

### DESCRIPTION

Twin rod cylinders series "CPA" act as devices against rotation in the presence of torques. They have been designed to be interchangeable with cylinders that comply with ISO 15552 standard (series "X" and "CPU") and so they can be used with the standardized rear mountings of those cylinders. The cylinders series "CPA" are cushioned at both ends and with magnetic piston type as standard.



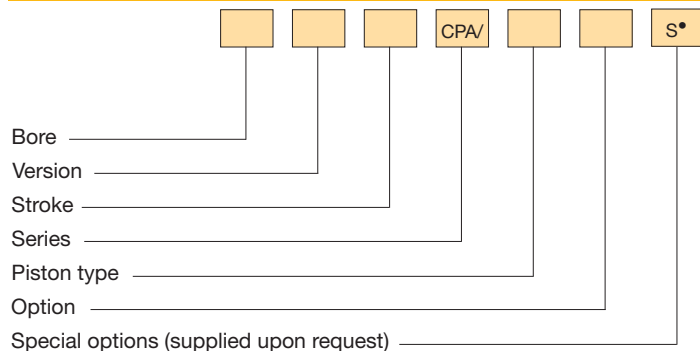
### TECHNICAL DATA

|                       |  |
|-----------------------|--|
| Operating pressure    | 1 ÷ 10 bar   |
| Working temperature   | 0 ÷ +80 °C (-20 °C with dry air)   |
| Fluid                 | Filtered, unlubricated or continuous lubricated compressed air             |
| Versions              | Double acting; Through ISO rod   |
| Bore                  | Ø 32, 40, 50, 63, 80, 100  |
| Port size             | Ø 32 = G 1/8<br>Ø 40 - 50 = G 1/4<br>Ø 63 - 80 = G 3/8<br>Ø 100 = G 1/2    |
| Standard strokes (mm) | 25, 50, 75, 80, 100, 125, 150, 160, 175, 200, 250, 300, 320, 350, 400, 500 |
| Decelerators length   | Ø 32 40 50 63 80 100<br>mm 25 25 25 30 35 35                               |
| Maximum strokes (mm)  | Ø 32 - 40 = 200; Ø 50 - 63 = 350; Ø 80 - 100 = 500                         |

### MATERIALS

|                     |  |
|---------------------|--|
| End caps            | Anodized aluminium alloy                                     |
| Cylinder barrel     | Extruded profile, 20µm anodized aluminium alloy              |
| Tie rods and nuts   | Steel  |
| Flange              | Anodized aluminium alloy                                     |
| Piston rod          | C45 chromium-plated steel<br>AISI 303 rolled stainless steel |
| Rod nut             | Steel<br>Stainless steel                                     |
| Piston rod bearing  | Bronze, sintered, self-lubricating                           |
| Decelerators ogives | Aluminium alloy  |
| Piston              | Aluminium alloy, Derling with magnet                         |
| Seals               | Polyurethane   |

### ORDER KEY



P.S.: Magnetic sensors FM100-FM157-FM158 (see chapter magnetic sensors from page 1.93)  
• See technical data on page 0.12

### VERSION

/ Double acting RA Through ISO rod

### PISTON TYPE

- M Magnetic

### OPTION

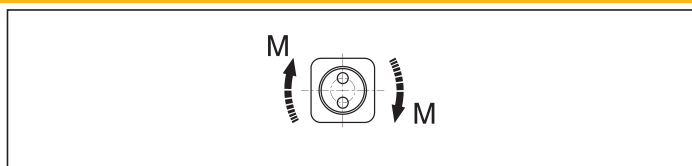
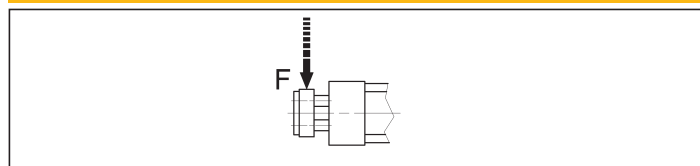
1 Stainless steel piston rods and rod nut

