



# Air Cylinder: Standard Type Single Acting, Spring Return/Extend Series CJ2

ø6, ø10, ø16

## How to Order



Spring return

| Mounting style |                                 |
|----------------|---------------------------------|
| B              | Basic style                     |
| L              | Axial foot style                |
| F              | Rod side flange style           |
| D              | Double clevis style (Except ø6) |

| Bore size |       |
|-----------|-------|
| 6         | 6 mm  |
| 10        | 10 mm |
| 16        | 16 mm |

| Standard stroke (mm) |                                   |
|----------------------|-----------------------------------|
| ø6                   | 15, 30, 45, 60                    |
| ø10                  | 15, 30, 45, 60                    |
| ø16                  | 15, 30, 45, 60, 75, 100, 125, 150 |

\*Intermediate strokes are available by the 1 mm interval with no stroke adjustment by spacer.  
\*When auto switch is mounted, refer to "Minimum Stroke for Auto Switch Mounting" on page 6-3-23.

| Action |                              |
|--------|------------------------------|
| S      | Single acting, Spring return |
| T      | Single acting, Spring extend |

### Built-in Magnet Cylinder Model

Suffix the symbol "A" (Rail mounting style) or "B" (Band mounting style) to the end of part number for cylinder with auto switch.

| Example | Mounting style      | Model         |
|---------|---------------------|---------------|
|         | Rail mounting style | CDJ2B16-60S-A |
|         | Band mounting style | CDJ2B10-45S-B |

\* For rail mounting style, screws and nuts for 2 pcs. switches come with the rail.

Without auto switch

CJ2 L 16 45 S R

With auto switch

CDJ2 L 16 45 S R J79W



Built-in magnet

| Port location on head cover |                  |                       |
|-----------------------------|------------------|-----------------------|
| Bore size (mm)              | 6                | 10, 16                |
| Symbol                      |                  |                       |
| Nil                         | —                | Perpendicular to axis |
| R                           | Axial foot style | Axial foot style      |

\* For configuration, refer to page 6-3-4.  
\* Single acting, Spring return (S), Clevis style is available only for 90° to the axis.  
\* Not applicable to single acting, spring extend (T).

Auto switch

\* For the applicable auto switch model, refer to the table below.  
\* Auto switch for rail mounting style is shipped together, (but not assembled).

\* If a built-in magnet cylinder without an auto switch is required, refer to the model of built-in magnet cylinder.

Number of auto switches

|     |          |
|-----|----------|
| Nil | 2 pcs.   |
| S   | 1 pc.    |
| n   | "n" pcs. |

## Applicable Auto Switch/Refer to page 6-16-1 for further information on auto switches.

| Type               | Special function                            | Electrical entry | Indicator light | Wiring (Output)         | Load voltage |              | Auto switch model            |                          |       | Lead wire length (m)* |       |       |          | Pre-wire connector | Applicable load |            |            |   |
|--------------------|---------------------------------------------|------------------|-----------------|-------------------------|--------------|--------------|------------------------------|--------------------------|-------|-----------------------|-------|-------|----------|--------------------|-----------------|------------|------------|---|
|                    |                                             |                  |                 |                         | DC           | AC           | Band mounting (ø6, ø10, ø16) | Rail mounting (ø10, ø16) |       | 0.5 (Nil)             | 3 (L) | 5 (Z) | None (N) |                    | IC circuit      | Relay, PLC |            |   |
| Reed switch        | —                                           | Grommet          | Yes             | 3-wire (NPN equivalent) | —            | 5 V          | —                            | C76                      | —     | A76H                  | ●     | ●     | —        | —                  |                 |            | —          | — |
|                    |                                             |                  |                 |                         |              | —            | 200 V                        | —                        | A72   | A72H                  | ●     | ●     | —        | —                  | —               |            |            |   |
|                    | With diagnostic output (2-color indication) | Connector        | Yes             | 2-wire                  | 24 V         | 12 V         | 100 V                        | C73                      | A73   | A73H                  | ●     | ●     | ●        | —                  | —               | —          | Relay, PLC |   |
|                    |                                             |                  |                 |                         |              | —            | —                            | —                        | C73C  | A73C                  | —     | ●     | ●        | ●                  | —               |            |            |   |
| Solid state switch | —                                           | Grommet          | Yes             | 3-wire (NPN)            | —            | 5V, 12V      | —                            | H7A1                     | F7NV  | F79                   | ●     | ●     | ○        | —                  | ○               | IC circuit | —          |   |
|                    |                                             |                  |                 |                         |              | 3-wire (PNP) |                              | H7A2                     | F7PV  | F7P                   | ●     | ●     | ○        | —                  | ○               |            |            |   |
|                    | Diagnostic indication (2-color indication)  | Connector        | Yes             | 2-wire                  | 24 V         | 12 V         | —                            | H7B                      | F7BV  | J79                   | ●     | ●     | ○        | —                  | ○               | —          | —          |   |
|                    |                                             |                  |                 |                         |              | 5V, 12V      |                              | H7C                      | J79C  | —                     | ●     | ●     | ●        | ●                  | —               |            |            |   |
|                    | Water resistant (2-color indication)        | Grommet          | Yes             | 3-wire (NPN)            | 24 V         | 5V, 12V      | —                            | H7NW                     | F7NWV | F79W                  | ●     | ●     | ○        | —                  | ○               | IC circuit | Relay, PLC |   |
|                    |                                             |                  |                 |                         |              | 3-wire (PNP) |                              | H7PW                     | —     | F7PW                  | ●     | ●     | ○        | —                  | ○               |            |            |   |
|                    | With diagnostic output (2-color indication) | Grommet          | Yes             | 2-wire                  | 24 V         | 12 V         | —                            | H7BW                     | F7BWV | J79W                  | ●     | ●     | ○        | —                  | ○               | —          | —          |   |
|                    |                                             |                  |                 |                         |              | 5V, 12V      |                              | H7BA                     | —     | F7BA                  | —     | ●     | ●        | ○                  | —               |            |            | ○ |
|                    | With diagnostic output (2-color indication) | Grommet          | Yes             | 4-wire (NPN)            | 24 V         | 5V, 12V      | —                            | —                        | F7BAV | —                     | —     | ●     | ●        | ○                  | —               | ○          | IC circuit | — |
|                    |                                             |                  |                 |                         |              | 5V, 12V      |                              | H7NF                     | —     | F79F                  | ●     | ●     | ○        | —                  | ○               |            |            |   |

