

# M

## Ø 8 ÷ 25 mm - Microcylinders ISO 6432

- Compact, clean, reliable
- Single and double acting
- With or without magnet
- With or without adjustable cushioning

Available ATEX version upon request



### TECHNICAL CHARACTERISTICS

|                     |   |
|---------------------|---|
| Ambient temperature | -20 ÷ 80 °C                               |
| Fluid               | filtered air, with or without lubrication |
| Working pressure    | 1,5 ÷ 10 bar                              |
| Bores               | Ø 8 - 10 - 12 - 16 - 20 - 25 mm           |
| Cushionings         | adjustable in both sides (Ø16÷25)         |

### CONSTRUCTIVE CHARACTERISTICS

|                           |  |
|---------------------------|--|
| End-caps                  | Anodized aluminium (crimped on the barrel)           |
| Barrel                    | stainless steel AISI 304 (crimped over the end-caps) |
| Piston                    | brass (Ø8÷16), aluminium (Ø20-25)                    |
| Guide slide               | acetalic resin (Ø16÷25)                              |
| Piston rod                | rolled stainless steel AISI 303                      |
| Piston seal               | double-lip seal in nitrile rubber (NBR)              |
| Guide bush for piston rod | steel structure, PTFE and sintered bronze sliding    |
| Shock absorber seals      | nitrile rubber (NBR) in both sides Ø12÷25            |
| Magnet                    | neodimio (Ø10), plastoferrite (Ø12÷25)               |

### CODIFICATION KEY

|   |   |   |   |   |   |   |   |   |   |   |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|--|--|--|
| M | 1 | 0 | 0 | 0 | 2 | 5 | 0 | 0 | 5 | 0 |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|--|--|--|

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

| 1 Series | 2 Type | 3 Version |
|----------|--------|-----------|
|----------|--------|-----------|

M = Ø8÷25 mm - ISO 6432  
Microcylinders

- 1 = Stainless steel piston rod (standard vesion)
- 2 = Chromium-plated steel piston rod (to be used only with locking unit)
- 3 = Reduced version with stainless steel piston rod

- 00 = D.A. Standard version
- 01 = D.A. Through piston rod
- 50 = D.A. With adjustable cushionings (Ø16÷25)

- 51 = D.A. Through piston rod with adjustable cushionings (Ø16÷25)
- 60 = S.A. Retracted piston rod (Ø10÷25), Max stroke 50 mm
- 70 = S.A. Extended piston rod (Ø16÷25), Max stroke 25 mm

D.A. = Double acting  
S.A. = Single acting

| 4 Bore (mm) | 5 Stroke (mm) | 6 Option | 7 Magnetic | 8 Atex option |
|-------------|---------------|----------|------------|---------------|
|-------------|---------------|----------|------------|---------------|

|           |           |            |            |
|-----------|-----------|------------|------------|
| 008 = Ø8  | 0010 = 10 | 0080 = 80  | 0250 = 250 |
| 010 = Ø10 | 0020 = 20 | 0100 = 100 | 0300 = 300 |
| 012 = Ø12 | 0025 = 25 | 0125 = 125 | 0320 = 320 |
| 016 = Ø16 | 0030 = 30 | 0150 = 150 | 0400 = 400 |
| 020 = Ø20 | 0040 = 40 | 0160 = 160 | 0500 = 500 |
| 025 = Ø25 | 0050 = 50 | 0175 = 175 |            |
|           | 0075 = 75 | 0200 = 200 |            |

F = Preset for locking unit  
reduced protrusion

M = Magnetic version  
(Ø10÷25)

X = Atex  
(upon request)

See ATEX Catalogue  
for types and versions

The version with high temperature seals (Max 120°C) available upon request.  
Nut for piston rod and nut for end-cap standard supplied.

Stroke tolerances

| Ø  | stroke ≤ 500 |
|----|--------------|
|    | mm           |
| 8  | +1,5 - 0     |
| 10 | +1,5 - 0     |
| 12 | +1,5 - 0     |
| 16 | +1,5 - 0     |
| 20 | +1,5 - 0     |
| 25 | +1,5 - 0     |

Single acting cylinder  
Theoretical forces (N) for return stroke

| Ø  | Max force    | Min. force          |                     |
|----|--------------|---------------------|---------------------|
|    |              | retraced piston rod | extended piston rod |
|    | stroke 50 mm | stroke 50 mm        | stroke 25 mm        |
| 10 | 7,6          | 4                   | -                   |
| 12 | 8,7          | 5,9                 | -                   |
| 16 | 16           | 7,8                 | 11,9                |
| 20 | 20           | 13                  | 16,5                |
| 25 | 23,5         | 15                  | 13,3                |

