

ISO 21287 CYLINDER SERIES LINER



Compact cylinder to ISO 21287, LINER series, available in different versions to meet all possible requirements:

- With or without magnet
- Double acting, single or through piston rod
- Double acting, perforated through piston rod
- Single acting, extended, retracted or through piston rod
- Single acting, perforated through rod
- Double acting anti-rotating version and double acting through piston rod
- Polyurethane or FKM/FPM gaskets (for high temperatures) also available
- Dimensions and centre distances to ISO 21287.

The heads have been eliminated for ease of installation, improved sturdiness and precision. The metal lining is designed to withstand heavy-duty work, tensile stress and impact. Technopolymer parts can withstand dynamic and pneumatic thrust. The lining virtually acts as a "bearing" to which most of user accessories are attached.

The wide range of anchors provide numerous fixing points.

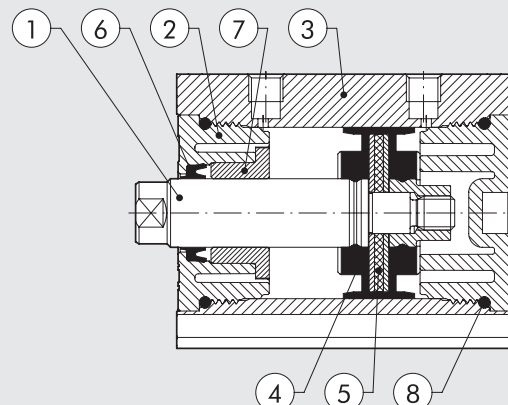
Retractable magnetic limit switches can be mounted to identify the position in the cylinder grooves.



| TECHNICAL DATA | | | Ø20 | Ø25 | Ø32 | Ø40 | Ø50 | Ø63 | Ø80 | Ø100 |
|---|---|---------|--|-----|-----|-----|-----|-----|------------|------|
| Max operating pressure | | bar | 10 | | | | | | | |
| | | MPa | 1 | | | | | | | |
| | | psi | 145 | | | | | | | |
| Temperature range | POLYURETHANE | °C | -10 to +60 | | | | | | -10 to +80 | |
| | | FKM/FPM | -10 to +150 (non-magnetic cylinders) | | | | | | | |
| Design | With profile | | | | | | | | | |
| Fixing centre distances | According to ISO 21287 | | | | | | | | | |
| Fluid | Unlubricated air. Lubrication, if used, must be continuous | | | | | | | | | |
| Versions | Double-acting, Double-acting through-rod, Single-acting extended or retracted rod, Single-acting through-rod, Single-acting through piston rod perforated, Double-acting through-rod perforated, Double-acting non-rotating, Double-acting through-rod non-rotating, No stick-slip. | | | | | | | | | |
| | All versions are available with male or female piston rod. | | | | | | | | | |
| | Available magnetic and non-magnetic versions. | | | | | | | | | |
| Sensor magnet | | | | | | | | | | |
| Inrush pressure | single piston rod | bar | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| | | | through-rod | 0.8 | 0.8 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 |
| Forces generated at 6 bar thrust/retraction | See cylinder "General technical data" at the beginning of the chapter | | | | | | | | | |
| Weights | See cylinder "General technical data" at the beginning of the chapter | | | | | | | | | |
| Notes | For correct operation, it is advisable to use 50 µm filtered air | | | | | | | | | |
| | | | For speeds lower than 0.2 m/s to prevent surging, use the version No stick-slip and non-lubricated air. | | | | | | | |

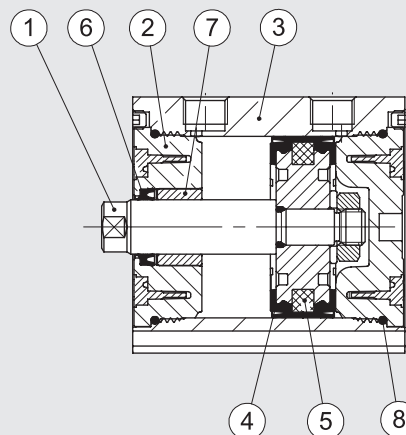
COMPONENTS Ø 20-25

- ① PISTON ROD: stainless steel, thick chromed
- ② END CAP: high-performance technopolymer
- ③ BARREL: drawn anodized and calibrated aluminium alloy
- ④ PISTON GASKET: polyurethane or FKM/FPM (for high temperature)
- ⑤ MAGNET: plasteodimio
- ⑥ PISTON ROD GASKET: polyurethane or FKM/FPM (for high temperature)
- ⑦ GUIDE BUSHING: sintered bronze
- ⑧ STATIC O-RINGS: NBR or FKM/FPM (for high temperature)



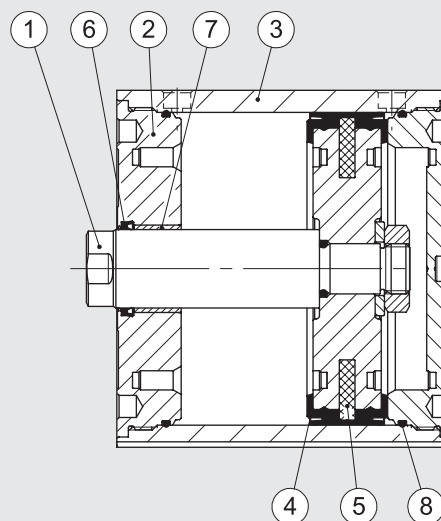
COMPONENTS Ø 32-63

- ① PISTON ROD: C45 steel or stainless steel, thick chromed
- ② END CAP: high-performance technopolymer
- ③ BARREL: drawn anodized and calibrated aluminium alloy
- ④ PISTON GASKET: polyurethane or FKM/FPM (for high temperature)
- ⑤ MAGNET: Ø 32 plastoneodimio - Ø 40 to 63 plastoferrite
- ⑥ PISTON ROD GASKET: polyurethane or FKM/FPM (for high temperature)
- ⑦ GUIDE BUSHING: sintered bronze
- ⑧ STATIC O-RINGS: NBR or FKM/FPM (for high temperature)

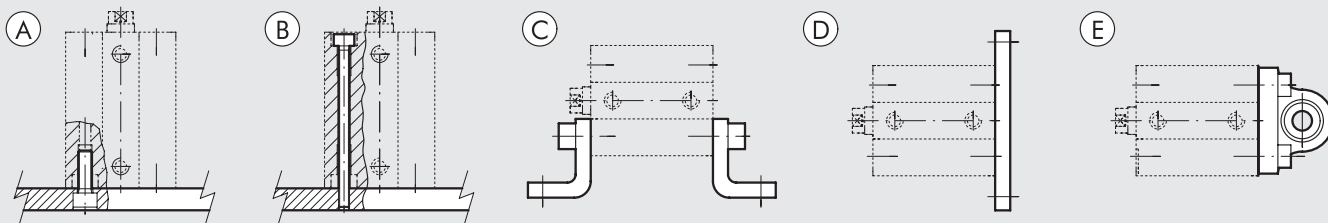


COMPONENTS Ø 80-100

- ① PISTON ROD: C45 steel or stainless steel, thick chromed
- ② END CAP: anodized aluminium alloy
- ③ BARREL: drawn anodized and calibrated aluminium alloy
- ④ PISTON GASKET: polyurethane or FKM/FPM (for high temperature)
- ⑤ MAGNET: plastoferrite
- ⑥ PISTON ROD GASKET: polyurethane or FKM/FPM (for high temperature)
- ⑦ GUIDE BUSHING: steel strip with bronze and PTFE insert
- ⑧ STATIC O-RINGS: NBR or FKM/FPM (for high temperature)



FIXING OPTIONS



- Ⓐ Fixing to structural work with a through screw, using the thread in the heads
- Ⓑ Direct fixing from above using long through screws or tie rods. Non-magnetic stainless steel must be used (e.g. AISI 304)
- Ⓒ Fixing with feet; the ordering code covers the supply of one foot and two screws for fixing to the cylinder
- Ⓓ Fixing with a flange mounted on the front or rear head; the ordering code covers the supply of a flange and four screws for fixing to the cylinder
- Ⓔ Fixing with articulated hinge to compensate for slight system misalignment and turn freely
The ordering code covers the supply of a hinge and four screws for fixing to the cylinder.

