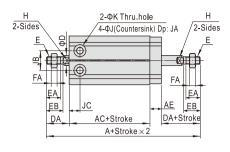
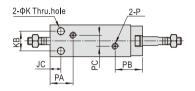


#### MD Series

# MDD

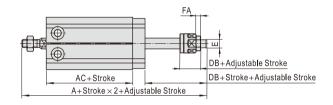




| Bore size\Item  | Witho | ut magnet | With | magnet | ΑE  | В    | _  | _  | DA | Е                 | E ^  | ЕВ   | F   | FA  | н  | J   | LA   | JB | 10 | к   | кв |                 | LA  | LB | P               | PA   | РВ   | D.C. |
|-----------------|-------|-----------|------|--------|-----|------|----|----|----|-------------------|------|------|-----|-----|----|-----|------|----|----|-----|----|-----------------|-----|----|-----------------|------|------|------|
| Dore Size litem | Α     | AC        | Α    | AC     | AL  | Ь    | ٦  | 0  | DA | _                 | EA   | EB   | F   | FA  | п  | J   | JA   | JD | 30 | , r | ND |                 | LA  | LD | Г               | FA   | гь   | FC   |
| 6               | 70    | 38        | 70   | 38     | 6   | 16.5 | 22 | 3  | 13 | $M3 \times 0.5$   | 7    | 8    | 5.5 | 2.5 | -  | 6   | 5    | 10 | 7  | 3.3 | 7  | $M3 \times 0.5$ | 5   | 17 | $M5 \times 0.8$ | 14   | 16   | -    |
| 10              | 74    | 36        | 74   | 36     | 6   | 16.5 | 24 | 4  | 16 | $M4 \times 0.7$   | 10   | 11   | 7   | 2   | -  | 6   | 5.5  | 11 | 7  | 3.3 | 9  | $M3 \times 0.5$ | 5   | 18 | $M5 \times 0.8$ | 15.5 | 16   | -    |
| 16              | 69.5  | 30        | 79.5 | 40     | 7.5 | 20   | 32 | 6  | 16 | M5×0.8            | 11   | 12.5 | 8   | 4   | 5  | 7.5 | 6.5  | 14 | 7  | 4.5 | 12 | $M4 \times 0.7$ | 5   | 25 | $M5 \times 0.8$ | 14.5 | 17.5 | 3    |
| 20              | 83    | 36        | 93   | 46     | 9   | 26   | 40 | 8  | 19 | M6×1.0            | 12   | 14   | 10  | 5   | 6  | 9.5 | 8    | 16 | 9  | 5.5 | 16 | $M5 \times 0.8$ | 7.5 | 30 | $M5 \times 0.8$ | 19   | 18.5 | 9    |
| 25              | 95    | 40        | 105  | 50     | 9   | 32   | 50 | 10 | 23 | $M8 \times 1.25$  | 15.5 | 18   | 12  | 6   | 8  | 9.5 | 9    | 20 | 10 | 5.5 | 20 | $M5 \times 0.8$ | 8   | 38 | $M5 \times 0.8$ | 21.5 | 17.5 | 12   |
| 32              | 106   | 42        | 116  | 52     | 10  | 40   | 62 | 12 | 27 | $M10 \times 1.25$ | 19.5 | 22   | 17  | 6   | 10 | 11  | 11.5 | 24 | 11 | 6.5 | 24 | $M6 \times 1.0$ | 9   | 48 | 1/8"            | 23   | 22.5 | 13   |

2-L Dp: LA

# MDJ



| Bore size\Item | A(Without magnet) | A(With magnet) | AC(Without magnet) | AC(With magnet) | DB | E          | FA  |
|----------------|-------------------|----------------|--------------------|-----------------|----|------------|-----|
| 6              | 70                | 70             | 38                 | 38              | 13 | M3 × 0.5   | 2.5 |
| 10             | 73                | 73             | 36                 | 36              | 15 | M4 × 0.7   | 2   |
| 16             | 70.5              | 80.5           | 30                 | 40              | 17 | M5 × 0.8   | 4   |
| 20             | 85                | 95             | 36                 | 46              | 21 | M6 × 1.0   | 5   |
| 25             | 97                | 107            | 40                 | 50              | 25 | M8 × 1.25  | 6   |
| 32             | 106               | 116            | 42                 | 52              | 27 | M10 × 1.25 | 6   |

Remark) The unmarked dimension is the same as MD standard type.

# Airtae

## **MK Series**



# MK MSK MTK MKD MKJ MK-S MSK-S MTK-S MKD-S MKJ-S

#### **Product feature**

- 1. Manufactured by our enterprise.
- 2. There are several fixation ways for the cylinder, and also convenient to install and use.
- Several cylinders can be assembled together to effectively save the installation space.
- 4. The guide precision of piston rod is high and no additional lubricant is needed.
- 5. Fixated block is attached to piston rod, which prevents it from rotating.
- 6. Various cylinders are available for your choice.
- 7. The seal material with high temperature resistance is adopted to guaranteethe normal operation of cylinder at 150℃(Option).