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

| Ø  | Surface area    |          | Surface area |     |     |     |     | Surface area |     |     |     |     |
|----|-----------------|----------|--------------|-----|-----|-----|-----|--------------|-----|-----|-----|-----|
|    | mm <sup>2</sup> |          | bar          |     |     |     |     | bar          |     |     |     |     |
|    | Thrust          | Traction | Thrust       |     |     |     |     | Traction     |     |     |     |     |
|    |                 |          | 2            | 4   | 6   | 8   | 10  | 2            | 4   | 6   | 8   | 10  |
| 8  | 50              | 38       | 10           | 20  | 30  | 40  | 50  | 8            | 15  | 23  | 30  | 38  |
| 10 | 79              | 66       | 16           | 31  | 47  | 63  | 79  | 13           | 26  | 40  | 53  | 66  |
| 12 | 113             | 85       | 23           | 45  | 68  | 90  | 113 | 17           | 34  | 51  | 68  | 85  |
| 16 | 201             | 173      | 40           | 80  | 121 | 161 | 201 | 35           | 69  | 104 | 138 | 173 |
| 20 | 314             | 264      | 63           | 126 | 188 | 251 | 314 | 53           | 106 | 158 | 211 | 264 |
| 25 | 419             | 412      | 98           | 196 | 295 | 393 | 491 | 82           | 165 | 247 | 330 | 412 |

Cushion

| Ø   | Length | Max kinetic energy absorption | Standard strokes   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |
|-----|--------|-------------------------------|--------------------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |        |                               | mm                 | Nm |    | mm |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |
|     |        | with cushioning               | without cushioning | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | -   | -   | -   | -   | -   | -   |     |
| 8   | -      | -                             | -                  | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | -   | -   | -   | -   | -   | -   |     |
| 10  | -      | -                             | -                  | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | -   | -   | -   | -   | -   | -   |     |
| 12  | -      | -                             | -                  | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | -   | -   | -   |     |
| 16  | -      | -                             | 0,12               | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | -   | -   | -   |     |
| 16* | 16     | 0,9                           | -                  | -  | -  | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | 300 | 320 | 400 | 500 |
| 20  | -      | -                             | 0,16               | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | 300 | -   | -   |     |
| 20* | 18     | 1,3                           | -                  | -  | -  | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | 300 | 320 | 400 | 500 |
| 25  | -      | -                             | 0,22               | 10 | 20 | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | 300 | 320 | 400 | 500 |
| 25* | 22     | 1,8                           | -                  | -  | -  | 25 | 30 | 40 | 50 | 75 | 80 | 100 | 125 | 150 | 160 | 175 | 200 | 250 | 300 | 320 | 400 | 500 |

\*= version with adjustable cushionings

Mass - single acting

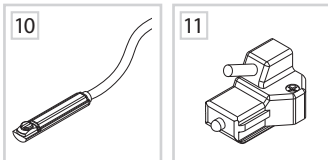
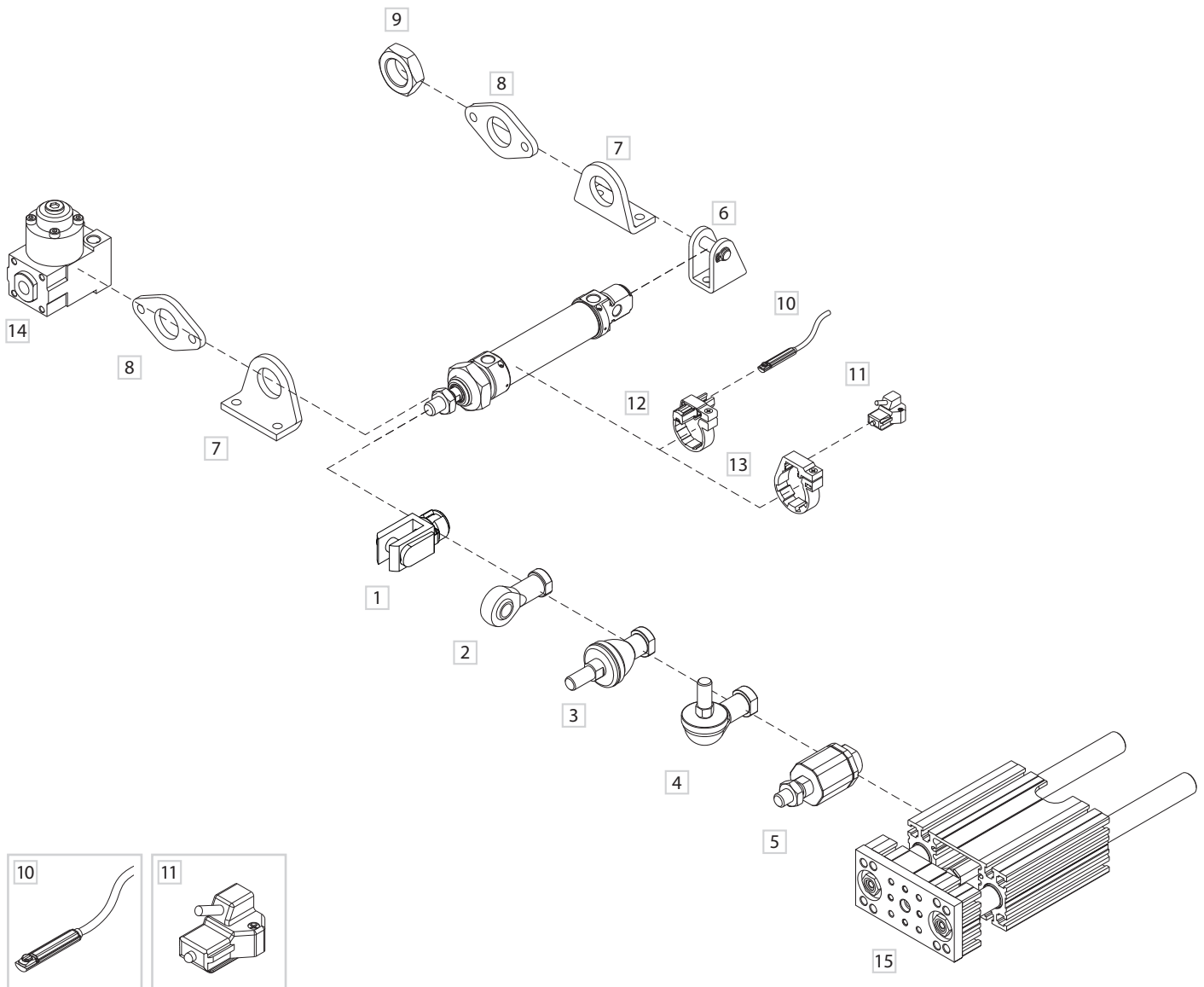
| Ø  | Cylinder - stroke 0 | Increase per mm stroke | Moving element - stroke 0 | Increase per mm stroke |
|----|---------------------|------------------------|---------------------------|------------------------|
|    | g                   | g                      | g                         | g                      |
| 10 | 38                  | 0,23                   | 9                         | 0,1                    |
| 12 | 79                  | 0,38                   | 23                        | 0,22                   |
| 16 | 85                  | 0,43                   | 26                        | 0,22                   |
| 20 | 167                 | 0,66                   | 45                        | 0,4                    |
| 25 | 238                 | 0,95                   | 80                        | 0,62                   |