FORCE OF SPRINGS IN SINGLE-ACTING CYLINDERS (THEORETICAL)

| Bore | Ø 20 | Ø 25 | Ø 32 | Ø 40 | Ø 50 | Ø 63 | Ø 80 | Ø 100 |
|---------------|-------|-------|-------|-------|-------|-------|--------|--------|
| Min. load (N) | 8.40 | 13.90 | 19.00 | 24.80 | 36.30 | 50.20 | 77.60 | 131.80 |
| Max. load (N) | 20.90 | 33.20 | 35.90 | 53.70 | 62.20 | 82.30 | 118.90 | 183.30 |

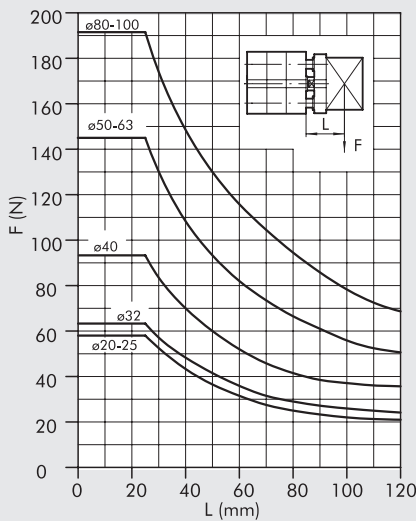
STROKES FOR COMPACT CYLINDERS ISO 21287

| Standard stroke for single-acting cylinders | Standard stroke for other types | Max. recommended strokes for other types | Max. recommended strokes for non-rotating cylinders | Max recommended strokes for through-rod perforated |
|---|---|--|---|---|
| Ø 20 to 100 → from 1 to 25 mm | Ø 20 to 25 → from 1 to 60 mm Ø 32 to 100 → from 1 to 80 mm | Ø 20 to 25 → 300 mm Ø 32 to 63 → 400 mm Ø 80 to 100 → 500 mm | Ø 20 to 63 → 120 mm Ø 80 to 100 → 150 mm | Ø 20 to 40 → from 1 to 80 mm Ø 50 to 63 → from 1 to 100 mm Ø 80 to 100 → from 1 to 160 mm |

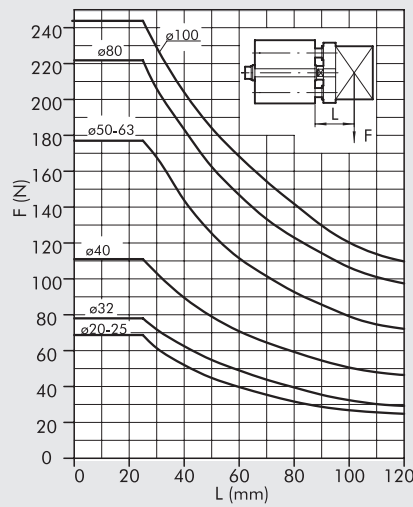
Maximum recommended strokes. Higher values can create operating problems

MAXIMUM LOADS FOR NON-ROTATING VERSION

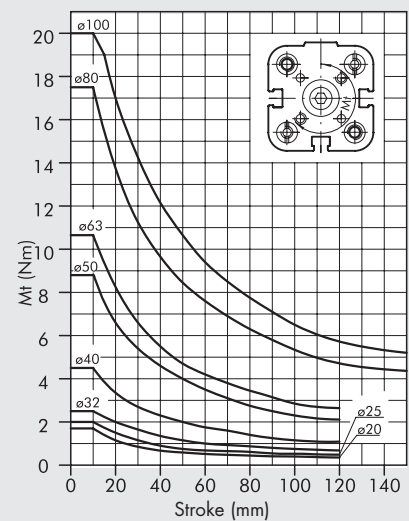
TRANSVERSAL FORCE FOR NON-ROTATING



TRANSVERSAL FORCE FOR NON-ROTATING THROUGH-ROD

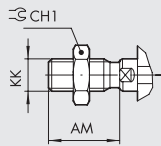


TORQUE DEPENDING ON STROKE



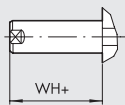
DIMENSIONS OF DOUBLE-ACTING Ø 20 to 50 AND SINGLE-ACTING Ø 20 to 50

SE-DE MALE PISTON ROD

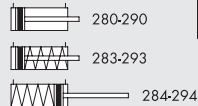
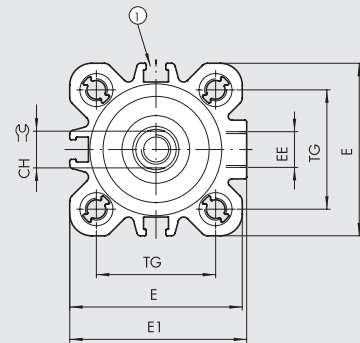
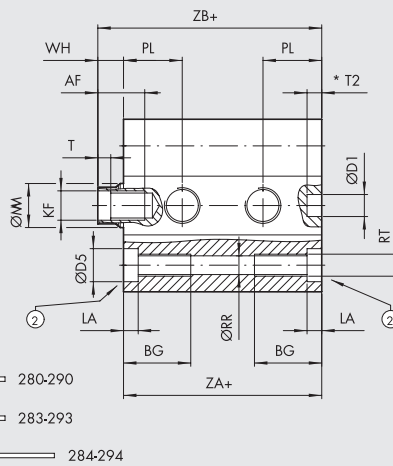
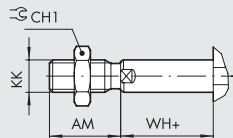


- + = ADD THE STROKE
- * = SECTION WITH TOLERANCE
- 1 = SENSOR SLOT
- 2 = SEAT FOR DIN 7984 SCREWS

SE EXTENDED PISTON ROD



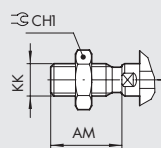
SE MALE EXTENDED PISTON ROD



| Ø | AF | AM | BG | CH | CH1 | ØD1 ^{H9} | ØD5 | E | E1 | EE | KF | KK | LA | ØMM | PL | ØRR | RT | T | T2 | TG ^{+0.2} | WH | ZA ^{+0.3} ₀ | ZB |
|----|------|----|------|----|-----|-------------------|------|------|------|------|-----|----------|-----|-----|------|-----|----|-----|-----|--------------------|----|---------------------------------|----|
| 20 | 14 | 16 | 17.5 | 8 | 13 | 6 | 7.5 | 35.5 | 36.5 | M5 | M6 | M8 | 4.2 | 10 | 12 | 4.2 | M5 | 2.5 | 3 | 22 | 6 | 37 | 43 |
| 25 | 14 | 16 | 17.5 | 8 | 13 | 6 | 7.5 | 39.5 | 40 | M5 | M6 | M8 | 4.2 | 10 | 13 | 4.2 | M5 | 2.5 | 3.5 | 26 | 6 | 39 | 45 |
| 32 | 16.5 | 19 | 21.5 | 10 | 17 | 6 | 9 | 47 | 48.2 | G1/8 | M8 | M10x1.25 | 4 | 12 | 16 | 5.1 | M6 | 3.5 | 4 | 32.5 | 7 | 44 | 51 |
| 40 | 16.5 | 19 | 21.5 | 10 | 17 | 6 | 9 | 55.5 | 56.5 | G1/8 | M8 | M10x1.25 | 4 | 12 | 16 | 5.1 | M6 | 3.5 | 4 | 38 | 7 | 45 | 52 |
| 50 | 17 | 22 | 21 | 13 | 19 | 6 | 10.5 | 66.5 | 67.8 | G1/8 | M10 | M12x1.25 | 4.5 | 16 | 15.5 | 6.8 | M8 | 4 | 3 | 46.5 | 8 | 45 | 53 |

