

This range of stainless steel cylinders has been specially designed for use in difficult environments. Hygienic design, external seals of flouriated rubber and prelubrication with our food-industry-approved grease according to USDA-H1 make the cylinders particularly suitable for food industry use. All cylinders have magnetic pistons for proximity position sensing. Fixing dimensions to ISO 6431 simplify installation and make the cylinders physically interchangeable throughout the world.

- Round cylinder to ISO 6431
- All stainless steel
- Clean, smooth washdown design
- Magnetic piston as standard
- Adjustable cushioning for long service life
- Complete range of mountings and sensors



**For ATEX specific products
contact Sales Office**



Operating information

| | |
|--------------------|-----------------------|
| Working pressure: | Max 10 bar |
| Temperature range: | -20°C to +70°C |
| ATEX approval: | CE Ex IIGD c T4 120°C |

Prelubricated, further lubrication is not normally necessary. If additional lubrication is introduced it must be continued.

For more information see www.parker.com/euro_pneumatic

Standard stroke lengths

Ø32mm - (G1/8)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-D032MS-0025 |
| 50 | P1S-D032MS-0050 |
| 80 | P1S-D032MS-0080 |
| 100 | P1S-D032MS-0100 |
| 125 | P1S-D032MS-0125 |
| 160 | P1S-D032MS-0160 |
| 200 | P1S-D032MS-0200 |
| 250 | P1S-D032MS-0250 |
| 320 | P1S-D032MS-0320 |
| 400 | P1S-D032MS-0400 |
| 500 | P1S-D032MS-0500 |

Ø63mm - (G3/8)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-D063MS-0025 |
| 50 | P1S-D063MS-0050 |
| 80 | P1S-D063MS-0080 |
| 100 | P1S-D063MS-0100 |
| 125 | P1S-D063MS-0125 |
| 160 | P1S-D063MS-0160 |
| 200 | P1S-D063MS-0200 |
| 250 | P1S-D063MS-0250 |
| 320 | P1S-D063MS-0320 |
| 400 | P1S-D063MS-0400 |
| 500 | P1S-D063MS-0500 |

Ø100mm - (G1/2)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-L100MS-0025 |
| 50 | P1S-L100MS-0050 |
| 80 | P1S-L100MS-0080 |
| 100 | P1S-L100MS-0100 |
| 125 | P1S-L100MS-0125 |
| 160 | P1S-L100MS-0160 |
| 200 | P1S-L100MS-0200 |
| 250 | P1S-L100MS-0250 |
| 320 | P1S-L100MS-0320 |
| 400 | P1S-L100MS-0400 |
| 500 | P1S-L100MS-0500 |

Ø40mm - (G1/4)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-D040MS-0025 |
| 50 | P1S-D040MS-0050 |
| 80 | P1S-D040MS-0080 |
| 100 | P1S-D040MS-0100 |
| 125 | P1S-D040MS-0125 |
| 160 | P1S-D040MS-0160 |
| 200 | P1S-D040MS-0200 |
| 250 | P1S-D040MS-0250 |
| 320 | P1S-D040MS-0320 |
| 400 | P1S-D040MS-0400 |
| 500 | P1S-D040MS-0500 |

Ø80mm - (G3/8)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-L080MS-0025 |
| 50 | P1S-L080MS-0050 |
| 80 | P1S-L080MS-0080 |
| 100 | P1S-L080MS-0100 |
| 125 | P1S-L080MS-0125 |
| 160 | P1S-L080MS-0160 |
| 200 | P1S-L080MS-0200 |
| 250 | P1S-L080MS-0250 |
| 320 | P1S-L080MS-0320 |
| 400 | P1S-L080MS-0400 |
| 500 | P1S-L080MS-0500 |

Ø125mm - (G1/2)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-L125MS-0025 |
| 50 | P1S-L125MS-0050 |
| 80 | P1S-L125MS-0080 |
| 100 | P1S-L125MS-0100 |
| 125 | P1S-L125MS-0125 |
| 160 | P1S-L125MS-0160 |
| 200 | P1S-L125MS-0200 |
| 250 | P1S-L125MS-0250 |
| 320 | P1S-L125MS-0320 |
| 400 | P1S-L125MS-0400 |
| 500 | P1S-L125MS-0500 |

