

| Standard executions | | | |
|---------------------|--------------|--------|------|
| Version | Profile Tube | Symbol | Type |
| Magnetic Standard | | | AMA |
| | | | AMT |

For the magnetic reed switches type ASV and ASC see from page 1.110.1.

For coupling cylinders/reed switches/brackets see table on page 1.120.5.

For mounting accessories see from page 1.97.1.

For rod accessories see from page 1.85.1.

For dimensions of the cylinder with piston rod brake see page 1.75.15.



On request, they can be supplied according to 2014/34/EU - ATEX



New series of cylinders conforming to ISO 15552 standards. These can be supplied with two different shapes of the barrel: AMA type with "T" and "C" grooves allowing to use the flush-mounted magnetic switch and the AMT type round with tie-rods.

Two different shapes of switches can be applied on opposite sides of AMA tube, to interchange with most competitors. The main features of this cylinder are the "clean" modern design and the attention to details.

| Options | Suffix |
|--|--------|
| Through rod | P |
| Rod in stainless steel AISI 304 | K |
| Extended rod in hardened and chrome plated steel* for the application of the static piston rod brake | B |
| Extended rod in hardened and chrome plated steel* for the application of the dynamic piston rod brake | B1 |
| Seals FKM -20°C ÷ +150°C | V |
| Scraper ring only FKM -20°C ÷ +80°C | V1 |
| Low temperature seals -40°C ÷ +80°C | BT |
| Tandem forward movement piston rods coupled together | TA1 |
| Tandem forward movement piston rods independent | TA2 |
| Tandem back to back | TA3 |
| Tandem front to front | TA4 |
| Extended rod (indicate the requested WH dimension in mm. E.g.: WH -100). | WH-... |
| Without adjustable cushionings | D |
| Adjustable rear cushioning only | D1 |
| Adjustable front cushioning only | D2 |
| Special male thread (indicate the requested thread. E.g. : R-M 10x1,5). The dimension AM of the special thread will be the same as the standard. The cylinder will be supplied without rod nut. | R-M... |
| Female thread | F |
| With bellows for protection of the rod (in this case the dimension WH will be extended according the stroke of the cylinder) | Z |
| NBR seals | H |
| Piston rod scraping ring in nitrile rubber NBR | H1 |
| Brass rod scraper (with V, V1, H and H1 options only) | Y |
| Stainless steel AISI 316L profile tube (with AMT type only) | TX |
| Special on request | /S |

The options can be combined (when this is possible).

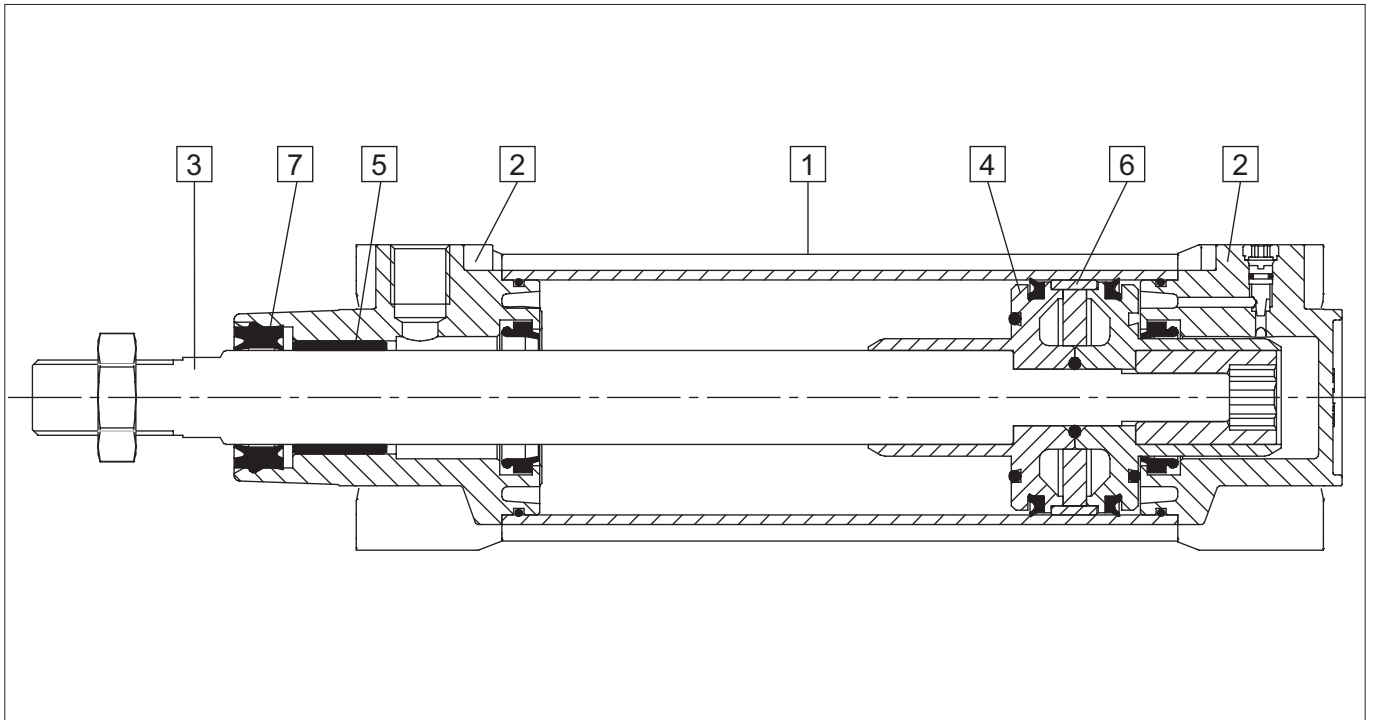
* In Stainless Steel AISI 304 for ATEX versions