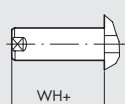
DIMENSIONS OF DOUBLE-ACTING Ø 63 to 100 AND SINGLE-ACTING Ø 63 to 100

SE-DE MALE PISTON ROD

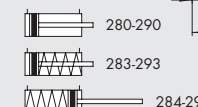
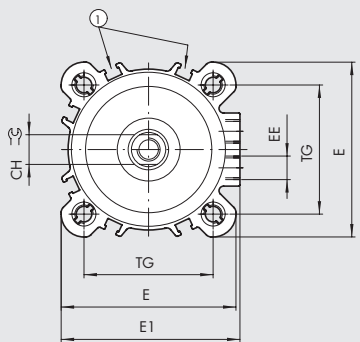
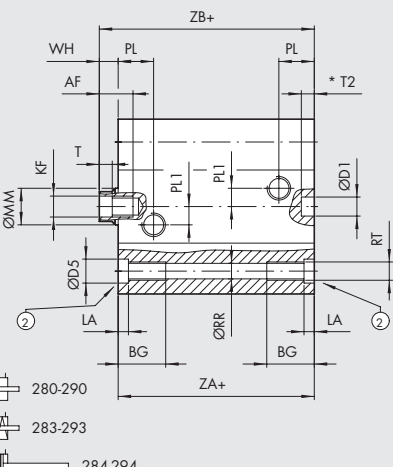
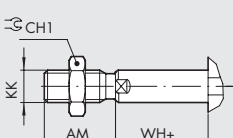


- + = ADD THE STROKE
- * = SECTION WITH TOLERANCE
- 1 = SENSOR SLOT
- 2 = SEAT FOR DIN 7984 SCREWS

SE EXTENDED PISTON ROD



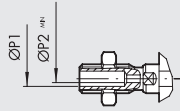
SE MALE EXTENDED PISTON ROD



| Ø | AF | AM | BG | CH | CH1 | ØD1 ^{H9} | ØD5 | E | E1 | EE | KF | KK | LA | ØMM | PL1 | PL | ØRR | RT | T | T2 | TG ^{+0.2} | WH | ZA ^{+0.4} ₀ | ZB |
|-----|----|----|------|----|-----|-------------------|------|------|------|------|-----|----------|-----|-----|-----|------|-----|-----|---|-----|--------------------|----|---------------------------------|----|
| 63 | 17 | 22 | 21 | 13 | 19 | 8 | 10.5 | 76.5 | 78.3 | G1/8 | M10 | M12x1.25 | 4.5 | 16 | 8 | 15.5 | 6.8 | M8 | 4 | 3.5 | 56.5 | 8 | 49 | 57 |
| 80 | 22 | 28 | 22.5 | 17 | 24 | 8 | 14 | 95.5 | 95.5 | G1/8 | M12 | M16x1.5 | 5 | 20 | 14 | 16.5 | 8.5 | M10 | 5 | 4 | 72 | 10 | 54 | 64 |
| 100 | 24 | 28 | 25.5 | 22 | 30 | 8 | 14 | 114 | 114 | G1/8 | M12 | M16x1.5 | 5 | 25 | 19 | 19.2 | 8.5 | M10 | 5 | 4 | 89 | 10 | 67 | 77 |

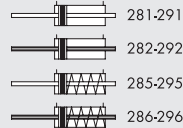
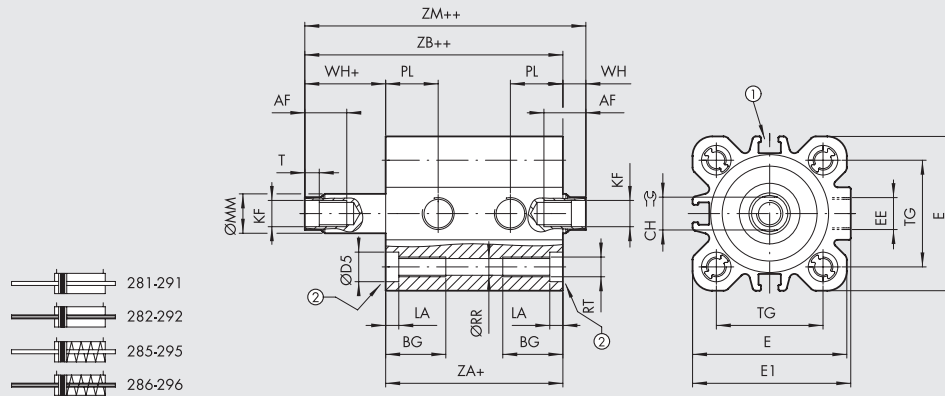
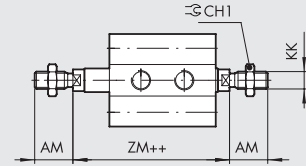
DIMENSIONS OF THROUGH-ROD Ø 20 to 50

SE-DE MALE PERFORATED THROUGH-ROD



- + = ADD THE STROKE
- ++ = ADD TWICE THE STROKE
- 1 = SENSOR SLOT
- 2 = SEAT FOR DIN 7984 SCREWS

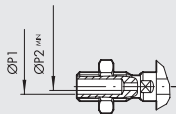
SE-DE MALE PISTON ROD



| Ø | AF | AM | BG | CH | CH1 | ØD5 | E | E1 | EE | KF | KK | LA | ØMM | ØP1 | ØP2 | PL | ØRR | RT | T | TG ^{+0.2} | WH | ZA ^{+0.3} | ZB | ZM |
|----|------|----|------|----|-----|------|------|------|------|-----|----------|-----|-----|-----|-----|------|-----|----|-----|--------------------|----|--------------------|----|----|
| 20 | 14 | 16 | 17.5 | 8 | 13 | 7.5 | 35.5 | 36.5 | M5 | M6 | M8 | 4.2 | 10 | 3 | 1.5 | 12 | 4.2 | M5 | 2.5 | 22 | 6 | 37 | 43 | 49 |
| 25 | 14 | 16 | 17.5 | 8 | 13 | 7.5 | 39.5 | 40 | M5 | M6 | M8 | 4.2 | 10 | 3 | 1.5 | 13 | 4.2 | M5 | 2.5 | 26 | 6 | 39 | 45 | 51 |
| 32 | 16.5 | 19 | 21.5 | 10 | 17 | 9 | 47 | 48.2 | G1/8 | M8 | M10x1.25 | 4 | 12 | 4 | 2.5 | 16 | 5.1 | M6 | 3.5 | 32.5 | 7 | 44 | 51 | 58 |
| 40 | 16.5 | 19 | 21.5 | 10 | 17 | 9 | 55.5 | 56.5 | G1/8 | M8 | M10x1.25 | 4 | 12 | 4 | 2.5 | 16 | 5.1 | M6 | 3.5 | 38 | 7 | 45 | 52 | 59 |
| 50 | 17 | 22 | 21 | 13 | 19 | 10.5 | 66.5 | 67.8 | G1/8 | M10 | M12x1.25 | 4.5 | 16 | 6 | 4 | 15.5 | 6.8 | M8 | 4 | 46.5 | 8 | 45 | 53 | 61 |

