

KE

Ø 32 ÷ 125 mm - Pneumatic Cylinders ISO 15552

- Clean profile heavy series
- High versatility even for more demanding users
- The traditional technology grants strength and reliability
- Grooves for DF recessed sensors on one side

Available ATEX version upon request

CE  II 2Gc IICT5 II 2Dc T100°C



TECHNICAL CHARACTERISTICS

| | |
|---------------------|---|
| Working temperature | -20 ÷ 80 °C |
| Fluid | filtered air, with or without lubrication |
| Working pressure | 1,5 ÷ 10 bar |
| Bores | Ø 32 - 40 - 50 - 63 - 80 - 100 - 125 mm |
| Cushionings | adjustable on both sides |

CONSTRUCTIVE CHARACTERISTICS

| | |
|---------------------------|---|
| End caps | die-cast aluminium alloy (painted) |
| Barrel | anodized aluminium |
| Piston | die-cast aluminium alloy |
| Guide slide | acetalic resin |
| Piston rod | chromium-plated steel standard, stainless steel, rolled AISI 303 |
| Piston seal | double-lip seal in nitrile rubber (NBR) |
| Guide bush for piston rod | UNIVER original self-lubricating and self-aligning |
| Shock absorber seals | nitrile rubber (NBR) in both sides |
| Magnet | plasto-ferrite |

CODIFICATION KEY

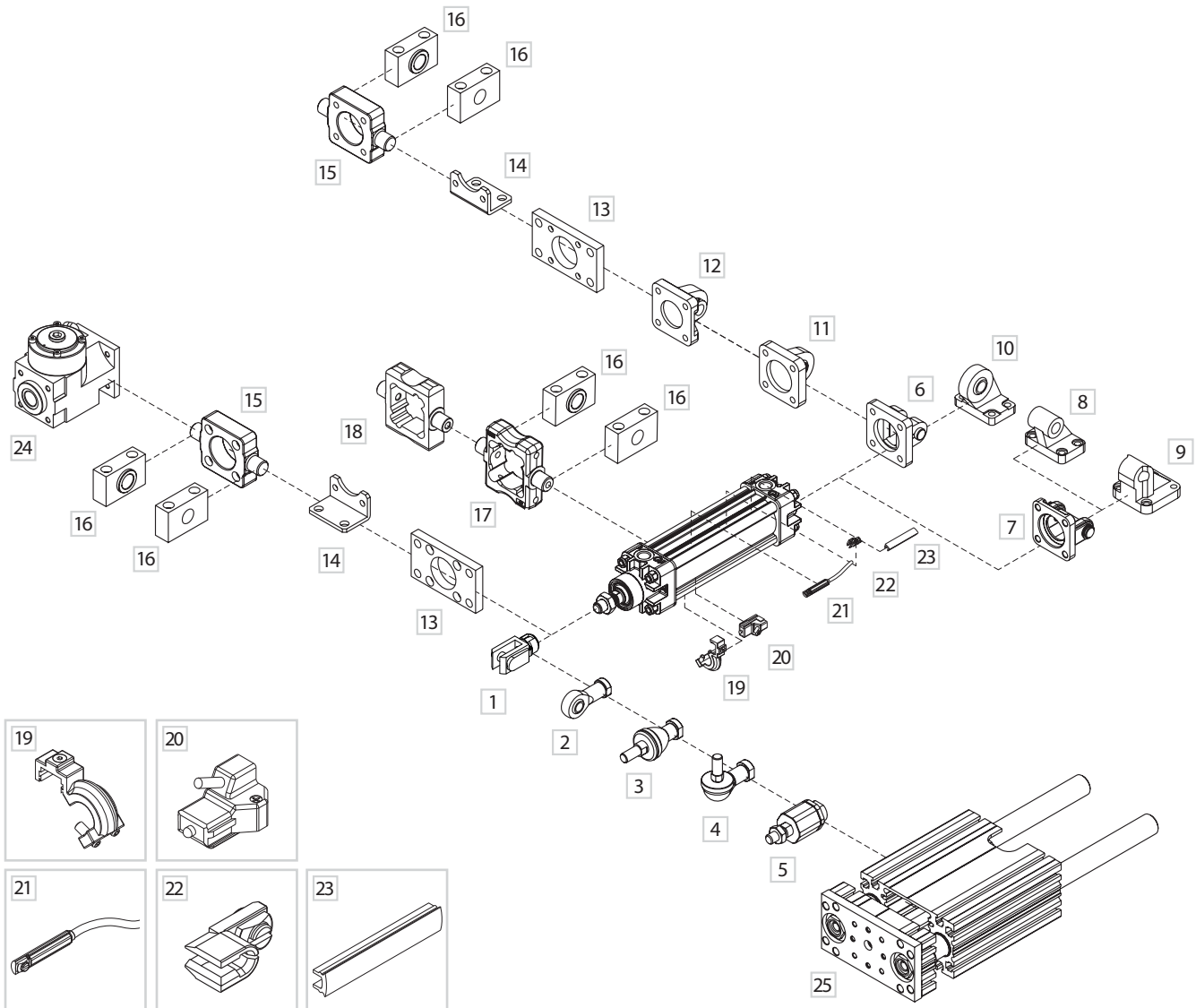
| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| K | E | 2 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 5 | 0 | | | |
| 1 | 2 | 3 | 4 | | | | 5 | | | | 6 | 7 | 8 | |

| 1 Series | 2 Type | 3 Version | 4 Bore (mm) |
|--|---|---|--|
| KE = Cylinders according to ISO 15552 Ø 32 ÷ 125 mm | 1 = Stainless steel piston rod 2 = Chromium-plated steel piston rod | 00 = D.A. Standard version 01 = D.A. Through piston rod 60 = S.A. Retracted piston rod Max stroke 50 mm 70 = S.A. Extended piston rod Max stroke 50 mm | 032 = Ø32 080 = Ø80 040 = Ø40 100 = Ø100 050 = Ø50 125 = Ø125 063 = Ø63 |
| K = Ø 32÷125 mm - ISO 15552 Pneumatic Cylinders (former ISO 6431 VDMA 24562) (available upon request) | | D.A. = Double acting S.A. = Single acting | |

| 5 Stroke (mm) | 6 Option | 7 Magnetic | 8 ATEX option |
|---|--|----------------------|---|
| 0025 = 25 0150 = 150 0320 = 320 0700 = 700 0050 = 50 0160 = 160 0350 = 350 0800 = 800 0075 = 75 0175 = 175 0400 = 400 0900 = 900 0080 = 80 0200 = 200 0450 = 450 1000 = 1000 0100 = 100 0250 = 250 0500 = 500 0125 = 125 0300 = 300 0600 = 600 | F = Preset for locking unit reduced protrusion G = Preset for locking unit ISO protrusion | M = Magnetic version | X = ATEX (upon request) See ATEX Catalogue for types and versions |

KE190 and KE290 versions with high temperature seals (Max 120°C) available upon request

