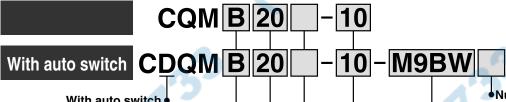
# **Compact Cylinder: Guide Rod Type**

# Series CQM

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

#### **How to Order**



## With auto switch

(Built-in magnet)

#### Mounting bracket • Through-hole (Standard) Both ends tapped (ø32 to ø100)

Note 1) Cylinder bodies of ø12 to ø25 are common for both B (through hole) and A (both ends tapped) types. Symbol to order is unified to "B" for those sizes.

Note 2) Cylinder mounting bolts are not included. Order them separately referring to Mounting Bolts for CQM on pages 796 and 797.

Note 3) Contact SMC for the other mounting

|    |       | Во  | re size |
|----|-------|-----|---------|
| 12 | 12 mm | 40  | 40 mm   |
| 16 | 16 mm | 50  | 50 mm   |
| 20 | 20 mm | 63  | 63 mm   |
| 25 | 25 mm | 80  | 80 mm   |
| 32 | 32 mm | 100 | 100 mm  |

#### Number of auto switches

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

#### Auto switch type

Nil Without auto switch

Refer to the table below for the applicable auto switch model.

#### Cylinder stroke (mm)

Refer to the next page for standard and intermediate strokes.

Thread type

| Nil  | M thread | ø12 to ø25  |  |  |  |  |  |
|------|----------|-------------|--|--|--|--|--|
| INII | Rc       |             |  |  |  |  |  |
| TN   | NPT      | ø32 to ø100 |  |  |  |  |  |
| TF   | G        |             |  |  |  |  |  |

Note) M thread to be used for without auto switch type of ø32, 5 stroke exceptionally. There is no need to enter the symbol when ordering.