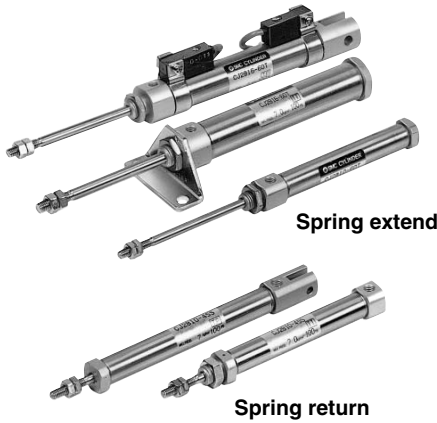
\* Lead wire length symbols: 0.5 m ..... Nil (Example) C73C  
3 m ..... L (Example) C73CL  
5 m ..... Z (Example) C73CZ  
None ..... N (Example) C73CN

\* Solid state switches marked with "○" are produced upon receipt of order.

• Since there are other applicable auto switches than listed, refer to page 6-3-13 for details.  
• For details about auto switches with pre-wire connector, refer to page 6-16-60.

# Air Cylinder: Standard Type

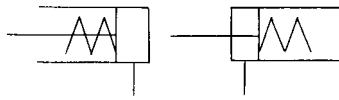
## Single Acting, Single Rod, Spring Return/Extend Series CJ2



### JIS Symbol

Single acting,  
Spring return

Single acting,  
Spring extend



**Made to Order Specifications**  
(For details, refer to page 6-17-1.)

| Symbol | Specifications          |
|--------|-------------------------|
| -XA□   | Change of rod end shape |
| -XC22  | Fluoro rubber seals     |
| -XC51  | With hose nipple        |

### Specifications

| Action                        |          | Single acting, Spring return                                                                  | Single acting, Spring extend |
|-------------------------------|----------|-----------------------------------------------------------------------------------------------|------------------------------|
| Fluid                         |          | Air                                                                                           |                              |
| Proof pressure                |          | 1.05 MPa                                                                                      |                              |
| Maximum operating pressure    |          | 0.7 MPa                                                                                       |                              |
| Minimum operating pressure    | ø6       | 0.2 MPa                                                                                       | 0.25 MPa                     |
|                               | ø10, ø16 | 0.15 MPa                                                                                      |                              |
| Ambient and fluid temperature |          | Without auto switch: -10 to 70°C (No freezing)<br>With auto switch: -10 to 60°C (No freezing) |                              |
| Cushion                       |          | Rubber bumper *                                                                               |                              |
| Lubrication                   |          | Not required (Non-lube)                                                                       |                              |
| Thread tolerance              |          | JIS Class 2                                                                                   |                              |
| Stroke length tolerance       |          | +1.0<br>0                                                                                     |                              |
| Piston speed                  |          | 50 to 750 mm/s                                                                                |                              |
| Allowable kinetic energy      | ø6       | 0.012 J                                                                                       |                              |
|                               | ø10      | 0.035 J                                                                                       |                              |
|                               | ø16      | 0.090 J                                                                                       |                              |

\* No freezing

### Standard Stroke

| Bore size (mm) | Standard stroke                   |
|----------------|-----------------------------------|
| 6              | 15, 30, 45, 60                    |
| 10             | 15, 30, 45, 60                    |
| 16             | 15, 30, 45, 60, 75, 100, 125, 150 |

\* Intermediate strokes are available by the 1 mm interval with no stroke adjustment by spacer.