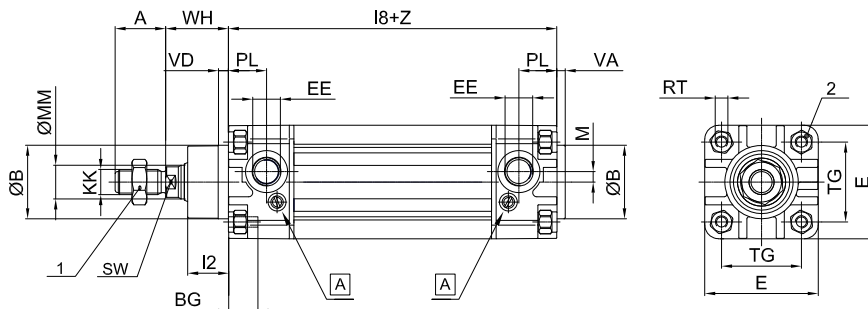
Fixing elements and accessories



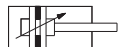
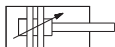
| DESCRIPTION | PART NO. |
|---|-------------|
| 1 Female fork with clips | KF-15___ |
| 2 Articulated self-lubricating fork | KF-17___ |
| 3 Fork with axially mounted articulated pin | KF-22___ |
| 4 Fork with angle-mounted articulated pin | KF-23___ |
| 5 Floating joint | KF-24___ |
| 6 Narrow female hinge with clips (DIN648K) | KF-10___AS |
| 7 Female hinge (ISO MP2) with pin | KF-10___A |
| 8 Counter hinge 90° (CETOP RP107P) | KF-19___CTA |
| 9 Counter hinge 90° | KF-19___ |
| 10 Articulated counter-hinge (DIN648K) | KF-19___SC |
| 11 Articulated rear male hinge (ISO MP6) | KF-11___S |
| 12 Rear male hinge (ISO MP4) | KF-11___ |
| 13 Front - rear flange (ISO MF1-MF2) | KF-12___ |
| 14 Angle bracket (ISO MS1) | KF-13___ |
| 15 Front - rear hinge with floating pin | KF-14___AP |
| 16 Hinge support | KF-41___ |
| 17 ISO intermediate hinge (ISO MT4) | KLF-14___ |
| * 18 ISO intermediate hinge (ISO MT4)* | KF-14___ |
| * 19 Mounting bracket for DH sensor * | DH-K___ |
| * 20 DH sensor | DH-___ |
| 21 DF sensor * | DF-___ |
| 22 Cable clamping for DF sensor | DF-001 |
| 23 DHF covering strip | DHF-0020100 |
| 24 Locking units | L1-N... |
| 25 Slide units | J12... |

* = Fixing elements and accessories for K series

Double acting/Single acting



A Pneumatic cushioning adjusting screw



KE100/200
D.A. Standard



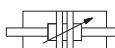
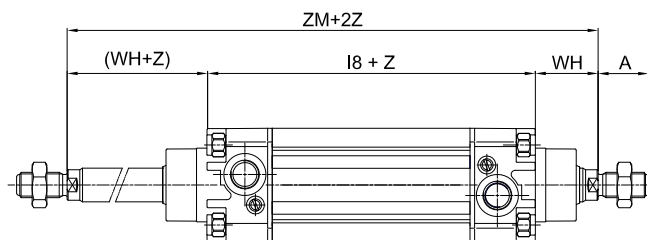
KE160/260
S.A. Retracted piston rod



KE170/270
S.A. Extended piston rod

For extended rod version add **WH+Z**(stroke) dimensions

Double acting through piston rod

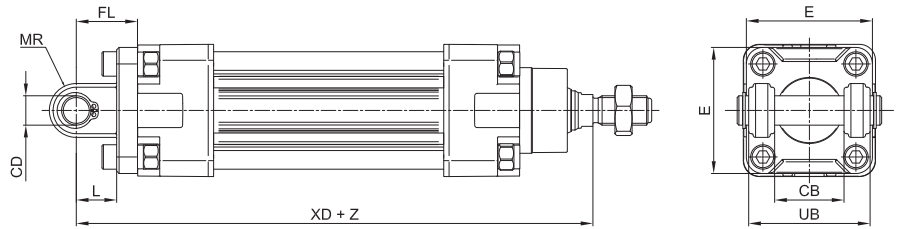
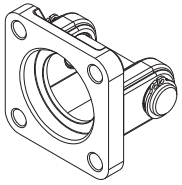


KE101/201
D.A. Through piston rod

Z = Stroke

| Ø | A | ØB | BG | E+0,5 | KK | I2 | I3 | I8 | PL | RT | SW | TG | VA | VD | WH | ØMM | EE | M | 1 | 2 | ZM |
|-----|----|----|----|-------|----------|----|----|----------|------|-----|----|-----------|-----|-----|----|-----|------|-----|----|----|-----|
| 32 | 22 | 30 | 16 | 46,5 | M10x1,25 | 16 | 5 | 94 ±0,4 | 14 | M6 | 10 | 32,5 ±0,5 | 3,5 | 5 | 26 | 12 | G1/8 | 4,4 | 17 | 6 | 146 |
| 40 | 24 | 35 | 16 | 52 | M12x1,25 | 20 | 5 | 105 ±0,7 | 16 | M6 | 13 | 38 ±0,5 | 4 | 5,5 | 30 | 16 | G1/4 | 5 | 19 | 6 | 165 |
| 50 | 32 | 40 | 17 | 64,5 | M16x1,5 | 26 | 6 | 106 ±0,7 | 15,5 | M8 | 17 | 46,5 ±0,6 | 4 | 6 | 37 | 20 | G1/4 | 6 | 24 | 8 | 180 |
| 63 | 32 | 45 | 18 | 76,5 | M16x1,5 | 26 | 6 | 121 ±0,8 | 17,5 | M8 | 17 | 56,5 ±0,7 | 4 | 6 | 37 | 20 | G3/8 | 8 | 24 | 8 | 195 |
| 80 | 40 | 45 | 20 | 95 | M20x1,5 | 32 | 7 | 128 ±0,8 | 20 | M10 | 22 | 72 ±0,7 | 4 | 8 | 46 | 25 | G3/8 | 7,5 | 30 | 10 | 220 |
| 100 | 40 | 55 | 20 | 114 | M20x1,5 | 35 | 7 | 138 ±1 | 20,5 | M10 | 22 | 89 ±0,7 | 4 | 8 | 51 | 25 | G1/2 | 9 | 30 | 10 | 240 |
| 125 | 54 | 60 | 24 | 140 | M27x2 | 45 | 8 | 160 ±1 | 20,5 | M12 | 27 | 110 ±1,1 | 5,5 | 10 | 65 | 32 | G1/2 | 11 | 41 | 12 | 290 |

Female hinge (ISO MP2) with pin

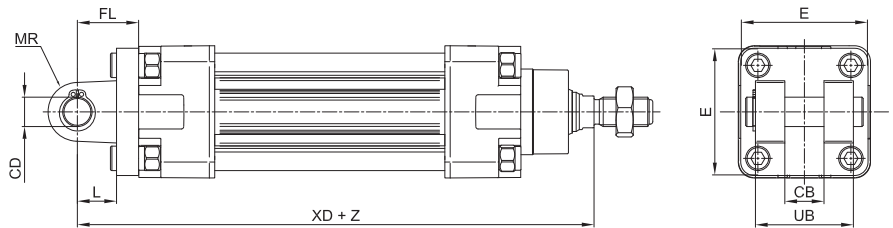
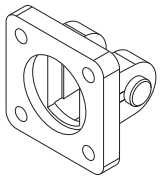


Material: Aluminium, zinc-plated steel pin

Z = Stroke

| Ø | CB | CD | E | FL | L | MR | UB | XD | Mass | Part no. | |
|-----|-----|----|-----|-------|------|-----|-----|-----|-------|----------|-----------|
| | H14 | H9 | | ± 0,2 | min. | Max | h14 | | g | | |
| 32 | 26 | 10 | 48 | 22 | 12 | 11 | 45 | 142 | ±1,25 | 75 | KF-10032A |
| 40 | 28 | 12 | 54 | 25 | 15 | 13 | 52 | 160 | ±1,25 | 110 | KF-10040A |
| 50 | 32 | 12 | 65 | 27 | 15 | 13 | 60 | 170 | ±1,25 | 150 | KF-10050A |
| 63 | 40 | 16 | 75 | 32 | 20 | 17 | 70 | 190 | ±1,6 | 270 | KF-10063A |
| 80 | 50 | 16 | 95 | 36 | 20 | 17 | 90 | 210 | ±1,6 | 420 | KF-10080A |
| 100 | 60 | 20 | 115 | 41 | 25 | 21 | 110 | 230 | ±1,6 | 765 | KF-10100A |
| 125 | 70 | 25 | 140 | 50 | 30 | 26 | 130 | 275 | ±2 | 1445 | KF-10125A |

Narrow female hinge with pin (DIN648K)