Ø50mm - (G1/4)

| Stroke mm | Order code |
|-----------|-----------------|
| 25 | P1S-D050MS-0025 |
| 50 | P1S-D050MS-0050 |
| 80 | P1S-D050MS-0080 |
| 100 | P1S-D050MS-0100 |
| 125 | P1S-D050MS-0125 |
| 160 | P1S-D050MS-0160 |
| 200 | P1S-D050MS-0200 |
| 250 | P1S-D050MS-0250 |
| 320 | P1S-D050MS-0320 |
| 400 | P1S-D050MS-0400 |
| 500 | P1S-D050MS-0500 |

Design Variants

Working temperatures

High temperature -10°C to +150°C Non-magnetic piston

Low temperature

Ø10 and Ø125mm -40°C to +40°C Non-magnetic piston

Stainless steel scraper for piston rod

-20°C to +80°C Magnetic piston



Double acting options

Double-acting
adjustable cushioning

Ø80 - Ø125



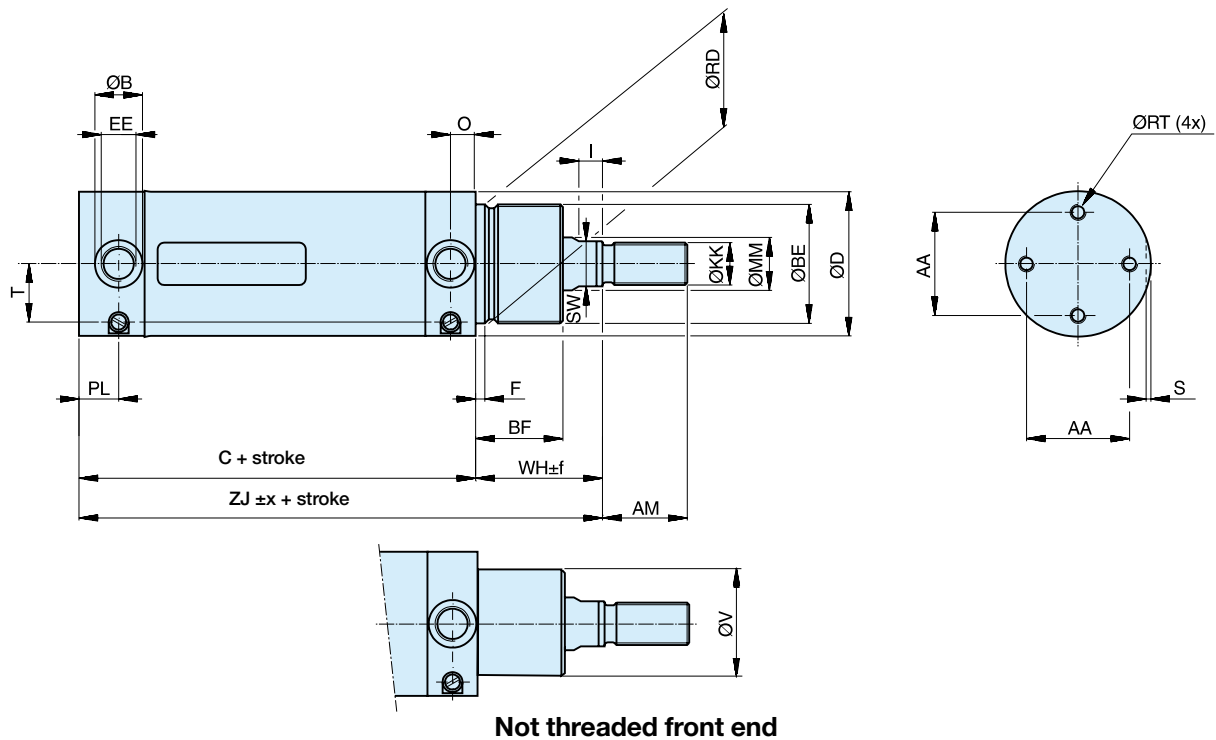
Double-acting
adjustable cushioning
through rod only

Ø80 - Ø125



Mounting options

ISO 6431 Stainless Steel Cylinders are available with a variety of integral threaded mounting holes or trunnion pegs.