### Spring Force

| Bore size (mm) | Spring Force (N) |               |
|----------------|------------------|---------------|
|                | Retracted side   | Extended side |
| 6              | 3.72             | 1.77          |
| 10             | 6.86             | 3.53          |
| 16             | 14.2             | 6.86          |

### Minimum Stroke for Auto Switch Mounting

| Auto switch mounting style            | Auto switch model                    | No. of auto switches mounted       | Minimum cylinder stroke (mm) |    |
|---------------------------------------|--------------------------------------|------------------------------------|------------------------------|----|
| Band mounting style<br>(ø6, ø10, ø16) | D-C7□<br>D-C80                       | 3 (Same side)                      | 90                           |    |
|                                       |                                      | 3 (Different sides)                | 55                           |    |
|                                       |                                      | 2 (Same side)                      | 50                           |    |
|                                       | D-H7□<br>D-H7□W<br>D-H7BAL<br>D-H7NF | 2 (Different sides)                | 15                           |    |
|                                       |                                      | 1                                  | 10                           |    |
|                                       |                                      | 3 (Same side)                      | 105                          |    |
|                                       | D-C73C<br>D-C80C<br>D-H7C            | 3 (Different sides)                | 60                           |    |
|                                       |                                      | 2 (Same side)                      | 60                           |    |
|                                       |                                      | 2 (Different sides)                | 15                           |    |
|                                       |                                      | 1                                  | 10                           |    |
|                                       |                                      | 3 (Same side)                      | 105                          |    |
|                                       |                                      | 3 (Different sides)                | 65                           |    |
|                                       | Rail mounting style<br>(ø10, ø16)    | D-A7□<br>D-A80<br>D-A73C<br>D-A80C | 3                            | 35 |
|                                       |                                      |                                    | 2                            | 10 |
|                                       |                                      |                                    | 1                            | 5  |
| D-A7□H<br>D-A80H                      |                                      | 3                                  | 45                           |    |
|                                       |                                      | 2                                  | 10                           |    |
|                                       |                                      | 1                                  | 5                            |    |
| D-A79W                                |                                      | 3                                  | 40                           |    |
|                                       |                                      | 2                                  | 15                           |    |
|                                       |                                      | 1                                  | 10                           |    |
| D-F7□<br>D-J79                        | 3                                    | 45                                 |                              |    |
|                                       | 2                                    | 5                                  |                              |    |
|                                       | 1                                    | 5                                  |                              |    |
| D-F7□V<br>D-J79C                      | 3                                    | 30                                 |                              |    |
|                                       | 2                                    | 5                                  |                              |    |
|                                       | 1                                    | 5                                  |                              |    |
| D-F7□W<br>D-J79W<br>D-F7BAL<br>D-F79F | 3                                    | 55                                 |                              |    |
|                                       | 2                                    | 15                                 |                              |    |
|                                       | 1                                    | 10                                 |                              |    |
|                                       | 3                                    | 40                                 |                              |    |
| D-F7□WV<br>D-F7BAVL                   | 2                                    | 15                                 |                              |    |
|                                       | 1                                    | 10                                 |                              |    |

CJ1

CJP

**CJ2**

CM2

CG1

MB

MB1

CA2

CS1

C76

C85

C95

CP95

NCM

NCA

D-

-X

20-

Data

# Series CJ2

## Weight/Spring Return (S)

(g)

| Bore size (mm)          |                                  | 6  | 10 | 16  |
|-------------------------|----------------------------------|----|----|-----|
| Basic weight *          | 15 stroke                        | 11 | 28 | 63  |
|                         | 30 stroke                        | 16 | 35 | 80  |
|                         | 45 stroke                        | 18 | 44 | 102 |
|                         | 60 stroke                        | 23 | 53 | 124 |
|                         | 75 stroke                        | —  | —  | 145 |
|                         | 100 stroke                       | —  | —  | 188 |
|                         | 125 stroke                       | —  | —  | 224 |
|                         | 150 stroke                       | —  | —  | 250 |
| Mounting bracket weight | Axial foot style                 | 8  | 8  | 20  |
|                         | Rod side flange style            | 5  | 5  | 15  |
|                         | Double clevis style (With pin) * | —  | 4  | 10  |

\* Mounting nut and rod end nut are included in the basic weight.  
 \*\* Mounting nut is not attached to the double clevis style, so the mounting nut weight is already subtracted.  
 Calculation: (Example) CJ2L10-45S  
 • Basic weight ..... 44 (ø10-45 stroke)  
 • Mounting bracket weight ... 8 (Axial foot style)  
 44 + 8 = 52 g

## Weight/Spring Extend (T)

(g)

| Bore size (mm)          |                                  | 6  | 10 | 16  |
|-------------------------|----------------------------------|----|----|-----|
| Basic weight *          | 15 stroke                        | 17 | 28 | 64  |
|                         | 30 stroke                        | 21 | 34 | 80  |
|                         | 45 stroke                        | 23 | 43 | 100 |
|                         | 60 stroke                        | 27 | 51 | 121 |
|                         | 75 stroke                        | —  | —  | 140 |
|                         | 100 stroke                       | —  | —  | 178 |
|                         | 125 stroke                       | —  | —  | 212 |
|                         | 150 stroke                       | —  | —  | 236 |
| Mounting bracket weight | Axial foot style                 | 8  | 8  | 20  |
|                         | Rod side flange style            | 5  | 5  | 15  |
|                         | Double clevis style (With pin) * | —  | 4  | 10  |

\* Mounting nut and rod end nut are included in the basic weight.  
 \*\* Mounting nut is not attached to the double clevis style, so the mounting nut weight is already subtracted.  
 Calculation: (Example) CJ2L10-45T  
 • Basic weight ..... 43 (ø10-45 stroke)  
 • Mounting bracket weight ... 8 (Axial foot style)  
 43 + 8 = 51 g

## Mounting Bracket Part No.

| Mounting bracket | Bore size (mm) |          |          |
|------------------|----------------|----------|----------|
|                  | 6              | 10       | 16       |
| Foot bracket     | CJ-L006B       | CJ-L010B | CJ-L016B |
| Flange bracket   | CJ-F006B       | CJ-F010B | CJ-F016B |
| T-bracket *      | —              | CJ-T010B | CJ-T016B |

\* T-bracket is used with double clevis (D).