Massa - double acting

| Ø   | Cylinder - stroke 0 | Increase per mm stroke | Moving element - stroke 0 | Increase per mm stroke |
|-----|---------------------|------------------------|---------------------------|------------------------|
|     | g                   | g                      | g                         | g                      |
| 8   | 37                  | 0,21                   | 7                         | 0,1                    |
| 10  | 38                  | 0,23                   | 9                         | 0,1                    |
| 12  | 78                  | 0,38                   | 23                        | 0,22                   |
| 16  | 85                  | 0,43                   | 23                        | 0,22                   |
| 16* | 87                  | 0,43                   | 25                        | 0,22                   |
| 20  | 167                 | 0,66                   | 45                        | 0,4                    |
| 20* | 170                 | 0,66                   | 48                        | 0,4                    |
| 25  | 237                 | 0,95                   | 80                        | 0,62                   |
| 25* | 245                 | 0,95                   | 88                        | 0,62                   |

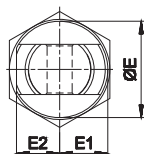
\*= version with adjustable cushionings

Fixing elements and accessories



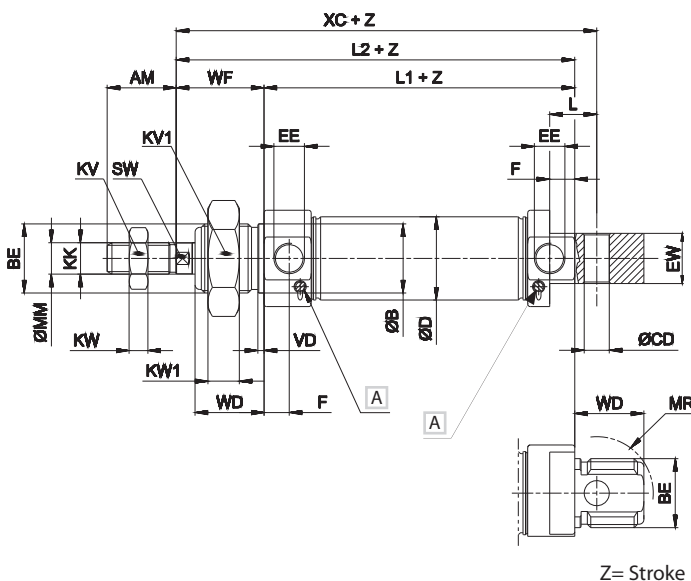
| DESCRIPTION                                 | PART NO.      |
|---|---------------|
| 1 Female fork with clips                    | MF/KF-15_ _ _ |
| 2 Articulated self-lubricating fork         | MF/KF-17_ _ _ |
| 3 Fork with axially mounted articulated pin | MF/KF-22_ _ _ |
| 4 Fork with angle mounted articulated pin   | MF/KF-23_ _ _ |
| 5 Floating joint                            | MF/KF-24_ _ _ |
| 6 Female rear hinge                         | MF-21_ _ _    |
| 7 Angle bracket (MS3)                       | MF-13_ _ _    |
| 8 Flange (MF8)                              | MF-12_ _ _    |
| 9 Nut for end-cap                           | MF-20_ _ _    |
| 10 DF Sensor                                | DF- _ _ _     |
| 11 DH Sensor                                | DH- _ _ _     |
| 12 Holder for DF sensor                     | DH-M_ _DF     |
| 13 Holder for DH sensor                     | DH-M_ _ _     |
| 14 Locking unit                             | L1-N          |
| 15 Slide unit                               | J12           |