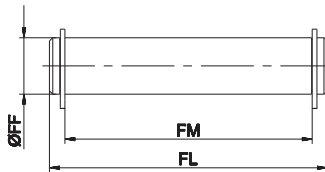


Material: Aluminium, zinc-plated steel pin

Z = Stroke

| Ø | CB | CD | E | FL | L | MR | UB | XD | Mass | Part no. | |
|-----|-----|----|-----|-------|------|-----|-----|-----|-------|----------|------------|
| | H14 | H9 | | ± 0,2 | min. | Max | h14 | | g | | |
| 32 | 14 | 10 | 45 | 22 | 10 | 10 | 34 | 142 | ±1,25 | 68 | KF-10032AS |
| 40 | 16 | 12 | 52 | 25 | 16 | 12 | 40 | 160 | ±1,25 | 112 | KF-10040AS |
| 50 | 21 | 16 | 65 | 27 | 16 | 14 | 45 | 170 | ±1,25 | 196 | KF-10050AS |
| 63 | 21 | 16 | 75 | 32 | 21 | 18 | 51 | 190 | ±1,6 | 288 | KF-10063AS |
| 80 | 25 | 20 | 95 | 36 | 22 | 20 | 65 | 210 | ±1,6 | 566 | KF-10080AS |
| 100 | 25 | 20 | 115 | 41 | 27 | 22 | 75 | 230 | ±1,6 | 818 | KF-10100AS |
| 125 | 37 | 30 | 140 | 50 | 30 | 25 | 97 | 275 | ±2 | 1706 | KF-10125AS |

Pin for female hinge



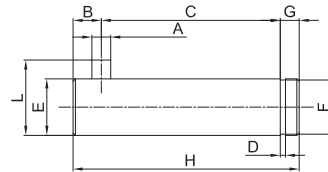
Including 2 circlips

Material: Zinc-plated steel

| Ø | FF | FL | FM | Mass | Part no.* |
|-----|----|-------|-----|------|-----------|
| | f8 | | | g | |
| 32 | 10 | 53 | 46 | 30 | KF-18032 |
| 40 | 12 | 61,3 | 53 | 50 | KF-18040 |
| 50 | 12 | 69 | 61 | 50 | KF-18050 |
| 63 | 16 | 80,5 | 71 | 120 | KF-18063 |
| 80 | 16 | 100,5 | 91 | 150 | KF-18080 |
| 100 | 20 | 122,5 | 111 | 290 | KF-18100 |
| 125 | 25 | 140 | 131 | 1530 | KF-18125 |

* = Pin for part no. KF-10...

Pin for narrow female hinge

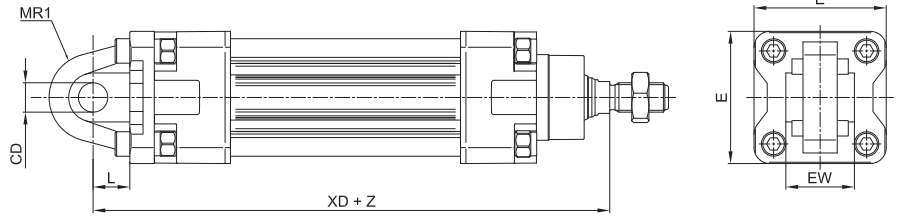
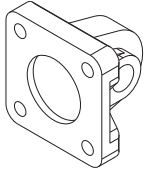


Including circlip

Material: Zinc-plated steel

| Ø | A | C | D | E | F | G | H | L | B | Mass | Part no. |
|-----|-----|--------------|-----|----|------|---|-----|-----------|-----|------|-----------|
| | H12 | +0,5 +0,3 | h13 | f7 | h11 | | | 0 -0,5 | | g | |
| 32 | 3 | 32,5 | 1,1 | 10 | 9,6 | 4 | 41 | 14 | 4,5 | 26 | KF-18032S |
| 40 | 4 | 38 | 1,1 | 12 | 11,5 | 4 | 48 | 16 | 6 | 42 | KF-18040S |
| 50 | 4 | 43 | 1,1 | 16 | 15,2 | 5 | 54 | 20 | 6 | 84 | KF-18050S |
| 63 | 4 | 49 | 1,1 | 16 | 15,2 | 5 | 60 | 20 | 6 | 94 | KF-18063S |
| 80 | 4 | 63 | 1,3 | 20 | 19 | 6 | 75 | 24 | 6 | 184 | KF-18080S |
| 100 | 4 | 73 | 1,3 | 20 | 19 | 6 | 85 | 24 | 6 | 208 | KF-18100S |
| 125 | 6 | 94 | 1,6 | 30 | 28,6 | 7 | 110 | 36 | 9 | 606 | KF-18125S |

Rear male hinge (ISO MP4)



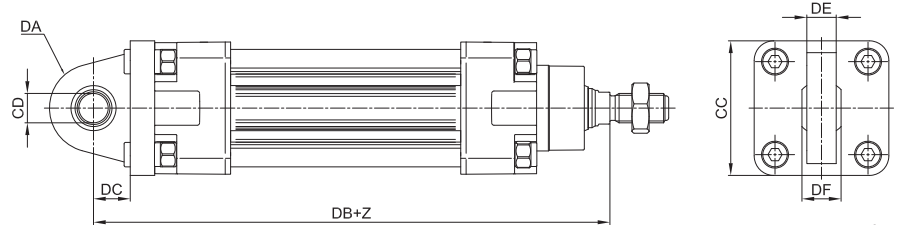
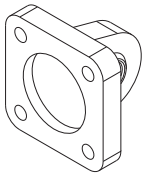
Material: Aluminium

Z = Stroke

| Ø | CD | E | EW | | L | MR1 | XD | Mass | Part no. | |
|-----|----|-----|----|-------------|----|-------|-----|-------|----------|----------|
| | H9 | | | | | | | | | min. |
| 32 | 10 | 48 | 26 | -0,2 / -0,6 | 12 | 15* | 142 | ±1,25 | 80 | KF-11032 |
| 40 | 12 | 54 | 28 | -0,2 / -0,6 | 15 | 18* | 160 | ±1,25 | 100 | KF-11040 |
| 50 | 12 | 65 | 32 | -0,2 / -0,6 | 15 | 20* | 170 | ±1,25 | 170 | KF-11050 |
| 63 | 16 | 75 | 40 | -0,2 / -0,6 | 20 | 23* | 190 | ±1,6 | 250 | KF-11063 |
| 80 | 16 | 95 | 50 | -0,2 / -0,6 | 20 | 27* | 210 | ±1,6 | 420 | KF-11080 |
| 100 | 20 | 115 | 60 | -0,5 / -1,2 | 25 | 29,5* | 230 | ±1,6 | 660 | KF-11100 |
| 125 | 30 | 140 | 70 | -0,5 / -1,2 | 30 | 26 | 275 | ±2 | 1500 | KF-11125 |

* = Non-standard dimension

Articulated rear male hinge (ISO MP6)

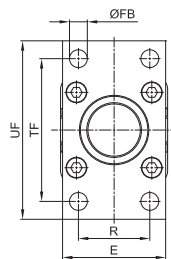
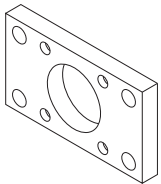


Material: Aluminium

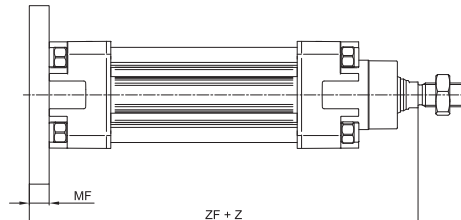
Z = Stroke

| Ø | CC | CD | DA | DB | DC | DE | DF | Mass | Part no. |
|-----|-----|----|------|-----|------|------|----|------|-----------|
| | | H9 | | | | | | | |
| 32 | 48 | 10 | 15 | 142 | 14 | 10,5 | 14 | 100 | KF-11032S |
| 40 | 54 | 12 | 18 | 160 | 16,5 | 12 | 16 | 200 | KF-11040S |
| 50 | 65 | 12 | 20 | 170 | 17,5 | 12 | 16 | 300 | KF-11050S |
| 63 | 75 | 16 | 21 | 190 | 21,5 | 15 | 21 | 350 | KF-11063S |
| 80 | 95 | 16 | 27 | 210 | 24 | 15 | 21 | 1600 | KF-11080S |
| 100 | 115 | 20 | 29,5 | 230 | 28 | 18 | 25 | 700 | KF-11100S |
| 125 | 140 | 30 | 40 | 275 | 30 | 25 | 37 | 1410 | KF-11125S |