## Auto Switch Mounting Bracket Part No. (Band mounting style)

| Bore size (mm) | Auto switch mounting bracket no. |                                          |
|----------------|----------------------------------|------------------------------------------|
| 6              | BJ2-006                          | Common for the types of D-C7/C8 and D-H7 |
| 10             | BJ2-010                          |                                          |
| 16             | BJ2-016                          |                                          |

[Mounting screws set made of stainless steel]  
 The following set of mounting screws made of stainless steel is also available. Use it in accordance with the operating environment. (Please order the mounting band separately, since it is not included.)

BBA4: For D-C7/C8/H7

“D-H7BAL” switch is set on the cylinder with the stainless steel screws above when shipped.  
 When only a switch is shipped independently, “BBA4” screws are attached.

## Mounting Style and Accessory/For details, refer to page 6-3-13.

| Mounting           |                        | Basic style | Axial foot style | Rod side flange style | Double * clevis style |
|--------------------|------------------------|-------------|------------------|-----------------------|-----------------------|
| Standard equipment | Mounting nut           | ●           | ●                | ●                     | —                     |
|                    | Rod end nut            | ●           | ●                | ●                     | ●                     |
|                    | Clevis pin             | —           | —                | —                     | ●                     |
| Option             | Single knuckle joint   | ●           | ●                | ●                     | ●                     |
|                    | Double knuckle joint * | ●           | ●                | ●                     | ●                     |
|                    | T-bracket              | —           | —                | —                     | ●                     |

\* Pin and snap ring are shipped together with double clevis and double knuckle joint. For the attached bracket weight, refer to page 6-3-4.

## Theoretical Output

Refer to the “Single acting, Spring return cylinder” in Theoretical Output 1 of Technical data 3 on page 6-19-7. In the case of the spring extend style, the force at OUT side will be the ending force of the spring return, and that at the IN side will be the amount of the IN side force of the double acting style cylinder from which the beginning force of the spring return has been subtracted.

## ⚠ Precautions

**Be sure to read before handling.**  
**Refer to pages 6-20-3 to 6-20-6 for Safety Instructions and Actuator Precautions.**

## Mounting

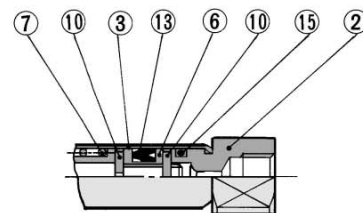
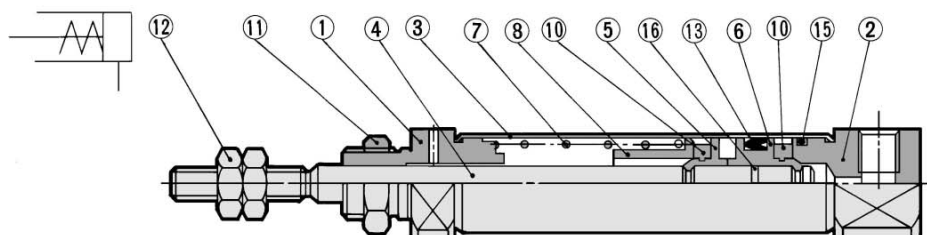
### ⚠ Caution

- During installation, secure the rod cover and tighten by applying an appropriate tightening force to the retaining nut or to the rod cover body.  
 If the head cover is secured or the head cover is tightened, the cover could rotate, leading to the deviation.
- Tighten the retaining screws to an appropriate tightening torque within the range given below.  
 ø6: 2.1 to 2.5 N·m, ø10: 5.9 to 6.4 N·m, ø16: 10.8 to 11.8 N·m
- In the case of a single acting cylinder, do not operate it in such a way that a load would be applied during the retraction of the piston rod of the spring return style, or during the extension of the piston rod of the spring extend style. The spring that is built into the cylinder provides only enough force to retract the piston rod. Thus, if a load is applied, the piston rod will not be able to retract to the end of the stroke.
- In the case of a single acting cylinder, a breather hole is provided in the cover surface. Make sure not to block this hole during installation, as this could lead to a malfunction.
- To remove and install the snap ring for the knuckle pin or the clevis pin, use an appropriate pair of pliers (tool for installing a type C snap ring).  
 In particular, use a pair of ultra-mini pliers such as the Super Tool CSM-07A for removing and installing the snap ring on the ø10 cylinder.
- In the case of auto switch rail mounting style, do not remove the rail that is mounted. Because retaining screws extend into the cylinder, this could lead to an air leak.

