .....   | 91  | K-8-HP-621 .....             | 181  | VM10-12 .....     | 442  | WT-017 .....         | 976 | Y-08-17 .....       | 594 |
| K-2030-20xS .....   | 152 | K-8-HP-623 .....             | 181  | VM112-12 .....    | 442  | WT-018 .....         | 977 | Y-09-17 .....       | 594 |
| K-2030-A-KIT .....  | 954 | K-8-HP-626 .....             | 181  | VM12-10 .....     | 442  | WT-019 .....         | 978 | Y-10-17 .....       | 594 |
| K-22-01-UNC .....   | 444 | K-8-HP-633 .....             | 181  | VM12-1516 .....   | 442  | WT-020 .....         | 979 | Y-11-17 .....       | 594 |
| K-22-A .....        | 401 | K-8-HP-637 .....             | 181  | VM12-7 .....      | 442  | WT-021 .....         | 980 | Y-12-17 .....       | 594 |
| K-22-A-E .....      | 403 | K-8-HP-800 .....             | 181  | VM14-12 .....     | 442  | WT-030 .....         | 981 | Y-13-17 .....       | 594 |
| K-22-A-M .....      | 402 | K-98-A .....                 | 742  | VM1415-1415 ..... | 442  | WT-031 .....         | 982 | Y-14-17 .....       | 594 |
| K-22-B .....        | 401 | K-A-<br>KT-440-355-144 ..... | 956  | VM1615-12 .....   | 442  | WT-1-INDUSTRIE ..... | 984 | Y-15-17 .....       | 594 |
| K-22-B-E .....      | 403 | K-A-KT-440-355-76 .....      | 956  | VM1815-1815 ..... | 442  | WT-220 .....         | 338 | Y-16-17 .....       | 594 |
| K-22-C-E .....      | 403 | K-A-<br>TL-600-400-185 ..... | 957  | VM1815-58 .....   | 442  | WT-43-44-45/12 ..... | 985 | Y-165-15-10-E ..... | 854 |
| K-220 .....         | 334 | K-CubeBoxx .....             | 958  | VM2015-58 .....   | 442  | WT-50 .....          | 983 | Y-165-15-20-E ..... | 854 |
| K-220-221-A .....   | 335 | K-i-BOXX .....               | 955  | VM2215-58 .....   | 442  | WTH-300/5 .....      | 990 | Y-165-25-10-E ..... | 854 |
| K-222-A .....       | 510 | K-L+BOXX .....               | 955  | <b>W</b>          |      | WTH-301/5 .....      | 990 | Y-17-17 .....       | 594 |
| K-226-4/12 .....    | 697 | K-L-BOXX-L-136 .....         | 955  | W-3132/K2 .....   | 864  | WTH-302/5 .....      | 990 | Y-18-17 .....       | 594 |
| K-26-A .....        | 386 | K-L-BOXX-L-238 .....         | 955  | W-3180 .....      | 674  | WTH-303/5 .....      | 990 | Y-19-17 .....       | 594 |
| K-26-B .....        | 386 | K-L-BOXX-MINI .....          | 955  | W-3188 .....      | 674  | WTH-304/5 .....      | 990 | Y-20-17 .....       | 594 |
| K-363-2-S .....     | 523 | K-SELECTHOR-01 .....         | 1003 | W-6050/6 .....    | 679  | WTH-305/5 .....      | 990 | Y-215-2 .....       | 568 |
| K-482 .....         | 295 | K-XL-BOXX .....              | 955  | W-6050/8 .....    | 679  | WTH-306/5 .....      | 990 | Y-215-3 .....       | 568 |
| K-49-B .....        | 753 | K-Y-165-15-10-P .....        | 855  | W-6050/9 .....    | 680  | WTH-307/5 .....      | 990 | Y-215-4 .....       | 568 |
