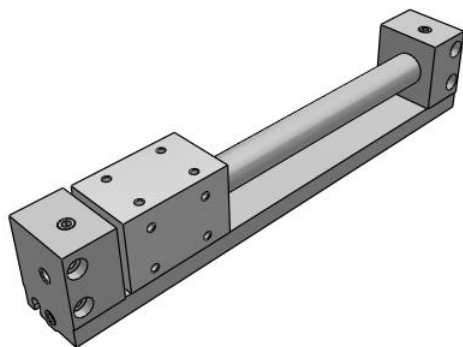




## CY3R, Magnetically Coupled Rodless Cylinder (with Switch Rail) CY3R10-100

Datasheet

### General series information

- Magnetically coupled rodless cylinder
- Direct mount type, with switch rail
- Bore sizes (mm): 6, 10, 15, 20, 25, 32, 40, 50, 63
- Maximum operating pressure: 0.7MPa
- Ambient temperature: -10 to 60°C
- Variety of auto switches available



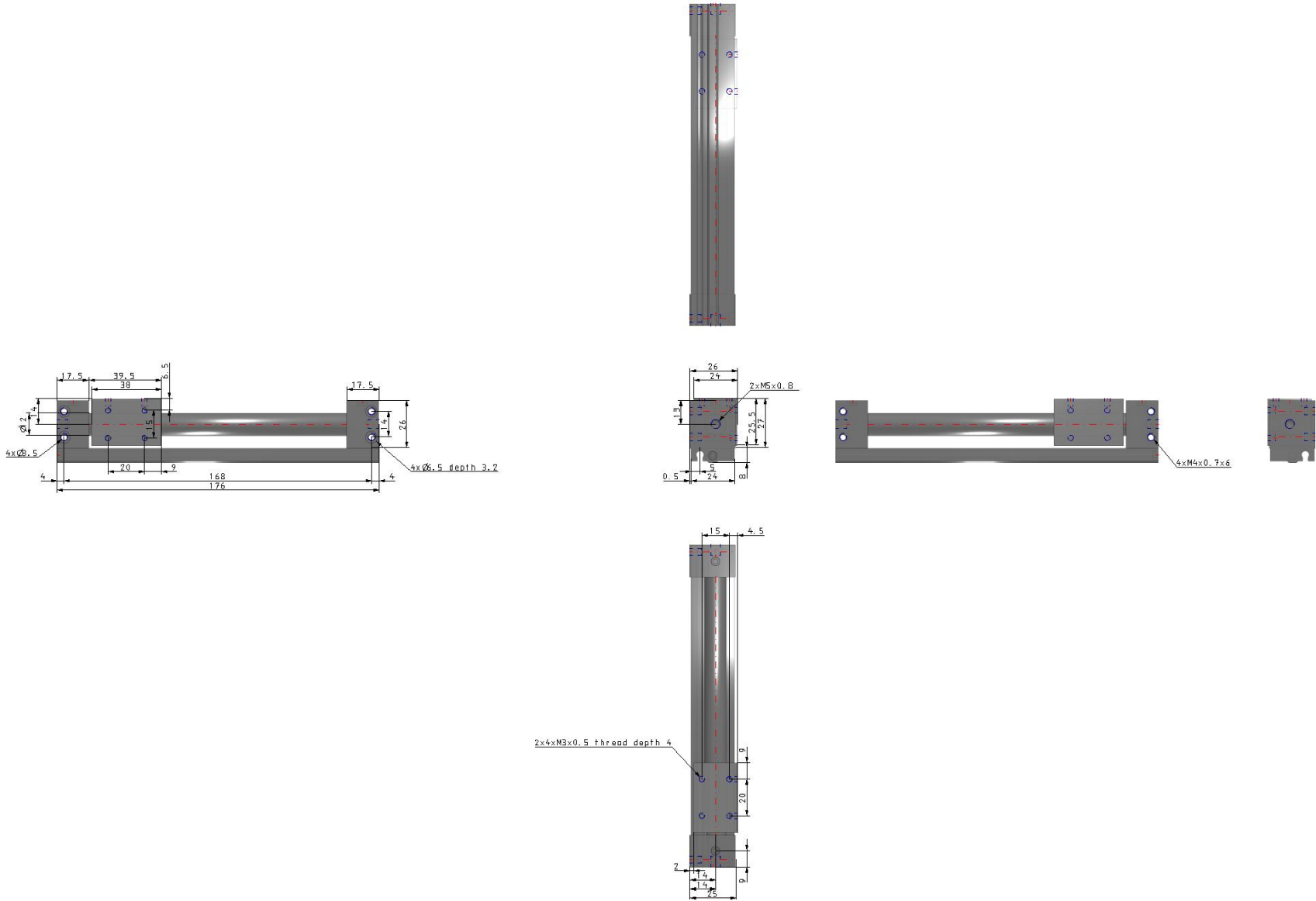
Magnetically coupled rodless cylinder

### Standard specifications

|                                  |                                                            |
|----------------------------------|------------------------------------------------------------|
| Piping                           | Standard                                                   |
| Bore Size                        | 10 mm                                                      |
| Port Thread                      | (M3 Thread-6)(M5 Thread-10~15 mm)(Rc-20~63 mm)             |
| Stroke                           | 100                                                        |
| Auto Switch                      | No Switch                                                  |
| Lead Wire or Pre-wired Connector | 0.5 m (Or None in the Case of No Switch)                   |
| Number                           | 2 pcs. (Or None in Case of No Switch)                      |
| Maximum operating pressure       | 0.7 MPa                                                    |
| Minimum operating pressure       | 0.16 MPa                                                   |
| Proof pressure                   | 1.05 MPa                                                   |
| Type of cushioning               | Rubber bumper on both ends                                 |
| Lubrication                      | Non-lube                                                   |
| Fluid                            | Air                                                        |
| Ambient and fluid temperature    | -10 - 60 °C                                                |
| Stroke length tolerance          | 0 to 250 st: +1.0 , 251 to 1000 st: +1.4, 1001 st to: +1.8 |
| F450 - Mounting                  | Direct mount type                                          |
| F452 - Magnetic Holding Force    | 53.9 N                                                     |