### SPARE PARTS

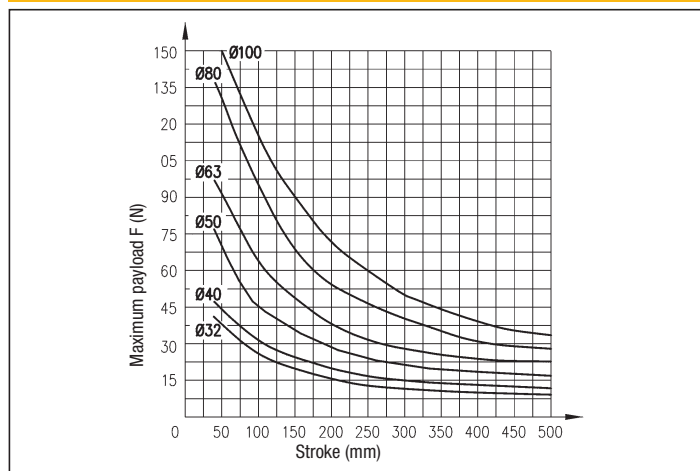
#### SEALS KIT

Polyurethane Ø/SG/CPA/M  
Through ISO rod, polyurethane Ø/SG/RA/CPA/M

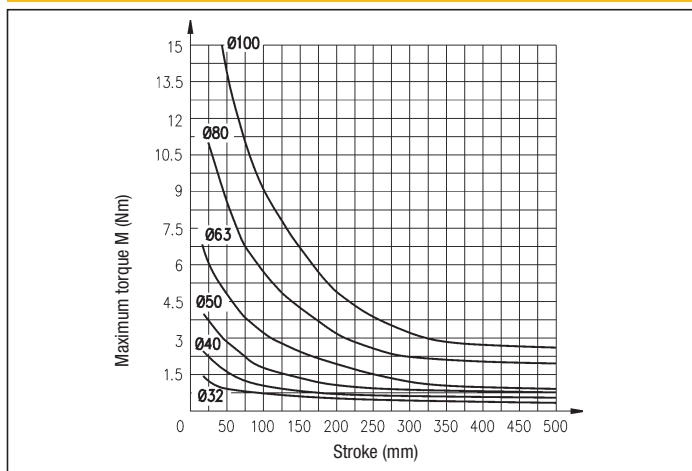
### TECHNICAL INFORMATION



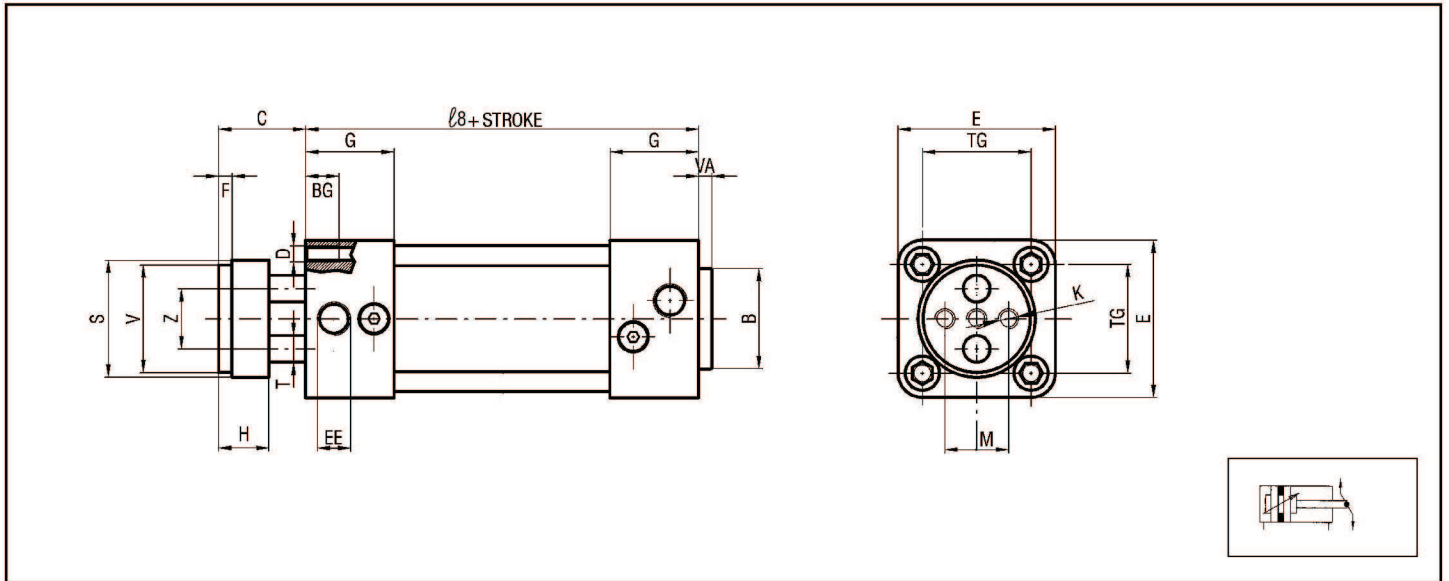
### MAXIMUM PERMISSIBLE TRANSVERSE FORCE