| K-54-B .....        | 717 | K-Y-165-15-20-P .....        | 855  | W-6066 .....      | 675  | WTH-308/5 .....      | 990 | Y-221-E .....       | 567 |
| K-55-B .....        | 719 | K-Y-165-25-10-P .....        | 855  | W-6067 .....      | 676  | WTH-309/5 .....      | 990 | Y-315-4 .....       | 568 |
| K-58-M05-M10 .....  | 741 | KS-2030-1-193+S .....        | 127  | W-714-1 .....     | 743  | WTH-310/5 .....      | 990 | Y-315-5 .....       | 568 |
| K-59-1/14 .....     | 735 | KS-22-01 .....               | 445  | W-714-2 .....     | 743  | WTH-311/5 .....      | 990 | Y-321-E .....       | 567 |
| K-600-A .....       | 173 | KS-22-01-UNC .....           | 445  | W-714-3 .....     | 743  | WTH-312/5 .....      | 990 | Y-515-5 .....       | 568 |
| K-600-B .....       | 173 | KS-22-02 .....               | 445  | W-714-4 .....     | 743  | WTH-313/5 .....      | 990 | Y-515-6 .....       | 568 |
| K-600-C .....       | 173 | KS-70-A-K .....              | 503  | W-880010 .....    | 903  | WTH-314/5 .....      | 990 | Y-515-7 .....       | 568 |
| K-600-D .....       | 173 | <b>L</b>                     |      | W-880020 .....    | 903  | WTH-315/5 .....      | 990 | Y-521-E .....       | 567 |
| K-606-A .....       | 177 | L-Schloss-45/35 .....        | 955  | W-880030 .....    | 903  | <b>X</b>             |     | Y-57-10 .....       | 721 |
| K-68-A .....        | 513 | <b>M</b>                     |      | W-880040 .....    | 903  | X-LS-10 .....        | 962 | Y-57-19 .....       | 721 |
| K-68-B .....        | 513 | MICRO .....                  | 342  | W-880050 .....    | 903  | X-MPK-780 .....      | 959 | Y-57-24 .....       | 721 |
| K-68-C .....        | 513 | <b>T</b>                     |      | W-880060 .....    | 903  | X-MW-179-5 .....     | 960 | Y-57-32 .....       | 721 |
| K-70-A .....        | 501 | T-AW-20 .....                | 727  | W-880080 .....    | 903  | X-SB-65x75 .....     | 963 | Y-57-41 .....       | 721 |
| K-70-B .....        | 501 | T-AW-40 .....                | 727  | W-880090 .....    | 903  | X-SW-179-6 .....     | 961 | Y-57-50 .....       | 721 |
| K-70-C .....        | 501 | <b>U</b>                     |      | WT-000 .....      | 965  | <b>Y</b>             |     | Y-57-60 .....       | 721 |
| K-71-L-A .....      | 790 |                              |      | WT-002 .....      | 969  | Y-01-17 .....        | 594 | Y-60-100 .....      | 580 |
| K-71-L-B .....      | 790 |                              |      | WT-003 .....      | 970  | Y-02-17 .....        | 594 | Y-60-100-17 .....   | 594 |
| K-71-L-C .....      | 790 |                              |      |                   |      |                      |     | Y-60-200 .....      | 580 |

