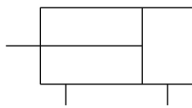


## C(D)QS, Compact Cylinder, Double Acting, Single Rod configurator CDQSB12-100DCM

### Datasheet

The CQS compact cylinder is available for those small bore cylinder applications where saving space is a concern. While sharing many of the outstanding features of the CQ2 series, the CQS offers standard long strokes (up to 300mm) in four bore sizes from 12 to 25mm. Long stroke versions incorporate a wear band and thicker piston to handle the increased bearing needs of the longer strokes. Both switch capable and non-switch capable body styles are the same, and switches can be mounted on three (12-16 bore) and four (20-25 bore) sides. An increased side load version (CQS\*S) is available for more demanding applications.



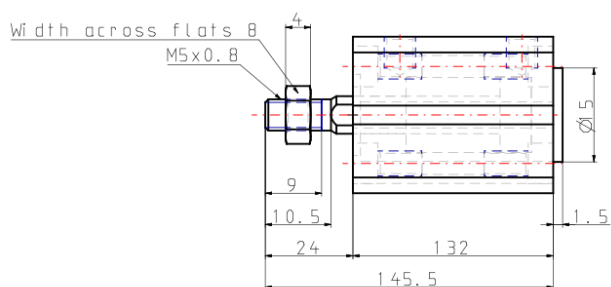
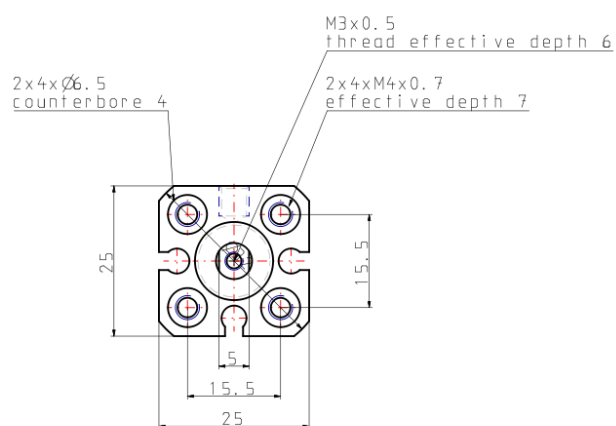
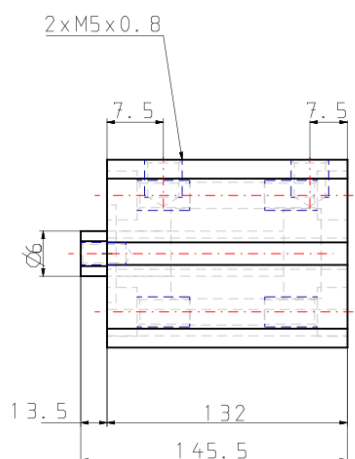
Double-acting, single-rod cylinder

### Standard specifications

|  |  |
|--|--|
| Magnet   | D (Built-in)                             |
| Mounting   | B (Through Hole, Both Ends Tapped)       |
| Bore Size  | Ø12 mm                                   |
| Lube-retainer                                      | Without Stable Lubrication Function      |
| Stroke   | 100                                      |
| Option   | CM (Rubber Cushion, 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.                                   |
| Dust Resistant                                     | None                                     |
| Rod End Options                                    | None                                     |
| Pressure medium                                    | Air                                      |
| Maximum temperature of pressure medium             | 60 °C                                    |
| Minimum temperature of pressure medium with magnet | -10 °C                                   |
| Maximum operating pressure                         | 1.0 MPa                                  |
| Minimum operating pressure                         | 0.07 MPa                                 |
| Proof pressure                                     | 1.5 MPa                                  |
| Maximum ambient temperature                        | 60 °C                                    |

|   |                  |
|---|------------------|
| Minimum ambient temperature with magnet                 | -10 °C           |
| Conform to the European RoHS Directive                  | Conform          |
| Numero of pneumatic connections                         | 2 pcs.           |
| Pneumatic input connection                              | M5               |
| Mode of operation of drive                              | Double acting    |
| Theoretical cylinder force, advance stroke (at 0.5 MPa) | 57 N             |
| Theoretical cylinder force, return stroke (at 0.5 MPa)  | 42 N             |
| Maximum piston speed                                    | 500 mm/s         |
| Piston rod end  | Internal thread  |
| Geometric form of the piston rod                        | Round piston rod |
| Male thread of rod end                                  | M5               |
| Female thread of rod end                                | M3               |
| Minimum piston speed                                    | 50 mm/s          |
| Lubrication   | Non-lube         |