The suffix of the options are to be added to the model number of the standard product, as shown in the following table.

How to order: 63 / 100 AMAKVR-M12x1,25

| | | | | | | |
|------|---|--------|------|--------|--------|------------|
| 63 | / | 100 | AMA | K | V | R-M12X1,25 |
| Bore | / | Stroke | Type | Option | Option | Option |





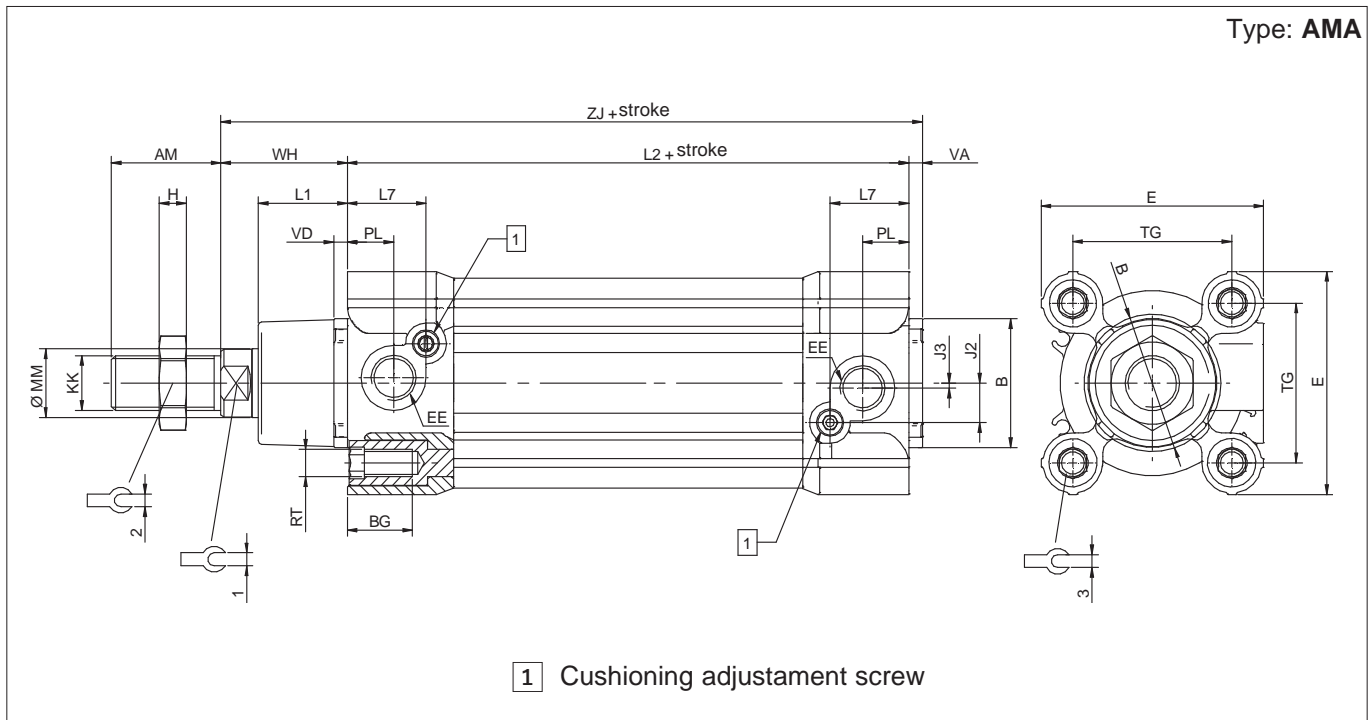
Materials (standard types)