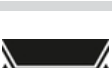
|                 |     |                 |     |                      |     |               |     |
|-----------------|-----|-----------------|-----|----------------------|-----|---------------|-----|
| Y-AP-371 .....  | 588 | Y28-256 .....   | 251 | Y518-33 .....        | 420 | YRH-202 ..... | 582 |
| Y-AP-372 .....  | 794 | Y30-180 .....   | 566 | Y58-180 .....        | 565 | YRH-206 ..... | 582 |
| Y-AP-373 .....  | 794 | Y30-205 .....   | 558 | Y58-205 .....        | 557 | YRH-302 ..... | 582 |
| Y-AP-75 .....   | 793 | Y30-206 .....   | 560 | Y58-206 .....        | 559 | YRH-603 ..... | 582 |
| Y05-208 .....   | 562 | Y300-00 .....   | 591 | Y58-215 .....        | 557 | YSM-100 ..... | 584 |
| Y08-208 .....   | 561 | Y305-00 .....   | 592 | Y58-216 .....        | 559 | YSM-200 ..... | 584 |
| Y10-208 .....   | 562 | Y305-20 .....   | 593 | Y58-500 .....        | 416 |               |     |
| Y18-208 .....   | 561 | Y306-30 .....   | 593 | Y58-518 .....        | 412 |               |     |
| Y20-11-0 .....  | 564 | Y318-03 .....   | 420 | Y58-556 .....        | 251 |               |     |
| Y20-11-1 .....  | 564 | Y318-04 .....   | 420 | YCH-604 .....        | 590 |               |     |
| Y20-11-2 .....  | 564 | Y318-10 .....   | 589 | YCR-400 .....        | 590 |               |     |
| Y20-180 .....   | 566 | Y318-11 .....   | 589 | YDB-27E .....        | 596 |               |     |
| Y20-205 .....   | 558 | Y318-12 .....   | 589 | YDB-33E .....        | 596 |               |     |
| Y20-206 .....   | 560 | Y318-33 .....   | 420 | YDB-55E .....        | 596 |               |     |
| Y20-215 .....   | 558 | Y318-36-P ..... | 420 | YDG-20E .....        | 596 |               |     |
| Y20-216 .....   | 560 | Y318-37-P ..... | 420 | YDG-30E .....        | 596 |               |     |
| Y200-00 .....   | 591 | Y318-38-P ..... | 420 | YDG-50E .....        | 596 |               |     |
| Y205-00 .....   | 592 | Y318-39-P ..... | 420 | YDM-20E .....        | 596 |               |     |
| Y205-20 .....   | 593 | Y318-41-P ..... | 420 | YDM-30E .....        | 596 |               |     |
| Y205-27 .....   | 592 | Y38-180 .....   | 565 | YDM-50E .....        | 596 |               |     |
| Y206-30 .....   | 593 | Y38-205 .....   | 557 | YF-200 .....         | 586 |               |     |
| Y218-03 .....   | 420 | Y38-206 .....   | 559 | YGA-2 .....          | 586 |               |     |
| Y218-04 .....   | 420 | Y38-300 .....   | 416 | YHP-320 .....        | 586 |               |     |
| Y218-06-P ..... | 420 | Y38-318 .....   | 412 | YHP-321 .....        | 586 |               |     |
| Y218-07-P ..... | 420 | Y38-356 .....   | 251 | YHP-324 .....        | 586 |               |     |
| Y218-08-P ..... | 420 | Y50-180 .....   | 566 | YHP-325 .....        | 586 |               |     |
| Y218-09-P ..... | 420 | Y50-205 .....   | 558 | YHP-326 .....        | 586 |               |     |
| Y218-10 .....   | 589 | Y50-206 .....   | 560 | YHP-420 .....        | 586 |               |     |
| Y218-11 .....   | 589 | Y50-215 .....   | 558 | YHP-421 .....        | 586 |               |     |
| Y218-12-P ..... | 420 | Y50-216 .....   | 560 | YHP-424 .....        | 586 |               |     |
| Y218-31-P ..... | 420 | Y500-00 .....   | 591 | YHP-425 .....        | 586 |               |     |
| Y218-33 .....   | 420 | Y505-00 .....   | 592 | YHU-S .....          | 696 |               |     |
| Y28-11-0 .....  | 563 | Y505-20 .....   | 593 | YHU-S-Citaro .....   | 579 |               |     |
| Y28-11-1 .....  | 563 | Y506-30 .....   | 593 | YHU-S-Y28-11-1 ..... | 577 |               |     |
| Y28-11-2 .....  | 563 | Y518-03 .....   | 420 | YM-235 .....         | 586 |               |     |
| Y28-180 .....   | 565 | Y518-04 .....   | 420 | YPP-520 .....        | 587 |               |     |
| Y28-200 .....   | 416 | Y518-07-P ..... | 420 | YPP-525 .....        | 587 |               |     |
| Y28-205 .....   | 557 | Y518-08-P ..... | 420 | YRE-050 .....        | 583 |               |     |
| Y28-206 .....   | 559 | Y518-09-P ..... | 420 | YRE-101 .....        | 583 |               |     |
| Y28-215 .....   | 557 | Y518-10 .....   | 589 | YRE-106 .....        | 583 |               |     |
| Y28-216 .....   | 559 | Y518-11 .....   | 589 | YRE-701 .....        | 583 |               |     |
| Y28-218 .....   | 412 | Y518-31-P ..... | 420 | YRH-132 .....        | 582 |               |     |