### MAXIMUM PERMISSIBLE TORQUE



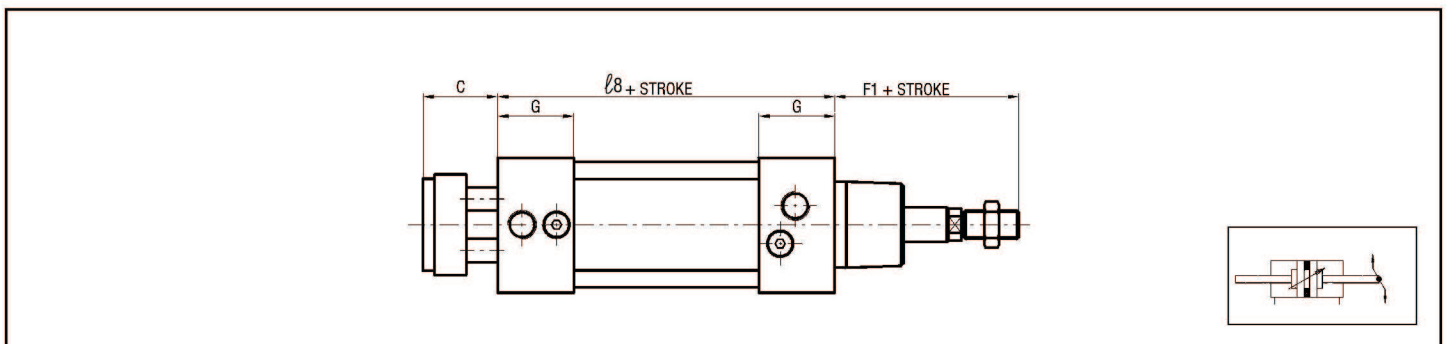
## CPA BASIC CYLINDER



## DIMENSIONS AND WEIGHTS BASIC CYLINDER

| Ø   | B  | BG | C  | D   | E   | EE   | F | F1 | G    | H  | K   | L8  | M    | S   | T  | TG   | V   | VA | Z  | WEIGHT (g) | INCR. (g) x 10 mm |
|-----|----|----|----|-----|-----|------|---|----|------|----|-----|-----|------|-----|----|------|-----|----|----|------------|-------------------|
| 32  | 30 | 16 | 26 | M6  | 47  | G1/8 | 4 | 48 | 28   | 15 | M6  | 94  | 19   | 35  | 8  | 32,5 | 32  | 4  | 18 | 770        | 30                |
| 40  | 35 | 16 | 30 | M6  | 53  | G1/4 | 4 | 54 | 31,5 | 15 | M8  | 105 | 22,5 | 45  | 10 | 38   | 40  | 4  | 22 | 980        | 43                |
| 50  | 40 | 16 | 37 | M8  | 65  | G1/4 | 5 | 69 | 31,5 | 18 | M8  | 106 | 30   | 55  | 12 | 46,5 | 50  | 4  | 26 | 1570       | 70                |
| 63  | 45 | 16 | 37 | M8  | 75  | G3/8 | 5 | 69 | 35   | 22 | M10 | 121 | 38   | 70  | 16 | 56,5 | 63  | 4  | 35 | 2320       | 128               |
| 80  | 45 | 16 | 46 | M10 | 95  | G3/8 | 5 | 86 | 36   | 22 | M12 | 128 | 50   | 85  | 20 | 72   | 80  | 4  | 40 | 3830       | 132               |
| 100 | 55 | 16 | 51 | M10 | 115 | G1/2 | 5 | 91 | 41   | 22 | M12 | 138 | 70   | 105 | 20 | 89   | 100 | 4  | 50 | 5600       | 139               |

## THROUGH ISO ROD



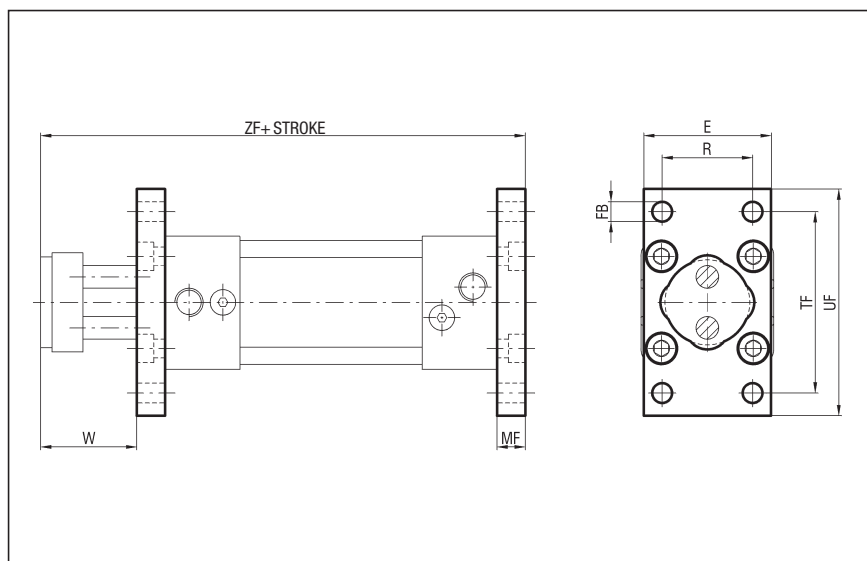
P.S.: Rod nut supplied as standard

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FLANGE - STEEL - Ø 32 ÷ 50 - CPUI/F Ø  
(Supplied with screws) - Ø 63 ÷ 100 - CPA/F Ø