| | | |
|---|-------------|----------------------------------|
| 1 | Tube | Anodised aluminium |
| 2 | Heads | Die-cast painted aluminium |
| 3 | Rod | Chrome-plated steel C45 |
| 4 | Piston | Die-cast aluminium |
| 5 | Bushing | Self-lubricating sintered bronze |
| 6 | Guide ring | Natural Delrin |
| 7 | Rod seals | Polyurethane |
| | Other seals | Nitrile rubber NBR/polyurethane |

Technical data

| Bore (mm) | 32 | 40 | 50 | 63 | 80 | 100 | 125 | |
|-------------------|--|------------|--------------------|------|-----------|--------------------|---------|------|
| Fluid | Compressed filtered air with or without lubrication. Lubrication, if started, must be continued. | | | | | | | |
| Pressure | 1 ÷ 10 bar | | | | | | | |
| Temperature range | -20°C ÷ +80°C (standard / V1) | | -20°C ÷ +150°C (V) | | | -40°C ÷ +80°C (BT) | | |
| Stroke | from 10 mm to 2500 mm | | | | | | | |
| Cushion length | 20 | 22 | 25 | 25 | 35 | 35 | 35 | |
| Ports | 1/8" | 1/4" | | 3/8" | | 1/2" | | |
| Rod thread | M10 x 1,25 | M12 x 1,25 | M16 x 1,5 | | M20 x 1,5 | | M27 x 2 | |
| Weight | Stroke zero (g) | 470 | 690 | 1145 | 1483 | 2381 | 3181 | 5284 |
| | Additional 10 mm stroke (g) | 21 | 29 | 44 | 47 | 69 | 80 | 119 |