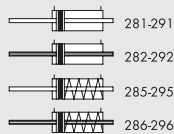
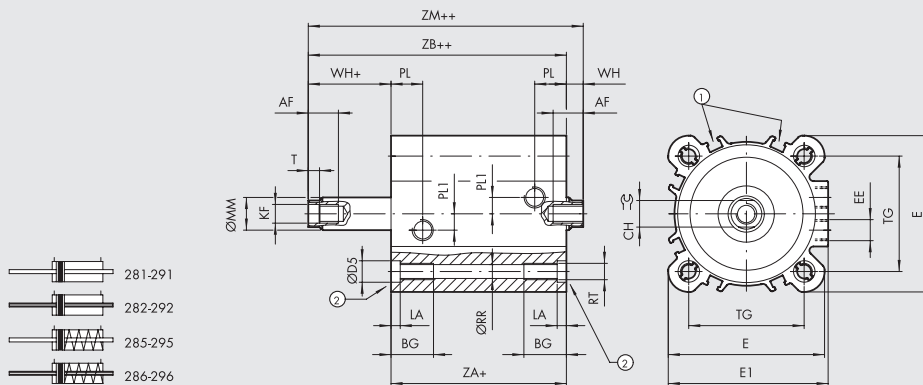
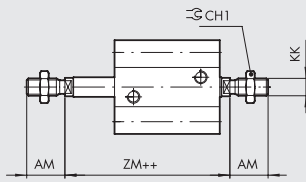
DIMENSIONS OF THROUGH-ROD Ø 63 to 100

SE-DE MALE PERFORATED THROUGH-ROD



- + = ADD THE STROKE
- ++ = ADD TWICE THE STROKE
- 1 = SENSOR SLOT
- 2 = SEAT FOR DIN 7984 SCREWS

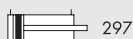
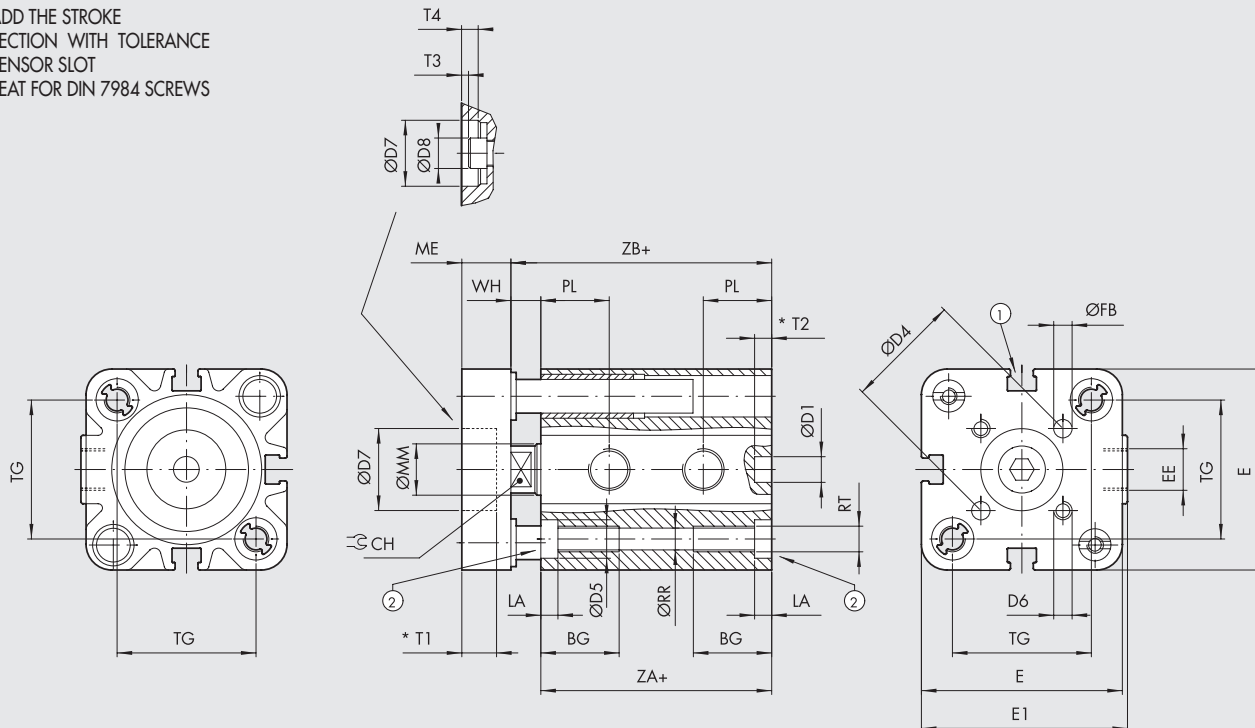
SE-DE MALE PISTON ROD



| Ø | AF | AM | BG | CH | CH1 | ØD5 | E | E1 | EE | KF | KK | LA | ØMM | ØP1 | ØP2 | PL1 | PL | ØRR | RT | T | TG ^{+0.2} | WH | ZA ^{+0.4} | ZB | ZM |
|-----|----|----|------|----|-----|------|------|------|------|-----|----------|-----|-----|------|-----|-----|------|-----|-----|---|--------------------|----|--------------------|----|----|
| 63 | 17 | 22 | 21 | 13 | 19 | 10.5 | 76.5 | 78.3 | G1/8 | M10 | M12x1.25 | 4.5 | 16 | 6 | 4 | 8 | 15.5 | 6.8 | M8 | 4 | 56.5 | 8 | 49 | 57 | 65 |
| 80 | 22 | 28 | 22.5 | 17 | 24 | 14 | 95.5 | 95.5 | G1/8 | M12 | M16x1.5 | 5 | 20 | G1/8 | 5 | 14 | 16.5 | 8.5 | M10 | 5 | 72 | 10 | 54 | 64 | 74 |
| 100 | 24 | 28 | 25.5 | 22 | 30 | 14 | 114 | 114 | G1/8 | M12 | M16x1.5 | 5 | 25 | G1/8 | 6 | 19 | 19.2 | 8.5 | M10 | 5 | 89 | 10 | 67 | 77 | 87 |

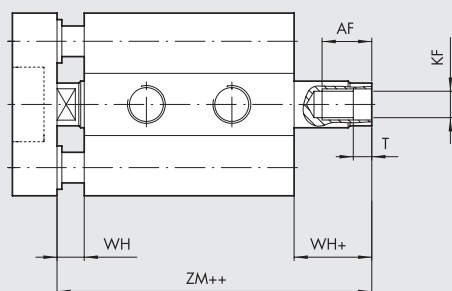
DIMENSIONS OF NON-ROTATING Ø 20 to 50

- + = ADD THE STROKE
- * = SECTION WITH TOLERANCE
- 1 = SENSOR SLOT
- 2 = SEAT FOR DIN 7984 SCREWS



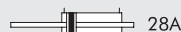
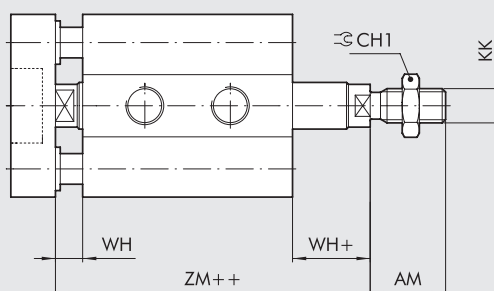
NON-ROTATING FEMALE THROUGH-ROD