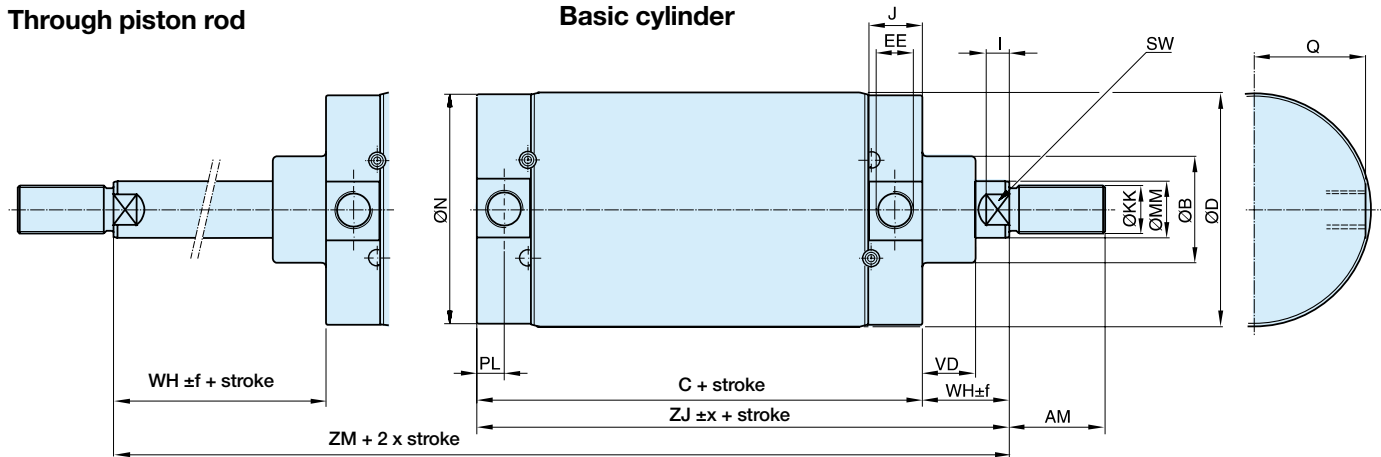


Dimensions Ø32-Ø63

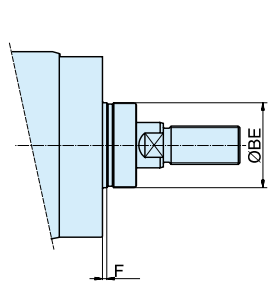
| Cylinder designation | AA | AM | B | BF | BE | C | D | EE | F | I | KK | MM | O | PL | RD | RT |
|----------------------|------|----|----|----|---------|-----|----|------|-----|----|----------|----|------|------|----|----|
| | mm | mm | mm | mm | | mm | mm | | mm | mm | | mm | mm | mm | mm | mm |
| P1S-D032M | 24,5 | 22 | 15 | 25 | M30x1,5 | 88 | 36 | G1/8 | 4,2 | 6 | M10x1,25 | 12 | 8 | 13 | 30 | M5 |
| P1S-D040M | 30 | 24 | 18 | 30 | M38x1,5 | 97 | 44 | G1/4 | 4,5 | 9 | M12x1,25 | 16 | 9,5 | 15 | 38 | M6 |
| P1S-D050M | 39 | 32 | 18 | 33 | M45x1,5 | 101 | 55 | G1/4 | 4,5 | 9 | M16x1,5 | 20 | 9,5 | 15 | 45 | M6 |
| P1S-D063M | 49 | 32 | 25 | 33 | M45x1,5 | 117 | 68 | G3/8 | 4,5 | 9 | M16x1,5 | 20 | 13,3 | 20,5 | 45 | M8 |

| Cylinder designation | S | SW | T | V | WH | ZJ | Mounting tolerances | | Stroke length |
|----------------------|-----|----|------|----|------|-------|---------------------|-----|---------------|
| | mm | mm | mm | mm | mm | mm | x | f | 0-500 mm |
| | | | | | | | mm | mm | mm |
| P1S-D032M | 1,5 | 10 | 12,2 | 26 | 35,5 | 123,5 | 1,2 | 2,5 | +2,0 |
| P1S-D040M | 1,5 | 14 | 16,5 | 35 | 44 | 141 | 1,0 | 2,2 | +2,0 |
| P1S-D050M | 1,5 | 17 | 22 | 41 | 47 | 148 | 0,9 | 2,3 | +2,0 |
| P1S-D063M | 1,5 | 17 | 26 | 41 | 47 | 164 | 1,4 | 2,3 | +2,5 |