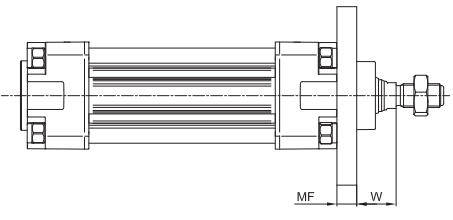
Front/rear flange (ISO MF1-MF2)



> Rear assembly



> Front assembly

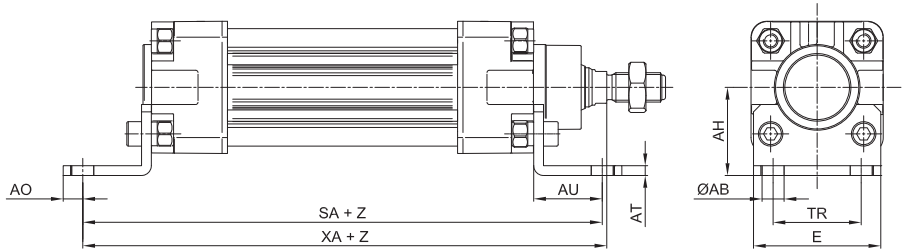
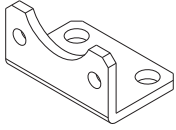


Material: Zinc-plated steel

Z = Stroke

| Ø | E | ØFB | MF | R | TF | UF | W | ZF | Mass | Part no. | | |
|-----|-----|-----|----|----|-----|-----|----|------|------|----------|------|----------|
| | | H13 | | | | | | | | | ±0,2 | JS14 |
| 32 | 45 | 7 | 10 | 32 | 64 | 80 | 16 | ±1,6 | 130 | ±1,25 | 200 | KF-12032 |
| 40 | 52 | 9 | 10 | 36 | 72 | 90 | 20 | ±1,6 | 145 | ±1,25 | 250 | KF-12040 |
| 50 | 65 | 9 | 12 | 45 | 90 | 110 | 25 | ±2 | 155 | ±1,25 | 500 | KF-12050 |
| 63 | 75 | 9 | 12 | 50 | 100 | 120 | 25 | ±2 | 170 | ±1,6 | 650 | KF-12063 |
| 80 | 95 | 12 | 16 | 63 | 126 | 150 | 30 | ±2 | 190 | ±1,6 | 1500 | KF-12080 |
| 100 | 115 | 14 | 16 | 75 | 150 | 170 | 35 | ±2 | 205 | ±1,6 | 2200 | KF-12100 |
| 125 | 140 | 16 | 20 | 90 | 180 | 205 | 45 | ±2,5 | 245 | ±2 | 4100 | KF-12125 |

Angle bracket (ISO MS1)

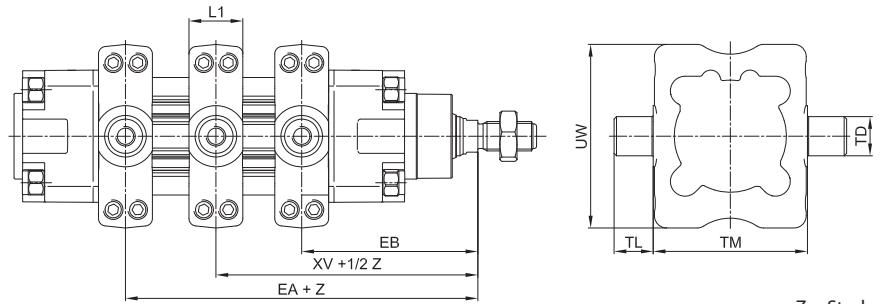
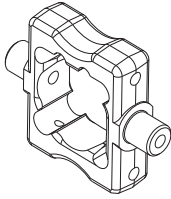


Material: Zinc-plated steel

Z = Stroke

| Ø | ØAB | AH | AO | AT | AU | E | SA | TR | XA | Mass | Part no. | |
|-----|-----|------|----|----|------|-----|-----|-------|----|------|----------|----------|
| | H13 | JS15 | | | ±0,2 | | | JS14 | | g | | |
| 32 | 7 | 32 | 6 | 4 | 24 | 45 | 142 | ±1,25 | 32 | 144 | ±1,25 | KF-13032 |
| 40 | 9 | 36 | 8 | 4 | 28 | 52 | 161 | ±1,25 | 36 | 163 | ±1,25 | KF-13040 |
| 50 | 9 | 45 | 10 | 5 | 32 | 64 | 170 | ±1,25 | 45 | 175 | ±1,25 | KF-13050 |
| 63 | 9 | 50 | 12 | 5 | 32 | 74 | 185 | ±1,6 | 50 | 190 | ±1,6 | KF-13063 |
| 80 | 12 | 63 | 15 | 6 | 41 | 94 | 210 | ±1,6 | 63 | 215 | ±1,6 | KF-13080 |
| 100 | 14 | 71 | 20 | 6 | 41 | 114 | 220 | ±1,6 | 75 | 230 | ±1,6 | KF-13100 |
| 125 | 16 | 90 | 15 | 8 | 45 | 140 | 250 | ±2 | 90 | 270 | ±2 | KF-13125 |

ISO intermediate hinge (ISO MT4)



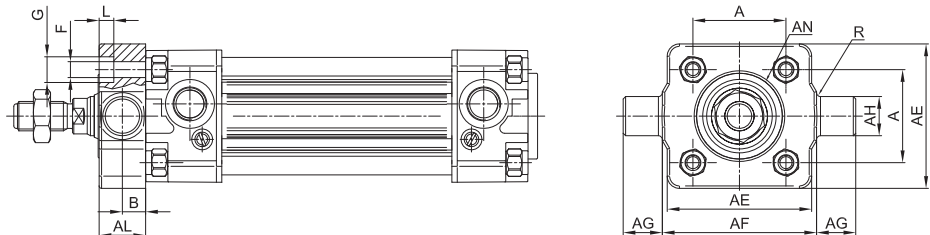
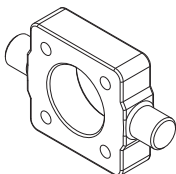
Material: Zinc-plated steel

Z = Stroke

| Ø | EA | EB | L1 | R | TD | TL | TM | UW | XV | Mass | Part no. | |
|-----|-----|------|------|-----|----|-----|-----|-----|------|------|----------|-----------|
| | Max | min. | | | e9 | h14 | h14 | | | g | | |
| 32 | 82 | 64 | 22 | 0,5 | 2 | 12 | 50 | 65 | 73 | ±2 | 20,2 | KLF-14032 |
| 40 | 93 | 72 | 22 | 0,5 | 16 | 16 | 63 | 75 | 82,5 | ±2 | 34,8 | KLF-14040 |
| 50 | 101 | 79 | 22 | 0,5 | 16 | 16 | 75 | 95 | 90 | ±2 | 53 | KLF-14050 |
| 63 | 107 | 88 | 27,5 | 1 | 20 | 20 | 90 | 105 | 97,5 | ±2 | 79,2 | KLF-14063 |
| 80 | 123 | 97 | 27,5 | 1,5 | 20 | 20 | 110 | 130 | 110 | ±2 | 118,6 | KLF-14080 |
| 100 | 131 | 109 | 33 | 1 | 25 | 25 | 132 | 145 | 120 | ±2 | 179,2 | KLF-14100 |
| 125 | 164 | 126 | 33 | 1 | 25 | 25 | 160 | 175 | 145 | ±2,5 | 251,2 | KLF-14125 |

The dimension XV + 1/2 indicates the position of the hinge between the end-caps of the cylinder

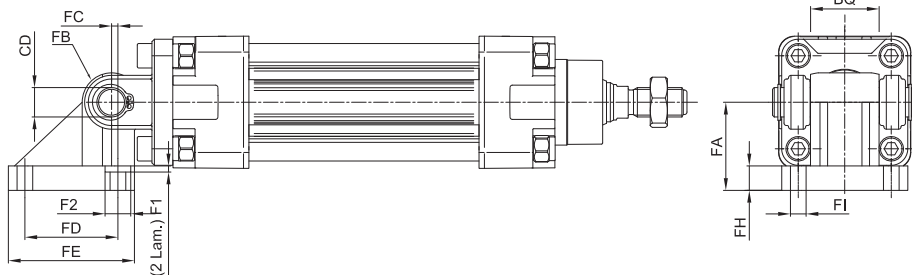
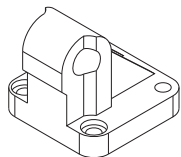
Front/rear hinge with floating pin