Type: **AMA**



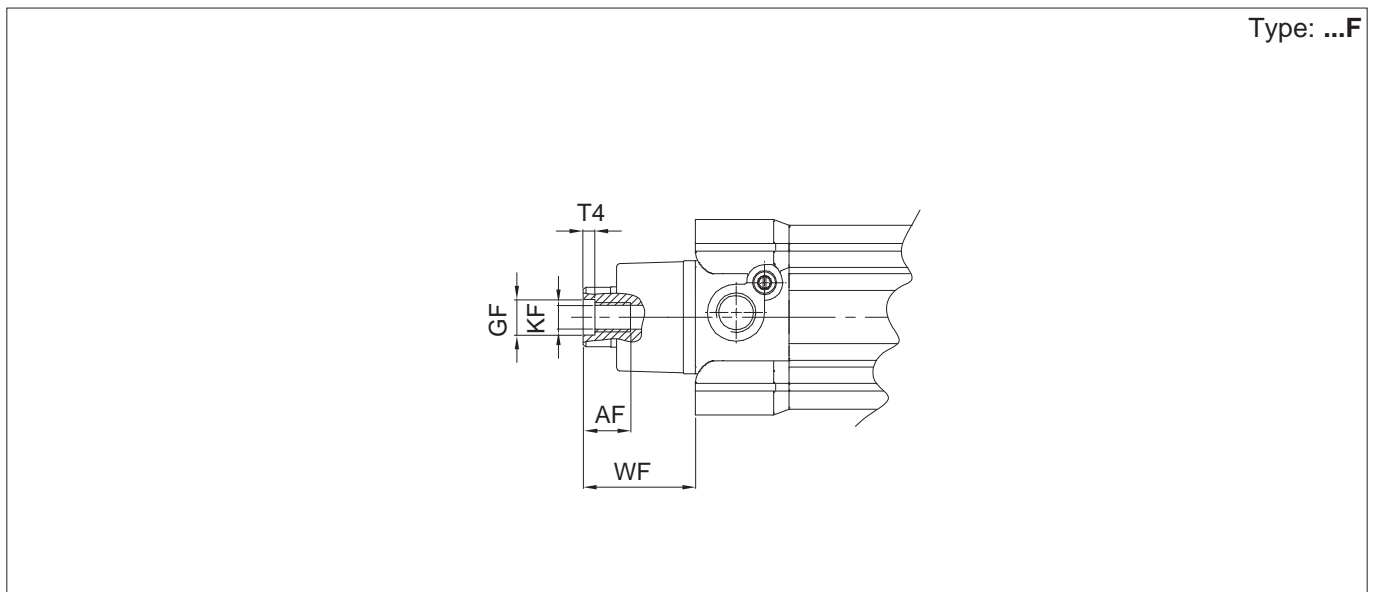
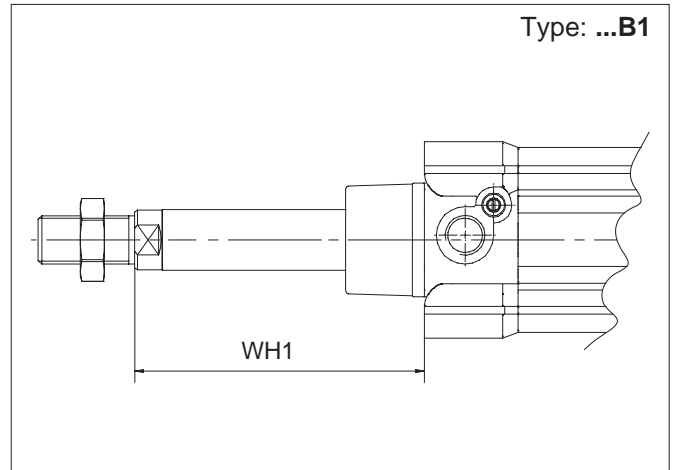
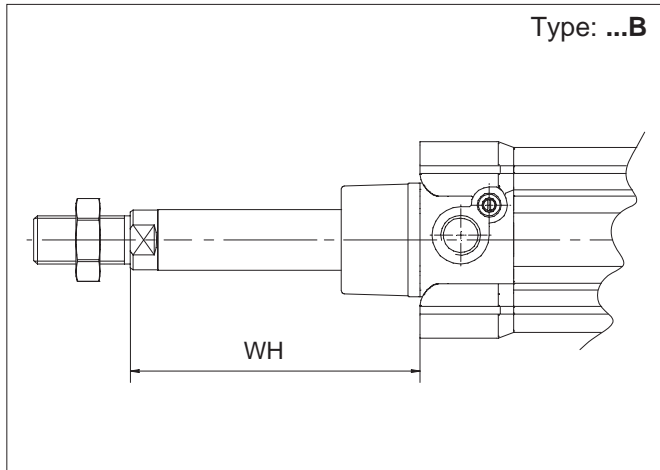
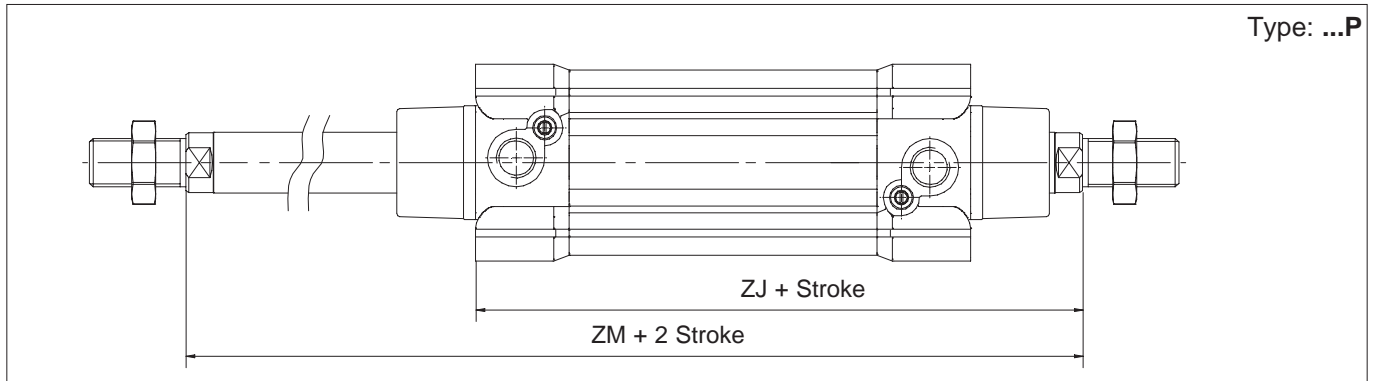
| Ø (mm) | AM | B Ø d11 | BG | E | EE | J2 | J3 | KK | L1 | L2 | H |
|--------|----|------------|----|-----|------|------|-----|----------|----|-----|----|
| 32 | 22 | 30 | 15 | 47 | 1/8" | 7 | 3,5 | M10x1,25 | 20 | 94 | 6 |
| 40 | 24 | 35 | 15 | 52 | 1/4" | 7,5 | 4 | M12x1,25 | 22 | 105 | 7 |
| 50 | 32 | 40 | 16 | 65 | 1/4" | 11,5 | 1,5 | M16x1,5 | 26 | 106 | 8 |
| 63 | 32 | 45 | 16 | 75 | 3/8" | 13,5 | 1 | M16x1,5 | 25 | 121 | 8 |
| 80 | 40 | 45 | 17 | 95 | 3/8" | 13 | 1 | M20x1,5 | 32 | 128 | 9 |
| 100 | 40 | 55 | 17 | 115 | 1/2" | 15 | 6 | M20x1,5 | 38 | 138 | 9 |
| 125 | 54 | 60 | 21 | 140 | 1/2" | 17 | 8 | M27x2 | 40 | 160 | 12 |