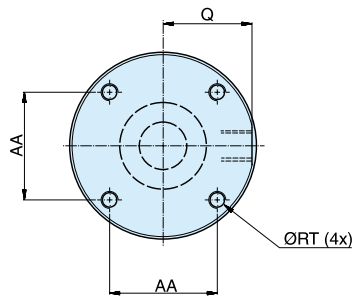
Through piston rod



Threaded front end



Mounting holes in the end covers



Dimensions Ø80-Ø125

| Cylinder designation | AA | AM | B | BE | C | D | EE | F | KK | I | J | MM | N | PL | Q |
|----------------------|----|----|----|---------|-----|-----|------|----|---------|----|------|----|-----|------|------|
| | mm | mm | mm | | mm | mm | | mm | | mm | mm | mm | mm | mm | mm |
| P1S-•Ø80M | 46 | 40 | 50 | M50x1,5 | 141 | 86 | G3/8 | 4 | M20x1,5 | 10 | 24,5 | 25 | 84 | 12,5 | 40 |
| P1S-•100M | 60 | 40 | 50 | M50x1,5 | 158 | 106 | G1/2 | 4 | M20x1,5 | 8 | 30 | 25 | 104 | 15,5 | 49,5 |
| P1S-•125M | 76 | 54 | 60 | M60x2 | 183 | 133 | G1/2 | 4 | M27x2 | 13 | 30 | 32 | 129 | 15,5 | 62,5 |

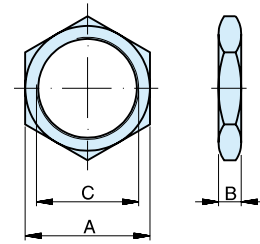
| Cylinder designation | RT | SW | VD | WH | ZJ | ZM | Mounting tol. Stroke length | | |
|----------------------|-----|----|----|----|-----|-----|-----------------------------|-----|----------|
| | mm | mm | mm | mm | mm | mm | x | f | 0-500 mm |
| | | | | | | | mm | mm | |
| P1S-•Ø80M | M8 | 21 | 19 | 37 | 178 | 215 | 1,5 | 2,5 | +2,5 |
| P1S-•100M | M10 | 21 | 19 | 35 | 193 | 228 | 1,5 | 2,5 | +2,5 |
| P1S-•125M | M12 | 27 | 24 | 47 | 230 | 277 | 2,0 | 2,5 | +4,0 |

Cylinder mountings Ø32 - Ø63

Mounting nut

Intended for fixed mounting of the cylinder via the neck.

Material: stainless steel, DIN X 5 CrNi 18 10



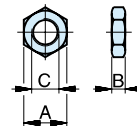
| Cylinder Ø mm | A mm | B mm | C | Weight Kg | Order code |
|---------------|------|------|---------|-----------|-------------------|
| 32 | 36 | 8 | M30x1,5 | 0,03 | 9127294401 |
| 40 | 46 | 10 | M38x1,5 | 0,06 | 9127294402 |
| 50 | 55 | 10 | M45x1,5 | 0,08 | 9127294403 |
| 63 | 55 | 10 | M45x1,5 | 0,08 | 9127294403 |

Cylinder mountings Ø32-Ø125

Rod nut

Intended for fixed mounting on the piston rod. Cylinders are supplied complete with one rod nut. (cylinders with through piston rods are supplied with two rod nuts.)

Material:
Stainless steel, DIN X 5 CrNi 18 10



| Cylinder Ø | A mm | B mm | C mm | Weight Kg | Order code |
|------------|------|------|----------|-----------|-------------------|
| 32 | 17 | 5 | M10x1,25 | 0,01 | 9126725404 |
| 40 | 19 | 6 | M12x1,25 | 0,01 | 9126725405 |
| 50 | 24 | 8 | M16x1,5 | 0,02 | 9126725406 |
| 63 | 24 | 8 | M16x1,5 | 0,02 | 9126725406 |
| 80 | 30 | 10 | M20x1,5 | 0,04 | 0261109921 |
| 100 | 30 | 10 | M20x1,5 | 0,04 | 0261109921 |
| 125 | 41 | 13,5 | M27x2 | 0,10 | 0261109922 |