## ICON LEGEND

|                                                                                     |                                          |                                                                                     |                                                        |                                                                                       |                                                             |
|-------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------|
|    | Item number                              |    | GTIN                                                   |    | Total width                                                 |
|    | Total depth                              |    | Overall height                                         |    | Spread of the support arms                                  |
|    | Load capacity                            |    | Gross weight                                           |    | FWI seal of origin „Made in Germany“                        |
|    | spread (max.)                            |    | jaw spread vise                                        |    | Jaw height                                                  |
|    | Clamping height                          |    | Width of the clamping rail                             |    | Depth of the clamping rail                                  |
|    | Drawer width                             |    | Drawer height                                          |    | Drawer depth                                                |
|    | Worktop depth                            |    | Worktop width                                          |    | Number of drawers                                           |
|    | Valve present                            |    | Overall length                                         |    | Diameter                                                    |
|    | Hose diameter                            |    | Hub                                                    |    | Color                                                       |
|   | Spread external extraction (min. - max.) |   | Reach (max.)                                           |   | spread internal extraction (min. - max.)                    |
|  | Max. torque                              |  | Ball bearing ISO                                       |  | Installation depth                                          |
|  | Diameter of the puller                   |  | Mounting thread                                        |  | Wrench size holding hex                                     |
|  | Wrench size actuation hexagon            |  | Overall jaw's hooked claw depth (overall claw depth H) |  | Total jaw thickness (L+1 mm) (jaw distance to base surface) |
|  | jaw's hooked claw width (jaw spread J)   |  | Usable jaw's hooked claw reach (usable claw reach O)   |  | Jaw's hooked claw thickness at the tip (claw thickness K)   |
|  | Suitable for (list)                      |  | spread external extraction (max.)                      |  | reach A1-A2                                                 |
|  | Thread dimension                         |  | spread puller (min. - max.)                            |  | Reach puller                                                |
|  | For ball bearing with inner diameter     |  | Female thread of connecting nut                        |  | Separating diameter (min. - max.)                           |
|  | Max. Pressure                            |  | spread external extraction (min.)                      |  | Reach external extraction                                   |
|  | Separating diameter (min.)               |  | Separation diameter (max.)                             |  | Puller height                                               |
|  | Voltage range                            |  | Max. Pressure of hydraulics                            |  | Suitable for (cross-reference list)                         |
|  | Length of the sliding hammer             |  | impact stroke                                          |  | Impact mass                                                 |



## ICON LEGEND

|                                                                                     |                                       |                                                                                     |                                         |                                                                                       |                                          |
|-------------------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------|
|    | spread internal extraction (min.)     |    | Spread internal extraction (max.)       |    | Reach (min.)                             |
|    | Insertion depth (max.)                |    | spread (min.)                           |    | reach (min.)                             |
|    | Insert thread                         |    | Internal thread of the thread adapter   |    | For sockets with diameter                |
|    | For socket with diameter (set)        |    | spread counter stay (min. - max.)       |    | Outreach (from/to)                       |
|    | Jaw length                            |    | Clamping force                          |    | Clamping thread                          |
|    | max. piston rod diameter              |    | jaw spread                              |    | Diameter of the impact insert            |
|    | Shore hardness                        |    | Head length                             |    | Beater insert filling quantity           |
|    | Wrench span connecting nut            |    | Wrench size                             |    | Width of the T-handle                    |
|    | Length of the screwdriver blade       |    | Jaw spread                              |    | jaw opening                              |
|   | Circlip diameter                      |   | Tip diameter                            |   | Length of the spindle tip (pin punch)    |
|  | Shaft diameter                        |  | Internal square drive size              |  | Blade width                              |
|  | Blade length                          |  | Hole diameter                           |  | Cutting edge length                      |
|  | Max. sheet thickness (steel)          |  | Cutting direction                       |  | Handle length                            |
|  | Overall width (for multi-jaw holders) |  | Overall depth (for multi-jaw holders)   |  | Character height set                     |
|  | Wire gauge                            |  | Handle diameter                         |  | Screwdriver blade width                  |
|  | Blade thickness                       |  | Phillips profile                        |  | color ring                               |
|  | Diameter (multiple)                   |  | Cutting length set                      |  | Tip diameter set                         |
|  | Max. jaw opening                      |  | Dimensional drawing clamp grip          |  | Number of pressure pieces                |
|  | Punch insert diameter                 |  | spread pliers                           |  | Screw thread diameter (min - max)        |
|  | Square drive                          |  | Diameter of the piston ring (min - max) |  | Clamping diameter (min - max)            |
|  | Spring diameter (min - max)           |  | Spring clamping range (min - max)       |  | Valve spring insertion depth (min - max) |

