## Air Cylinder: Non-rotating Rod Type Single Acting, Spring Return/Extend

CJ2K Series



CJ1

CJP CJ<sub>2</sub>

JCM

CM<sub>2</sub>

CM3

CG<sub>1</sub>

CG3 **JMB** 

MB

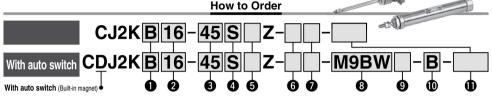
MB<sub>1</sub>

CA<sub>2</sub>

CS<sub>1</sub>

CS<sub>2</sub>

ø10. ø16



#### Mounting

| В   | Basic              |
|-----|--------------------|
| E   | Double-side bossed |
| D** | Double clevis      |
| L   | Single foot        |
| M   | Double foot        |
| F   | Rod flange         |
| G   | Head flange        |
|     |                    |

- \*: Foot/Flange brackets are shipped together with the product, but not assembled.
- \*\*: Refer to page 151-1 for the double clevis (with one-touch connecting

#### 8 Auto switch

| Nil       | Without auto switch    |
|-----------|------------------------|
| a. For an | nlicable auto switches |

- refer to the table below.
- ★ Enter the auto switch mounting type (A or B) even when a built-in magnet cylinder without an auto switch is required.

#### Bore size

| 10 | 10 mm |
|----|-------|
| 16 | 16 mm |
|    |       |

#### Head cover port location

|         |   | Nil |  |
|---------|---|-----|--|
| R Axial | 0 | R   |  |

- \*\* For double clevis, the product is perpendicular to the cylinder axis.
- \* For double-side bossed, the product
- is perpendicular to the cylinder axis. \*: Not applicable to single acting. spring extend (T).

# Number of auto switches

| Nui | iliber of auto switches |
|-----|-------------------------|
| Nil | 2 pcs.                  |
| S   | 1 pc.                   |
| n   | "n" pcs.                |
|     |                         |

### \*: Refer to "Ordering Example of Cylinder Assembly" on page 96.

#### Cylinder standard stroke [mm] Refer to "Standard Strokes" on

page 96.

## 6 Pivot bracket

| Nil |      | None   |  |  |  |  |  |
|-----|------|--|--|--|--|--|--|
| N   | N    | Pivot bracket is shipped together with the product |  |  |  |  |  |
|     | Only | for the character of each                          |  |  |  |  |  |

- \*: Pivot bracket is shipped
- together with the product, but not assembled.

#### Auto switch mounting type Rail mounting В Band mounting

- \*: For rail mounting, screws and nuts for 2 auto switches come with the rail.
- \*: Refer to page 148 for auto switch mounting brackets.

## Action

| S | Single acting, Spring return |
|---|------------------------------|
| Т | Single acting, Spring extend |

## Rod end bracket

| Nil | None                     |
|-----|--------------------------|
| V   | Single knuckle joint     |
| W** | Double knuckle joint     |
| Т   | Rod end cap (Flat type)  |
| U   | Rod end cap (Round type) |
|     |                          |

- \*: Rod end bracket is shipped together with the product, but not assembled.
- \*\*: Refer to page 63 for the double knuckle joint (with one-touch connecting pin).

## Made to Order

Refer to page 96 for details.

Applicable Auto Switches/Refer to pages 1575 to 1701 for further information on auto switches.