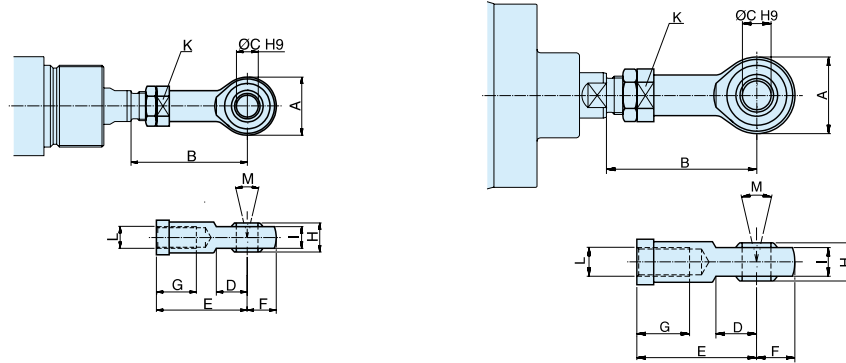
Cylinder mountings Ø32 - Ø125

Swivel rod eye



According to ISO 8139
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction.

Material:
Swivel rod eye: stainless steel, DIN X 5 CrNi 18 10
Ball: hardened stainless steel, DIN X 5 CrNi 18 10



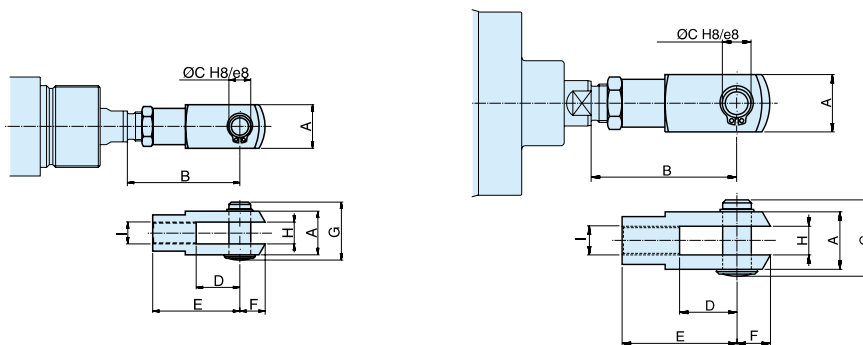
| Cyl. Ø mm | A mm | B _{min} mm | B _{max} mm | C mm | D mm | E mm | F mm | G mm | H mm | I mm | K mm | L | M | Weight Kg | Order code |
|-----------|------|---------------------|---------------------|------|------|------|------|------|------|------|------|----------|-----|-----------|-----------------|
| 32 | 28 | 50 | 55 | 10 | 15 | 43 | 14 | 15 | 14 | 10,5 | 17 | M10x1,25 | 24° | 0,08 | P1S-4JRT |
| 40 | 32 | 56 | 62 | 12 | 17 | 50 | 16 | 22 | 16 | 12 | 19 | M12x1,25 | 24° | 0,12 | P1S-4LRT |
| 50 | 42 | 72 | 80 | 16 | 22 | 64 | 21 | 28 | 21 | 15 | 22 | M16x1,5 | 30° | 0,25 | P1S-4MRT |
| 63 | 42 | 72 | 80 | 16 | 22 | 64 | 21 | 28 | 21 | 15 | 22 | M16x1,5 | 30° | 0,25 | P1S-4MRT |
| 80 | 50 | 87 | 97 | 20 | 26 | 77 | 25 | 33 | 25 | 18 | 32 | M20x1,5 | 30° | 0,46 | P1S-4PRT |
| 100 | 50 | 87 | 97 | 20 | 26 | 77 | 25 | 33 | 25 | 18 | 32 | M20x1,5 | 30° | 0,46 | P1S-4PRT |
| 125 | 70 | 123,5 | 137 | 30 | 36 | 110 | 35 | 51 | 37 | 25 | 41 | M27x2 | 30° | 1,28 | P1S-4RRT |

Clevis



According to ISO 8140
Intended for articulated mounting of the cylinder. This mounting is adjustable in the axial direction. Supplied complete with pin.