Material: Zinc-plated steel

| Ø | AE | AL | AH | AG | AF | AN | A | B | F | G | L | R | Mass | Part no. |
|-----|-----|-----|----|-----|-----|-----|------|--------------------------------|------|------|--------------------------------|--------------------------------|------|------------|
| | Max | Max | e9 | h14 | h14 | h11 | ±0,2 | ^{+0,2} / ₀ | H13 | H13 | ^{+0,5} / ₀ | ⁰ / _{+0,3} | g | |
| 32 | 46 | 14 | 12 | 12 | 50 | 30 | 32,5 | 6,5 | 6,5 | - | 6 | 1 | 137 | KF-14032AP |
| 40 | 59 | 19 | 16 | 16 | 63 | 35 | 38 | 9 | 6,5 | 10,5 | 6 | 1,6 | 385 | KF-14040AP |
| 50 | 69 | 19 | 16 | 16 | 75 | 40 | 46,5 | 9 | 8,5 | 13,5 | 8 | 1,6 | 513 | KF-14050AP |
| 63 | 84 | 24 | 20 | 20 | 90 | 45 | 56,5 | 11,5 | 8,5 | 13,5 | 8 | 1,6 | 1041 | KF-14063AP |
| 80 | 102 | 24 | 20 | 20 | 110 | 45 | 72 | 11,5 | 10,5 | 16,5 | 10 | 1,6 | 1567 | KF-14080AP |
| 100 | 125 | 29 | 25 | 25 | 132 | 55 | 89 | 14 | 10,5 | 16,5 | 10 | 2 | 3000 | KF-14100AP |
| 125 | 155 | 32 | 25 | 25 | 160 | 133 | 110 | - | 13,5 | 20 | 12 | 2 | 2400 | KF-14125AP |

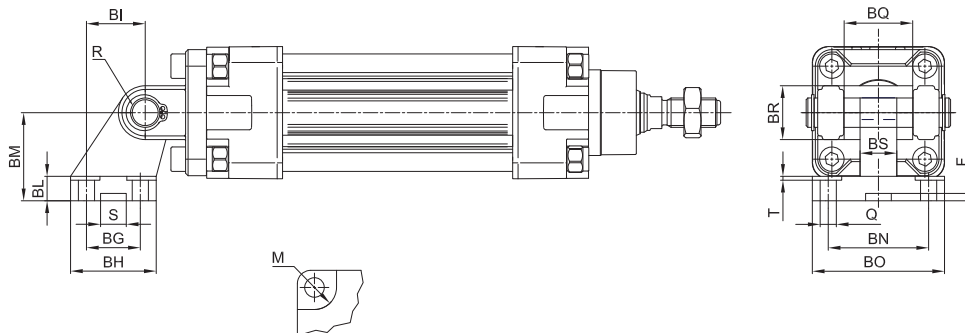
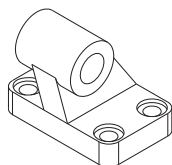
Counter hinge 90°



Material: Aluminium

| Ø | CD | FA | FB | FC | FD | FE | FH | FI | F1 | F2 | BQ | Mass | Part no. |
|-----|----|----|----|-----|------|------|------|------|-----|------|----|------|----------|
| | H9 | | | | | | | | | | | g | |
| 32 | 10 | 32 | 10 | 1,2 | 32,5 | 46,5 | 9 | 6,4 | 5,5 | 10,5 | 26 | 90 | KF-19032 |
| 40 | 12 | 36 | 12 | 2,6 | 38 | 51,5 | 9 | 6,4 | 5,5 | 10,5 | 28 | 120 | KF-19040 |
| 50 | 12 | 45 | 12 | 0,3 | 46,5 | 63,5 | 9 | 8,4 | 5 | 13,5 | 32 | 200 | KF-19050 |
| 63 | 16 | 50 | 16 | 3,3 | 56,5 | 73,5 | 10,5 | 8,4 | 5 | 13,5 | 40 | 320 | KF-19063 |
| 80 | 16 | 63 | 16 | 1,0 | 72 | 93 | 12 | 10,5 | 4,5 | 16,5 | 50 | 580 | KF-19080 |
| 100 | 20 | 73 | 20 | 2,5 | 89 | 113 | 13 | 10,5 | 4,5 | 16,5 | 60 | 910 | KF-19100 |

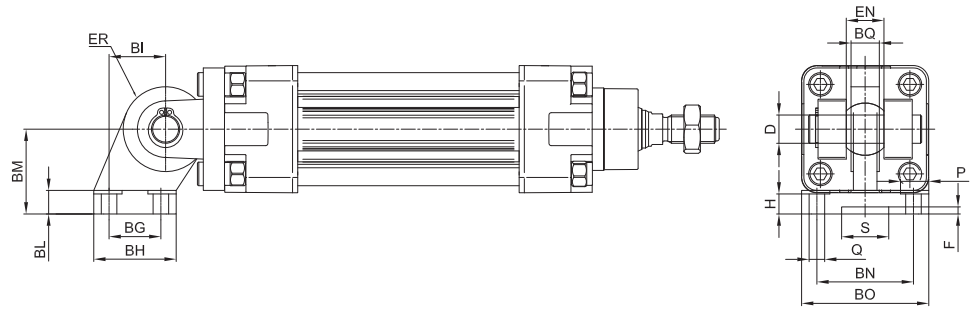
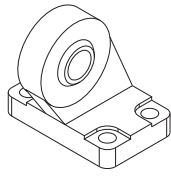
Counter hinge 90° (CETOP RP107P)



Material: Aluminium

| Ø | Q | M | BG | BH | BI | BL | BM | BN | BO | BS | BR | T | G | S | F | BQ | Mass | Part no. |
|-----|-----|-----|------|-----|------|----|------|------|-----|-----|-----|-----|----|--------|--------|----|------|-------------|
| | H13 | H13 | JS14 | Max | JS14 | | JS15 | JS14 | Max | Max | Max | Max | H9 | +0,5/0 | +0,5/0 | | g | |
| 32 | 6,6 | 11 | 18 | 31 | 21 | 8 | 32 | 38 | 51 | 10 | 20 | 1,6 | 10 | 10,5 | 3 | 26 | 56 | KF-19032CTA |
| 40 | 6,6 | 11 | 22 | 35 | 24 | 10 | 36 | 41 | 54 | 15 | 22 | 1,6 | 12 | 10,5 | 3 | 28 | 139 | KF-19040CTA |
| 50 | 9 | 15 | 30 | 45 | 33 | 12 | 45 | 50 | 65 | 16 | 26 | 1,6 | 12 | 10,5 | 3 | 32 | 142 | KF-19050CTA |
| 63 | 9 | 15 | 35 | 50 | 37 | 14 | 50 | 52 | 67 | 16 | 30 | 1,6 | 16 | 10,5 | 3 | 40 | 200 | KF-19063CTA |
| 80 | 11 | 18 | 40 | 60 | 47 | 14 | 63 | 66 | 86 | 20 | 30 | 2,5 | 16 | 10,5 | 3 | 50 | 321 | KF-19080CTA |
| 100 | 11 | 18 | 50 | 70 | 55 | 17 | 71 | 76 | 96 | 20 | 38 | 2,5 | 20 | 10,5 | 3 | 60 | 656 | KF-19100CTA |
| 125 | 14 | 20 | 60 | 90 | 70 | 20 | 90 | 94 | 124 | 30 | 45 | 3,2 | 25 | 10,5 | 3 | 70 | 826 | KF-19125CTA |

