

# EXS Series Double Shaft Cylinder



## EXS

### Double Shaft Cylinder



#### Specifications

| Bore(mm)                  | 6                                                 | 10                 | 16 | 20 | 25     | 32                |
|---------------------------|---------------------------------------------------|--------------------|----|----|--------|-------------------|
| Acting type               | Double acting                                     |                    |    |    |        |                   |
| Working Medium            | Clean Air(after 40 μm filtration)                 |                    |    |    |        |                   |
| Working Pressure (MPa)    | 0.1~1.0                                           |                    |    |    |        |                   |
| Guaranteed Pressure (MPa) | 1.5                                               |                    |    |    |        |                   |
| Working Temperature (°C)  | -20~70( No freezing)                              |                    |    |    |        |                   |
| Speed range (mm/s)        | 30~500                                            |                    |    |    |        |                   |
| Cushion type              | Rubber cushion                                    |                    |    |    |        |                   |
| Stroke tolerance(mm)      | $\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ |                    |    |    |        |                   |
| Adjustable stroke(mm)     | -5~-0                                             |                    |    |    |        |                   |
| No-rotating precision     | $\pm 0.2^{\circ}$                                 | $\pm 0.15^{\circ}$ |    |    |        | $\pm 0.1^{\circ}$ |
| Port Size                 | M5 x 0.8                                          |                    |    |    | G1/8 ① |                   |

① PT、NPT port size is optional.

#### How to Order?

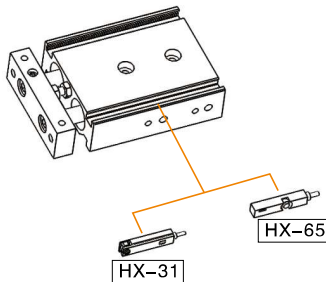
| Series No | Type No          | Bore                             | X | Stroke                | - | Magnet No       | - | Thread Type                   |
|-----------|------------------|----------------------------------|---|-----------------------|---|-----------------|---|-------------------------------|
| EXS       | M: Slide bearing | 6<br>10<br>12<br>16<br>20<br>... |   | 25<br>50<br>75<br>... |   | S : With magnet |   | Blank: G<br>P : PT<br>T : NPT |

Order Example:

EXS series, Slide Bearing type, Bore 6mm, stroke 30mm ERP code is: EXSM6X30-S

Note: The cylinder's bore and stroke, mounting accessories details according to drawings.

#### Optional Accessories

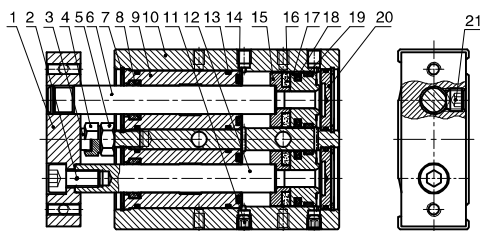


#### Stroke

| Bore (mm) | Standard Stroke (mm)                                    | Max. Stroke (mm) |
|-----------|---------------------------------------------------------|------------------|
| 6         | 10 20 30 40 50                                          | 50               |
| 10        | 10 20 25 30 40 50 60 70 75<br>80 90 100                 | 100              |
| 16-32     | 10 20 25 30 40 50 60 70 75<br>80 90 100 125 150 175 200 | 200              |

Note: The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder.  
e.g. 27mm stroke cylinder has the same dimensions of 30 std. stroke cylinder.

