

## CY1S-Z, Magnetically Coupled Rodless Cylinder, Slide Bearing CY1S20TF-800Z

Datasheet

### General series information

- Slider style: slide bearing
- Bore sizes: 6, 10, 15, 20, 25, 32 and 40 (mm)
- Strokes from 15mm through 1500mm
- Improved auto switch mounting
- 3 options available for stroke adjustment
- Available with shock absorbers

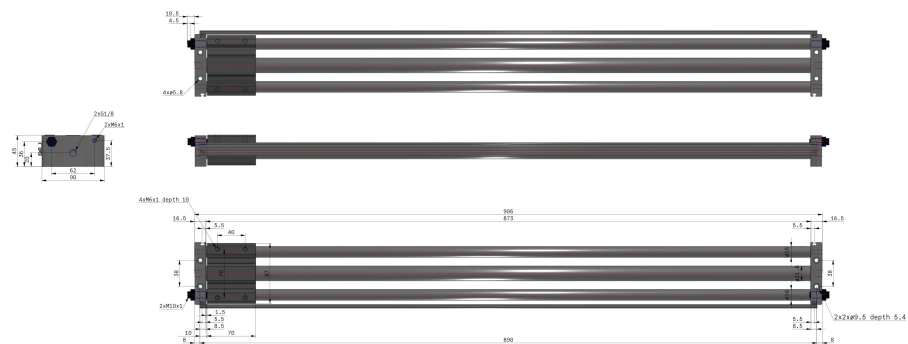


*Magnetically coupled rodless cylinder*

### Standard specifications

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Piping                                 | Bilateral Piping Type                    |
| Bore Size                              | 20 mm                                    |
| Port Thread                            | TF (G)                                   |
| Stroke                                 | 800                                      |
| Stopper Type                           | Bumper Bolt (Resin Tipped)               |
| 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)    |
| Pressure medium                        | Compressed air                           |
| Maximum temperature of pressure medium | 60 °C                                    |
| Minimum temperature of pressure medium | -10 °C                                   |
| Maximum operating pressure             | 0.7 MPa                                  |
| Minimum operating pressure             | 0.18 MPa                                 |
| Proof pressure                         | 1.05 MPa                                 |
| Maximum ambient temperature            | 60 °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              | 400 mm/s      |
| Type of cushioning                | Rubber Bumper |
| Maximum stroke reduction per side | 7 mm          |
| Max. Allowable Thrust             | 422 N         |
| F124- Max-operating-frequency     | 70 cycle/min  |
| Max. Absorbed Energy              | 422 J         |



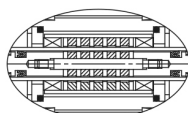
## Constructions

### CY1S/Bilateral piping type

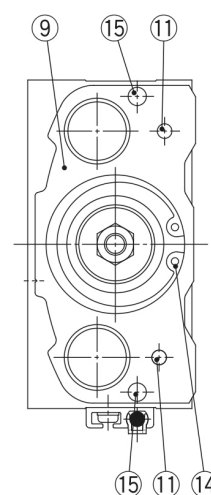
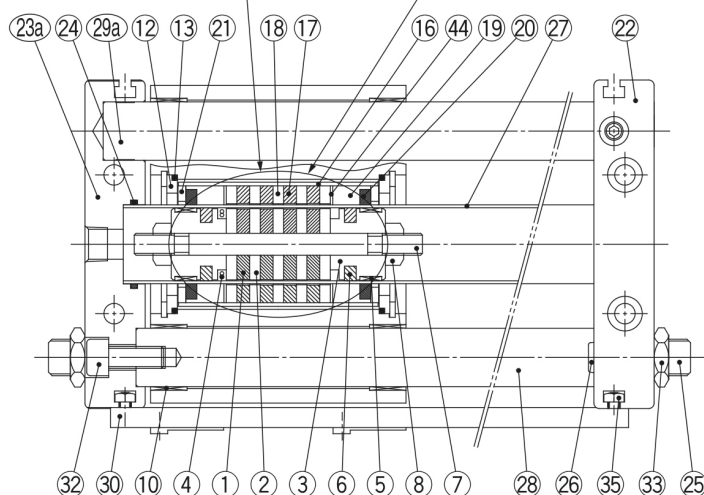
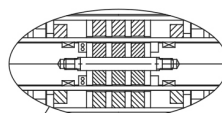
For ø6