|        | Special function                             | Electrical<br>entry | Classical. | Electrical.        | Floridae | Indicator light | 100           | Load                        |         | oltage                | Auto switch model |         |          |         |        | d wir                  | e ler       | ngth        | [m]    | Den wise d | Annli | ooblo |   |   |            |
|--------|--|---------------------|------------|--------------------|----------|-----------------|---------------|-----------------------------|---------|-----------------------|-------------------|---------|----------|---------|--------|------------------------|-------------|-------------|--------|------------|-------|-------|---|---|------------|
| Туре   |  |                     | ator       | Wiring<br>(Output) |          | DC              | AC            | Band mounting Rail mounting |         |                       | 0.5               | 1       | 3        | 5       | None   | Pre-wired<br>connector |             | cable<br>ad |        |            |       |       |   |   |            |
|        |  | Chiliy              | lgi.       | (Output)           |          | ьс              | AC            | Perpendicular               | In-line | Perpendicular In-line |                   | (Nil)   | (M)      | (L)     | (Z)    | (N)                    | COIIIIECIOI | ioau        |        |            |       |       |   |   |            |
|        |  |                     |            | 3-wire (NPN)       |          | 5 V.12 V        |               | M9NV                        | M9N     | M9NV                  | M9N               | •       | •        | •       | 0      | -                      | 0           | IC circuit  |        |            |       |       |   |   |            |
| ج      |  | Grommet             | t          | 3-wire (PNP)       |          | J V,12 V        |               | M9PV                        | M9P     | M9PV                  | M9P               | •       | •        | •       | 0      | _                      | 0           | IC CITCUIT  |        |            |       |       |   |   |            |
| switch |  |                     |            | 2-wire             |          | 12 V            |               | M9BV                        | M9B     | M9BV                  | M9B               | •       | •        | •       | 0      | -                      | 0           |             |        |            |       |       |   |   |            |
|        |  | Connector           |            | 2-wire             |          | 12 V            |               | _                           | H7C     | J79C                  | _                 | •       | -        | •       | •      | •                      | _           | _           |        |            |       |       |   |   |            |
| auto   | Diagnostic indication                        |                     | 1          | 3-wire (NPN)       |          | 5 V,12 V        |               | M9NWV                       | M9NW    | M9NWV                 | M9NW              | •       | •        | •       | 0      | -                      | 0           | IC circuit  | Balan  |            |       |       |   |   |            |
|        | Diagnostic indication<br>(2-color indicator) |                     | Yes        | 3-wire (PNP)       | 24 V     | 5 V,12 V        | _             | M9PWV                       | M9PW    | M9PWV                 | M9PW              | •       | •        | •       | 0      | -                      | 0           | IC circuit  | PLC    |            |       |       |   |   |            |
| state  |  |                     |            | 2-wire             | 4        | 12 V            |               |                             | M9BWV   | M9BW                  | M9BWV             | M9BW    | •        | •       | •      | 0                      | <b> </b> -  | 0           | _      | 120        |       |       |   |   |            |
|        | Gromme                                       | Grommet             |            | 3-wire (NPN)       |          | 5 V,12 V        |               |                             |         | M9NAV*1               | M9NA*1            | M9NAV*1 | M9NA*1   | 0       | 0      | •                      | 0           | -           | 0      | IC circuit |       |       |   |   |            |
| Solid  | Water resistant                              |                     |            | 3-wire (PNP)       |          | 5 V,12 V        |               |                             |         | M9PAV*1               | M9PA*1            | M9PAV*1 | M9PA*1   | 0       | 0      | •                      | 0           | <u> </u>    | 0      | IC CITCUIT |       |       |   |   |            |
| ű      | (2-color indicator)                          |                     |            | 2-wire             | 12 V     | 1               |               |                             |         |                       |                   | M9BAV*1 | M9BA*1   | M9BAV*1 | M9BA*1 | 0                      | 0           | •           | 0      | _          | 0     | _     |   |   |            |
|        | With diagnostic output (2-color indicator)   |                     |            | 4-wire (NPN)       |          |                 |               |                             |         | wire (NPN)            | 5 V,12 V          | 1       |          | 1       | _      | H7NF                   | _           | F79F        | •      | -          | •     | 0     | _ | 0 | IC circuit |
| switch | Grommet                                      | 3-wire              | _          | 5 V                | _        | A96V            | A96           | A96V                        | A96     | •                     | -                 | •       | _        | -       | _      | IC circuit             | _           |             |        |            |       |       |   |   |            |
| 3      |  | Gromme              | Grommet    | Grommet            | Yes      |                 | 1             | _                           | 200 V   | _                     | _                 | A72     | A72H     | •       | _      | •                      | _           | _           | _      |            |       |       |   |   |            |
| 0 0    |  |                     |            |                    |          |                 | 100 V         | A93V*2                      | A93     | A93V*2                | A93               | •       | •        | •       | •      | _                      | _           | -           |        |            |       |       |   |   |            |
| anto   |  |                     | No         | 0                  |          | 10.1/           | 100 V or less | A90V                        | A90     | A90V                  | A90               | •       | _        | •       | -      | -                      | _           | IC circuit  | Relay, |            |       |       |   |   |            |
|        |  |                     | Yes        | 2-wire             | 24 V     | 12 V            | _             | _                           | C73C    | A73C                  | _                 | •       | <b>—</b> | •       | •      | •                      | _           | _           | PLĆ    |            |       |       |   |   |            |
| Reed   |  | Connector           | No         | 1                  |          |                 | 24 V or less  | _                           | C80C    | A80C                  | _                 | •       | _        | •       | •      | •                      | _           | IC circuit  | 1      |            |       |       |   |   |            |
| _      | Diagnostic indication (2-color indicator)    | Grommet             | Yes        |                    |          | _               | _             | _                           | _       | A79W                  | _                 | •       | _        | •       | —      | _                      | _           | -           | 1      |            |       |       |   |   |            |

- \*1: Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance, Please contact SMC regarding water resistant types with the above model numbers.
- \*2: 1 m type lead wire is only applicable to D-A93.

\*: Lead wire length symbols: 0.5 m ..... Nil (Example) M9NW 1 m----- M (Example) M9NWM 3 m····· L (Example) M9NWL

5 m····· Z (Example) M9NWZ None----- N (Example) H7CN

\*: Since there are other applicable auto switches than listed, refer to page 149 for details.

\*: Solid state auto switches marked with "0" are produced upon receipt of order.
\*: The D-A9□M9□IA7□/A80□/F7□J7□ auto switches are shipped together, but not assembled. (For band mounting, only auto switch mounting brackets are assembled before being shipped.)

D-

-X□ Technical