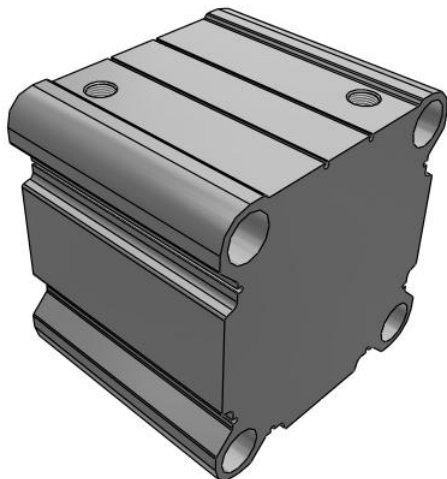




## C(D)Q2, Compact Cylinder, Double Acting, Single Rod, Large Bore w/Auto Switch Mounting Groove CQ2B180TF-75DCMZ

Datasheet

### General series information

- Compact, double acting, single rod, large bore
- Bore sizes (mm): 125, 140, 160, 180, 200
- Standard stroke range (mm): 10 to 300
- Port threads: Rc, NPT, G
- Can mount small auto switches on 4 surfaces.



Double-acting, single-rod cylinder

### Standard specifications

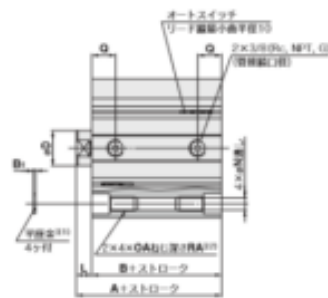
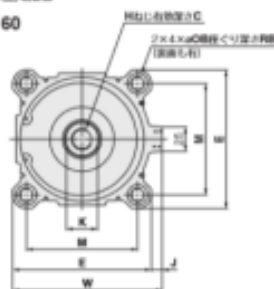
|                                        |                                        |
|----------------------------------------|----------------------------------------|
| Magnet                                 | None                                   |
| Bore Size                              | Ø180 mm                                |
| Port Thread Type                       | TF (G)                                 |
| Stroke                                 | 75                                     |
| Body Option                            | M (Rod End Male Thread)                |
| Auto Switch                            | No Switch                              |
| Lead Wire or Prewired Connector        | 0.5 m or None in the Case of No Switch |
| Number                                 | 2 pcs.                                 |
| Rod End Options                        | None                                   |
| Fluororubber Seal                      | None                                   |
| Pressure medium                        | Compressed air                         |
| Maximum temperature of pressure medium | 70 °C                                  |
| Minimum temperature of pressure medium | -10 °C                                 |
| Maximum operating pressure             | 0.7 MPa                                |
| Minimum operating pressure             | 0.05 MPa                               |
| Proof pressure                         | 1.05 Mpa                               |
| Maximum ambient temperature            | 70 °C                                  |
| Minimum ambient temperature            | -10 °C                                 |

|                                                         |               |
|---------------------------------------------------------|---------------|
| Number of pneumatic connections                         | 2 pcs.        |
| Pneumatic input connection                              | G 1/2         |
| Mode of operation of drive                              | Double acting |
| Theoretical cylinder force, advance stroke (at 0.5 MPa) | 12,095 N      |
| Theoretical cylinder force, return stroke (at 0.5 MPa)  | 12,724 N      |
| Maximum piston speed                                    | 400 mm/s      |
| Piston rod end                                          | Male thread   |
| Geometric form of the piston rod                        | Single rod    |
| Male thread of rod end                                  | M36 x 1.5     |
| Female thread of rod end                                | M24 x 3       |
| Minimum piston speed                                    | 20 mm/s       |
| Weight                                                  | 15.470 Kg     |

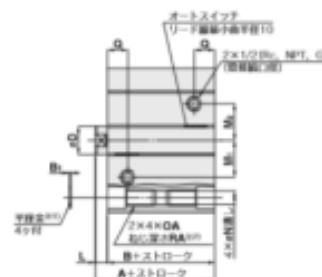
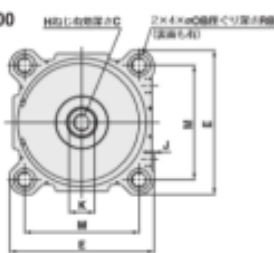
# Dimensions