- + = ADD THE STROKE
- ++ = ADD TWICE THE STROKE



NON-ROTATING MALE THROUGH-ROD

- + = ADD THE STROKE
- ++ = ADD TWICE THE STROKE

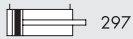
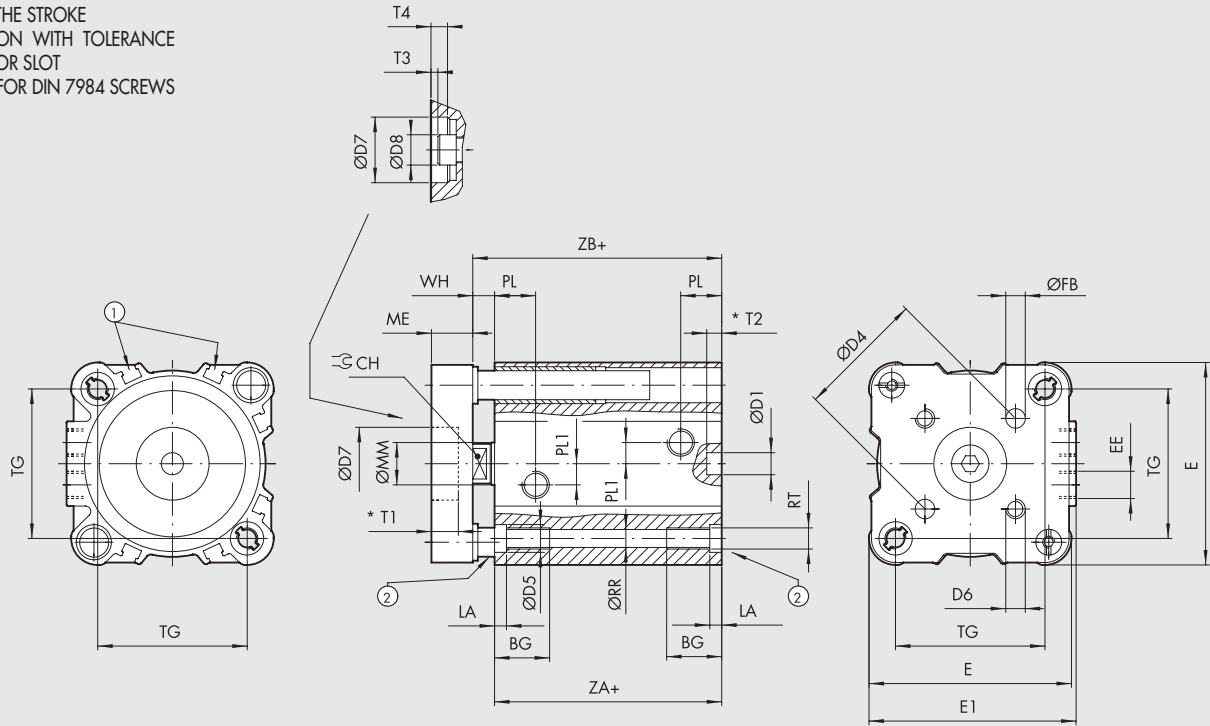


| Ø | AF | AM | BG | CH | CH1 | ØD1 ^{H9} | ØD4 | ØD5 | D6 | ØD7 ^{H9} | ØD8 | E | E1 | EE | ØFB | KF | KK | LA | ME | ØMM | PL | ØRR | RT | T | T1 | T2 | T3 | T4 |
|----|------|----|------|----|-----|-------------------|-----|------|----|-------------------|-----|------|------|------|-----|-----|----------|-----|----|-----|------|-----|----|-----|-----|-----|-----|-----|
| 20 | 14 | 16 | 17.5 | 8 | 13 | 6 | 17 | 7.5 | M4 | - | - | 35.5 | 36.5 | M5 | 4 | M6 | M8 | 4.2 | 8 | 10 | 12 | 4.2 | M5 | 2.5 | - | 3 | - | - |
| 25 | 14 | 16 | 17.5 | 8 | 13 | 6 | 22 | 7.5 | M5 | 14 | 10 | 39.5 | 40 | M5 | 5 | M6 | M8 | 4.2 | 8 | 10 | 13 | 4.2 | M5 | 2.5 | 3.5 | 3.5 | 1 | 3.5 |
| 32 | 16.5 | 19 | 21.5 | 10 | 17 | 6 | 28 | 9 | M5 | 17 | 13 | 47 | 48.2 | G1/8 | 5 | M8 | M10x1.25 | 4 | 10 | 12 | 16 | 5.1 | M6 | 3.5 | 3.5 | 4 | 1 | 3.5 |
| 40 | 16.5 | 19 | 21.5 | 10 | 17 | 6 | 33 | 9 | M5 | 17 | 13 | 55.5 | 56.5 | G1/8 | 5 | M8 | M10x1.25 | 4 | 10 | 12 | 16 | 5.1 | M6 | 3.5 | 3.5 | 4 | 1 | 3.5 |
| 50 | 17 | 22 | 21 | 13 | 19 | 6 | 42 | 10.5 | M6 | 22 | 16 | 66.5 | 67.8 | G1/8 | 6 | M10 | M12x1.25 | 4.5 | 12 | 16 | 15.5 | 6.8 | M8 | 4 | 5 | 3 | 1.5 | 5 |

| Ø | TG ^{+0.2} | WH | ZA ^{+0.3} | ZB | ZM |
|----|--------------------|----|--------------------|----|----|
| 20 | 22 | 6 | 37 | 43 | 49 |
| 25 | 26 | 6 | 39 | 45 | 51 |
| 32 | 32.5 | 7 | 44 | 51 | 58 |
| 40 | 38 | 7 | 45 | 52 | 59 |
| 50 | 46.5 | 8 | 45 | 53 | 61 |

DIMENSIONS OF NON-ROTATING Ø 63 to 100

- + = ADD THE STROKE
- * = SECTION WITH TOLERANCE
- 1 = SENSOR SLOT
- 2 = SEAT FOR DIN 7984 SCREWS

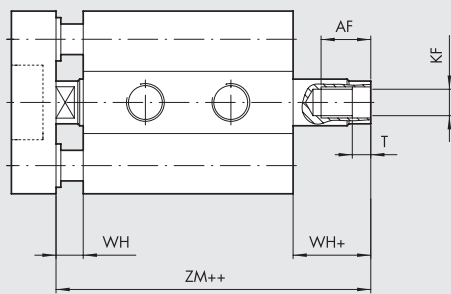


ACTUATORS

ISO 21287 CYLINDER – SERIES LINER

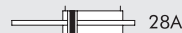
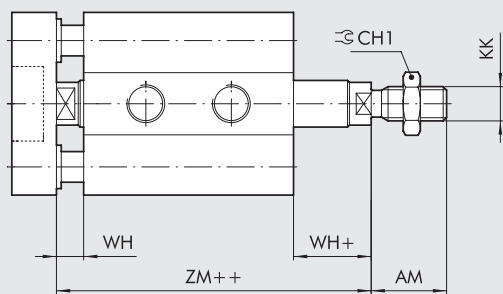
NON-ROTATING FEMALE THROUGH-ROD

- + = ADD THE STROKE
- ++ = ADD TWICE THE STROKE



NON-ROTATING MALE THROUGH-ROD

- + = ADD THE STROKE
- ++ = ADD TWICE THE STROKE



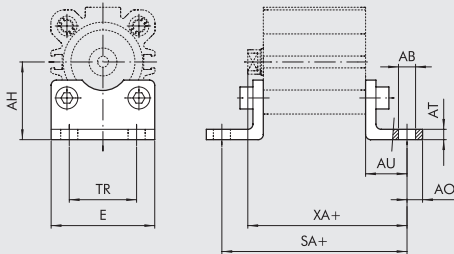
| Ø | AF | AM | BG | CH | CH1 | ØD1 ^{H9} | ØD4 | ØD5 | D6 | ØD7 ^{H9} | ØD8 | E | E1 | EE | ØFB | KF | KK | LA | ME | ØMM | PL1 | PL | ØRR | RT | T | T1 | T2 | T3 |
|-----|----|----|------|----|-----|-------------------|-----|------|-----|-------------------|-----|------|------|------|-----|-----|----------|-----|----|-----|-----|------|-----|-----|---|-----|-----|-----|
| 63 | 17 | 22 | 21 | 13 | 19 | 8 | 50 | 10.5 | M6 | 22 | 16 | 76.5 | 78.3 | G1/8 | 6 | M10 | M12x1.25 | 4.5 | 12 | 16 | 8 | 15.5 | 6.8 | M8 | 4 | 5 | 3.5 | 1.5 |
| 80 | 22 | 28 | 22.5 | 17 | 24 | 8 | 65 | 14 | M8 | 24 | 18 | 95.5 | 95.5 | G1/8 | 8 | M12 | M16x1.5 | 5 | 14 | 20 | 14 | 16.5 | 8.5 | M10 | 5 | 7.5 | 4 | 3.5 |
| 100 | 24 | 28 | 25.5 | 22 | 30 | 8 | 80 | 14 | M10 | 24 | 18 | 114 | 114 | G1/8 | 10 | M12 | M16x1.5 | 5 | 14 | 25 | 19 | 19.2 | 8.5 | M10 | 5 | 7.5 | 4 | 3.5 |

| Ø | T4 | TG ^{+0.2} | WH | ZA ^{+0.4} | ZB | ZM |
|-----|-----|--------------------|----|--------------------|----|----|
| 63 | 5 | 56.5 | 8 | 49 | 57 | 65 |
| 80 | 7.5 | 72 | 10 | 54 | 64 | 74 |
| 100 | 7.5 | 89 | 10 | 67 | 77 | 87 |

