

Standard: Double Acting Double Rod

Series CG1W

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Standard

CG1W L N 25 — 100

With auto switch

CDG1W L N 25 — 100 — B53

With auto switch (magnet)

Double acting/Double rod

Mounting

| | |
|-----------|----------------|
| B | Basic |
| L | Axial foot |
| F | Front flange |
| U* | Front trunnion |

* Not available for bore sizes ø80 and ø100.
** Mounting brackets are included, not mounted.

Cushion

| | |
|----------|---------------|
| N | Rubber bumper |
| A | Air cushion |

Bore size

| | | | |
|-----------|------|------------|-------|
| 20 | 20mm | 50 | 50mm |
| 25 | 25mm | 63 | 63mm |
| 32 | 32mm | 80 | 80mm |
| 40 | 40mm | 100 | 100mm |

Number of auto switches

| | |
|----------|---|
| — | 2 |
| S | 1 |
| n | n |

Applicable auto switch

| | |
|---|---------------------------------------|
| — | Without auto switch (Built-in magnet) |
|---|---------------------------------------|

* Refer to the table below for selecting applicable auto switches.

Rod boot

| | |
|----------------------|--------------------------|
| — | Without rod boot |
| One side J | Nylon tarpaulin |
| Both sides K | Heat resistant tarpaulin |
| Both sides JJ | Nylon tarpaulin |
| Both sides KK | Heat resistant tarpaulin |

* In case of foot brackets and front flanges, rod boots are mounted when shipped.

Cylinder stroke (mm)

Refer to p.1.7-15 for Standard Stroke Table.

* Mounting accessories are not mounted, should be order separate. Please refer order keys in next pages.

Applicable Auto Switches/Refer to p.5.3-2 for further information on auto switch.

| Style | Special function | Electrical entry | Indicator | Wiring (output) | Load voltage | | Auto switch model | | Lead wire (m)* | | | | Applicable load | | |
|---|----------------------------------|------------------|--------------|-----------------|--------------|------|----------------------|-------------|----------------|-------|-------|----------|-----------------|-----------|---|
| | | | | | DC | AC | Applicable bore size | | 0.5 (—) | 3 (L) | 5 (Z) | None (N) | | | |
| | | | | | | | ø20 to ø63 | ø20 to ø100 | | | | | | | |
| Reed switch | — | Grommet | Yes | 3 wire (NPN) | — | 5V | — | C76 | — | ● | ● | — | — | IC | — |
| | | | | 2 wire | 24V | — | — | B53 | ● | ● | ● | — | — | PLC | |
| | | | 200V or less | | | — | B54 | ● | ● | ● | — | — | — | | |
| | | | 100V | | | — | B64 | ● | ● | — | — | | | | |
| | | Connector | No | 5V, 12V | 100V or less | C80 | — | ● | ● | — | — | IC | Relay PLC | | |
| | | | | 12V | — | C73C | — | ● | ● | ● | ● | — | | | |
| | | | | 5V, 12V | 24V or less | C80C | — | ● | ● | ● | ● | IC | | | |
| | | | | — | — | B59W | ● | ● | — | — | — | | | | |
| Diagnostic indication (2 colour) | Grommet | Yes | | | | | | | | | | | | | |
| Solid state switch | — | Grommet | Yes | 3 wire (NPN) | 5V, 12V | — | H7A1 | G59 | ● | ● | ○ | — | IC | Relay PLC | |
| | | | | 3 wire (PNP) | | | H7A2 | G5P | ● | ● | ○ | — | — | | |
| | Connector | 2 wire | 12V | H7B | K59 | ● | ● | ○ | — | — | | | | | |
| | | | | H7C | — | ● | ● | ● | ● | — | | | | | |
| | Diagnostic indication (2 colour) | Grommet | Yes | 3 wire (NPN) | 5V, 12V | — | H7NW | G59W | ● | ● | ○ | — | IC | | |
| | | | | 3 wire (PNP) | | | H7PW | G5PW | ● | ● | ○ | — | — | | |
| | | | | 2 wire | | | H7BW | K59W | ● | ● | ○ | — | — | | |
| | | | | H7BA | | | G5BA | — | ● | ○ | — | — | | | |
| | | | | — | | | G5NT | — | ● | ○ | — | — | | | |
| | | | | — | | | H7NF | G59F | ● | ● | ○ | — | IC | | |
| | Water resistant (2 colour) | Grommet | Yes | 4 wire (NPN) | 5V, 12V | — | H7LF | — | ● | ● | ○ | — | — | | |
| | With timer | | | | | | | | | | | | | | |
| Diagnostic output (2 colour) | | | | | | | | | | | | | | | |
| Latch with diagnostic output (2 colour) | | | | | | | | | | | | | | | |