### Double acting/Single acting



- M100**  
D.A. Standard
- M150**  
D.A. With adjustable cushionings
- M160**  
S.A. Retracted piston rod
- M170**  
S.A. Extended piston rod

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

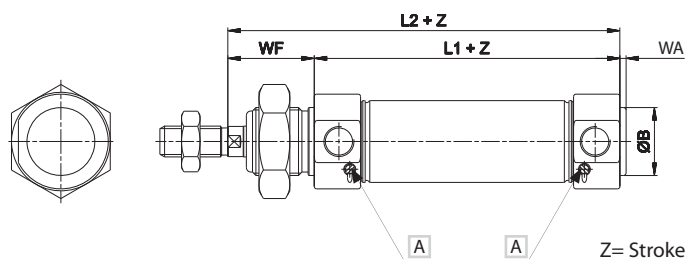


### Double acting reduced version



- M300**  
D.A. Standard
- M350**  
D.A. With adjustable cushionings
- M360**  
S.A. Retracted piston rod
- M370**  
S.A. Extended piston rod

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

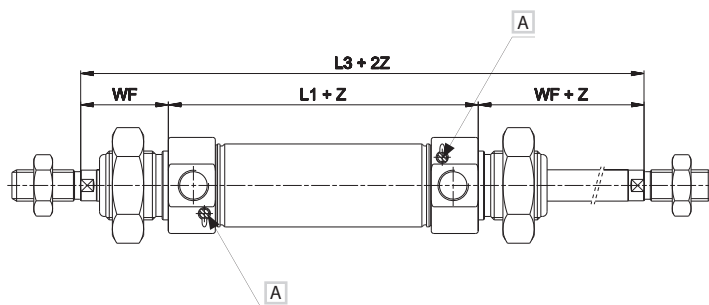


### Double acting through piston rod



- M101**  
D.A. Through piston rod
- M151**  
D.A. Through piston rod with adjustable cushionings

Z = Stroke



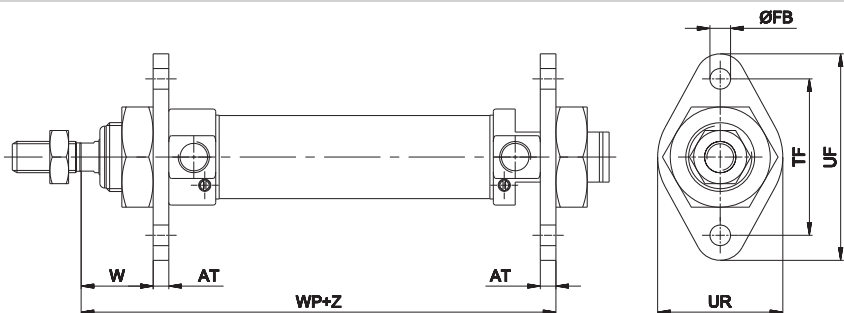
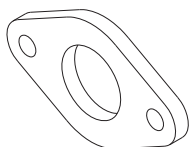
| Ø  | AM | B    | BE       | CD  | D    | E    | E1    | E2    | EE     | EW   | F   | KK       | KV | KV1 |
|----|----|------|----------|-----|------|------|-------|-------|--------|------|-----|----------|----|-----|
|    |    | h 10 |          | H 9 |      |      |       |       |        | d 13 |     |          |    |     |
| 8  | 12 | 12   | M12x1,25 | 4   | 9,3  | 14   | 7,9   | 7,2   | M5x0,8 | 8    | 5   | M4x0,7   | 7  | 19  |
| 10 | 12 | 12   | M12x1,25 | 4   | 11,3 | 14   | 7,9   | 7,2   | M5x0,8 | 8    | 5   | M4x0,7   | 7  | 19  |
| 12 | 16 | 16   | M16x1,5  | 6   | 13,3 | 17   | 9,4   | 8,7   | M5x0,8 | 12   | 5   | M6x1     | 10 | 24  |
| 16 | 16 | 16   | M16x1,5  | 6   | 17,3 | 20,8 | 10,4  | 9,6   | M5x0,8 | 12   | 5,5 | M6x1     | 10 | 24  |
| 20 | 20 | 22   | M22x1,5  | 8   | 21,6 | 27,7 | 13,85 | 12    | G1/8   | 16   | 8   | M8x1,25  | 13 | 32  |
| 25 | 22 | 22   | M22x1,5  | 8   | 26,6 | 30,7 | 15,35 | 13,75 | G1/8   | 16   | 8   | M10x1,25 | 17 | 32  |

| Ø  | KW  | KW1 | L  | L1 | L2 | L3  | MM | MR | SW | VD  | WA  | WD | WF    | XC  |
|----|-----|-----|----|----|----|-----|----|----|----|-----|-----|----|-------|-----|
|    |     |     |    |    |    |     |    |    |    |     |     |    | ± 1,2 | ± 1 |
| 8  | 2,8 | 7   | 7  | 46 | 62 | 78  | 4  | 12 | 3  | 1,5 | 1,5 | 12 | 16    | 64  |
| 10 | 2,8 | 7   | 7  | 46 | 62 | 78  | 4  | 12 | 3  | 1,5 | 1,5 | 12 | 16    | 64  |
| 12 | 4   | 8   | 9  | 50 | 72 | 94  | 6  | 16 | 5  | 1,5 | 1,5 | 17 | 22    | 75  |
| 16 | 4   | 8   | 8  | 56 | 78 | 100 | 6  | 16 | 5  | 1,5 | 1,5 | 17 | 22    | 82  |
| 20 | 5   | 10  | 11 | 68 | 92 | 116 | 8  | 18 | 7  | 2   | 2   | 19 | 24    | 95  |
| 25 | 6   | 10  | 15 | 69 | 97 | 125 | 10 | 18 | 9  | 2   | 2   | 22 | 28    | 104 |