| Ø (mm) | L7 | MM Ø f7 | PL | RT | TG | VA | VD | WH | ZJ | ⇄ 1 | ⇄ 2 | ⇄ 3 |
|--------|------|------------|------|-----|------|----|----|----|-----|-----|-----|-----|
| 32 | 19,4 | 12 | 8,5 | M6 | 32,5 | 4 | 4 | 26 | 124 | 10 | 17 | 6 |
| 40 | 23 | 16 | 10 | M6 | 38 | 4 | 4 | 30 | 139 | 13 | 19 | 6 |
| 50 | 23 | 20 | 13,5 | M8 | 46,5 | 4 | 4 | 37 | 147 | 17 | 24 | 8 |
| 63 | 23 | 20 | 15 | M8 | 56,5 | 4 | 4 | 37 | 162 | 17 | 24 | 8 |
| 80 | 30 | 25 | 21 | M10 | 72 | 4 | 4 | 46 | 178 | 22 | 30 | 10 |
| 100 | 30,5 | 25 | 24 | M10 | 89 | 4 | 4 | 51 | 193 | 22 | 30 | 10 |
| 125 | 27,5 | 32 | 23 | M12 | 110 | 5 | 5 | 65 | 230 | 27 | 41 | 12 |

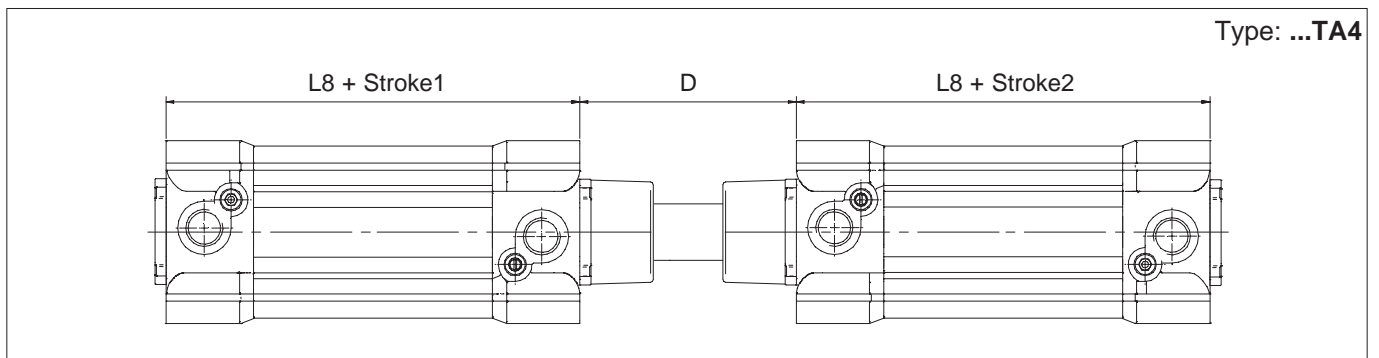
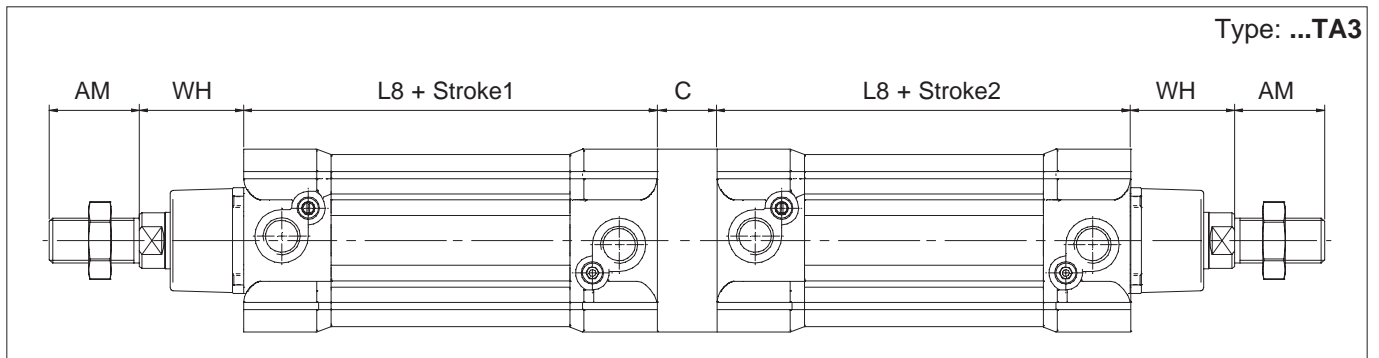
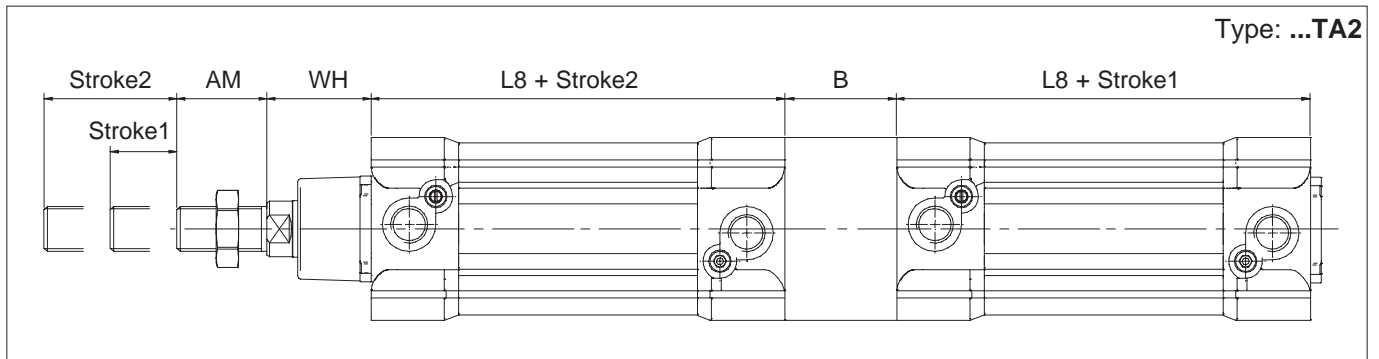
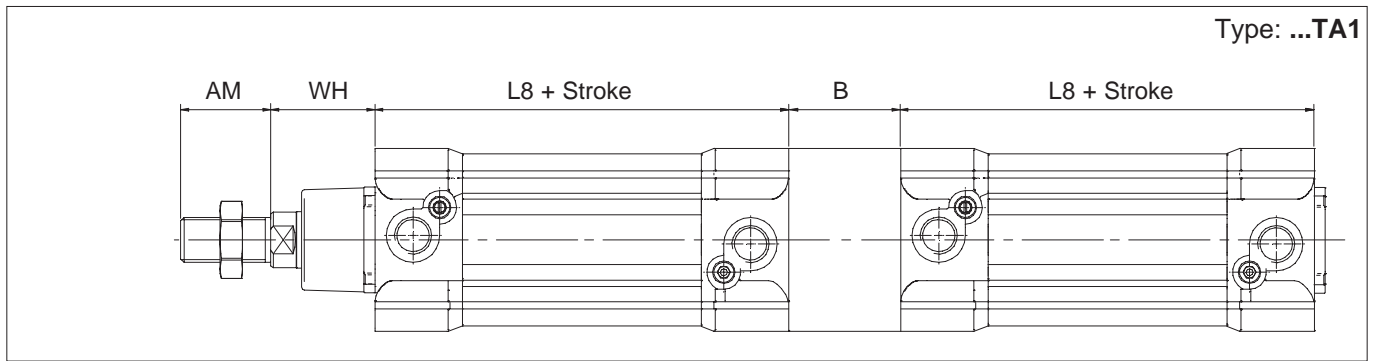
| Seals kits | |
|------------|--|
| n. 1 | Rod seal |
| n. 2 | Cushioning seal |
| n. 2 | Piston lip-seal |
| n. 1 | Linear rubber ring for piston (damper) |
| n. 2 | Tube O-ring |
| n. 1 | Piston guiding ring |
| n. 2 | O-ring for cushioning screw |
| n. 1 | O-ring to seal two semi-pistons |