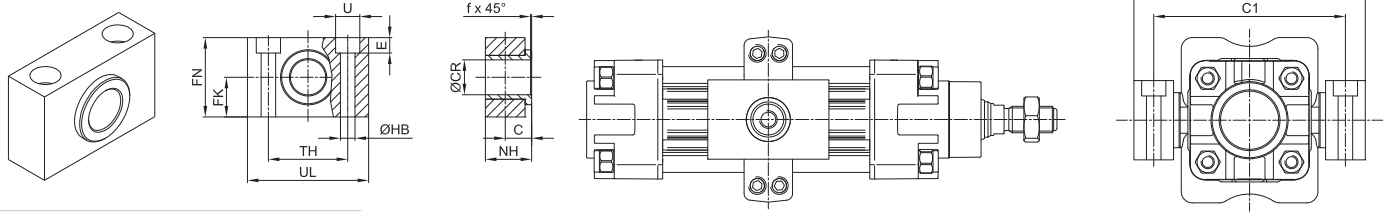
Articulated counter hinge (DIN648K)



Material: Aluminium

| Ø | Q | P | BG | BH | BI | BL | BM | BN | BO | EN | ER | BQ | D | H | S | F | Mass | Part no. |
|-----|------|-----|------|-----|------|----|------|------|-----|--------|-----|------|----|--------|-----|---|------|------------|
| | H13 | H13 | JS14 | Max | JS15 | | JS15 | JS14 | Max | 0/-0,1 | Max | Max | H7 | +0,5/0 | H13 | | g | |
| 32 | 6,6 | 11 | 18 | 31 | 21 | 10 | 32 | 38 | 51 | 14 | 15 | 10,5 | 10 | 8,5 | 20 | 3 | 178 | KF-19032SC |
| 40 | 6,6 | 11 | 22 | 35 | 24 | 10 | 36 | 41 | 54 | 16 | 18 | 12 | 12 | 8,5 | 20 | 3 | 268 | KF-19040SC |
| 50 | 9 | 15 | 30 | 45 | 33 | 12 | 45 | 50 | 65 | 21 | 20 | 15 | 16 | 10,5 | 20 | 3 | 458 | KF-19050SC |
| 63 | 9 | 15 | 35 | 50 | 37 | 12 | 50 | 52 | 67 | 21 | 23 | 15 | 16 | 10,5 | 20 | 3 | 550 | KF-19063SC |
| 80 | 11 | 18 | 40 | 60 | 47 | 14 | 63 | 66 | 86 | 25 | 27 | 18 | 20 | 11,5 | 20 | 3 | 970 | KF-19080SC |
| 100 | 11 | 18 | 50 | 70 | 55 | 15 | 71 | 76 | 96 | 25 | 30 | 18 | 20 | 12,5 | 20 | 3 | 1326 | KF-19100SC |
| 125 | 13,5 | 20 | 60 | 90 | 70 | 20 | 90 | 94 | 124 | 37 | 40 | 25 | 30 | 17 | 20 | 3 | 3000 | KF-19125SC |

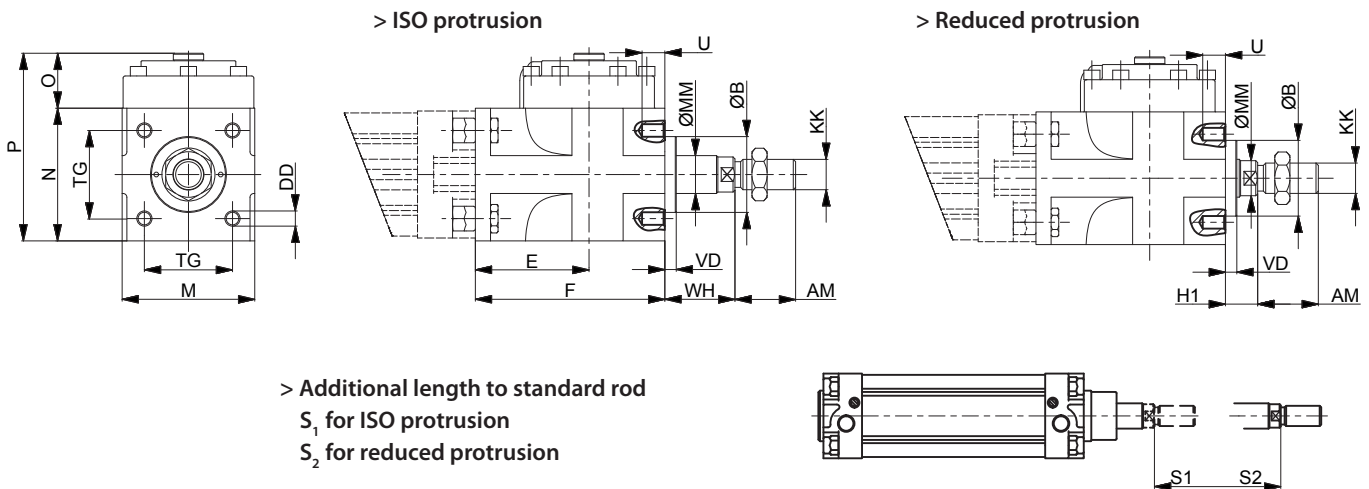
Hinge support



Material: Aluminium body and brass bushing

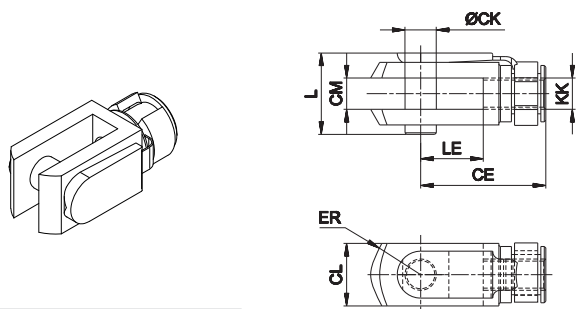
| Ø | C | ØCR | FK | FN | ØHB | NH | TH | UL | ØU | E | f | C1 | C2 | Mass | Part no. |
|-----|------|-----|------|----|-----|------|------|----|----|------|-----|-----|-----|------|-------------|
| | H9 | f7 | ±0,1 | | | | ±0,1 | | | ±0,5 | | | | g | |
| 32 | 10,5 | 12 | 15 | 30 | 6,6 | 18 | 32 | 46 | 11 | 7 | 1 | 71 | 86 | 100 | KF-41032 |
| 40 | 12 | 16 | 18 | 36 | 9 | 21 | 36 | 55 | 15 | 9 | 1,6 | 87 | 105 | 150 | KF-41040050 |
| 50 | 12 | 16 | 18 | 36 | 9 | 21 | 36 | 55 | 15 | 9 | 1,6 | 99 | 117 | 150 | KF-41040050 |
| 63 | 13 | 20 | 20 | 40 | 11 | 23 | 42 | 65 | 18 | 11 | 1,6 | 116 | 136 | 234 | KF-41063080 |
| 80 | 13 | 20 | 20 | 40 | 11 | 23 | 42 | 65 | 18 | 11 | 1,6 | 136 | 156 | 234 | KF-41063080 |
| 100 | 16 | 25 | 25 | 50 | 14 | 28,5 | 50 | 75 | 20 | 13 | 2 | 164 | 189 | 435 | KF-41100125 |
| 125 | 16 | 25 | 25 | 50 | 14 | 28,5 | 50 | 75 | 20 | 13 | 2 | 192 | 217 | 435 | KF-41100125 |

Locking unit for ISO cylinders Ø 32 ÷ 125



| Ø | AM | B | DD | E | F | H1 | KK | M | MM | N | O | P | S1 | S2 | TG | U | VD | WH |
|-----|----|----|-----|-------|-----|----|------------|-----|----|-----|------|-------|-----|-----|------|----|-----|----|
| 32 | 22 | 30 | M6 | 54,5 | 84 | 16 | M10 x 1,25 | 50 | 12 | 50 | 29,5 | 79,5 | 85 | 75 | 32,5 | 10 | 6 | 26 |
| 40 | 24 | 35 | M6 | 58 | 90 | 15 | M12 x 1,25 | 58 | 16 | 58 | 29,5 | 87,5 | 90 | 75 | 38 | 9 | 6 | 30 |
| 50 | 32 | 40 | M8 | 60 | 100 | 17 | M16 x 1,5 | 70 | 20 | 70 | 29 | 99 | 100 | 80 | 46,5 | 10 | 6 | 37 |
| 63 | 32 | 45 | M8 | 65 | 110 | 17 | M16 x 1,5 | 85 | 20 | 85 | 37 | 122 | 110 | 90 | 56,5 | 13 | 6 | 37 |
| 80 | 40 | 45 | M10 | 75 | 125 | 21 | M20 x 1,5 | 100 | 25 | 100 | 40,5 | 140,5 | 125 | 100 | 72 | 16 | 8 | 46 |
| 100 | 40 | 55 | M10 | 90 | 152 | 26 | M20 x 1,5 | 116 | 25 | 116 | 59 | 179 | 150 | 125 | 89 | 18 | 8 | 51 |
| 125 | 54 | 60 | M12 | 112,5 | 185 | 35 | M27 x 2 | 145 | 32 | 145 | 62 | 207 | 185 | 155 | 110 | 22 | 9,5 | 65 |