A Pneumatic cushioning adjusting screw

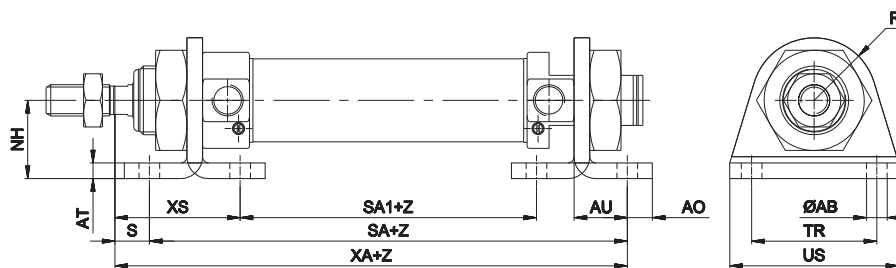
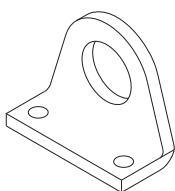
**Flange (MF8)**



Material: Zinc-plated steel

| Ø      | AT | ØFB | TF   | UF | UR | W     | WP  | Mass | Part No. |
|--------|----|-----|------|----|----|-------|-----|------|----------|
|        |    | H13 | Js14 |    |    | ± 1,4 |     | g    |          |
| 8 - 10 | 3  | 4,5 | 30   | 40 | 25 | 13    | 65  | 12   | MF-12008 |
| 12     | 4  | 5,5 | 40   | 53 | 30 | 18    | 76  | 25   | MF-12012 |
| 16     | 4  | 5,5 | 40   | 53 | 30 | 18    | 82  | 49   | MF-12020 |
| 20     | 5  | 6,6 | 50   | 66 | 40 | 19    | 97  |      |          |
| 25     | 5  | 6,6 | 50   | 66 | 40 | 23    | 102 |      |          |

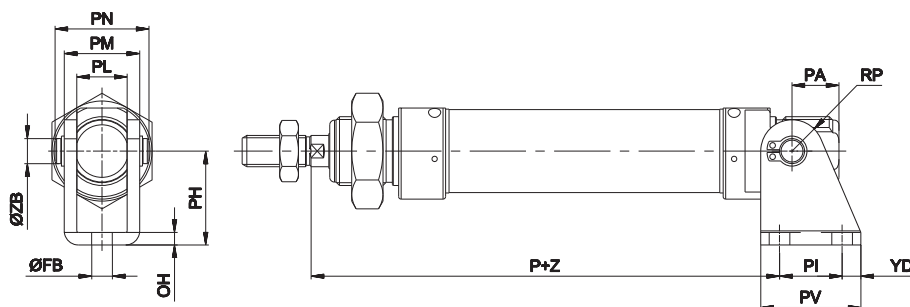
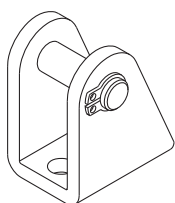
**Angle bracket (MS3)**



Material: Zinc-plated steel

| Ø      | AB  | AO | AT | AU        | NH   | R  | S  | SA  | SA1 | TR   | US | XA  | XS   | Mass | Part No. |
|--------|-----|----|----|-----------|------|----|----|-----|-----|------|----|-----|------|------|----------|
|        | H13 |    |    | +0,3<br>0 | ±0,3 |    |    |     |     | Js14 |    |     | ±1,4 | g    |          |
| 8 - 10 | 4,5 | 5  | 3  | 11        | 16   | 10 | 5  | 68  | 30  | 25   | 35 | 73  | 24   | 20   | MF-13008 |
| 12     | 5,5 | 6  | 4  | 14        | 20   | 13 | 8  | 78  | 30  | 32   | 42 | 86  | 32   | 40   | MF-13012 |
| 16     | 5,5 | 6  | 4  | 14        | 20   | 13 | 8  | 84  | 36  | 32   | 42 | 92  | 32   | 40   | MF-13020 |
| 20     | 6,6 | 8  | 5  | 17        | 25   | 20 | 7  | 102 | 44  | 40   | 54 | 109 | 36   | 90   |          |
| 25     | 6,6 | 8  | 5  | 17        | 25   | 20 | 11 | 103 | 45  | 40   | 54 | 114 | 40   |      |          |

