

### Order example

**MCB – 40**

MODEL

TUBE I.D.

### Features

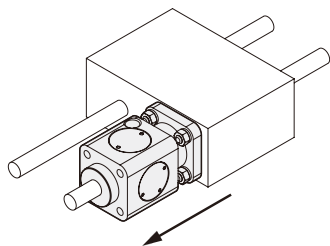
- Locking unit is a mechanical device to apply to cylinders ISO 15552 and ISO 6432 whose scope is to block cylinder's rod in any position. This solution allows to block the race of the cylinder anytime takes place an unexpected fall of pressure.
- The blocking force is always and however greater of the one developed from the respective cylinder at 1 MPa.

### Specification

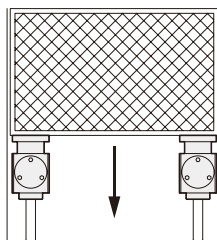
| Model  | MCB  |      |      |      |      |      |      |      |       |  |
|--|--|------|------|------|------|------|------|------|-------|--|
| Tube I.D. (mm)   | 20   | 25   | 32   | 40   | 50   | 63   | 80   | 100  | 125   |  |
| Rod diameter (mm)  | 8  | 10   | 12   | 16   | 20   | 20   | 25   | 25   | 32    |  |
| Medium   | Air  |      |      |      |      |      |      |      |       |  |
| Operating pressure range   | 0.3~0.6 MPa                                  |      |      |      |      |      |      |      |       |  |
| Proof pressure   | 1.5 MPa                                      |      |      |      |      |      |      |      |       |  |
| Ambient temperature  | -5~+80°C (No freezing)                       |      |      |      |      |      |      |      |       |  |
| Min. working pressure  | 0.3 MPa                                      |      |      |      |      |      |      |      |       |  |
| Locking mode   | Secure locking of piston rod in any position |      |      |      |      |      |      |      |       |  |
| Lock retention forces (N)<br>Max. static loading-<br>Horizontal mounting | 490  | 490  | 790  | 1240 | 1930 | 3060 | 5400 | 7700 | 12040 |  |
| Weight (kg)  | 0.19   | 0.19 | 0.40 | 0.60 | 1.10 | 1.50 | 2.60 | 3.50 | 6.50  |  |

### Other examples of locking unit applications

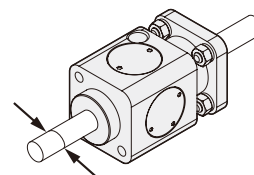
For slides



For piling

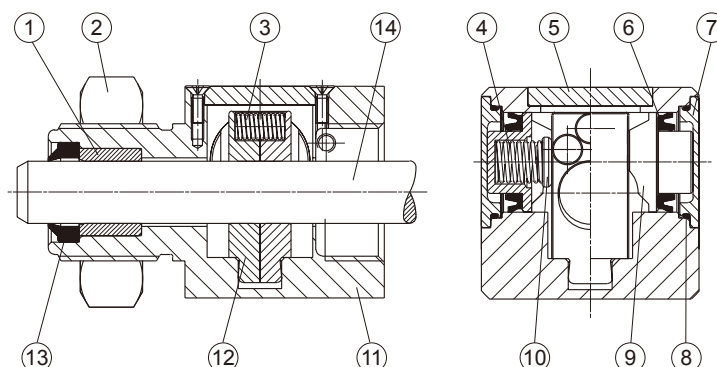


Chromium-plated shaft



|              |                     |
|--------------|---------------------|
| Tolerance    | <b>f7</b>           |
| Rod diameter | 8,10,12,16,20,25,32 |

## LOCKING UNIT



### Attention

- Locking unit functioning is static type (cylinder's rod stopped).
- Before using the brake, take care to stop cylinder's rod.

### Assemble attention

- Unlocking the locking unit by supplying air to the ⑪ body of locking unit. Please don't take out the ⑭ support pin after unlocking the locking unit.
- Using piston rod to push the ⑭ support pin off until the piston rod replaces the position of the ⑭ support pin. Finally you can lock the piston rod by removing the air supply.

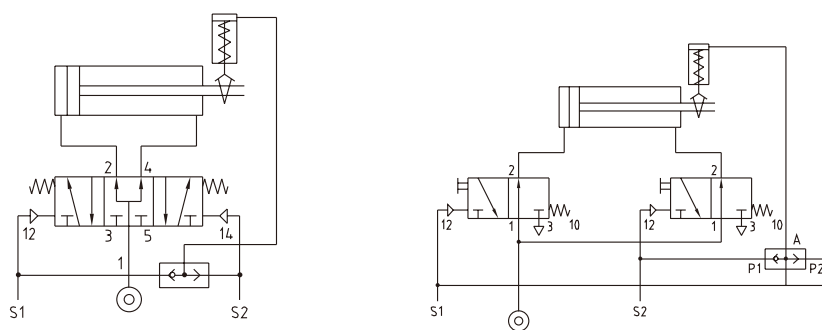
\* When the ⑪ body of locking unit is removed the air supply, if there is no ⑭ support pin or piston rod to support inside structure, it will cause the ⑫ jaws deviation. The piston rod can't be mounted anymore.