Female fork with clips

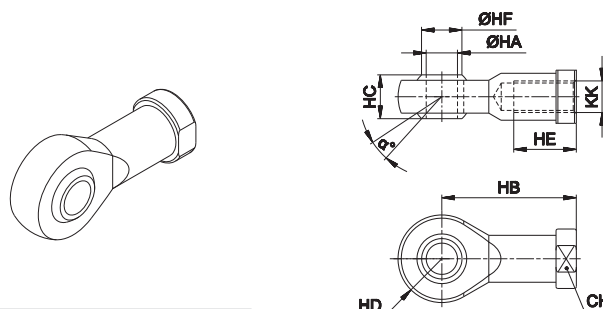


Material: Zinc-plated steel

| Ø | CE | CK | CL | CM | ER | KK | L | LE | Mass g | Part no. |
|----------|-----|----|----|----|----|----------|----|----|--------|----------|
| | | | | | | | | | | |
| 32 | 40 | 10 | 20 | 10 | 16 | M10x1,25 | 26 | 20 | 90 | KF-15032 |
| 40 | 48 | 12 | 24 | 12 | 19 | M12x1,25 | 32 | 24 | 150 | KF-15040 |
| 50 - 63 | 64 | 16 | 32 | 16 | 25 | M16x1,5 | 40 | 32 | 340 | KF-15050 |
| 80 - 100 | 80 | 20 | 40 | 20 | 32 | M20x1,5 | 50 | 40 | 670 | KF-15080 |
| 125 | 110 | 30 | 55 | 30 | 45 | M27x2 | 65 | 54 | 1790 | KF-15125 |

Fork with pin for piston rod according to ISO 8140 standard with

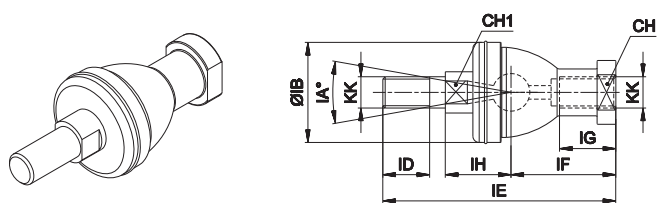
Articulated self-lubricating fork



Material: Zinc-plated steel

| Ø | α° | CH | KK | HA | HB | HC | HD | HE | HF | Mass g | Part no. |
|----------|----|----|----------|----|-----|----|----|----|------|--------|----------|
| | | | | | | | | | | | |
| 32 | 13 | 17 | M10x1,25 | 10 | 43 | 14 | 14 | 20 | 12,9 | 76 | KF-17032 |
| 40 | 13 | 19 | M12x1,25 | 12 | 50 | 16 | 16 | 22 | 15,4 | 110 | KF-17040 |
| 50 - 63 | 15 | 22 | M16x1,5 | 16 | 64 | 21 | 21 | 28 | 19,3 | 220 | KF-17050 |
| 80 - 100 | 14 | 30 | M20x1,5 | 20 | 77 | 25 | 25 | 33 | 24,3 | 400 | KF-17080 |
| 125 | 17 | 41 | M27x2 | 30 | 110 | 37 | 35 | 51 | 34,8 | 1119 | KF-17125 |

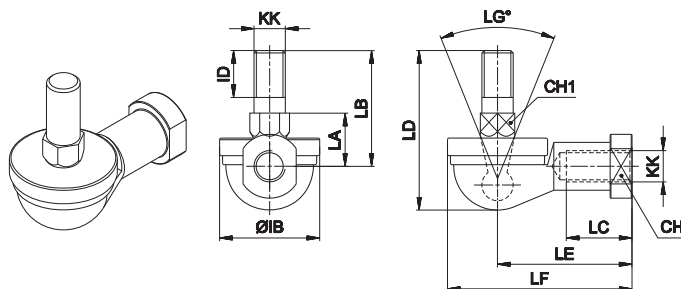
Fork with axially mounted articulated pin



Material: Zinc-plated steel

| Ø | CH | CH1 | IA° | KK | IH | IB | ID | IE | IF | IG | Mass g | Part no. |
|----------|----|-----|-----|----------|------|----|----|------|----|----|--------|----------|
| | | | | | | | | | | | | |
| 32 | 17 | 11 | 30 | M10x1,25 | 19,5 | 32 | 15 | 74,5 | 35 | 18 | 120 | KF-22025 |
| 40 | 19 | 17 | 30 | M12x1,25 | 22 | 36 | 17 | 84 | 40 | 20 | 185 | KF-22040 |
| 50 - 63 | 22 | 19 | 22 | M16x1,5 | 27,5 | 47 | 23 | 112 | 50 | 27 | 360 | KF-22050 |
| 80 - 100 | 30 | 24 | 15 | M20x1,5 | 31,5 | 58 | 25 | 133 | 63 | 38 | 570 | KF-22080 |
| 125 | - | - | - | - | - | - | - | - | - | - | - | - |

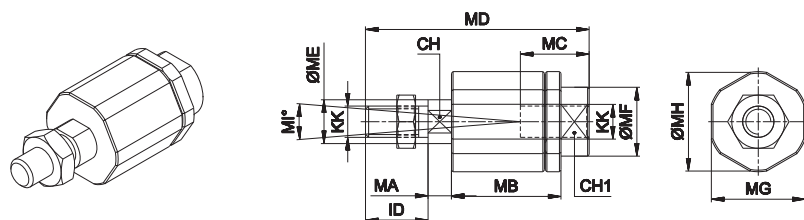
Fork with angle mounted articulated pin



Material: Zinc-plated steel

| Ø | CH | CH1 | LG° | KK | IB | ID | LA | LB | LC | LD | LE | LF | Mass g | Part no. |
|----------|----|-----|-----|----------|----|----|------|----|----|------|----|----|--------|----------|
| | | | | | | | | | | | | | | |
| 32 | 17 | 11 | 50 | M10x1,25 | 32 | 15 | 17 | 37 | 21 | 50,5 | 43 | 57 | 110 | KF-23025 |
| 40 | 19 | 17 | 50 | M12x1,25 | 36 | 17 | 19 | 42 | 27 | 57,5 | 50 | 66 | 165 | KF-23040 |
| 50 - 63 | 22 | 19 | 40 | M16x1,5 | 47 | 23 | 23,5 | 60 | 33 | 79,5 | 64 | 84 | 330 | KF-23050 |
| 80 - 100 | 30 | 24 | 32 | M20x1,5 | 58 | 25 | 27 | 68 | 40 | 90 | 77 | 99 | 540 | KF-23080 |
| 125 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

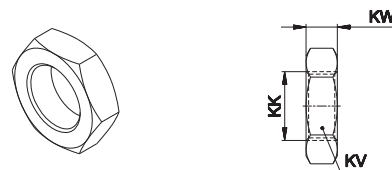
Floating joint



Material: Zinc-plated steel

| Ø | CH | CH1 | ID | KK | MA | MB | MC | MD | ME | MF | MG | MH | MI° | Mass g | Part no. |
|----------|----|-----|-----|----------|----|----|----|-----|----|----|----|----|-----|--------|----------|
| | | | | | | | | | | | | | | | |
| 40 | 12 | 19 | 75 | M12x1,25 | 5 | 35 | 20 | 75 | 14 | 22 | 30 | 32 | 8 | 230 | KF-24040 |
| 50 - 63 | 20 | 30 | 103 | M16x1,5 | 8 | 54 | 32 | 103 | 22 | 32 | 41 | 45 | 6 | 660 | KF-24050 |
| 80 - 100 | 20 | 30 | 119 | M20x1,5 | 8 | 54 | 40 | 119 | 22 | 32 | 41 | 45 | 6 | 700 | KF-24080 |
| 125 | 24 | 54 | 54 | M27x2 | 10 | 60 | 48 | 147 | 32 | 57 | 65 | 70 | 8 | 2060 | KF-24125 |