**Female rear hinge**

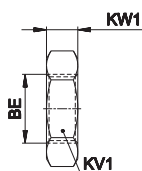


Including bolt and 2 clips

Material: Zinc-plated steel

| Ø      | FB  | OH  | P    | PA | PH | PI   | PL   | PM   | PN | PV | RP  | YD  | ZB | Mass | Part No. |
|--------|-----|-----|------|----|----|------|------|------|----|----|-----|-----|----|------|----------|
|        | H13 |     |      |    |    |      | E9   |      |    |    |     |     | f8 | g    |          |
| 8 - 10 | 4,5 | 2,5 | 62,5 | 11 | 24 | 12,5 | 8,1  | 13,1 | 17 | 20 | 5,3 | 3,8 | 4  | 19   | MF-21008 |
| 12     | 5,5 | 3   | 73   | 13 | 27 | 15   | 12,1 | 18,1 | 23 | 25 | 7   | 5   | 6  | 37   | MF-21012 |
| 16     | 5,5 | 3   | 80   | 13 | 27 | 15   | 12,1 | 18,1 | 23 | 25 | 7   | 5   | 6  | 80   | MF-21020 |
| 20     | 6,6 | 4   | 91   | 16 | 30 | 20   | 16,1 | 24,1 | 30 | 32 | 10  | 6   | 8  |      |          |
| 25     | 6,6 | 4   | 100  | 16 | 30 | 20   | 16,1 | 24,1 | 30 | 32 | 10  | 6   | 8  |      |          |

**Nut for end-cap**

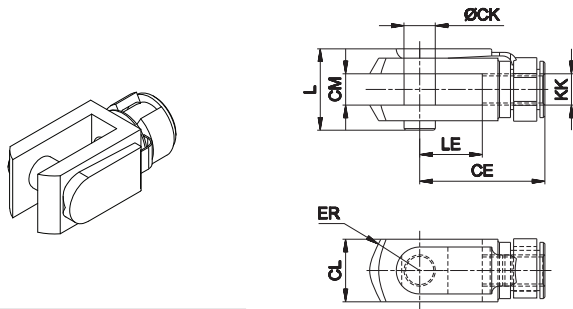


Material: Zinc-plated steel

Subject to change

| Ø       | BE       | KV1 | KW1 | Mass | Part No. |
|---------|----------|-----|-----|------|----------|
|         |          |     |     | g    |          |
| 8 - 10  | M12x1,25 | 19  | 7   | 11   | MF-20008 |
| 12 - 16 | M16x1,5  | 24  | 8   | 18   | MF-20012 |
| 20 - 25 | M22x1,5  | 32  | 10  | 33   | MF-20020 |

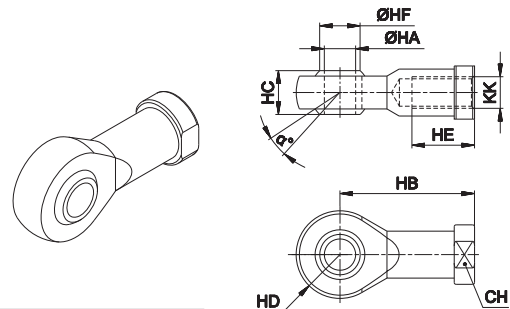
Female fork with clips



Material: Zinc-plated steel

| Ø       | CE  | CK | CL | CM | ER | KK       | L  | LE | Mass | Part No. |
|---------|-----|----|----|----|----|----------|----|----|------|----------|
|         | B12 |    |    |    |    |          |    |    |      |          |
| 8 - 10  | 16  | 4  | 8  | 4  | 5  | M4x0,7   | 11 | 8  | 7    | MF-15008 |
| 12 - 16 | 24  | 6  | 12 | 6  | 7  | M6x1     | 16 | 12 | 19   | MF-15012 |
| 20      | 32  | 8  | 16 | 8  | 10 | M8x1,25  | 22 | 16 | 46   | MF-15020 |
| 25      | 40  | 10 | 20 | 10 | 16 | M10x1,25 | 26 | 20 | 90   | KF-15032 |

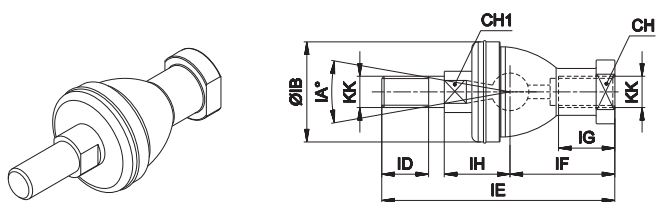
Articulated self-lubricating fork



Material: Zinc-plated steel

| Ø       | α°  | CH | KK       | HA | HB | HC | HD | HE | HF   | Mass | Part No. |
|---------|-----|----|----------|----|----|----|----|----|------|------|----------|
|         |     |    |          | H7 |    |    |    |    |      |      |          |
| 8 - 10  | 13° | 9  | M4x0,7   | 5  | 27 | 8  | 9  | 10 | 7,7  | 18   | MF-17008 |
| 12 - 16 | 13° | 11 | M6x1     | 6  | 30 | 9  | 10 | 12 | 9    | 26   | MF-17012 |
| 20      | 14° | 14 | M8x1,25  | 8  | 36 | 12 | 12 | 16 | 10,4 | 46   | MF-17020 |
| 25      | 13° | 17 | M10x1,25 | 10 | 43 | 14 | 14 | 20 | 12,9 | 76   | KF-17032 |