#### Internal Structure

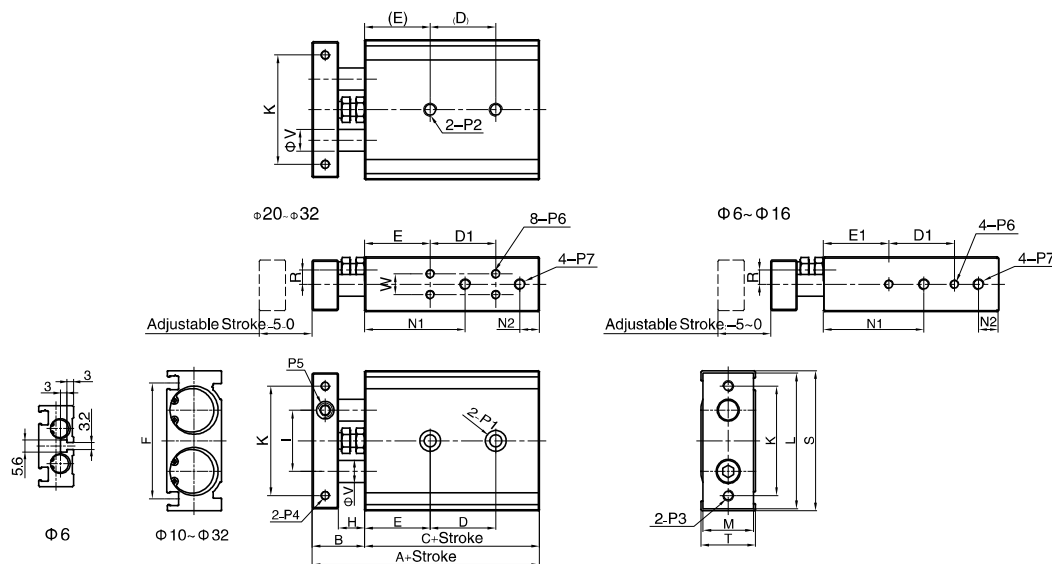


| No. | Part Name         | Material                      |
|-----|-------------------|-------------------------------|
| 1   | Fixing plate      | Aluminum alloy                |
| 2   | Nut               | Carbon steel                  |
| 3   | Bumper            | POM                           |
| 4   | Adjustable nut    | Carbon steel                  |
| 5   | Screw             | Carbon steel                  |
| 6   | Piston rod        | S45C hard chrome carbon steel |
| 7   | C clip            | Carbon steel                  |
| 8   | Wiper seal        | NBR                           |
| 9   | Head cover        | Aluminum alloy                |
| 10  | Body              | Aluminum alloy                |
| 11  | Hex fix screw     | Cu                            |
| 12  | Piston rod        | S45C hard chrome carbon steel |
| 13  | O-ring            | NBR                           |
| 14  | Anti-bump cushion | TPU(EN10 is POM)              |
| 15  | Magnet holder     | Aluminum alloy                |
| 16  | Magnet            | NdFeB                         |
| 17  | Piston            | Aluminum alloy                |
| 18  | Piston seal       | NBR                           |
| 19  | Wear ring         | PTFE                          |
| 20  | Rear cover        | Aluminum alloy                |
| 21  | Hex fix screw     | Cu                            |

# EXS Series Double Shaft Cylinder



## Main Dimension



(mm)

| Bore\Sign | A    | B    | C  | D D1                                                    |       |       |        |     |     |     |     | E  | E1 | F    | H  | I  | K  | L  | M  | N1   | N2  | R    |
|-----------|------|------|----|---------------------------------------------------------|-------|-------|--------|-----|-----|-----|-----|----|----|------|----|----|----|----|----|------|-----|------|
|           |      |      |    | 10-25                                                   | 30-50 | 60-80 | 90-100 | 125 | 150 | 175 | 200 |    |    |      |    |    |    |    |    |      |     |      |
| 6         | 58.5 | 13.5 | 45 | $D = 10 + \text{Stroke}/2$<br>$D1 = 13 + \text{Stroke}$ |       |       |        |     |     |     |     | 13 | 10 | 25.8 | 8  | 16 | 28 | 35 | 14 | 24.5 | 6.5 | 4.5  |
| 10        | 72   | 17   | 55 | 30                                                      | 40    | 50    | 60     | -   | -   | -   | -   | 20 | 20 | 36.5 | 9  | 20 | 35 | 44 | 15 | 30   | 8   | 3.5  |
| 16        | 79   | 19   | 60 | 25                                                      | 35    | 45    | 55     | 65  | 75  | 145 | 145 | 30 | 30 | 47.5 | 9  | 25 | 45 | 56 | 18 | 38   | 8   | 5    |
| 20        | 94   | 24   | 70 | 30                                                      | 40    | 60    | 60     | 80  | 80  | 100 | 100 | 30 | -  | 53   | 12 | 28 | 50 | 62 | 23 | 46   | 9   | 6.5  |
| 25        | 96   | 24   | 72 | 30                                                      | 40    | 60    | 60     | 80  | 80  | 100 | 100 | 30 | -  | 64   | 12 | 35 | 60 | 78 | 28 | 43   | 9   | 9    |
| 32        | 112  | 30   | 82 | 40                                                      | 50    | 70    | 70     | 90  | 90  | 110 | 110 | 30 | -  | 76   | 14 | 44 | 75 | 96 | 36 | 53   | 10  | 11.5 |

| Bore\Sign | S  | T  | V  | W   | P1                           | P2            | P3     | P4            | P5      | P6            | P7     |
|-----------|----|----|----|-----|------------------------------|---------------|--------|---------------|---------|---------------|--------|
| 6         | 37 | 16 | 4  | -   | φ6.5 Dp:3.3; Thru.hole: φ3.4 | -             | M3X0.5 | M3X0.5        | M3X0.5  | M3X0.5 Dp:4.5 | M5X0.8 |
| 10        | 46 | 17 | 6  | -   | φ6.5 Dp:3.3; Thru.hole: φ3.4 | M4X0.7 Dp:7   | M4X0.7 | M3X0.5        | M5X0.8  | M3X0.5 Dp:5   | M5X0.8 |
| 16        | 58 | 20 | 8  | -   | φ8 Dp:4.4; Thru.hole: φ4.3   | M5X0.8 Dp:8   | M5X0.8 | M4X0.7        | M6X1.0  | M4X0.7 Dp:5   | M5X0.8 |
| 20        | 64 | 25 | 10 | 9.5 | φ9.5 Dp:5.3; Thru.hole: φ5.2 | M6X1.0 Dp:10  | M5X0.8 | M4X0.7 Dp:6   | M8X1.25 | M4X0.7 Dp:5.5 | M5X0.8 |
| 25        | 80 | 30 | 12 | 13  | φ11 Dp:6.3; Thru.hole: φ6.8  | M8X1.25 Dp:12 | M6X1.0 | M5X0.8 Dp:7.5 | M8X1.25 | M5X0.8 Dp:7   | 1/8"   |
| 32        | 98 | 38 | 16 | 20  | φ11 Dp:6.3; Thru.hole: φ6.8  | M8X1.25 Dp:12 | M6X1.0 | M5X0.8 Dp:8   | M10X1.5 | M5X0.8 Dp:7   | 1/8"   |