|                      |                                |
|----------------------|--------------------------------|
| Piston speed         | 50 - 500 mm/s                  |
| Mounting orientation | Horizontal, Inclined, Vertical |
| Weight               | 0.179 Kg                       |

Dimensions

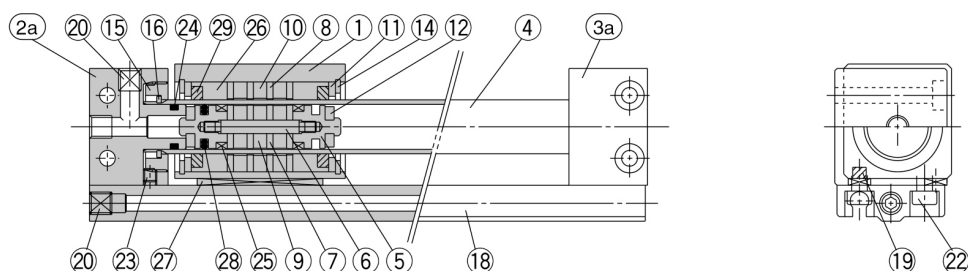


Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.

## Constructions

### Both sides piping type

#### CY3R10



#### Component Parts

| No. | Description                | Material                                     | Note                                                       |
|-----|----------------------------|----------------------------------------------|------------------------------------------------------------|
| 1   | Body                       | Aluminum alloy                               | Hard anodized                                              |
| 2a  | End cover A                | Aluminum alloy                               | Electroless nickel plated                                  |
| 2b  | End cover C                | Aluminum alloy                               | Electroless nickel plated                                  |
| 3a  | End cover B                | Aluminum alloy                               | Electroless nickel plated                                  |
| 3b  | End cover D                | Aluminum alloy                               | Electroless nickel plated                                  |
| 4   | Cylinder tube              | Stainless steel                              |                                                            |
| 5   | Piston                     | ø6 to ø15 Brass<br>ø20 to ø63 Aluminum alloy | ø6 to ø15 Electroless nickel plated<br>ø20 to ø63 Chromate |
| 6   | Shaft                      | Stainless steel                              |                                                            |
| 7   | Piston side yoke           | Rolled steel plate                           | Zinc chromated                                             |
| 8   | External slider side yoke  | Rolled steel plate                           | Zinc chromated                                             |
| 9   | Magnet A                   | Rare earth magnet                            |                                                            |
| 10  | Magnet B                   | Rare earth magnet                            |                                                            |
| 11  | Spacer                     | Aluminum alloy                               | Black anodized<br>(ø6: not available)                      |
| 12  | Bumper                     | Urethane rubber                              |                                                            |
| 13  | Piston nut                 | Carbon steel                                 | Zinc chromate<br>(ø6 to ø15: not available)                |
| 14  | C type snap ring for hole  | Carbon tool steel                            | Nickel plated                                              |
| 15  | Attachment ring            | Aluminum alloy                               | Chromate                                                   |
| 16  | C type snap ring for shaft | Hard steel wire                              |                                                            |
| 17  | Magnetic shielding plate   | Rolled steel plate                           | Chromated<br>(ø6, ø10: not available)                      |
| 18  | Switch rail                | Aluminum alloy                               | White anodized                                             |
| 19  | Magnet                     | Rare earth magnet                            |                                                            |
| 20  | Hexagon socket head plug   | Chromium steel                               | Nickel plated                                              |

| No. | Description                   | Material       | Note                                               |
|-----|-------------------------------|----------------|----------------------------------------------------|
| 21  | Steel balls                   | Chromium steel | ø40 Hexagon socket head plug<br>ø20, ø50, ø63 None |
| 22  | Hexagon socket head screw     | Chromium steel | Nickel plated                                      |
| 23  | Hexagon socket head set screw | Chromium steel | Nickel plated                                      |
| 24* | Cylinder tube Gasket          | NBR            |                                                    |
| 25* | Wear ring A                   | Special resin  |                                                    |
| 26* | Wear ring B                   | Special resin  |                                                    |
| 27* | Wear ring C                   | Special resin  |                                                    |
| 28* | Piston seal                   | NBR            |                                                    |
| 29* | Lubretainer                   | Special resin  |                                                    |
| 30* | Switch rail gasket            | NBR            | Both sides piping type: None                       |

\* Seal kits are sets consisting of numbers 24 through 30. Order using the kit number corresponding to each bore size.

## Additional information

Catalogue

[CY3-C\\_EU.pdf](#)

Operation manuals

[OM\\_CYBx\\_OM0001EN-A.pdf](#)

[OM\\_CY3R\\_OM0001H\\_EN.pdf](#)