# Series CJ2

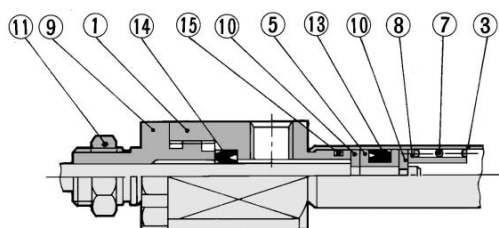
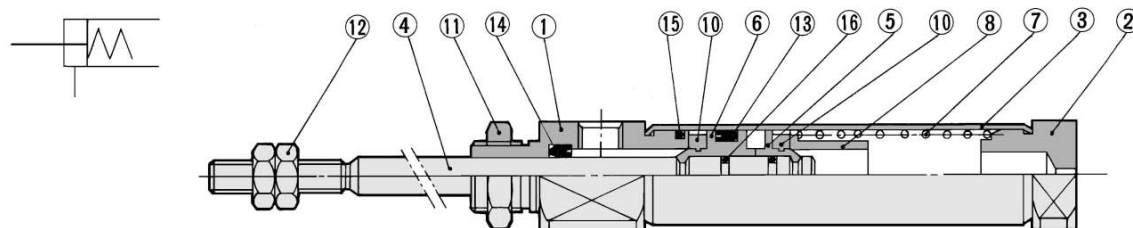
## Construction (Not able to disassemble.)

### Single acting, Spring return



CJ2□6 Piston/Head cover

### Single acting, Spring extend



CJ2□6 Piston/Rod cover

### Component Parts

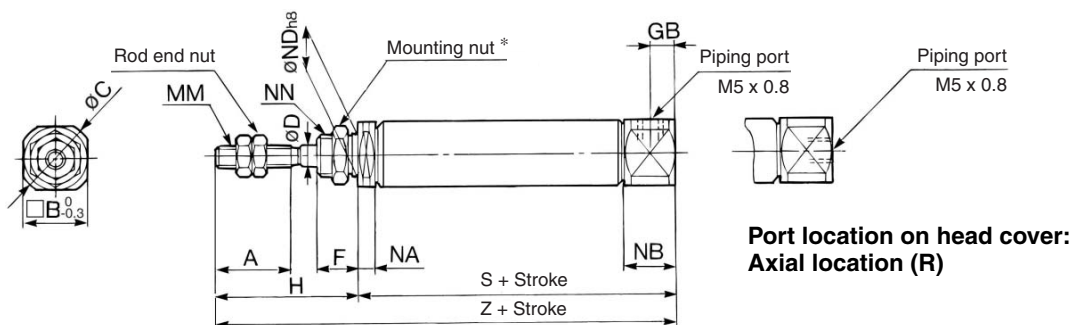
| No. | Description   | Material        | Note           |
|-----|---------------|-----------------|----------------|
| ①   | Rod cover     | Aluminum alloy  | Anodized       |
| ②   | Head cover    | Aluminum alloy  | Anodized       |
| ③   | Cylinder tube | Stainless steel |                |
| ④   | Piston rod    | Stainless steel |                |
| ⑤   | Piston A      | Brass           |                |
| ⑥   | Piston B      | Brass           |                |
| ⑦   | Return spring | Piano wire      | Zinc chromated |
| ⑧   | Spring seat   | Brass           |                |

| No. | Description   | Material       | Note                              |
|-----|---------------|----------------|-----------------------------------|
| ⑨   | Seal retainer | Aluminum alloy | Clear anodized (ø6 spring extend) |
| ⑩   | Bumper        | Urethane       |                                   |
| ⑪   | Mounting nut  | Brass          | Nickel plated                     |
| ⑫   | Rod end nut   | Rolled steel   | Nickel plated                     |
| ⑬   | Piston seal   | NBR            |                                   |
| ⑭   | Rod seal      | NBR            |                                   |
| ⑮   | Tube gasket   | NBR            |                                   |
| ⑯   | Piston gasket | NBR            |                                   |

# Air Cylinder: Standard Type Single Acting, Single Rod, Spring Return/Extend **Series CJ2**

## Single Acting, Spring Return: Basic Style (B)

**CJ2B** Bore size Stroke S Port location on head cover



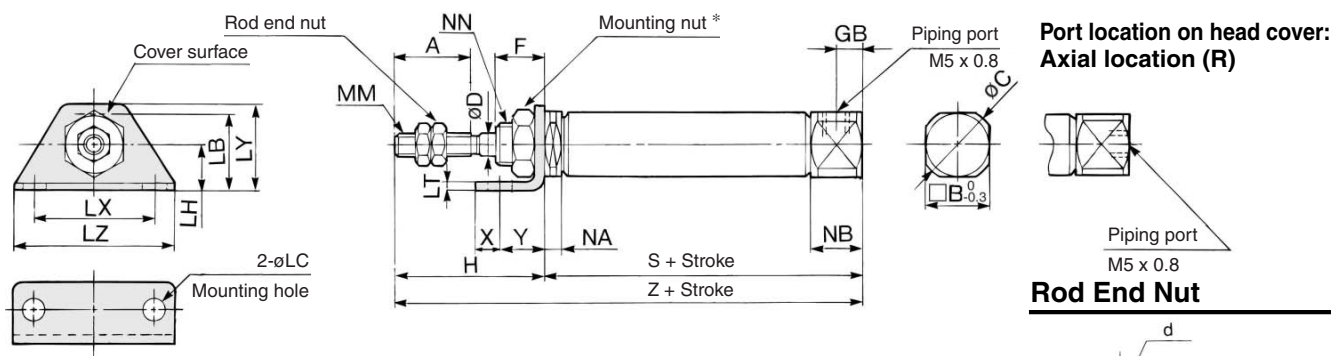
\* For details of the mounting nut, refer to page 6-3-11.