### Material

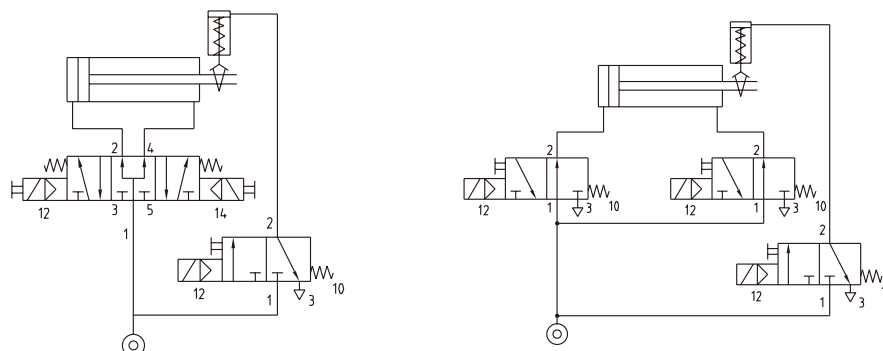
| No. | Part name      | Material       |
|-----|----------------|----------------|
| 1   | Guida bush     | Igolidur       |
| 2   | Nut            | Steel          |
| 3   | Spring         | Steel          |
| 4   | Spring         | Steel          |
| 5   | Superior cover | Aluminum alloy |
| 6   | Seal piston    | NBR            |
| 7   | Lateral cover  | Aluminum alloy |
| 8   | O-ring         | NBR            |
| 9   | Piston         | Delrin         |
| 10  | Spring cover   | Delrin         |
| 11  | Body           | Aluminum alloy |
| 12  | Jaws           | Bronze         |
| 13  | Rod seal       | NBR            |
| 14  | Support pin    | Carbon steel   |

### Connection scheme

#### Pneumatic control

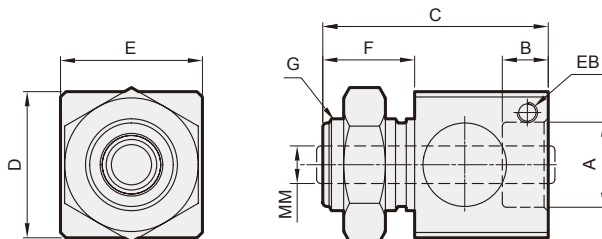


#### Electropneumatic control



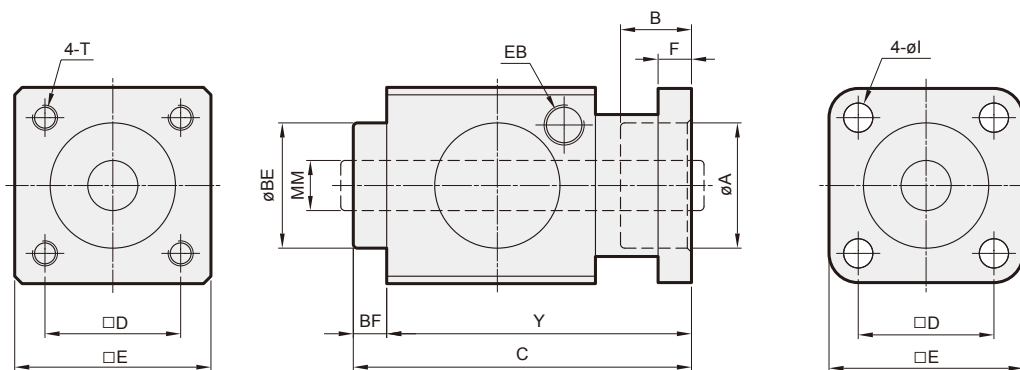
## LOCKING UNIT

### $\phi 20, \phi 25$



| Code<br>Tube I.D. | A       | B  | C  | D  | E  | EB | F  | G       | MM             |
|-------------------|---------|----|----|----|----|----|----|---------|----------------|
| 20                | M22×1.5 | 11 | 54 | 35 | 34 | M5 | 22 | M22×1.5 | $\phi 8^{T7}$  |
| 25                | M22×1.5 | 11 | 54 | 35 | 34 | M5 | 22 | M22×1.5 | $\phi 10^{T7}$ |

### $\phi 32 \sim \phi 125$



| Code<br>Tube I.D. | A    | B    | BE   | BF  | C    | D    | E   | F  | EB   | I   | MM             | T       | Y   |
|-------------------|------|------|------|-----|------|------|-----|----|------|-----|----------------|---------|-----|
| 32                | 30.5 | 19.5 | 30   | 7.5 | 67.5 | 32.5 | 47  | 6  | G1/8 | 6.5 | $\phi 12^{T7}$ | M6×8L   | 60  |
| 40                | 35.5 | 22.5 | 34.9 | 10  | 80   | 38   | 54  | 6  | G1/8 | 6.5 | $\phi 16^{T7}$ | M6×8L   | 70  |
| 50                | 40.5 | 29   | 40   | 10  | 100  | 46.5 | 65  | 8  | G1/8 | 9   | $\phi 20^{T7}$ | M8×12L  | 90  |
| 63                | 45.5 | 29   | 45   | 10  | 100  | 56.5 | 75  | 8  | G1/8 | 9   | $\phi 20^{T7}$ | M8×12L  | 90  |
| 80                | 45.5 | 37   | 45   | 10  | 120  | 72   | 95  | 12 | G1/4 | 11  | $\phi 25^{T7}$ | M10×16L | 110 |
| 100               | 55.5 | 39   | 55   | 10  | 120  | 89   | 114 | 12 | G1/4 | 11  | $\phi 25^{T7}$ | M10×16L | 110 |
| 125               | 60.5 | 51.5 | 60   | 16  | 156  | 110  | 138 | 20 | G1/4 | 13  | $\phi 32^{T7}$ | M12×20L | 140 |