Material:
Clevis: stainless steel, DIN X 10 CrNiS 18 9
Pin: stainless steel, DIN X 5 CrNi 18 10
Locking rings according to DIN 471



| Cyl. Ø mm | A mm | B _{min} mm | B _{max} mm | C mm | D mm | E mm | F mm | G mm | H mm | I | Weight Kg | Order code |
|-----------|------|---------------------|---------------------|------|------|------|------|------|------|----------|-----------|-----------------|
| 32 | 20 | 46 | 52 | 10 | 20 | 40 | 12 | 28 | 10 | M10x1,25 | 0,09 | P1S-4JRD |
| 40 | 24 | 54 | 60 | 12 | 24 | 48 | 19 | 32 | 12 | M12x1,25 | 0,15 | P1S-4LRD |
| 50 | 32 | 72 | 80 | 16 | 32 | 64 | 25 | 42 | 16 | M16x1,5 | 0,35 | P1S-4MRD |
| 63 | 32 | 72 | 80 | 16 | 32 | 64 | 25 | 42 | 16 | M16x1,5 | 0,35 | P1S-4MRD |
| 80 | 40 | 90 | 100 | 20 | 40 | 80 | 32 | 50 | 20 | M20x1,5 | 0,75 | P1S-4PRD |
| 100 | 40 | 90 | 100 | 20 | 40 | 80 | 32 | 50 | 20 | M20x1,5 | 0,75 | P1S-4PRD |
| 125 | 55 | 123,5 | 137 | 30 | 54 | 110 | 45 | 72 | 30 | M27x2 | 2,10 | P1S-4RRD |

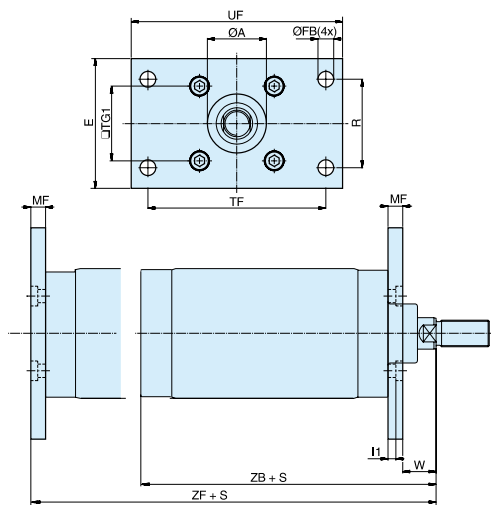
Cylinder mountings

Flange MF1/MF2



Intended for fixed attachment of cylinder version D, E, F or L. The flange is designed for mounting on the front or rear end covers.

Material:
Stainless steel, DIN X 5 CrNiMo 17 13 3



| Cylinder Ø mm | A mm | FB mm | E mm | R mm | TF mm | TG1 mm | UF mm | MF mm | I1 mm | W mm | ZB mm | ZF mm | Weight Kg | Order code |
|---------------|------|-------|------|------|-------|--------|-------|-------|-------|------|-------|-------|-----------|-----------------|
| 80 | 50,2 | 12 | 86 | 63 | 126 | 46 | 150 | 12 | 6 | 25 | 178 | 190 | 0,97 | P1S-4PMB |
| 100 | 51 | 14 | 106 | 75 | 150 | 60 | 170 | 12 | 6 | 23 | 193 | 205 | 1,42 | P1S-4QMB |
| 125 | 61 | 16 | 132 | 90 | 180 | 76 | 205 | 15 | 8 | 32 | 230 | 245 | 1,55 | P1S-4RMB |

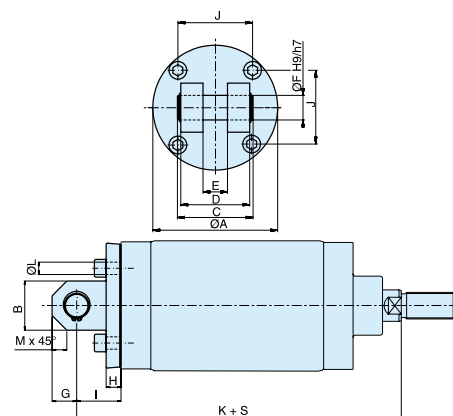
S = Stroke

Clevis bracket MP4



Intended for articulated mounting of cylinder versions D, F, or L. The bracket is mounted on the rear end cover and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket.

