

# Made to Order Common Specifications: -XC57: Rodless Cylinder with Floating Joint



## 47 Rodless Cylinder with Floating Joint

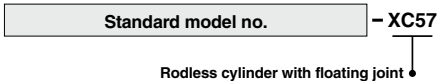
A special floating joint has been added to the CY3B series, which reduces the amount of labor that is required for connecting the cylinder to the guide of another shaft (load side).

The bolts used for joining the floating joint to the load can be secured either from above or below. (CY1B with a  $\phi 6$  or  $\phi 10$  bore must be secured from above.)

### Applicable Series

| Series | Description                           | Model | Action        | Vol. no. (for std model) |
|--------|---------------------------------------|-------|---------------|--------------------------|
| CY3    | Magnetically coupled rodless cylinder | CY3B  | Double acting | ②-1 From P. 1468         |
|        |                                       | CY3R  | Double acting |                          |
| REA    | Sine rodless cylinder                 | REA   | Double acting | ②-3 From P. 25           |
|        |                                       | REAR  | Double acting |                          |
| REB    | Sine rodless cylinder                 | REBR  | Double acting |                          |

### How to Order

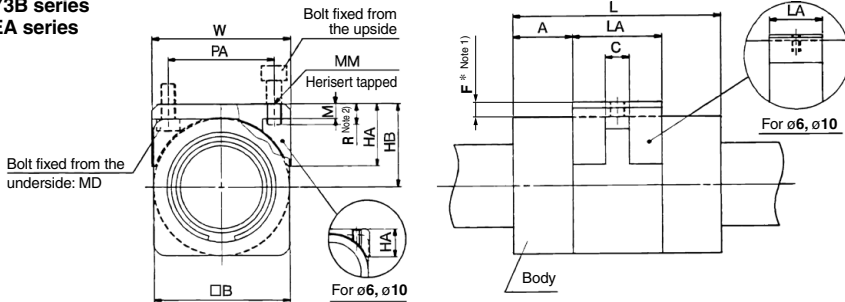


Note) The body of this cylinder is for connecting to the floating joint so that it cannot be connected to the body of the standard type. Therefore, please contact SMC for this.

Specifications: Same as standard type

### Construction/Dimensions (Other dimensions are the same as standard.)

#### CY3B series REA series



| Bore size (mm) | A    | □B  | C   | F <sup>(1)</sup> | HA   | HB   | L   | LA | MM            | MD | M   | PA | R <sup>(2)</sup> | W   |
|----------------|------|-----|-----|------------------|------|------|-----|----|---------------|----|-----|----|------------------|-----|
| 6              | 10   | 17  | —   | 2.5              | 6.3  | 11   | 35  | 15 | M3 x 0.5 x 3L | —  | —   | 12 | —                | 18  |
| 10             | 10   | 25  | —   | 2.5              | 9.5  | 15   | 38  | 18 | M3 x 0.5 x 3L | —  | —   | 17 | —                | 26  |
| 15             | 16   | 35  | 6.5 | 5.5              | 16.5 | 23   | 57  | 25 | M4 x 0.7      | M3 | 4.5 | 25 | 6                | 36  |
| 20             | 18   | 36  | 6.5 | 5.5              | 17   | 23.5 | 66  | 30 | M4 x 0.7      | M3 | 4.5 | 27 | 6                | 37  |
| 25             | 20   | 46  | 8.0 | 5.5              | 21   | 28.5 | 70  | 30 | M5 x 0.8      | M4 | 5.5 | 36 | 7                | 47  |
| 32             | 22.5 | 60  | 9.5 | 6.0              | 27.5 | 36   | 80  | 35 | M6 x 1.0      | M5 | 6.5 | 47 | 8                | 61  |
| 40             | 26   | 70  | 9.5 | 6.0              | 28.5 | 41   | 92  | 40 | M6 x 1.0      | M5 | 6.7 | 55 | 8                | 71  |
| 50             | 35   | 86  | 11  | 6.0              | 35   | 49   | 110 | 40 | M8 x 1.25     | M6 | 8.5 | 65 | 11               | 87  |
| 63             | 36   | 100 | 18  | 7.0              | 42   | 57   | 122 | 50 | M8 x 1.25     | M6 | 10  | 80 | 11               | 101 |

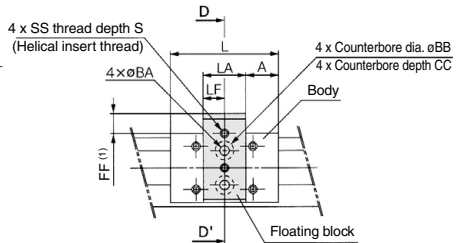
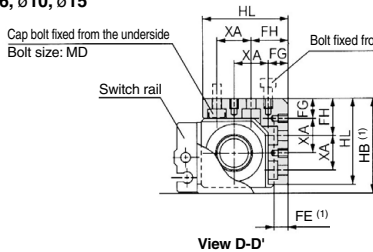
Note 1) With dimension F<sup>①</sup>, the amount of clearance between the body and the floating joint is 1 mm. The self weight deflection of the cylinder tube is not taken into account. Before operating the cylinder, determine the proper value by taking the amount of self weight deflection and the amount of off-centering from the other shaft into consideration.