### **Built-in Magnet Cylinder Model**

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) CDQMB32-10

#### Applicable Auto Switch/Refer to pages 1263 to 1371 for further information on auto switches.

| Туре        |        | Special function                              |                      | Indicator light | Wiring                 | Load voltage |          |   | Auto switch model |             |                          | Lead wire length (m) |             |     |     |      |                     |            |          |
|-------------|--------|---|----------------------|-----------------|------------------------|--------------|----------|---|-------------------|-------------|--------------------------|----------------------|-------------|-----|-----|------|---------------------|------------|----------|
|             |        |   | Electrical entry     |                 |                        |              | DO 40    |   | Perpendicular     |             | In-line                  | 0.5                  | 1           | 3   | 5   | None | Pre-wired connector | Applica    | ble load |
|             |        |   | entry                | Indic           | (Output)               | DC           |          | AC  | ø12 to ø25        | ø32 to ø100 | ø12 to ø25   ø32 to ø100 | (Nil)                | (M)         | (L) | (Z) | (N)  | connector           |            |          |
|             |        | -6°   | Grommet<br>Connector |                 | 3-wire (NPN)           |              | 5 V,     | 2 V<br>2 V<br>V,<br>2 V<br>2 V<br>V,<br>2 V<br>V,<br>2 V<br>2 V | M9                | NV          | M9N                      | •                    | •           | •   | 0   | _    | 0                   | IC circuit |          |
|             |        |   |                      |                 | 3-wire (PNP)           |              | 12 V     |   | M9                | PV          | M9P                      | •                    | •           | •   | 0   |      | 0                   | ic circuit |          |
|             | _      |   |                      |                 | 2-wire                 |              | 12 V     |   | M9                | BV          | M9B                      | •                    | •           | •   | 0   | _    | 0                   |            |          |
|             | switch |   |                      |                 |                        |              |          |   | -8                | J79C        | _                        | •                    | <u>  — </u> | •   | •   | •    |                     |            | A        |
|             | Š      | Diagnostic indication (2-color indication)    | Grommet              |                 | 3-wire (NPN)           |              | 5 V,     |   | M9N               | IWV         | M9NW                     | •                    | •           | •   | 0   | _    | 0                   | IC circuit |          |
|             | je je  |   |                      | Yes             | 3-wire (PNP)           | 24 V         | 12 V     |   | M9F               | WV          | M9PW                     | •                    | •           | •   | 0   | _    | 0                   | IC Circuit | Relay,   |
|             | state  |   |                      |                 | 2-wire                 |              | 12 V     |   | M9E               | WV          | M9BW                     | •                    | •           | •   | 0   | _    | 0 -                 | -          | PLC      |
|             | Solid  | Water resistance<br>(2-color indication)      |                      |                 | 3-wire (NPN)           |              | 5 V,     |   | M91               |             | M9NA                     | 0                    | 0           | •   | 0   | _    | 0                   | IC circuit |          |
|             |        |   |                      |                 | 3-wire (PNP)           |              | 12 V     |   | M9F               |             | М9РА                     | 0                    | 0           | •   | 0   | -    | 0                   |            |          |
|             |        |   |                      |                 | 2-wire<br>4-wire       |              | 12 V     |   | M9E               | BAV         | M9BA                     | 0                    | 0           | •   | 0   | _    | 0                   | _          |          |
|             |        | With diagnostic output (2-color indication)   |                      |                 |                        |              | 5 V,12 V |   | _                 | -           | _ F79F                   | •                    | -           | •   | 0   |      | 0                   | IC circuit |          |
|             |        | Magnetic field resistant (2-color indication) |                      |                 | 2-wire (Non-polar)     |              | 1-       |   | -                 | -           | — P4DW**                 | _                    | _           |     |     | _    | 0                   |            |          |
| Reed switch |        |   |                      | Vaa             | 3-wire<br>(NPN equiv.) | <u>/.)</u> — | 5 V      | _   | <b>A</b> 9        | 6V          | A96                      | •                    | -           | •   | _   | _    | _                   | IC circuit | _        |
|             | 당      |   | Grommet              | No<br>Yes       |                        |              | _        | 200 V   | _                 | A72         | — A72H                   | •                    | -           | •   | _   | _    | _                   |            |          |
|             | , Wi   |   |                      |                 | 2-wire                 | 24 V         | 12 V     | 100 V   | A9                | 3V          | A93                      |                      | -           | •   | _   | -    | _                   | _          |          |
|             |        |   |                      |                 |                        |              | 5 V,12 V | 100 V or less   | A9                | 0V          | A90                      |                      |             | •   | _   |      |                     | IC circuit |          |
|             | æ      |   |                      |                 |                        |              | 12 V     | _   | _                 | A73C        |                          | •                    | _           | •   | •   | •    | _                   |            | PLC      |
|             |        |   | COMMECTOR            | No              |                        |              | 5 V,12 V | 24 V or less  | _                 | A80C        | -, 1                     | •                    | <u> -</u>   | •   | •   | •    | _                   | IC circuit |          |
|             |        | With diagnostic output (2-color indication)   | Grommet              | Yes             |                        |              | _        | _   | _                 | A79W        | <b>A</b> 4               |                      | -           | •   | -   |      | —                   | _          |          |

- Lead wire length symbols: 0.5 m···· ..... M (Example) M9NWM (Example) M9NWL 3 m ..... L M9NWZ
- \* Solid state auto switches marked with a "O" are produced upon receipt of order.
- \*\* D-P4DWL type is compatible with bore sizes ø40 to ø100.
- \* Only D-P4DW type is assembled when shipped
- Besides the models in the above catalog, there are some other auto switches that are applicable. For more information, refer to page 803.

J79CN

- Refer to pages 1328 and 1329 for the details of auto switches with a pre-wired connector.
  When mounting D-A9□(V)/M9□(V)/M9□(V)/M9□A(V)L types on a side other than the port side with ø32 to ø50 cylinders, order auto switch mounting brackets separately. Refer to page 803 for details.