## ICON LEGEND

|  |                                        |  |                                        |  |                                      |
|--|----------------------------------------|--|----------------------------------------|--|--------------------------------------|
|  | spread / projection clamp              |  | Cross-section of the slide rail        |  | Maximum current                      |
|  | Jaw sets suitable for (list)           |  | Working length                         |  | Spindle thread dimension             |
|  | Mounting thread for tension bolt       |  | Screw-in length of the thread adapter  |  | For hand taps according to DIN 352   |
|  | For hand reamers according to DIN 206  |  | Clamping range for square drives       |  | Shaft width                          |
|  | Font height                            |  | Flankenwinkel                          |  | Thread pitch                         |
|  | Beating insert fits                    |  | Overall length of the spindle          |  | stud bolt diameter                   |
|  | Jaw length, short                      |  | Jaw length, long                       |  | Length to be extended by             |
|  | Spare part from                        |  | Spread bearing separator (min. - max.) |  | Thread gauge (set)                   |
|  | Shaft diameter (min. - max.)           |  | Inside/Outside diameter                |  | Diameter of the jaw opening          |
|  | Diameter of the bolt circle            |  | Lever clamping range                   |  | Max. torque (hydraulic)              |
|  | Fork height (jaw height)               |  | Fork thickness at the tip, K           |  | Inner diameter of the impact sleeves |
|  | Length of impact sleeves               |  | For ball bearings with outer diameter  |  | Outer diameter of the impact sleeves |
|  | Passage width                          |  | Clearance height                       |  | Overall height press frame           |
|  | Stroke of the cylinder                 |  | Angle of the swivel unit               |  | Flange diameter                      |
|  | Minimum diameter for screw bore        |  | Chain length                           |  | Balanced chain length                |
|  | Chain length Y strand                  |  | Pin spacing                            |  | Width of chain passage               |
|  | Diameter of the press pins             |  | Suitable for chain pin diameter        |  | Radius of rounding pins              |
|  | Sheet thickness                        |  | Cylinder height                        |  | Total length of the tools (set)      |
|  | Diameter of the reversible spindle tip |  | Mounting diameter pressure piece       |  | Length of concave                    |
|  | Length of the plate                    |  | Length of the tip                      |  | Outer diameter                       |
|  | Inner diameter                         |  | Outer diameter (set)                   |  | Blade length of the tools (set)      |

## ICON LEGEND

|                                                                                     |                                    |                                                                                     |                                          |                                                                                       |                                         |
|-------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------|
|    | Hole diameter set                  |    | Thread diameter screw set (min - max)    |    | Square drive set                        |
|    | extension set                      |    | Actuation hexagon span (set)             |    | Width of the tarpaulin                  |
|    | Tarpaulin height                   |    | Diameter of the barometer                |    | Division of the scale of the barometer  |
|    | Max. rivet diameter                |    | Suitable for fork tubes with diameter    |    | Spread counter stay (min. - max.)       |
|    | Clamping depth (min.)              |    | Length of the sliding hammer             |    | Impact distance                         |
|    | Fork opening diameter set          |    | Chisel cutting edge width set            |    | Wrench size of the nut (min - max)      |
|    | For strength classes of the nut    |    | Body diameter                            |    | Diameter of the oil filter              |
|    | drive internal square              |    | adapter internal square drive            |    | drive hexagon drive (male)              |
|    | flange diameter of the power nut   |    | Thread size of the power nut             |    | Overall height of the power nut         |
|   | Diameter of bolt circles (set)     |   | Length of stud extractor                 |   | Diameter of the stud extractor          |
|  | Overall length (set)               |  | Stroke cylinder width                    |  | Hub cylinder length                     |
|  | Stroke cylinder height             |  | Usable oil volume                        |  | External thread pressure cylinder       |
|  | internal thread hydraulic cylinder |  | internal thread hydraulic pressure piece |  | Overall width hydraulic cylinder        |
|  | Overall depth hydraulic cylinder   |  | Overall height hydraulic cylinder        |  | Outer diameter hydraulic pressure piece |
|  | Overall length set                 |  | Total depth of set                       |  | Overall height Set                      |
|  | Load capacity                      |  | Chisel cutting edge width                |  | Cutting range (diameter) (min - max)    |
|  | Piston ring clamping height        |  | Clamping range (min - max)               |  | Width of the basic unit                 |
|  | Drill diameter                     |  | Spannweite (min - max)                   |  | Max. torque                             |
|  | Suitable hydraulic spindles (list) |  | Diameter of the centering tip            |  | Diameter of the spindle tip set         |
|  | reach (min. - max.)                |  | reach counter stay                       |  | Overall cutting height                  |
|  | Cutting edge thickness at the tip  |  | Cutting thickness rear                   |  | Usable cutting depth                    |