ACCESSORIES FOR ISO 21287 CYLINDERS: FIXING

FOOT - MODEL A

+ = ADD THE STROKE



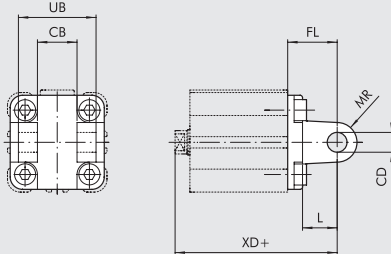
| Code | Ø | ØAB | AH | AO | AT | AU | E | SA | TR | XA | Weight [g] |
|-------------|-----|-----|-----|-----|----|-----|-----|------|----|------|------------|
| W0950206001 | 20 | 6.6 | 27 | 6 | 4 | 16 | 36 | 69 | 22 | 59 | 46 |
| W0950256001 | 25 | 6.6 | 30* | 6 | 4 | 16 | 40 | 71 | 26 | 61 | 52 |
| W0950322001 | 32 | 7 | 32* | 11* | 4 | 24* | 45 | 92* | 32 | 75* | 76 |
| W0950402001 | 40 | 9 | 36* | 15* | 4 | 28* | 52 | 101* | 36 | 80* | 100 |
| W0950502001 | 50 | 9 | 45 | 15* | 5 | 32* | 65 | 109* | 45 | 85* | 162 |
| W0950632001 | 63 | 9 | 50 | 15* | 5 | 32* | 75 | 113* | 50 | 89* | 266 |
| W0950802001 | 80 | 12 | 63 | 20* | 6 | 41* | 95 | 136* | 63 | 105* | 456 |
| W0951002001 | 100 | 14 | 71* | 25* | 6 | 41* | 115 | 149* | 75 | 118* | 572 |

Note: Individually packed with 2 screws.

* **IMPORTANT:** Values not to ISO 21287. Cylinder pins to ISO 15552 are used.

FEMALE HINGE-MODEL B

+ = ADD THE STROKE

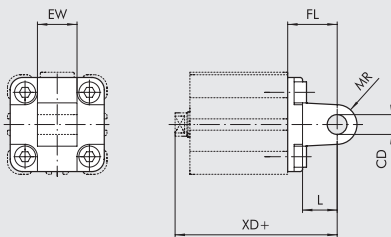


| Code | Ø | CB ^{H14} | CD ^{H9} | FL | L | MR | UB ^{H14} | XD | Weight [g] |
|-------------|-----|-------------------|------------------|----|----|----|-------------------|-----|------------|
| W0950322003 | 32 | 26 | 10 | 22 | 12 | 10 | 45 | 73 | 112 |
| W0950402003 | 40 | 28 | 12 | 25 | 15 | 12 | 52 | 77 | 159 |
| W0950502003 | 50 | 32 | 12 | 27 | 15 | 12 | 60 | 80 | 250 |
| W0950632003 | 63 | 40 | 16 | 32 | 20 | 16 | 70 | 89 | 390 |
| W0950802003 | 80 | 50 | 16 | 36 | 20 | 16 | 90 | 100 | 668 |
| W0951002003 | 100 | 60 | 20 | 41 | 25 | 20 | 110 | 118 | 1047 |

Note: Supplied with 4 screws, 4 washers, 2 snap-rings and 1 pin

MALE HINGE-MODEL BA

+ = ADD THE STROKE

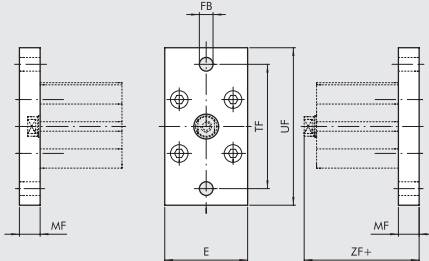


| Code | Ø | CD ^{H9} | EW | FL | L | MR | XD | Weight [g] |
|-------------|-----|------------------|----|----|----|----|-----|------------|
| W0950206004 | 20 | 8 | 16 | 20 | 12 | 8 | 63 | 44 |
| W0950256004 | 25 | 8 | 16 | 20 | 12 | 8 | 65 | 48 |
| W0950322004 | 32 | 10 | 26 | 22 | 13 | 10 | 73 | 94 |
| W0950402004 | 40 | 12 | 28 | 25 | 16 | 12 | 77 | 124 |
| W0950502004 | 50 | 12 | 32 | 27 | 16 | 12 | 80 | 220 |
| W0950632004 | 63 | 16 | 40 | 32 | 22 | 16 | 89 | 316 |
| W0950802004 | 80 | 16 | 50 | 36 | 22 | 16 | 100 | 578 |
| W0951002004 | 100 | 20 | 60 | 41 | 27 | 20 | 118 | 850 |

Note: Supplied with 4 screws.

FLANGE Ø 20 to 25 - MODEL C (FRONT AND REAR)

+ = ADD THE STROKE



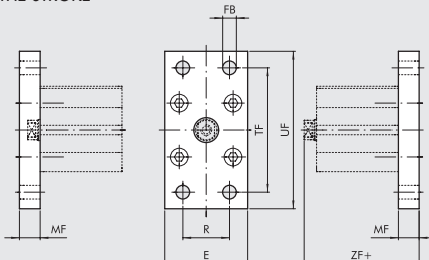
| Code | Ø | E | ØFB | MF | TF | UF | ZF | Weight [g] |
|-------------|----|----|-----|-----|----|----|-----|------------|
| W0950206002 | 20 | 36 | 6.6 | 10* | 55 | 70 | 53* | 184 |
| W0950256002 | 25 | 40 | 6.6 | 10* | 60 | 76 | 55* | 226 |

Note: Supplied with 4 screws.

* **IMPORTANT:** Non ISO 21287 norm fixing distance

FLANGE Ø 32 to 100 - MODEL C (FRONT AND REAR)

+ = ADD THE STROKE

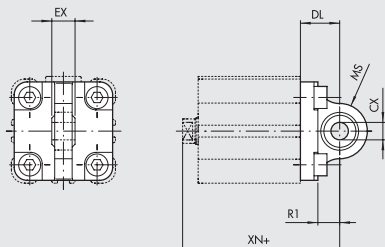


| Code | Ø | E | ØFB | MF | R | TF | UF | ZF | Weight [g] |
|-------------|-----|-----|-----|----|----|-----|-----|----|------------|
| W0950322002 | 32 | 50 | 7 | 10 | 32 | 64 | 80 | 61 | 246 |
| W0950402002 | 40 | 55 | 9 | 10 | 36 | 72 | 90 | 62 | 290 |
| W0950502002 | 50 | 65 | 9 | 12 | 45 | 90 | 110 | 65 | 522 |
| W0950632002 | 63 | 75 | 9 | 12 | 50 | 100 | 120 | 69 | 670 |
| W0950802002 | 80 | 95 | 12 | 15 | 63 | 126 | 150 | 80 | 1420 |
| W0951002002 | 100 | 115 | 14 | 15 | 75 | 150 | 178 | 93 | 2040 |

Note: Supplied with 4 screws.