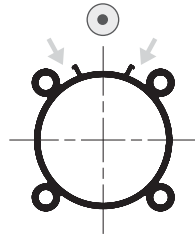
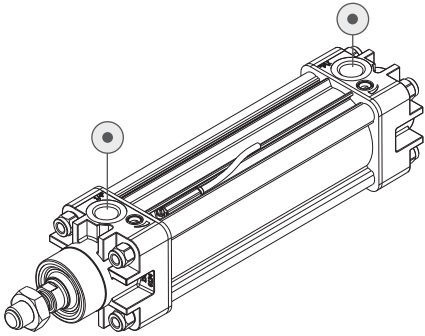
Piston rod locknut (zinc-plated steel)



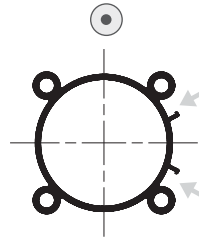
Material: Zinc-plated steel

| Ø | KK | KV | KW | Mass g | Part no. |
|----------|----------|----|----|--------|----------|
| | | | | | |
| 40 | M12x1,25 | 19 | 7 | 10 | KF-16040 |
| 50 - 63 | M16x1,5 | 24 | 8 | 20 | KF-16050 |
| 80 - 100 | M20x1,5 | 30 | 9 | 30 | KF-16080 |
| 125 | M27x2 | 41 | 12 | 80 | KF-16125 |

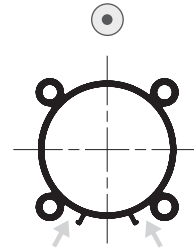
Slot positions for DF magnetic sensor



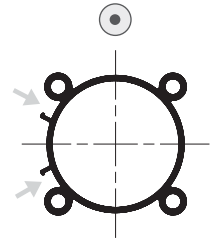
Supply port side
standard




To the right of
supply port side
upon request



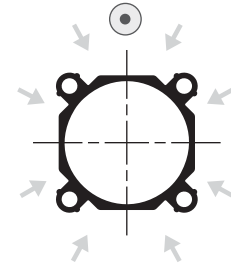
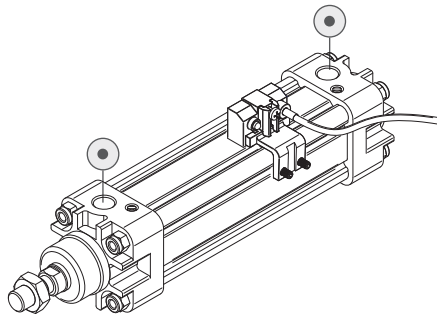
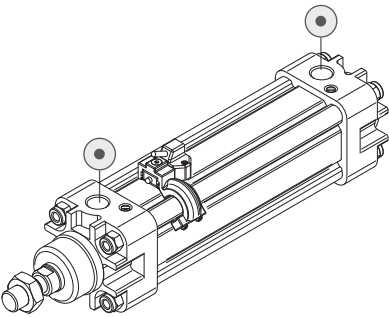
Opposite to the
supply port side
upon request



To the left of
supply port side
upon request

 supply port

Slot positions for DH magnetic sensor - K cylinder series



standard
on all sides

Stroke tolerances

| Ø | stroke ≤ 500 | 501 ≤ stroke ≤ 1000 |
|-----|--------------|---------------------|
| | mm | mm |
| 32 | +2 - 0 | +3,2 - 0 |
| 40 | +2 - 0 | +3,2 - 0 |
| 50 | +2 - 0 | +3,2 - 0 |
| 63 | +2,5 - 0 | +4 - 0 |
| 80 | +2,5 - 0 | +4 - 0 |
| 100 | +2,5 - 0 | +4 - 0 |
| 125 | +4 - 0 | +5 - 0 |

Single acting cylinder Theoretical forces (N) for return stroke

| Ø | Max spring force at 0 stroke | Min. spring force at 0 stroke |
|-----|------------------------------|-------------------------------|
| 32 | 52 | 28 |
| 40 | 70 | 42,5 |
| 50 | 98 | 48 |
| 63 | 98 | 48 |
| 80 | 140 | 80 |
| 100 | 140 | 80 |
| 125 | 235 | 175 |

Theoretical forces (N) at different working pressure (bar)

| Ø | Surface area | | Working pressure | | | | | Working pressure | | | | |
|-----|-----------------|----------|------------------|------|------|------|-------|------------------|------|------|------|-------|
| | mm ² | | bar | | | | | bar | | | | |
| | Thrust | Traction | Thrust | | | | | Traction | | | | |
| | | | 2 | 4 | 6 | 8 | 10 | 2 | 4 | 6 | 8 | 10 |
| 32 | 804 | 691 | 161 | 322 | 482 | 643 | 804 | 138 | 276 | 414 | 553 | 691 |
| 40 | 1256 | 1056 | 251 | 502 | 754 | 1005 | 1256 | 211 | 422 | 633 | 844 | 1055 |
| 50 | 1962 | 1649 | 393 | 785 | 1178 | 1570 | 1963 | 330 | 660 | 990 | 1320 | 1650 |
| 63 | 3116 | 2802 | 623 | 1246 | 1869 | 2493 | 3116 | 560 | 1120 | 1680 | 2240 | 2800 |
| 80 | 5024 | 4533 | 1005 | 2010 | 3014 | 4019 | 5024 | 907 | 1814 | 2722 | 3629 | 4536 |
| 100 | 7850 | 7359 | 1570 | 3140 | 4710 | 6280 | 7850 | 1472 | 2944 | 4416 | 5888 | 7360 |
| 125 | 12266 | 11462 | 2453 | 4906 | 7359 | 9812 | 12266 | 2294 | 4588 | 6882 | 9176 | 11470 |

Cushion

| Ø | Length | Max kinetic energy absorption |
|-----|--------|-------------------------------|
| | mm | Nm |
| 32 | 18 | 1,8 |
| 40 | 24 | 2,5 |
| 50 | 24 | 4,5 |
| 63 | 30 | 8 |
| 80 | 30 | 12 |
| 100 | 35 | 21 |
| 125 | 35 | 36 |

Mass - Standard cylinder

| Ø | Cylinder - stroke 0 | Increase per mm stroke | Moving element - stroke 0 | Increase per mm stroke |
|-----|---------------------|------------------------|---------------------------|------------------------|
| | g | g | g | g |
| 32 | 480 | 2,05 | 130 | 0,9 |
| 40 | 710 | 3,06 | 250 | 1,6 |
| 50 | 1180 | 4,28 | 440 | 2,5 |
| 63 | 1740 | 4,91 | 550 | 2,5 |
| 80 | 2740 | 7,20 | 970 | 3,9 |
| 100 | 3920 | 8,00 | 1190 | 3,9 |
| 125 | 6830 | 12,40 | 2200 | 6,3 |

Mass - Through piston rod cylinder

| Ø | Cylinder - stroke 0 | Increase per mm stroke | Moving element - stroke 0 | Increase per mm stroke |
|-----|---------------------|------------------------|---------------------------|------------------------|
| | g | g | g | g |
| 32 | 550 | 2,92 | 190 | 1,8 |
| 40 | 850 | 4,62 | 360 | 3,2 |
| 50 | 1440 | 6,72 | 640 | 4,9 |
| 63 | 2010 | 7,36 | 740 | 4,9 |
| 80 | 3190 | 11,0 | 1350 | 7,6 |
| 100 | 4460 | 11,8 | 1570 | 7,6 |
| 125 | 7810 | 18,53 | 3050 | 12,4 |

Graph of theoretical forces/pressure and of acceptable strokes depending on maximum peak load