Material:
Bracket: stainless steel, DIN X 5 CrNi 18 10
Pin: stainless steel, DIN X 5 CrNiMo 17 13 3



| Cylinder Ø mm | A mm | B mm | C mm | D mm | E mm | F mm | G mm | H mm | I mm | J mm | K mm | L mm | M mm | Weight Kg | Order code |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
| 80 | 80 | 30 | 57 | 50 | 16 | 16 | 15 | 12 | 32 | 46 | 210 | 8,6 | 9 | 0,78 | P1S-4PME |
| 100 | 103 | 42 | 67 | 60 | 20 | 20 | 21 | 12 | 37 | 60 | 230 | 10,6 | 12 | 1,42 | P1S-4QME |
| 125 | 127 | 50 | 77 | 70 | 25 | 25 | 25 | 15 | 45 | 76 | 275 | 12,6 | 15 | 2,06 | P1S-4RME |

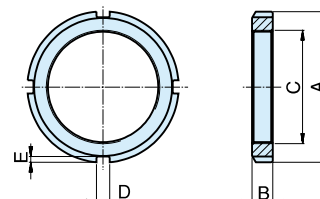
S = Stroke

Mounting nut



Intended for fixed mounting on the front end cover of cylinders according to cylinder version C or D.

Material:
Stainless steel, DIN X 5 CrNi 18 10



| Cylinder Ø mm | A mm | B mm | C mm | D mm | E mm | Weight Kg | Order code |
|---------------|------|------|---------|------|------|-----------|-------------------|
| 80 | 70 | 11 | M50x1,5 | 6 | 2,5 | 0,16 | 9126461304 |
| 100 | 70 | 11 | M50x1,5 | 6 | 2,5 | 0,16 | 9126461304 |
| 125 | 80 | 11 | M60x2 | 7 | 3 | 0,19 | 9126461305 |

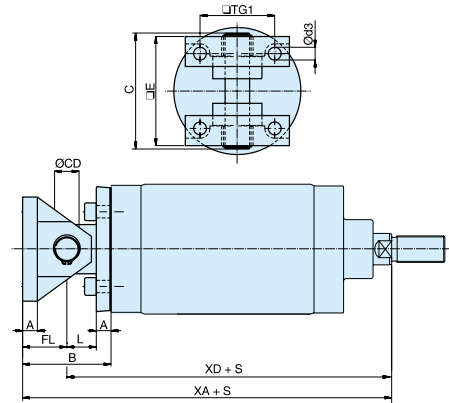
Cylinder mountings

Cylinder mountings

| Type | Description | Cyl. bore Ø mm | Weight kg | Order code |
|--|---|-------------------|--------------|-----------------|
| Combinated mounting MP2/MP4 | Intended for articulated mounting of cylinder versions D, F or L. The unit is mounted on the rear end cover and is combined with bearing brackets MP2 and is supplied complete with shaft, mounting screw and O-ring for a clean joint between end cover and bracket. | 80 | 1,29 | P1S-4PML |
| | | 100 | 2,33 | P1S-4QML |
| | | 125 | 3,30 | P1S-4RML |



Material:
 Bearing brackets: stainless steel, DIN X 5 CrNi 18 10
 Journal bearing: stainless steel,
 Journal bearing: DIN X 5 CrNiMo 17 13 3/PTFE
 Bracket: stainless steel, DIN X 5 CrNi 18 10
 Pin: stainless steel, DIN X 5 CrNiMo 17 13 3



| Cylinder Ø mm | A mm | B mm | C mm | CD mm | d3 mm | E mm | FL mm | L mm | TG1 mm | XA mm | XD mm |
|------------------|---------|---------|---------|----------|----------|---------|----------|---------|-----------|----------|----------|
| 80 | 12 | 64 | 82 | 16 | 9 | 74 | 32 | 20 | 46 | 242 | 210 |
| 100 | 12 | 74 | 98 | 20 | 11 | 90 | 37 | 25 | 60 | 267 | 230 |
| 125 | 15 | 90 | 118 | 25 | 13 | 110 | 45 | 30 | 76 | 320 | 275 |

S = Stroke