| Ø   | FB<br>H13 | E   | MF<br>JS14 | R<br>JS14 | TF<br>JS14 | UF  | W  |
|-----|-----------|-----|------------|-----------|------------|-----|----|
| 32  | 7         | 45  | 10         | 32        | 64         | 80  | 16 |
| 40  | 9         | 52  | 10         | 36        | 72         | 90  | 20 |
| 50  | 9         | 65  | 12         | 45        | 90         | 110 | 25 |
| 63  | 9         | 75  | 12         | 50        | 100        | 120 | 25 |
| 80  | 12        | 95  | 16         | 63        | 126        | 150 | 30 |
| 100 | 14        | 115 | 16         | 75        | 150        | 170 | 35 |

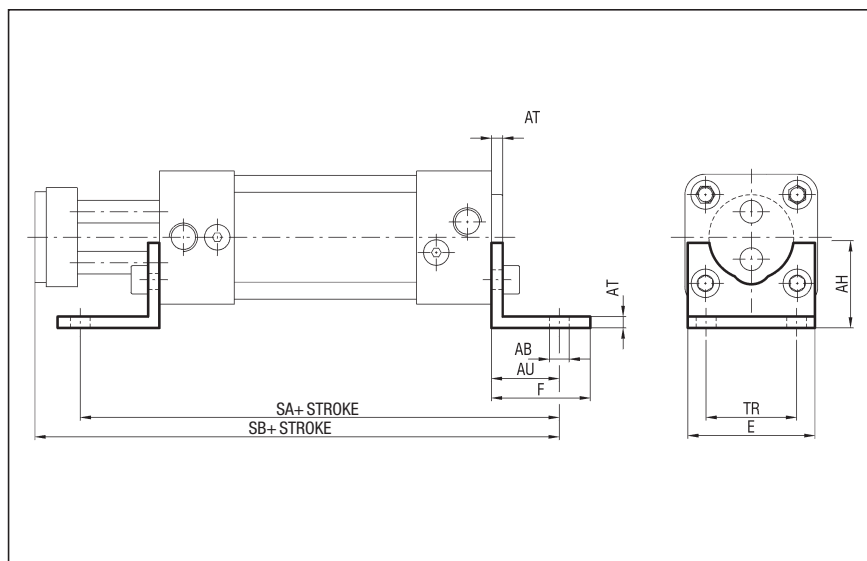
| Ø   | ZF  | WEIGHT<br>(g) |
|-----|-----|---------------|
| 32  | 130 | 190           |
| 40  | 145 | 246           |
| 50  | 155 | 478           |
| 63  | 170 | 622           |
| 80  | 190 | 1430          |
| 100 | 205 | 1986          |



FOOT - STEEL - Ø 32 ÷ 50 - CPUI/PB Ø  
(Supplied with screws) - Ø 63 ÷ 100 - CPA/PB Ø

| Ø   | AB<br>H14 | AH<br>JS15 | AT | AU | E   | F  | SA  |
|-----|-----------|------------|----|----|-----|----|-----|
| 32  | 7         | 32         | 4  | 24 | 45  | 35 | 142 |
| 40  | 9         | 36         | 4  | 28 | 52  | 36 | 161 |
| 50  | 9         | 45         | 5  | 32 | 65  | 47 | 170 |
| 63  | 9         | 50         | 5  | 32 | 75  | 45 | 185 |
| 80  | 12        | 63         | 6  | 41 | 95  | 55 | 210 |
| 100 | 14        | 71         | 6  | 41 | 115 | 57 | 220 |

| Ø   | SB  | TR<br>JS14 | WEIGHT<br>(g) |
|-----|-----|------------|---------------|
| 32  | 144 | 32         | 66            |
| 40  | 163 | 36         | 78            |
| 50  | 175 | 45         | 168           |
| 63  | 190 | 50         | 190           |
| 80  | 215 | 63         | 382           |
| 100 | 230 | 75         | 452           |



P.S.: REAR MOUNTINGS ACCESSORIES SAME OF THE CYLINDERS SERIES "X" AND "CPUI" (see from page 1.29)