# **Specification**

| Bore size(n  | nm)           | 6  | 10 | 16     | 20     | 25 | 32 |  |  |
|--------------|---------------|--|----|--------|--------|----|----|--|--|
| A ating tune | MK/MKD/MKJ    | Double acting                                |    |        |        |    |    |  |  |
| Acting type  | MSK/MTK       |  |    | Single | acting |    |    |  |  |
| Fluid        |               | Air(to be filtered by 40 μ m filter element) |    |        |        |    |    |  |  |
| Operating    | Double acting | 0.15~1.0MPa(22~145psi)                       |    |        |        |    |    |  |  |
| pressure     | Single acting | 0.2~1.0MPa(28~145psi)                        |    |        |        |    |    |  |  |
| Proof press  | ure           | 1.5MPa(215psi)                               |    |        |        |    |    |  |  |
| Temperatur   | e °C          | -20~70                                       |    |        |        |    |    |  |  |
| Speed range  | e mm/s        | Double acting: 30~500 Single acting: 50~500  |    |        |        |    |    |  |  |
| Stroke toler | ance          | +1.0   |    |        |        |    |    |  |  |
| Cushion typ  | е             | Bumper                                       |    |        |        |    |    |  |  |
| Port size [N | lote]         | M5×0.8 1/8"                                  |    |        |        |    |    |  |  |

[Note1] PT thread, G thread are available. Add) Refer to P353 for detail of sensor switch.

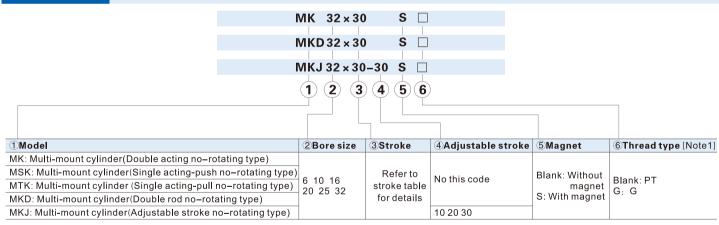
#### Stroke

| Bore | size (mm)     | Standard stroke (mm)      | Max.std stroke |  |  |
|------|---------------|---------------------------|----------------|--|--|
| 6    | Double acting | 5 10 15 20 25 30 35       | 35             |  |  |
|      | Single acting | 5 10 15 20                | 20             |  |  |
| 10   | Double acting | 5 10 15 20 25 30 35       | 35             |  |  |
|      | Single acting | 5 10 15 20                | 20             |  |  |
| 16   | Double acting | 5 10 15 20 25 30 40 50    | 50             |  |  |
|      | Single acting | 5 10 15 20                | 20             |  |  |
| 20   | Double acting | 5 10 15 20 25 30 40 50 60 | 60             |  |  |
| 20   | Single acting | 5 10 15 20                | 20             |  |  |
| 25   | Double acting | 5 10 15 20 25 30 40 50 60 | 60             |  |  |
|      | Single acting | 5 10 15 20                | 20             |  |  |
| 32   | Double acting | 5 10 15 20 25 30 40 50 60 | 60             |  |  |
|      | Single acting | 5 10 15 20                | 20             |  |  |

Note) 1. Please contact the company for other special strokes.

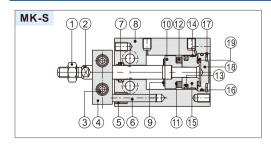
 The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 23mm stroke cylinder has the same dimensions of 25 std. stroke cylinder.

## Ordering code



[Note1] Standard thread is blank here.

# Inner structure and material of major parts



| NO. | Item              | Material        | NO. | Item          | Material                             |
|-----|-------------------|-----------------|-----|---------------|--------------------------------------|
| 1   | Rod nut           | Carbon steel    | 11  | Magnet washer | NBR                                  |
| 2   | Piston rod        | Stainless steel | 12  | Magnet        | Sintered metal(Neodymium-iron-boron) |
| 3   | Screw             | Carbon steel    | 13  | Piston seal   | NBR                                  |
| 4   | No-rotating plate | Aluminum alloy  | 14  | Wear ring     | Wear resistant material              |
| 5   | Bushing           | Brass           | 15  | Piston        | Aluminum alloy                       |
| 6   | Fixed rod         | Stainless steel | 16  | O-ring        | NBR                                  |
| 7   | Rod packing       | NBR             | 17  | C-clip        | Spring steel                         |
| 8   | Body              | Aluminum alloy  | 18  | Back cover    | Aluminum alloy                       |
| 9   | Bumper            | TPU             | 19  | Bumper        | TPU                                  |
| 10  | Magnet holder     | Aluminum alloy  |     |               |                                      |