For ø6



For ø10



With bumper bolt

### Component Parts

| No. | Description               | Material          | Note             |
|-----|---------------------------|-------------------|------------------|
| 1   | Magnet A                  | —                 |                  |
| 2   | Piston side yoke          | Rolled steel      |                  |
| 3   | Piston                    | Aluminium alloy   |                  |
| 4*  | Piston seal               | NBR               |                  |
| 5*  | Wear ring A               | Special resin     |                  |
| 6*  | Lub-retainer A            | Special resin     | Except ø6, ø10   |
| 7   | Shaft                     | Stainless steel   |                  |
| 8   | Piston nut                | Carbon steel      | Except ø6 to ø15 |
| 9   | Slide block               | Aluminium alloy   |                  |
| 10  | Bushing                   | Bearing alloy     |                  |
| 11  | Parallel pin              | Carbon steel      |                  |
| 12  | Slider spacer             | Rolled steel      |                  |
| 13* | Slider gasket             | NBR               |                  |
| 14  | Retaining ring            | Carbon tool steel |                  |
| 15  | Magnet for switch         | —                 |                  |
| 16  | External slider tube      | Aluminium alloy   |                  |
| 17  | Magnet B                  | —                 |                  |
| 18  | External slider side yoke | Rolled steel      |                  |
| 19* | Wear ring B               | Special resin     |                  |
| 20* | Lub-retainer B            | Special resin     | Except ø6        |
| 21  | Spacer                    | Rolled steel      | Except ø6        |
| 22  | Plate A                   | Aluminium alloy   |                  |
| 23a | Plate C                   | Aluminium alloy   | Bilateral piping |

| No. | Description                               | Material                  | Note                      |
|-----|-------------------------------------------|---------------------------|---------------------------|
| 24* | Cylinder tube gasket                      | NBR                       |                           |
| 25  | Bumper bolt                               | Chromium molybdenum steel |                           |
| 26  | Bumper                                    | Urethane rubber           |                           |
| 27  | Cylinder tube                             | Stainless steel           |                           |
| 28  | Guide shaft B                             | Carbon steel              | Hard chrome plated        |
| 29a | Guide shaft C                             | Carbon steel              | Hard chrome plated        |
| 29b | Guide shaft A                             | Carbon steel              | Hard chrome plated        |
| 30  | Switch rail                               | Aluminium alloy           |                           |
| 31  | Hexagon socket head set screw             | Chromium molybdenum steel |                           |
| 32  | Hexagon socket head cap screw             | Chromium molybdenum steel |                           |
| 33  | Hexagon nut                               | Chromium molybdenum steel |                           |
| 34  | Hexagon nut                               | Chromium molybdenum steel |                           |
| 35  | Square nut                                | Chromium molybdenum steel |                           |
| 36  | Cross-recessed head machine screw with SW | Chromium molybdenum steel |                           |
| 37  | Switch spacer                             | Special resin             |                           |
| 38  | Port plug                                 | Chromium molybdenum steel | ø6, Bilateral piping only |
| 41  | Adjustment bolt                           | Chromium molybdenum steel |                           |
| 42  | Auto switch                               | —                         |                           |
| 43  | Shock absorber                            | —                         |                           |
| 44  | Liner                                     | Aluminium alloy           |                           |

Note 1) \* denotes parts that are included in the seal kit.

Note 2) Auto switch and switch spacer are shipped together with the product, but not assembled.

## Additional information

Catalogue

[CY1-Z-A\\_EU.pdf](#)