## 通し穴/C型Q2B

ø125~ø160



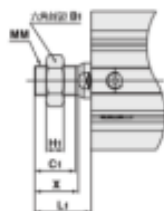
ø180, ø200



| シリーズ内径<br>(mm) | 標準ストローク範囲          | A     | B    | C    | D  | E   | H       | J  | K    | L  | M    | M <sub>1</sub> | M <sub>2</sub> | N    | OA      | OB   | G    | RA | RB   | W    |
|----------------|--------------------|-------|------|------|----|-----|---------|----|------|----|------|----------------|----------------|------|---------|------|------|----|------|------|
| 125            | 10, 20, 30, 40, 50 | 99.6  | 37.5 | 30   | 36 | 140 | M22x2.5 | 11 | 32   | 16 | 11.4 | —              | —              | 17.5 | M14x2   | 21   | 24.5 | 25 | 18.4 | 15.3 |
| 140            | 10, 20, 30, 40, 50 | 126.0 | 37.5 | 30   | 36 | 154 | M22x2.5 | 10 | 32   | 16 | 12.6 | —              | —              | 17.5 | M14x2   | 21   | 24.5 | 25 | 18.4 | 16.6 |
| 160            | 75, 100, 125, 150  | 154.0 | 41.2 | 33.4 | 40 | 174 | M24x3   | 10 | 36   | 17 | 14.4 | —              | —              | 14.5 | M16x2   | 24   | 27.5 | 29 | 21   | 16.6 |
| 180            | 175, 200, 250, 300 | 182.0 | 33   | 33.4 | 40 | 204 | M24x3   | 3  | 36   | 17 | 16.2 | 52             | 52             | 19   | M22x2.5 | 31.5 | 29   | 30 | 20   | —    |
| 200            |                    | 174.0 | 36   | 33.4 | 40 | 224 | M24x3   | 7  | 1.36 | 17 | 16.2 | 62             | 62             | 19   | M22x2.5 | 31.5 | 30   | 30 | 20   | —    |

注1) 通し穴でシリングも取付ける場合は、外筒の厚さを必ずご使用ください。  
注2) ø125~ø160の10ストローク以下およびø180, ø200の20ストローク以下の場合は、OAに差し替えます。

## ロッド先端ねじ

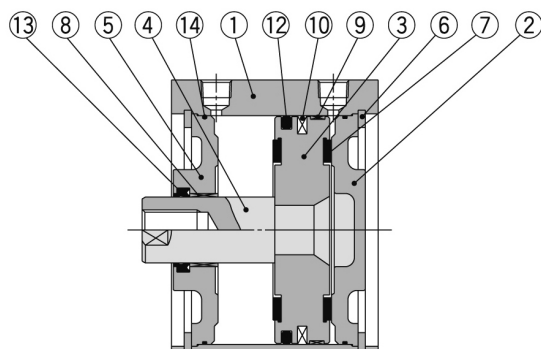


| シリーズ内径<br>(mm) | B1 | C1 | H  | L  | MM      | X  |
|----------------|----|----|----|----|---------|----|
| 125            | 40 | 42 | 10 | 50 | M20x1.5 | 45 |
| 140            | 40 | 42 | 10 | 50 | M20x1.5 | 45 |
| 160            | 55 | 47 | 21 | 64 | M20x1.5 | 50 |
| 180            | 55 | 47 | 21 | 64 | M20x1.5 | 50 |
| 200            | 55 | 47 | 21 | 64 | M20x1.5 | 50 |

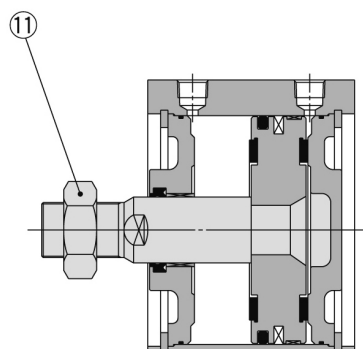
※ロッド先端ナットの取付位置については2P.26

## Constructions

**Standard**



**Rod end male thread**



### Component Parts

| No. | Description    | Material          | Note               |
|-----|----------------|-------------------|--------------------|
| 1   | Cylinder tube  | Aluminum alloy    | Hard anodised      |
| 2   | Head cover     | Carbon steel      | Nickel plated      |
| 3   | Piston         | Aluminum alloy    | Chromated          |
| 4   | Piston rod     | Carbon steel      | Hard chrome plated |
| 5   | Rod cover      | Carbon steel      | Nickel plated      |
| 6   | Retaining ring | Carbon tool steel | Phosphate coated   |
| 7   | Bumper         | Urethane          |                    |
| 8   | Bushing        | Bearing alloy     |                    |
| 9   | Wear ring      | Resin             |                    |
| 10  | Magnet         | —                 | For CDQ2B□ only    |
| 11  | Rod end nut    | Carbon steel      | Nickel plated      |
| 12  | Piston seal    | NBR               |                    |
| 13  | Rod seal       | NBR               |                    |
| 14  | Tube gasket    | NBR               |                    |

### Replacement Parts/Seal Kit

| Bore size (mm) | Kit no.    | Contents                                      |
|----------------|------------|-----------------------------------------------|
| 125            | CQ2B125-PS | Kits include items 12, 13, 14 from the table. |
| 140            | CQ2B140-PS |                                               |
| 160            | CQ2B160-PS |                                               |
| 180            | CQ2B180-PS |                                               |
| 200            | CQ2B200-PS |                                               |

\* Seal kit includes 12, 13, 14. Order the seal kit, based on each bore size.  
 \* Since the seal kit does not include a grease pack, order it separately.

**Grease pack part no.: GR-S-010 (10 g)**

## Additional information

Catalogue

[CQ2-Z-D\\_EU.pdf](#)

Operation manuals

[OM\\_CQ2x\\_OM0002MEN.pdf](#)