ARTICULATED MALE HINGE - MODEL BAS

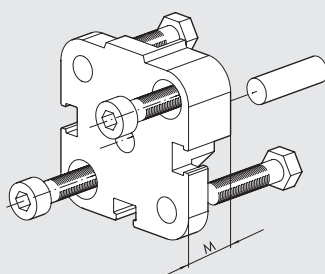
+ = ADD THE STROKE



| Code | Ø | CX ^{H9} | DL | EX | MS | R1 | XN | Weight [g] |
|-------------|-----|------------------|----|----|----|----|-----|------------|
| W0950322006 | 32 | 10 | 22 | 14 | 16 | 12 | 73 | 106 |
| W0950402006 | 40 | 12 | 25 | 16 | 18 | 15 | 77 | 142 |
| W0950502006 | 50 | 12 | 27 | 16 | 21 | 19 | 80 | 236 |
| W0950632006 | 63 | 16 | 32 | 21 | 23 | 20 | 89 | 336 |
| W0950802006 | 80 | 16 | 36 | 21 | 28 | 24 | 100 | 572 |
| W0951002006 | 100 | 20 | 41 | 25 | 30 | 25 | 118 | 840 |

Note: Supplied with 4 screws, 4 washers

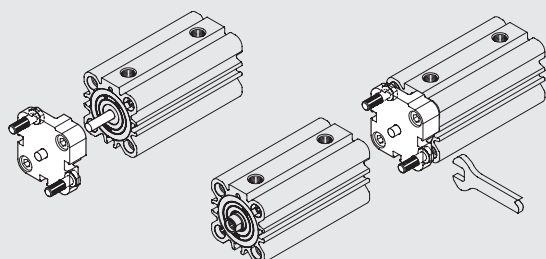
FLANGE FOR OPPOSITE CYLINDERS



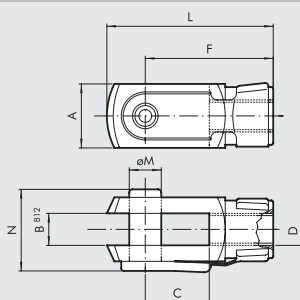
| Code | Ø | M | Weight [g] |
|------------|-----|------|------------|
| 0950203060 | 20 | 12.5 | 45 |
| 0950253060 | 25 | 13 | 57 |
| 0950323060 | 32 | 14.5 | 88 |
| 0950403061 | 40 | 14.5 | 106 |
| 0950503061 | 50 | 14.5 | 158 |
| 0950633061 | 63 | 14.5 | 258 |
| 0950803061 | 80 | 16.5 | 452 |
| 0951003061 | 100 | 19.5 | 801 |

Note: Supplied complete with 1 pin, 4 screws

ASSEMBLING OPPOSING CYLINDERS



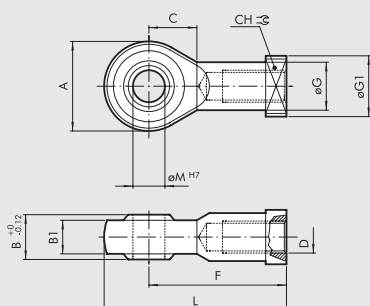
FORK - MODEL GK-M



| Code | Ø | A | B | C | D | F | L | øM | N | Weight [g] |
|-------------|-----|----|----|----|----------|----|----|----|----|------------|
| W0950200020 | 20 | 16 | 8 | 16 | M8 | 32 | 42 | 8 | 22 | 48 |
| W0950200025 | 25 | 16 | 8 | 16 | M8 | 32 | 42 | 8 | 22 | 48 |
| W0950322020 | 32 | 20 | 10 | 20 | M10x1.25 | 40 | 52 | 10 | 26 | 92 |
| W0950322025 | 40 | 20 | 10 | 20 | M10x1.25 | 40 | 52 | 10 | 26 | 92 |
| W0950402020 | 50 | 24 | 12 | 24 | M12x1.25 | 48 | 62 | 12 | 32 | 148 |
| W0950402025 | 63 | 24 | 12 | 24 | M12x1.25 | 48 | 62 | 12 | 32 | 148 |
| W0950502020 | 80 | 32 | 16 | 32 | M16x1.5 | 64 | 83 | 16 | 40 | 340 |
| W0950502025 | 100 | 32 | 16 | 32 | M16x1.5 | 64 | 83 | 16 | 40 | 340 |

Note: Individually packed

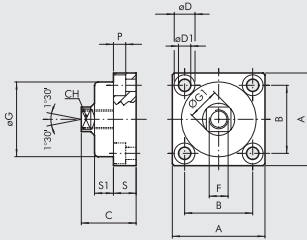
ROD EYE - MODEL GA-M



| Code | Ø | A | B | B1 | C | CH | D | F | øG | øG1 | L | øM | Weight [g] |
|-------------|-----|----|----|------|----|----|----------|----|------|-----|----|----|------------|
| W0950200025 | 20 | 24 | 12 | 9 | 13 | 14 | M8 | 36 | 12.5 | 16 | 48 | 8 | 50 |
| W0950200025 | 25 | 24 | 12 | 9 | 13 | 14 | M8 | 36 | 12.5 | 16 | 48 | 8 | 50 |
| W0950322025 | 32 | 28 | 14 | 10.5 | 15 | 17 | M10x1.25 | 43 | 15 | 19 | 57 | 10 | 78 |
| W0950322025 | 40 | 28 | 14 | 10.5 | 15 | 17 | M10x1.25 | 43 | 15 | 19 | 57 | 10 | 78 |
| W0950402025 | 50 | 32 | 16 | 12 | 17 | 19 | M12x1.25 | 50 | 17.5 | 22 | 66 | 12 | 116 |
| W0950402025 | 63 | 32 | 16 | 12 | 17 | 19 | M12x1.25 | 50 | 17.5 | 22 | 66 | 12 | 116 |
| W0950502025 | 80 | 42 | 21 | 15 | 23 | 22 | M16x1.5 | 64 | 22 | 27 | 85 | 16 | 226 |
| W0950502025 | 100 | 42 | 21 | 15 | 23 | 22 | M16x1.5 | 64 | 22 | 27 | 85 | 16 | 226 |

Note: Individually packed

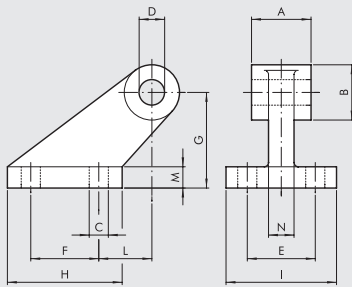
COMPENSATION JOINT - MODEL GA



| Code | Ø | A | B | C | CH | øD | øD1 | F | øG | ØG1 | P | S | S1 | Weight [g] |
|-------------|-----|----|----|----|----|----|------|----------|------|-----|------|----|------|------------|
| W0950326021 | 32 | 49 | 36 | 30 | 13 | 11 | 6.5 | M10x1.25 | 39.5 | 17 | 6.5 | 12 | 10 | 172 |
| W0950326021 | 40 | 49 | 36 | 30 | 13 | 11 | 6.5 | M10x1.25 | 39.5 | 17 | 6.5 | 12 | 10 | 172 |
| W0950406021 | 50 | 59 | 42 | 36 | 15 | 14 | 8.5 | M12x1.25 | 44 | 19 | 8.5 | 15 | 13.5 | 286 |
| W0950406021 | 63 | 59 | 42 | 36 | 15 | 14 | 8.5 | M12x1.25 | 44 | 19 | 8.5 | 15 | 13.5 | 286 |
| W0950506021 | 80 | 79 | 58 | 44 | 22 | 17 | 10.5 | M16x1.5 | 59 | 26 | 10.5 | 20 | 15 | 628 |
| W0950506021 | 100 | 79 | 58 | 44 | 22 | 17 | 10.5 | M16x1.5 | 59 | 26 | 10.5 | 20 | 15 | 628 |