How to order: 63 / SG / AM

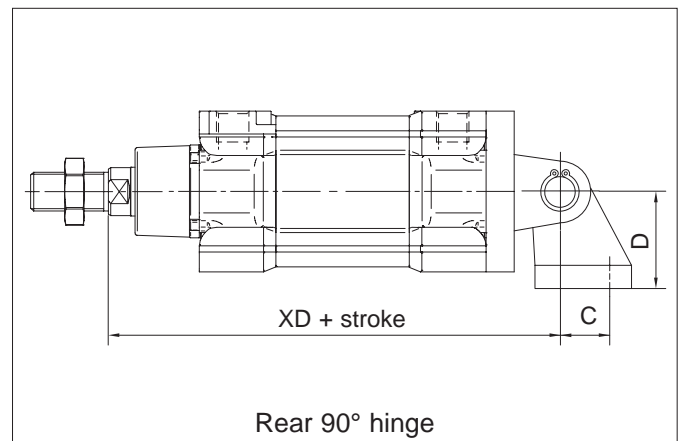
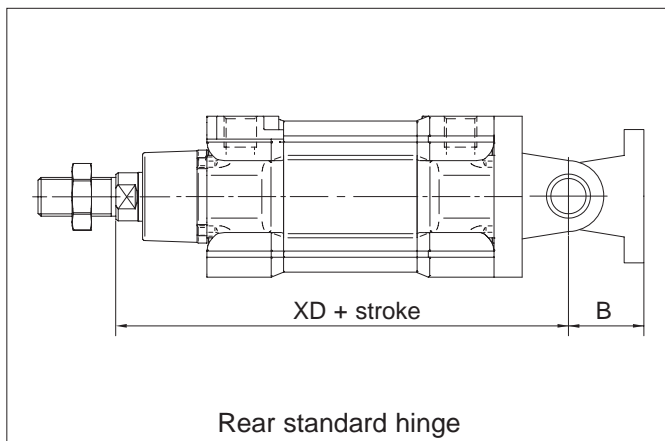
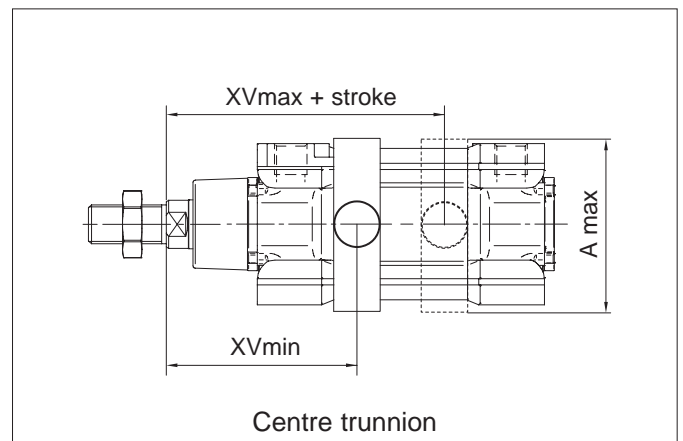
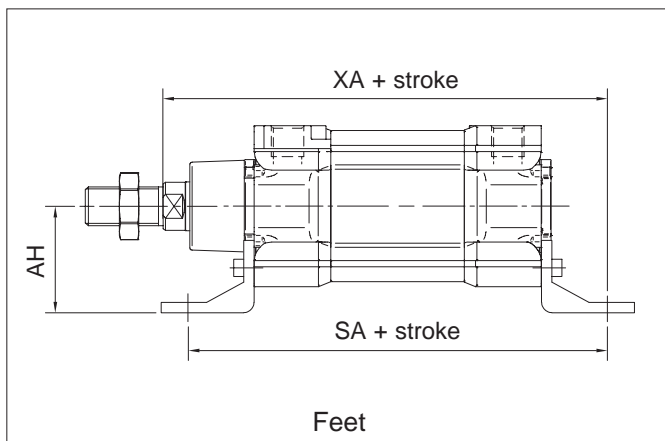
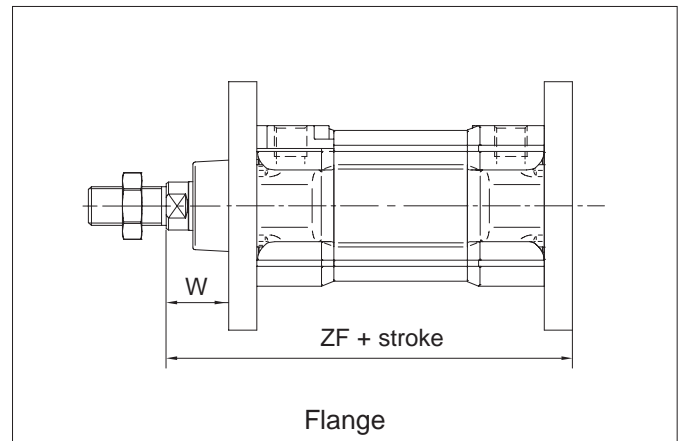
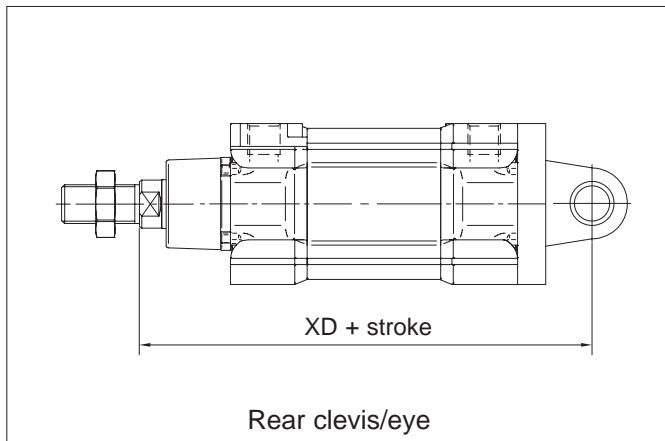
| 63 | / | SG | / | AM |
|------|---|----------|---|------|
| Bore | / | Seal kit | / | Type |