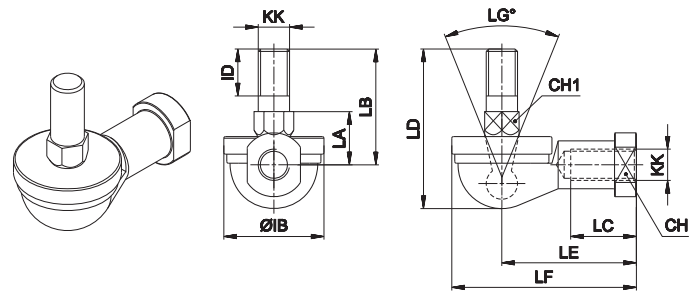
Fork with axially mounted articulated pin



Material: Zinc-plated steel

| Ø       | CH | CH1 | IA° | KK       | IH   | IB | ID | IE   | IF | IG | Mass | Part No. |
|---------|----|-----|-----|----------|------|----|----|------|----|----|------|----------|
|         |    |     |     |          | ±0,3 |    |    |      |    |    |      |          |
| 8 - 10  | -  | -   | -   | -        | -    | -  | -  | -    | -  | -  | -    | -        |
| 12 - 16 | 11 | 8   | 30° | M6x1     | 12,2 | 22 | 11 | 55,2 | 28 | 15 | 40   | MF-22016 |
| 20      | 14 | 10  | 30° | M8x1,25  | 16   | 28 | 12 | 65   | 32 | 16 | 75   | MF-22020 |
| 25      | 17 | 11  | 30° | M10x1,25 | 19,5 | 32 | 15 | 74,5 | 35 | 18 | 120  | KF-22025 |

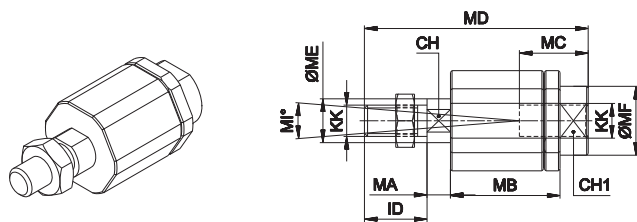
Fork with angle mounted articulated pin



Material: Zinc-plated steel

| Ø       | CH | CH1 | LG° | KK       | IB | ID | LA   | LB | LC | LD   | LE | LF | Mass | Part No. |
|---------|----|-----|-----|----------|----|----|------|----|----|------|----|----|------|----------|
|         |    |     |     |          |    |    | ±0,3 |    |    |      |    |    |      |          |
| 8 - 10  | -  | -   | -   | -        | -  | -  | -    | -  | -  | -    | -  | -  | -    | -        |
| 12 - 16 | 11 | 8   | 50° | M6x1     | 22 | 11 | 11   | 26 | 14 | 35,5 | 30 | 40 | 37   | MF-23012 |
| 20      | 14 | 10  | 50° | M8x1,25  | 28 | 12 | 14   | 31 | 17 | 42,5 | 36 | 48 | 67   | MF-23020 |
| 25      | 17 | 11  | 50° | M10x1,25 | 32 | 15 | 17   | 37 | 21 | 50,5 | 43 | 57 | 110  | KF-23025 |

Floating joint



Material: Zinc-plated steel

| Ø       | CH | CH1 | ID | KK       | MA  | MB   | MC   | MD   | ME | MF   | MG | MH   | Mi° | Mass | Part No. |
|---------|----|-----|----|----------|-----|------|------|------|----|------|----|------|-----|------|----------|
|         |    |     |    |          |     |      |      |      |    |      |    |      | 6°  |      |          |
| 8 - 10  | -  | -   | -  | -        | -   | -    | -    | -    | -  | -    | -  | -    | -   | -    | -        |
| 12 - 16 | 5  | 7   | 11 | M6x1     | 2,5 | 17,5 | 12,5 | 35   | 6  | 8,5  | 13 | 14,5 | 6°  | 35   | MF-24012 |
| 20      | 7  | 11  | 21 | M8x1,25  | 5   | 26   | 16   | 57   | 8  | 12,5 | 17 | 19   | 8°  | 60   | MF-24020 |
| 25      | 12 | 19  | 20 | M10x1,25 | 7,5 | 35   | 22   | 71,5 | 14 | 22   | 30 | 32   | 8°  | 220  | KF-24032 |