Note: Individually packed

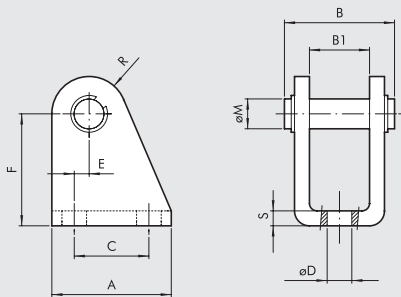
COUNTER-HINGE CETOP Ø 32 to 100



| Code | Ø | A | B | C | D | E | F | G | H | I | L | M | N | Weight [g] |
|-------------|-----|----|----|----|----|----|----|----|-----|----|----|----|----|------------|
| W0950322008 | 32 | 26 | 19 | 7 | 10 | 25 | 20 | 32 | 37 | 41 | 18 | 8 | 10 | 96 |
| W0950402008 | 40 | 28 | 26 | 9 | 12 | 32 | 32 | 45 | 54 | 52 | 25 | 10 | 12 | 216 |
| W0950502008 | 50 | 32 | 26 | 9 | 12 | 32 | 32 | 45 | 54 | 52 | 25 | 10 | 12 | 212 |
| W0950632008 | 63 | 40 | 33 | 11 | 16 | 40 | 50 | 63 | 75 | 63 | 32 | 12 | 15 | 440 |
| W0950802008 | 80 | 50 | 33 | 11 | 16 | 40 | 50 | 63 | 75 | 63 | 32 | 12 | 15 | 464 |
| W0951002008 | 100 | 60 | 44 | 14 | 20 | 50 | 70 | 90 | 103 | 80 | 40 | 16 | 22 | 985 |

Note: Supplied complete with 4 screws, 4 washers

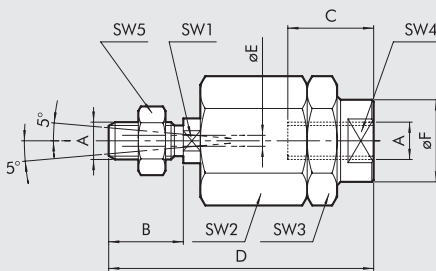
COUNTER-HINGE Ø 16 to 25 - MODEL BC



| Code | Ø | A | B | B1 | C | øD | E | F | øM | R | S | Weight [g] |
|-------------|----|----|----|----|----|-----|---|----|----|----|---|------------|
| W0950200005 | 20 | 32 | 30 | 16 | 20 | 6.5 | 4 | 30 | 8 | 10 | 4 | 78 |
| W0950200005 | 25 | 32 | 30 | 16 | 20 | 6.5 | 4 | 30 | 8 | 10 | 4 | 78 |

Note: Supplied complete with 1 pin and 2 snap rings

SELF ALIGNING ROD COUPLER - MODEL GA-K



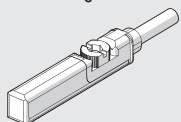
| Code | Ø | A | B | C | D | øE | øF | SW1 | SW2 | SW3 | SW4 | SW5 | Weight [g] |
|-------------|-----|----------|----|----|-----|----|------|-----|-----|-----|-----|-----|------------|
| W0950200030 | 20 | M8 | 20 | 20 | 57 | 4 | 12.5 | 7 | 17 | 17 | 11 | 13 | 56 |
| W0950200030 | 25 | M8 | 20 | 20 | 57 | 4 | 12.5 | 7 | 17 | 17 | 11 | 13 | 56 |
| W0950322030 | 32 | M10x1.25 | 20 | 20 | 71 | 4 | 22 | 12 | 30 | 30 | 19 | 17 | 216 |
| W0950322030 | 40 | M10x1.25 | 20 | 20 | 71 | 4 | 22 | 12 | 30 | 30 | 19 | 17 | 216 |
| W0950402030 | 50 | M12x1.25 | 24 | 20 | 75 | 4 | 22 | 12 | 30 | 30 | 19 | 19 | 220 |
| W0950402030 | 63 | M12x1.25 | 24 | 20 | 75 | 4 | 22 | 12 | 30 | 30 | 19 | 19 | 220 |
| W0950502030 | 80 | M16x1.5 | 32 | 32 | 103 | 4 | 32 | 20 | 41 | 41 | 30 | 24 | 620 |
| W0950502030 | 100 | M16x1.5 | 32 | 32 | 103 | 4 | 32 | 20 | 41 | 41 | 30 | 24 | 620 |

Note: Individually packed

RETRACTABLE SENSOR

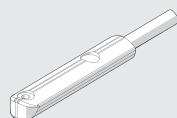
SENSOR, SQUARE TYPE

Latest generation,
secure fixing



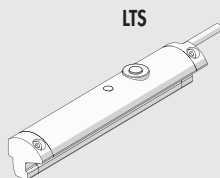
SENSOR, OVAL TYPE

Traditional



For codes and technical data, see **chapter A6**.

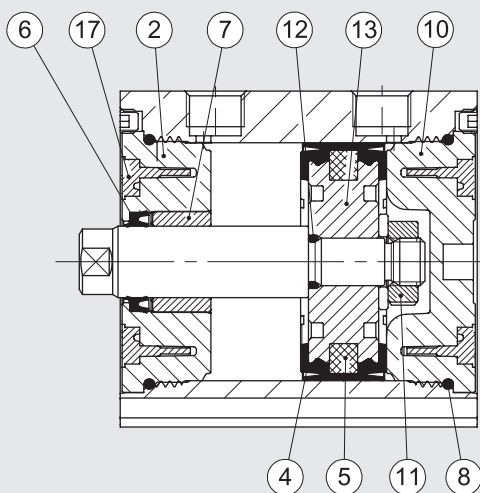
POSITION SENSORS



For technical data and usage strokes see **chapter A6**.

SPARE PARTS FOR ISO 21287 CYLINDER

COMPACT CYLINDERS ISO 21287 (POLYURETHANE)



| Code | Bores | Type | Parts |
|--------------|-------------------|--|----------------------------|
| 009 ... L001 | Ø 20, 25 | Complete set of gaskets polyurethane | 4 6 8 |
| 009 ... L001 | Ø 32 to 63 | Complete set of gaskets polyurethane | 4 6 8 12 17 |
| 009 ... L001 | Ø 80, 100 | Complete set of gaskets polyurethane | 4 6 8 12 |
| 009 ... L008 | Ø 20, 25 | Complete set of (high temperature) FKM/FPM gaskets | 4 6 8 |
| 009 ... L008 | Ø 32 to 63 | Complete set of (high temperature) FKM/FPM gaskets | 4 6 8 12 17 |
| 009 ... L008 | Ø 80, 100 | Complete set of (high temperature) FKM/FPM gaskets | 4 6 8 12 |
| 009 ... 7013 | Ø 20 to 100 | Polyurethane piston rod gasket kit | 6 |
| 009 ... 7014 | Ø 20 to 100 | FKM/FPM piston rod gasket kit | 6 |
| 009 ... L101 | Ø 20, 25, 80, 100 | Front head kit | 2 6 7 8 |
| 009 ... L101 | Ø 32 to 63 | Front head kit | 2 6 7 8 17 |
| 009 ... L201 | Ø 20, 25, 80, 100 | Rear head kit | 8 10 |
| 009 ... L201 | Ø 32 to 63 | Rear head kit | 8 10 17 |
| 009 ... 7401 | Ø 20, 25 | Piston kit polyurethane | 4 5 11 |
| 009 ... L401 | Ø 32 to 63 | Piston kit polyurethane | 4 5 11 12 13 17 |
| 009 ... 7401 | Ø 80 to 100 | Piston kit polyurethane | 4 5 11 12 13 |
| 009 ... 7501 | Ø 20, 25, 80, 100 | Magnet | 5 |
| 009 ... L501 | Ø 32 to 63 | Magnet | 5 17 |
| 009 ... L901 | Ø 20, 25 | Front + rear cylinder head + piston kit polyurethane | 2 4 5 6 7 8 10 11 |
| 009 ... L901 | Ø 32 to 63 | Front + rear cylinder head + piston kit polyurethane | 2 4 5 6 7 8 10 11 12 13 17 |
| 009 ... L901 | Ø 80, 100 | Front + rear cylinder head + piston kit polyurethane | 2 4 5 6 7 8 10 11 12 13 |