| Bore size (mm) | A  | B    | C  | D | F | GB | H  | MM       | NA  | NB  | ND <sub>h8</sub>     | NN        | S*             |                |                |                |             |              |               |               | Z*             |                |                |                |             |              |               |               |
|----------------|----|------|----|---|---|----|----|----------|-----|-----|----------------------|-----------|----------------|----------------|----------------|----------------|-------------|--------------|---------------|---------------|----------------|----------------|----------------|----------------|-------------|--------------|---------------|---------------|
|                |    |      |    |   |   |    |    |          |     |     |                      |           | 5 to 15 st     | 16 to 30 st    | 31 to 45 st    | 46 to 60 st    | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st | 5 to 15 st     | 16 to 30 st    | 31 to 45 st    | 46 to 60 st    | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st |
| 6              | 15 | 8    | 9  | 3 | 8 | —  | 28 | M3 x 0.5 | 3   | 7   | 6 <sub>-0.018</sub>  | M6 x 1.0  | 34.5<br>(39.5) | 43.5<br>(48.5) | 47.5<br>(52.5) | 61.5<br>(66.5) | —           | —            | —             | —             | 62.5<br>(67.5) | 71.5<br>(76.5) | 75.5<br>(80.5) | 89.5<br>(94.5) | —           | —            | —             | —             |
| 10             | 15 | 12   | 14 | 4 | 8 | 5  | 28 | M4 x 0.7 | 5.5 | 9.5 | 8 <sub>-0.022</sub>  | M8 x 1.0  | 45.5           | 53             | 65             | 77             | —           | —            | —             | —             | 73.5           | 81             | 93             | 105            | —           | —            | —             | —             |
| 16             | 15 | 18.3 | 20 | 5 | 8 | 5  | 28 | M5 x 0.8 | 5.5 | 9.5 | 10 <sub>-0.022</sub> | M10 x 1.0 | 45.5           | 54             | 66             | 78             | 84          | 108          | 126           | 138           | 73.5           | 82             | 94             | 106            | 112         | 136          | 154           | 166           |

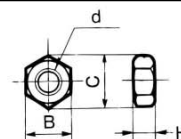
\* ( ) in S and Z dimensions: With auto switch

## Single Acting, Spring Return: Axial Foot Style (L)

**CJ2L** Bore size Stroke S Port location on head cover



**Rod End Nut**



Material: Iron

| Part no. | Applicable bore (mm) | B   | C   | d        | H   |
|----------|----------------------|-----|-----|----------|-----|
| NTJ-006A | 6                    | 5.5 | 6.4 | M3 x 0.5 | 2.4 |
| NTJ-010A | 10                   | 7   | 8.1 | M4 x 0.7 | 3.2 |
| NTJ-015A | 16                   | 8   | 9.2 | M5 x 0.8 | 4   |

\* For details of the mounting nut, refer to page 6-3-11.

| Bore size (mm) | A  | B    | C  | D | F | GB | H  | LB | LC  | LH | LT  | LX | LY   | LZ | MM       | NA  | NB  | NN        | X | Y | S*             |                |                |                |             |              |               |               | Z*             |                |                |                |             |              |               |               |
|----------------|----|------|----|---|---|----|----|----|-----|----|-----|----|------|----|----------|-----|-----|-----------|---|---|----------------|----------------|----------------|----------------|-------------|--------------|---------------|---------------|----------------|----------------|----------------|----------------|-------------|--------------|---------------|---------------|
|                |    |      |    |   |   |    |    |    |     |    |     |    |      |    |          |     |     |           |   |   | 5 to 15 st     | 16 to 30 st    | 31 to 45 st    | 46 to 60 st    | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st | 5 to 15 st     | 16 to 30 st    | 31 to 45 st    | 46 to 60 st    | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st |
| 6              | 15 | 8    | 9  | 3 | 8 | —  | 28 | 13 | 4.5 | 9  | 1.6 | 24 | 16.5 | 32 | M3 x 0.5 | 3   | 7   | M6 x 1.0  | 5 | 7 | 34.5<br>(39.5) | 43.5<br>(48.5) | 47.5<br>(52.5) | 61.5<br>(66.5) | —           | —            | —             | —             | 62.5<br>(67.5) | 71.5<br>(76.5) | 75.5<br>(80.5) | 89.5<br>(94.5) | —           | —            | —             | —             |
| 10             | 15 | 12   | 14 | 4 | 8 | 5  | 28 | 15 | 4.5 | 9  | 1.6 | 24 | 16.5 | 32 | M4 x 0.7 | 5.5 | 9.5 | M8 x 1.0  | 5 | 7 | 45.5           | 53             | 65             | 77             | —           | —            | —             | —             | 73.5           | 81             | 93             | 105            | —           | —            | —             | —             |
| 16             | 15 | 18.3 | 20 | 5 | 8 | 5  | 28 | 23 | 5.5 | 14 | 2.3 | 33 | 25   | 42 | M5 x 0.8 | 5.5 | 9.5 | M10 x 1.0 | 6 | 9 | 45.5           | 54             | 66             | 78             | 84          | 108          | 126           | 138           | 73.5           | 82             | 94             | 106            | 112         | 136          | 154           | 166           |