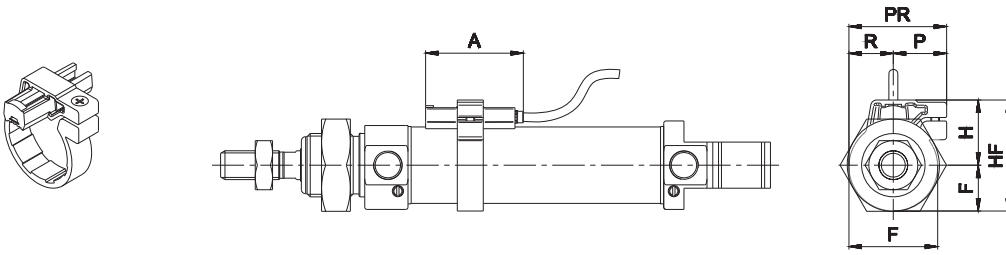
Nut for piston rod



Material: Zinc-plated steel

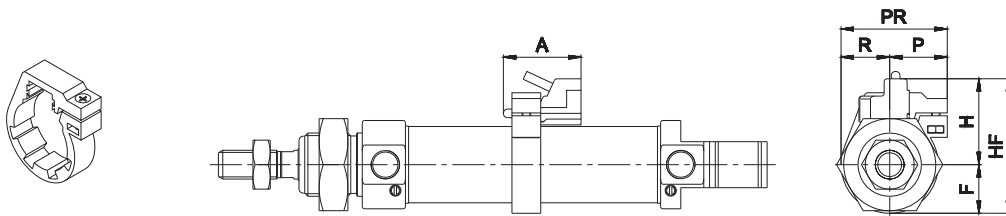
| Ø       | KK       | KV | KW  | Mass | Part No. |
|---------|----------|----|-----|------|----------|
|         |          |    |     |      |          |
| 8 - 10  | M4x0,7   | 7  | 2,8 | 0,2  | MF-16008 |
| 12 - 16 | M6x1     | 10 | 4   | 1,6  | MF-16012 |
| 20      | M8x1,25  | 13 | 5   | 3,4  | MF-16020 |
| 25      | M10x1,25 | 17 | 6   | 5    | KF-16032 |

DF sensor fixing elements



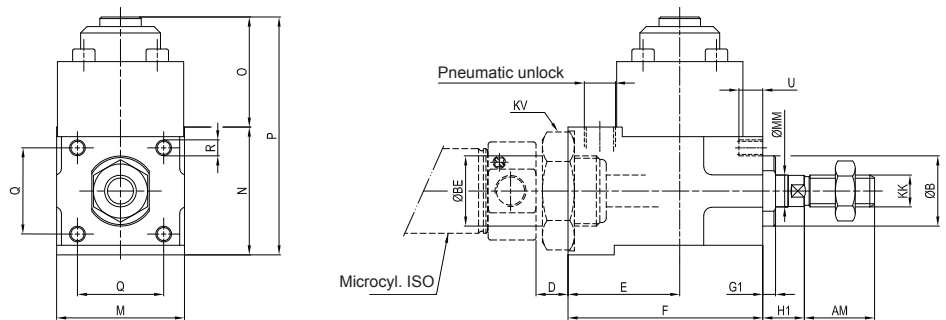
| Ø  | A  | F  | H  | HF | P  | R  | PR | Part No. |
|----|----|----|----|----|----|----|----|----------|
| 10 | 34 | 8  | 17 | 25 | 15 | 8  | 23 | DH-M10DF |
| 12 | 34 | 8  | 17 | 25 | 15 | 8  | 23 | DH-M12DF |
| 16 | 34 | 11 | 18 | 29 | 17 | 11 | 28 | DH-M16DF |
| 20 | 34 | 12 | 20 | 32 | 17 | 12 | 29 | DH-M20DF |
| 25 | 34 | 16 | 23 | 39 | 19 | 16 | 35 | DH-M25DF |

DH sensor fixing elements

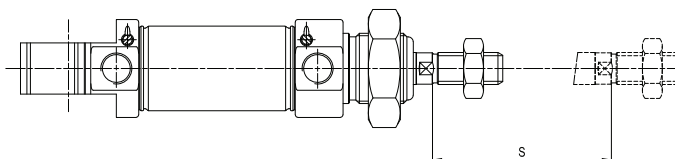


| Ø  | A  | F    | H    | HF | P  | R  | PR | Part No. |
|----|----|------|------|----|----|----|----|----------|
| 10 | 24 | 12,5 | 22,5 | 35 | 17 | 10 | 27 | DH-M10   |
| 12 | 24 | 11,5 | 23,5 | 35 | 17 | 10 | 27 | DH-M12   |
| 16 | 24 | 15   | 25   | 40 | 18 | 13 | 31 | DH-M16   |
| 20 | 24 | 19   | 27   | 46 | 18 | 17 | 29 | DH-M20   |
| 25 | 24 | 18   | 30   | 48 | 20 | 17 | 37 | DH-M25   |

Locking unit for Microcylinders Ø 16 - 20 - 25 mm



> Additional length to standard rod



| Ø  | AM | B  | BE        | D  | E  | F  | G1  | H1 | KK         | KV     | M  | MM | N  | O    | P    | Q  | R  | S  | U   |
|----|----|----|-----------|----|----|----|-----|----|------------|--------|----|----|----|------|------|----|----|----|-----|
| 16 | 16 | 16 | M16 x 1,5 | 10 | 35 | 61 | 1,5 | 7  | M6 x 1     | es. 24 | 40 | 6  | 40 | 34,5 | 74,5 | 27 | M5 | 55 | 7,5 |
|    | 20 | 22 | M22 x 1,5 | 10 | 35 | 61 | 4   | 9  | M8 x 1,25  | es. 32 | 40 | 8  | 40 | 34,5 | 74,5 | 27 | M5 | 55 | 7,5 |
| 25 | 22 | 22 | M22 x 1,5 | 10 | 35 | 61 | 4   | 13 | M10 x 1,25 | es. 32 | 40 | 10 | 40 | 34,5 | 74,5 | 27 | M5 | 55 | 7,5 |