## ICON LEGEND

|  |                                 |  |                                     |  |                                    |
|--|---------------------------------|--|-------------------------------------|--|------------------------------------|
|  | spread (min. - max.)            |  | reach                               |  | Internal thread of the spindle     |
|  | Width of the jaws               |  | Hook thickness                      |  | Internal extractor reach           |
|  | Diameter of the Bearing adapter |  | External thread of the spindle      |  | Hook length (min. - max.)          |
|  | Number of hooks                 |  | Jaw opening                         |  | Seal diameter (max)                |
|  | Outer diameter Lock nut         |  | Gross weight                        |  | Overall length of the Hook spanner |
|  | Jaw spread Hook spanner         |  | Head height Hook spanner            |  | Length                             |
|  | Blade length                    |  | spread of the body (max.)           |  | reach of the body (max.)           |
|  | Dimensions of the sleeves       |  | Diameter of the pressure piece      |  | Outer diameter of the impact ring  |
|  | Compatible chains               |  | Outer diameter of the extension     |  | Width across flats                 |
|  | Width across flats              |  | Hook length (min.)                  |  | Hook length (max.)                 |
|  | Number of support rings         |  | Diameter of the support rings       |  | Insert sleeve dimensions           |
|  | Diameter of twist drills        |  | Filling quantity                    |  | Female thread of the handle        |
|  | Reach                           |  | Gewindeadapter IG+AG                |  | Maximum weight of the ball bearing |
|  | Temperatur                      |  | Thread size of the nut              |  | Pressure range                     |
|  | Connection of the hose          |  | Version low spark                   |  | Item number                        |
|  | Profile                         |  | Total width of the separating knife |  | Overall length of the knife        |
|  | Overall height of the knife     |  | Blade length of the knife           |  | Blade hardness                     |
|  | Handle design                   |  | Applications of the knife           |  | Clothing size                      |
|  | Total width                     |  | Total depth                         |  | Total height                       |
|  | Drawer width                    |  | Drawer height                       |  | Drawer depth                       |
|  | Worktop depth                   |  | Worktop width                       |  | Total length                       |

ICON LEGEND

|                                                                                                                                  |                                                                                                                                |                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|  <div>Maximum elongation</div>                  |  <div>Lashing capacity LC</div>               |  <div>Length by which is extended</div>           |
|  <div>Span outside pull-off (min. - max.)</div> |  <div>Clamping depth of external puller</div> |  <div>Width across flats</div>                    |
|  <div>Span inside pull-out (min. - max.)</div>  |  <div>reach (min. - max.)</div>               |  <div>For ball bearings with inner diameter</div> |
|  <div>Diameter in mm</div>                      |  <div>Total length of the tools (set)</div>   |  <div>Handle length</div>                         |
|  <div>Spatula width</div>                       |  <div>Non-sparking cutting width</div>        |  <div>Size screwdriver</div>                      |
|  <div>Small span</div>                          |  <div>Spread (max)</div>                      |                                                                                                                                      |









**Edition 11/2025**

**Imprint:**

**K&K Swiss AG**

Via Sant' Abbondio 59  
CH-6577 Ranzo

Represented by:  
Michael Kleinbongartz

Telefon: +49 (0) 2103-9754-300  
Telefax: +49 (0) 2103-9754-310  
E-Mail: [info@kukko.com](mailto:info@kukko.com)  
Web: <https://kukag.ch>

**Register entry:**

Commercial register: Tessin  
Register number: CH-020.3.044.143-6

Responsible for the content according to § 55 Abs. 2 RStV: Michael Kleinbongartz

© 2025 Kleinbongartz & Kaiser oHG | All rights reserved.  
Unauthorized reproduction or distribution without written permission is strictly prohibited.  
Technical changes and typographical and printing errors excepted.

**KUKKO // Pull forward**



**KUKKO Werkzeugfabrik**  
**Kleinbongartz & Kaiser oHG**  
Heinrich-Hertz-Straße 5  
40721 Hilden  
Germany

Phone: +49 (0) 2103-9754-300  
Fax: +49 (0) 2103-9754-310

E-Mail: [info@kukko.com](mailto:info@kukko.com)  
Web: <https://www.kukko.com>

Catalogue PDF:



CAT-EN-W11-010