| ∅ mm | AF | GF | KF | T4 | WF | WH | WH1 | ZJ | ZM |
|------|----|----|-----|-----|----|-----|-----|-----|-----|
| 32 | 12 | 8 | M6 | 2,6 | 26 | 74 | 99 | 120 | 146 |
| 40 | 12 | 10 | M8 | 3,3 | 30 | 85 | 106 | 135 | 165 |
| 50 | 16 | 12 | M10 | 4,7 | 37 | 107 | 127 | 143 | 180 |
| 63 | 16 | 12 | M10 | 4,7 | 37 | 107 | 129 | 158 | 195 |
| 80 | 20 | 14 | M12 | 6,1 | 46 | 136 | 156 | 174 | 220 |
| 100 | 20 | 14 | M12 | 6,1 | 51 | 143 | 181 | 189 | 240 |
| 125 | 32 | 18 | M16 | 8 | 65 | 187 | - | 225 | 290 |



| Ø mm | AM | B | C | D | L8 | WH |
|------|----|----|----|-----|-----|----|
| 32 | 22 | 40 | 12 | 48 | 94 | 26 |
| 40 | 24 | 44 | 12 | 54 | 105 | 30 |
| 50 | 32 | 52 | 16 | 69 | 106 | 37 |
| 63 | 32 | 50 | 16 | 69 | 121 | 37 |
| 80 | 40 | 64 | 20 | 86 | 128 | 46 |
| 100 | 40 | 76 | 20 | 91 | 138 | 51 |
| 125 | 54 | 80 | 35 | 120 | 160 | 65 |



| Ø mm | A max | AH | B | C | D | SA | W | XA | XD | XV min | XV max | ZF |
|------|-------|----|----|----|----|-----|----|-----|-----|--------|--------|-----|
| 32 | 70 | 32 | 22 | 21 | 32 | 142 | 16 | 144 | 142 | 60 | 86 | 130 |
| 40 | 78 | 36 | 25 | 24 | 36 | 161 | 20 | 163 | 160 | 69 | 96 | 145 |
| 50 | 91 | 45 | 27 | 33 | 45 | 170 | 25 | 175 | 170 | 78 | 102 | 155 |
| 63 | 94 | 50 | 32 | 37 | 50 | 185 | 25 | 190 | 190 | 82 | 113 | 170 |
| 80 | 130 | 63 | 36 | 47 | 63 | 210 | 30 | 215 | 210 | 97 | 123 | 190 |
| 100 | 145 | 71 | 41 | 55 | 71 | 220 | 35 | 230 | 230 | 107 | 133 | 205 |
| 125 | 170 | 90 | 50 | 70 | 90 | 250 | 45 | 270 | 275 | 126,5 | 163,5 | 245 |

For dimensions and codes of the accessories: see page 1.97.1