Note 2) When the bolts are secured from above, be aware that if the cylinder is operated when dimension R (on  $\phi 6$  and  $\phi 10$ , 3 mm or over) is exceeded, the end of the bolt could come in contact with the body, without being able to achieve the floating effect.

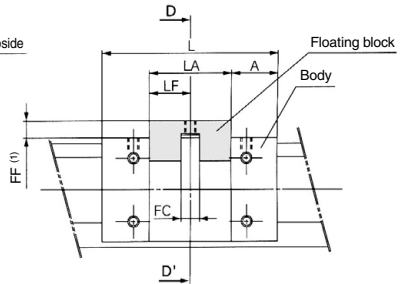
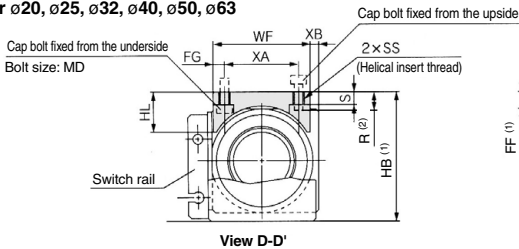
**Construction/Dimensions**

**CY3R series  
REAR, REBR series**

For  $\phi 6, \phi 10, \phi 15$



For  $\phi 20, \phi 25, \phi 32, \phi 40, \phi 50, \phi 63$



| Bore size (mm) | A    | BA  | BB  | CC  | FC  | FE <sup>(1)</sup> | FF <sup>(1)</sup> | FG  | FH   | HB <sup>(1)</sup> | HL   | L   | LA | LF   | MD | R <sup>(2)</sup> | S   | SS        | WF | XA | XB |
|----------------|------|-----|-----|-----|-----|-------------------|-------------------|-----|------|-------------------|------|-----|----|------|----|------------------|-----|-----------|----|----|----|
| 6              | 9.5  | 3.4 | 6.5 | 3.3 | —   | 5                 | 7                 | 5.5 | 10.5 | 26                | 23   | 34  | 15 | 7.5  | M3 | —                | 3.5 | M3 x 0.5  | —  | 10 | —  |
| 10             | 11.5 | 3.4 | 6.5 | 3.3 | —   | 5                 | 7                 | 7   | 13   | 33                | 30   | 38  | 15 | 7.5  | M3 | —                | 3.5 | M3 x 0.5  | —  | 12 | —  |
| 15             | 18   | 4.5 | 8   | 4.4 | —   | 4.5               | 6.5               | 7.5 | 14.5 | 38.5              | 35.5 | 53  | 17 | 8.5  | M4 | —                | 4.5 | M4 x 0.7  | —  | 14 | —  |
| 20             | 16.5 | —   | —   | —   | 6.5 | —                 | 6                 | 4   | —    | 45                | 14   | 62  | 29 | 14.5 | M3 | 7                | 4.5 | M4 x 0.7  | 34 | 26 | 3  |
| 25             | 20.5 | —   | —   | —   | 8   | —                 | 7                 | 4   | —    | 51                | 17   | 70  | 29 | 14.5 | M4 | 8                | 5.5 | M5 x 0.8  | 39 | 31 | 3  |
| 32             | 21   | —   | —   | —   | 9.5 | —                 | 7.5               | 4.5 | —    | 62.5              | 22   | 76  | 34 | 17   | M5 | 10               | 6.5 | M6 x 1    | 50 | 41 | 3  |
| 40             | 25.5 | —   | —   | —   | 9.5 | —                 | 7.5               | 7.5 | —    | 74.5              | 28   | 90  | 39 | 19.5 | M5 | 10               | 6.5 | M6 x 1    | 60 | 45 | 3  |
| 50             | 35.5 | —   | —   | —   | 11  | —                 | 7.5               | 9   | —    | 92.5              | 38   | 110 | 39 | 19.5 | M6 | 15               | 10  | M8 x 1.25 | 78 | 60 | 3  |
| 63             | 34.5 | —   | —   | —   | 18  | —                 | 7.5               | 10  | —    | 104.5             | 39   | 118 | 49 | 24.5 | M6 | 15               | 10  | M8 x 1.25 | 90 | 70 | 3  |

Note 1) With dimension FE, FF, and HB, the amount of clearance between the body and the floating joint is 1 mm. The self weight deflection of the cylinder tube is not taken into account. Before operating the cylinder, determine the proper value by taking the amount of self weight deflection and the amount of off-centering with the other shaft into consideration.

Note 2) When the bolts are secured from above, be aware that if the cylinder is operated when dimension R is exceeded, the end of the bolt could come in contact with the body, without being able to achieve the floating effect.