



## C(D)Q2, Compact Cylinder, Double Acting Single Rod, Long Stroke w/Auto Switch Mounting Groove CQ2A40TF-250DCZ

Datasheet

### General series information

- Compact Cylinder: Long Stroke Double Acting, Single Rod
- Bore sizes (mm): 32, 40, 50, 63, 80, 100
- Standard stroke range (mm): 125 to 300
- Port threads: Rc, NPT or G
- Can mount small auto switches on 4 surfaces.



Double-acting, single-rod cylinder

### Standard specifications

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Magnet                                 | None                                     |
| Mounting                               | A (Both Ends Tapped)                     |
| Type                                   | Standard                                 |
| Bore Size                              | Ø40 mm                                   |
| Port Thread                            | TF [G]                                   |
| Stroke                                 | 250                                      |
| Cushion                                | C (Rubber Bumper)                        |
| Body Option                            | Standard (Rod End Female Thread)         |
| Auto Switch                            | No Switch                                |
| Lead Wire or Pre-wired Connector       | 0.5 m (Or None in the Case of No Switch) |
| Number                                 | 2 pcs.                                   |
| Rod End Options                        | None                                     |
| Made of Stainless Steel                | 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             | 1.0 MPa                                  |

|                                  |               |
|----------------------------------|---------------|
| Minimum operating pressure       | 0.05 MPa      |
| Proof pressure                   | 1.5 MPa       |
| Maximum ambient temperature      | 70 °C         |
| Minimum ambient temperature      | -10 °C        |
| Number of pneumatic connections  | 2 pcs.        |
| Pneumatic input connection       | G 1/8         |
| Mode of operation of drive       | Double acting |
| Maximum piston speed             | 500 mm/s      |
| Type of cushioning               | Elastically   |
| Piston rod end                   | Female-Thread |
| Geometric form of the piston rod | Single rod    |
| Male thread of rod end           | M14 x 1.5     |
| Female thread of rod end         | M8 x 1.25     |
| Minimum piston speed             | 50 mm/s       |
| Weight                           | 1.209 Kg      |

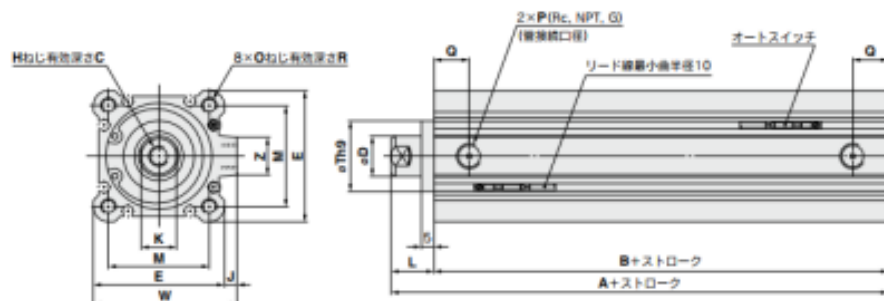
## Dimensions

チューブ内径

### φ32~φ100 オートスイッチ用磁石なし、磁石付

両端タップタイプ/C回Q2A

オートスイッチ用磁石なし、付とも外形寸法は同じです。



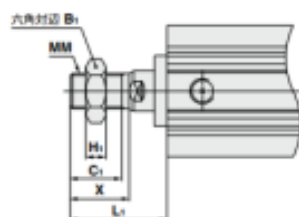
| チューブ内径 (mm) | ストローク範囲 (mm)                 | A    | B    | C  | D  | E   | H       | J   | K  | L  | M  | O        | P   | Q    | R  | Th9 | W     | Z  |
|-------------|------------------------------|------|------|----|----|-----|---------|-----|----|----|----|----------|-----|------|----|-----|-------|----|
| 32          |                              | 62.5 | 45.5 | 13 | 16 | 45  | M8×1.25 | 4.5 | 14 | 17 | 34 | M6×1.0   | 1/8 | 10   | 10 | 22  | 49.5  | 14 |
| 40          |                              | 72   | 55   | 13 | 16 | 52  | M8×1.25 | 5   | 14 | 17 | 40 | M6×1.0   | 1/8 | 12.5 | 10 | 28  | 57    | 15 |
| 50          | 125, 150, 175, 200, 250, 300 | 73.5 | 55.5 | 15 | 20 | 64  | M10×1.5 | 7   | 17 | 18 | 50 | M8×1.25  | 1/4 | 14   | 14 | 35  | 71    | 19 |
| 63          |                              | 75   | 57   | 15 | 20 | 77  | M10×1.5 | 7   | 17 | 18 | 60 | M10×1.5  | 1/4 | 16.5 | 18 | 35  | 84    | 19 |
| 80          |                              | 86   | 66   | 21 | 25 | 98  | M16×2.0 | 6   | 22 | 20 | 77 | M12×1.75 | 3/8 | 19   | 22 | 43  | 104   | 25 |
| 100         |                              | 97.5 | 75.5 | 27 | 30 | 117 | M20×2.5 | 6.5 | 27 | 22 | 94 | M12×1.75 | 3/8 | 23   | 22 | 50  | 123.5 | 25 |