\* ( ) in S and Z dimensions: With auto switch

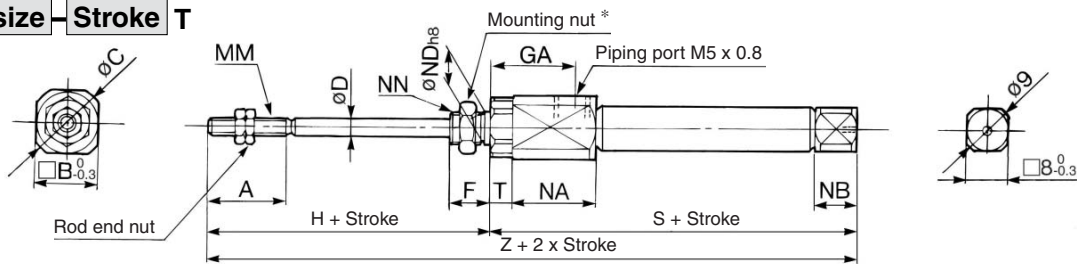
- CJ1
- CJP
- CJ2**
- CM2
- CG1
- MB
- MB1
- CA2
- CS1
- C76
- C85
- C95
- CP95
- NCM
- NCA
- D-
- X
- 20-
- Data

# Air Cylinder: Standard Type Single Acting, Single Rod, Spring Return/Extend **Series CJ2**

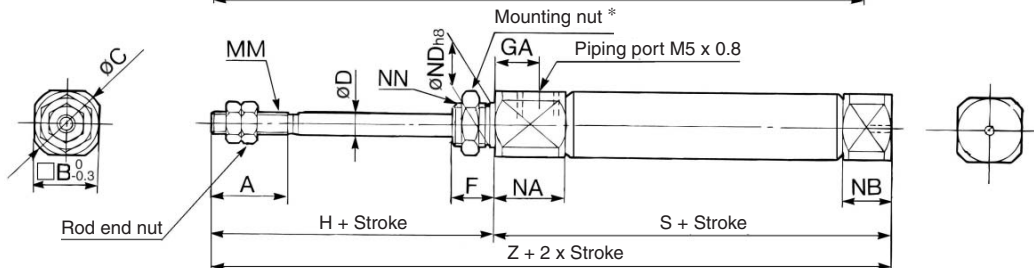
## Single Acting, Spring Extend: Basic Style (B)

**CJ2B** Bore size — Stroke T

**CJ2B6**



**CJ2B10/16**



\* For details of the mounting nut, refer to page 6-3-11.

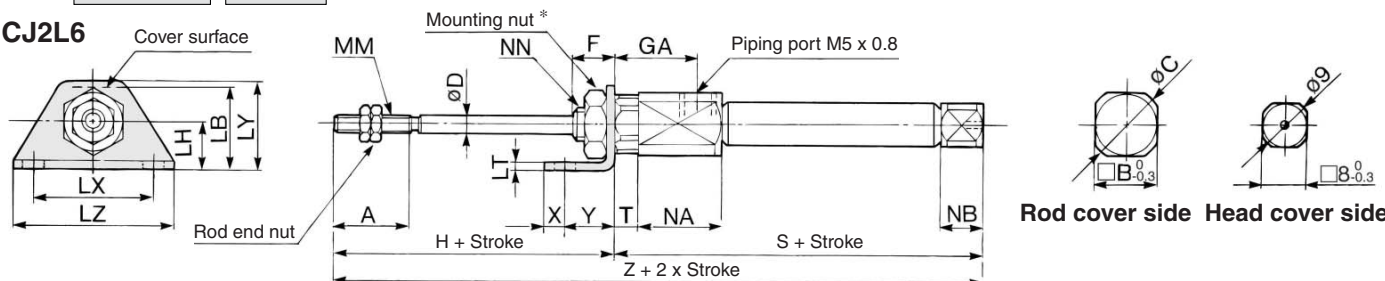
| Bore size (mm) | A  | B    | C  | D | F | GA   | H  | MM       | NN        | NA   | NB  | ND h8                             | T | S*          |             |             |             |             |              |               |               | Z*          |             |             |               |             |              |               |               |
|----------------|----|------|----|---|---|------|----|----------|-----------|------|-----|-----------------------------------|---|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|-------------|-------------|---------------|-------------|--------------|---------------|---------------|
|                |    |      |    |   |   |      |    |          |           |      |     |                                   |   | 5 to 15 st  | 16 to 30 st | 31 to 45 st | 46 to 60 st | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st | 5 to 15 st  | 16 to 30 st | 31 to 45 st | 46 to 60 st   | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st |
| 6              | 15 | 12   | 14 | 3 | 8 | 14.5 | 28 | M3 x 0.5 | M6 x 1.0  | 16   | 3   | 6 <sup>0</sup> <sub>-0.18</sub>   | 3 | 46.5 (51.5) | 55.5 (60.5) | 59.5 (64.5) | 73.5 (78.5) | —           | —            | —             | —             | 74.5 (79.5) | 83.5 (88.5) | 87.5 (92.5) | 101.5 (106.5) | —           | —            | —             | —             |
| 10             | 15 | 12   | 14 | 4 | 8 | 8    | 28 | M4 x 0.7 | M8 x 1.0  | 12.5 | 5.5 | 8 <sup>0</sup> <sub>-0.022</sub>  | — | 48.5        | 56          | 68          | 80          | —           | —            | —             | —             | 76.5        | 84          | 96          | 108           | —           | —            | —             | —             |
| 16             | 15 | 18.3 | 20 | 5 | 8 | 8    | 28 | M5 x 0.8 | M10 x 1.0 | 12.5 | 5.5 | 10 <sup>0</sup> <sub>-0.022</sub> | — | 48.5        | 57          | 69          | 81          | 87          | 111          | 129           | 141           | 76.5        | 85          | 97          | 109           | 115         | 139          | 157           | 169           |