## Dimensions

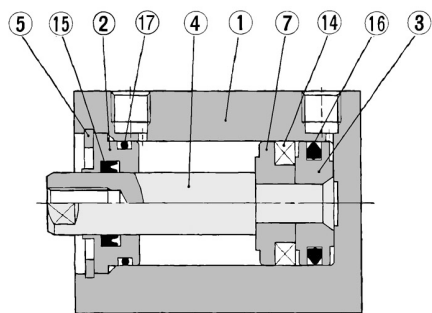




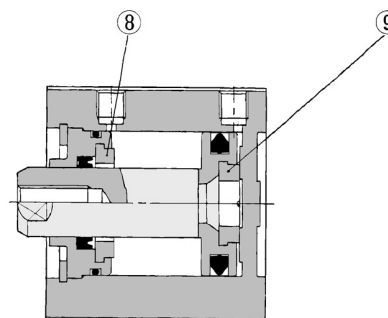
## Constructions

### Construction

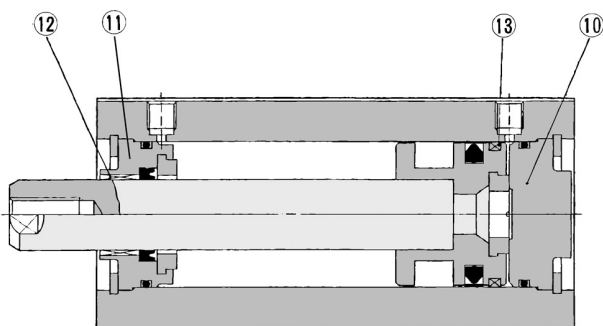
**With auto switch  
(Built-in magnet)**  
ø12, ø16



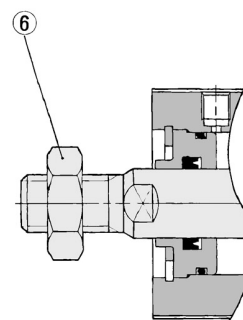
**With rubber bumper**



**Long stroke**



**Rod end male thread**



#### Component Parts

| No. | Description   | Material               | Note              |
|-----|---------------|------------------------|-------------------|
| ①   | Cylinder tube | Aluminum alloy         | Hard anodized     |
| ②   | Collar        | Aluminum bearing alloy | Anodized          |
| ③   | Piston        | Aluminum alloy         | Chromated         |
| ④   | Piston rod    | Stainless steel        |                   |
| ⑤   | Snap ring     | Carbon tool steel      | Phosphate coating |
| ⑥   | Rod end nut   | Carbon steel           | Nickel plated     |
| ⑦   | Switch spacer | Aluminum alloy         | Chromated         |
| ⑧   | Bumper A      | Urethane               |                   |
| ⑨   | Bumper B      | Urethane               |                   |
| ⑩   | Head cover    | Aluminum alloy         | Anodized          |

#### Component Parts

| No. | Description | Material                       | Note     |
|-----|-------------|--------------------------------|----------|
| ⑪   | Collar      | Aluminum alloy                 | Anodized |
| ⑫   | Bushing     | Oil impregnated sintered alloy |          |
| ⑬   | Wearing     | Resin                          |          |
| ⑭   | Magnet      | —                              |          |
| ⑮   | Rod seal    | NBR                            |          |
| ⑯   | Piston seal | NBR                            |          |
| ⑰   | Tube gasket | NBR                            |          |

## Additional information

Catalogue

[CQS\\_EU.pdf](#)