※ロッド先端ナットおよび付属金具の詳細につきましてはP.26、27

注1) 中間ストロークの長手寸法の算出方法につきましてはP.73

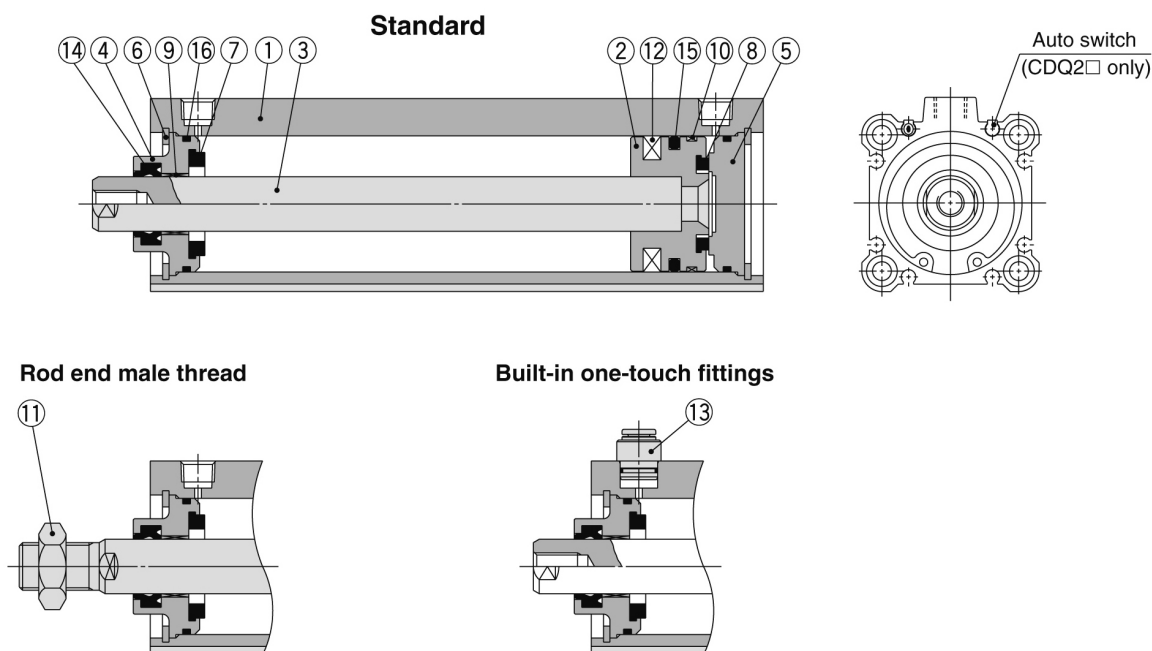
注2) オートスイッチの適正取付位置・取付高さ寸法につきましてはP.139~145

ロッド先端ねじ



| チューブ内径 (mm) | B <sub>1</sub> | C <sub>1</sub> | H <sub>1</sub> | L <sub>1</sub> | MM      | X    |
|-------------|----------------|----------------|----------------|----------------|---------|------|
| 32          | 22             | 20.5           | 8              | 38.5           | M14×1.5 | 23.5 |
| 40          | 22             | 20.5           | 8              | 38.5           | M14×1.5 | 23.5 |
| 50          | 27             | 26             | 11             | 43.5           | M18×1.5 | 28.5 |
| 63          | 27             | 26             | 11             | 43.5           | M18×1.5 | 28.5 |
| 80          | 32             | 32.5           | 13             | 53.5           | M22×1.5 | 35.5 |
| 100         | 41             | 32.5           | 16             | 53.5           | M26×1.5 | 35.5 |

## Constructions



### Component Parts

| No. | Description       | Material          | Note               |
|-----|-------------------|-------------------|--------------------|
| 1   | Cylinder tube     | Aluminum alloy    | Hard anodised      |
| 2   | Piston            | Aluminum alloy    | Chromated          |
| 3   | Piston rod        | Carbon steel      | Hard chrome plated |
| 4   | Collar            | Aluminum alloy    | Anodised           |
| 5   | Bottom plate      | Aluminum alloy    | Anodised           |
| 6   | Retaining ring    | Carbon tool steel | Phosphate coated   |
| 7   | Bumper A          | Urethane          |                    |
| 8   | Bumper B          | Urethane          |                    |
| 9   | Bushing           | Bearing alloy     |                    |
| 10  | Wear ring         | Resin             |                    |
| 11  | Rod end nut       | Carbon steel      | Nickel plated      |
| 12  | Magnet            | —                 | For CDQ2A□ only    |
| 13  | One-touch fitting | —                 | ø32 to ø63         |
| 14* | Rod seal          | NBR               |                    |
| 15* | Piston seal       | NBR               |                    |
| 16* | Tube gasket       | NBR               |                    |

### Replacement Parts/Seal Kit

| Bore size (mm) | Kit no.      | Contents                                      |
|----------------|--------------|-----------------------------------------------|
| 32             | CQ2A32-L-PS  | Kits include items 14, 15, 16 from the table. |
| 40             | CQ2A40-L-PS  |                                               |
| 50             | CQ2A50-L-PS  |                                               |
| 63             | CQ2A63-L-PS  |                                               |
| 80             | CQ2A80-L-PS  |                                               |
| 100            | CQ2A100-L-PS |                                               |

\* Seal kit includes 14, 15, 16. 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](#)