\* ( ) in S and Z dimensions: With auto switch

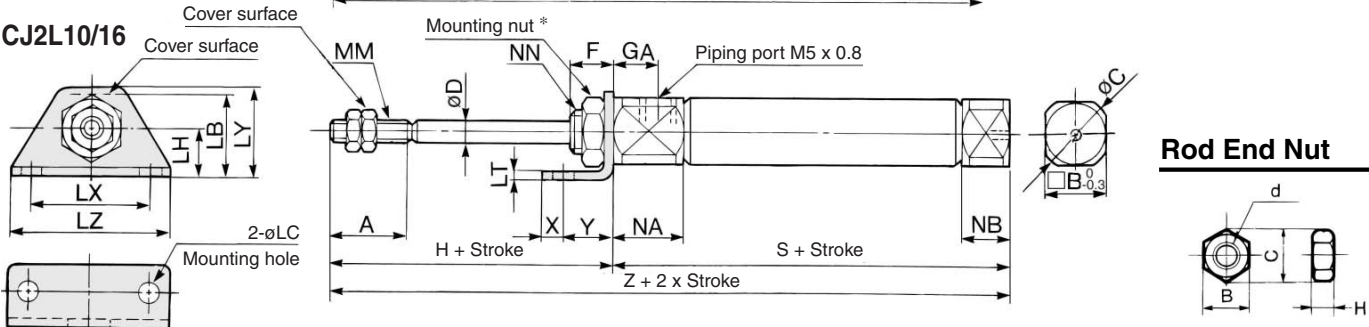
## Single Acting, Spring Extend: Axial Foot Style (L)

**CJ2L** Bore size — Stroke T

**CJ2L6**



**CJ2L10/16**



Material: Iron

| Part no. | Applicable bore (mm) | B   | C   | d        | H   |
|----------|----------------------|-----|-----|----------|-----|
| NTJ-006A | 6                    | 5.5 | 6.4 | M3 x 0.5 | 2.4 |
| NTJ-010A | 10                   | 7   | 8.1 | M4 x 0.7 | 3.2 |
| NTJ-015A | 16                   | 8   | 9.2 | M5 x 0.8 | 4   |

\* For details of the mounting nut, refer to page 6-3-11.

| Bore size (mm) | A  | B    | C  | D | F | GA   | H  | LB | LC  | LH | LT  | LX | LY   | LZ | MM       | NA   | NB  | NN        | T | X | Y | S*          |             |             |             |             |              |               |               | Z*          |             |             |               |             |              |               |               |
|----------------|----|------|----|---|---|------|----|----|-----|----|-----|----|------|----|----------|------|-----|-----------|---|---|---|-------------|-------------|-------------|-------------|-------------|--------------|---------------|---------------|-------------|-------------|-------------|---------------|-------------|--------------|---------------|---------------|
|                |    |      |    |   |   |      |    |    |     |    |     |    |      |    |          |      |     |           |   |   |   | 5 to 15 st  | 16 to 30 st | 31 to 45 st | 46 to 60 st | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st | 5 to 15 st  | 16 to 30 st | 31 to 45 st | 46 to 60 st   | 61 to 75 st | 76 to 100 st | 101 to 125 st | 126 to 150 st |
| 6              | 15 | 12   | 14 | 3 | 8 | 14.5 | 28 | 15 | 4.5 | 9  | 1.6 | 24 | 16.5 | 32 | M3 x 0.5 | 16   | 3   | M6 x 1.0  | 3 | 5 | 7 | 46.5 (51.5) | 55.5 (60.5) | 59.5 (64.5) | 73.5 (78.5) | —           | —            | —             | —             | 74.5 (79.5) | 83.5 (88.5) | 87.5 (92.5) | 101.5 (106.5) | —           | —            | —             | —             |
| 10             | 15 | 12   | 14 | 4 | 8 | 8    | 28 | 15 | 4.5 | 9  | 1.6 | 24 | 16.5 | 32 | M4 x 0.7 | 12.5 | 5.5 | M8 x 1.0  | — | 5 | 7 | 48.5        | 56          | 68          | 80          | —           | —            | —             | —             | 76.5        | 84          | 96          | 108           | —           | —            | —             | —             |
| 16             | 15 | 18.3 | 20 | 5 | 8 | 8    | 28 | 23 | 5.5 | 14 | 2.3 | 33 | 25   | 42 | M5 x 0.8 | 12.5 | 5.5 | M10 x 1.0 | — | 6 | 9 | 48.5        | 57          | 69          | 81          | 87          | 111          | 129           | 141           | 76.5        | 85          | 97          | 109           | 115         | 139          | 157           | 169           |

\* ( ) in S and Z dimensions: With auto switch

- CJ1
- CJP
- CJ2**
- CM2
- CG1
- MB
- MB1
- CA2
- CS1
- C76
- C85
- C95
- CP95
- NCM
- NCA
- D-
- X
- 20-
- Data