*Lead wire length 0.5m.....— 3m.....L e.g.) C73C 5m.....Z C73CL None.....N e.g.) C73CZ C73CN

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

Standard: Double Acting Double Rod *Series CG1W*



Specifications

| Bore size (mm) | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 |
|-------------------------------|---|----|----|----|----|----|--|-----|
| Action | Double acting/Double rod | | | | | | | |
| Lubrication | Non-lube | | | | | | | |
| Fluid | Air | | | | | | | |
| Proof pressure | 1.5MPa | | | | | | | |
| Max. operating pressure | 1.0MPa | | | | | | | |
| Min. operating pressure | 0.05MPa | | | | | | | |
| Ambient and fluid temperature | Without auto switch: -10°C to +70°C (No freezing) | | | | | | | |
| | With auto switch: -10°C to +60°C (No freezing) | | | | | | | |
| Piston speed | 50 to 1000mm/s | | | | | | 50 to 700mm/s | |
| Stroke tolerance | Up to 1000 ^{+1.4} ₀ mm, | | | | | | Up to 1000 ^{+1.4} ₀ mm | |
| | Up to 1200 ^{+1.8} ₀ mm | | | | | | Up to 1500 ^{+1.8} ₀ mm | |
| Thread tolerance | JIS class 2 | | | | | | | |
| Cushion | Rubber bumper/Air cushion | | | | | | | |
| Mounting* | Basic, Axial foot, Front flange, Front trunnion | | | | | | | |



* Front trunnion style is not available for bore sizes ø80 and ø100. ** No freezing

Accessories

| Mounting | | Basic | Axial foot | Front flange | Front trunnion |
|----------|------------------------------------|-------|------------|--------------|----------------|
| Standard | Rod end nut | ● | ● | ● | ● |
| | Single knuckle joint | ● | ● | ● | ● |
| | Double knuckle joint** (With pins) | ● | ● | ● | ● |
| | Pivot bracket* | — | — | — | ●* |
| | Rod boot | ● | ● | ● | ● |

* Pivot bracket is not available for bore size ø80 and ø100.

** Pins and snap rings for double knuckle joint are included, not mounted.

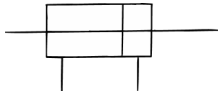
Stroke

| Bore size(mm) | Standard stroke (mm) ⁽¹⁾ | Long stroke (mm) | Max. stroke |
|---------------|--|------------------|-------------|
| 20 | 25, 50, 75, 100, 125, 150, 200 | 201 to 350 | 1500 |
| 25 | 25, 50, 75, 100, 125, 150, 200 250, 300 | 301 to 400 | |
| 32 | | 301 to 450 | |
| 40 | | 301 to 800 | |
| 50/63 | | 301 to 1200 | |
| 80 | | 301 to 1400 | |
| 100 | | 301 to 1500 | |

Note 1) Other intermediate strokes can be manufactured upon receipt of order. Spacers are not used for the intermediate strokes. Refer to p.1.7-17 to 1.7-19 for dimensions.

Note 2) Long stroke applies to the axial foot style and the front flange style. If other mounting brackets are used, or the length exceeds the long stroke limit, the stroke should be determined based on the stroke selection table in the technical data.

JIS symbol



Made to Order

Refer to p.5.4-1 for made to order products of series CG1.

Mounting Bracket

Refer to p.1.7-19 for part numbers of the mounting brackets.

Auto Switch Mounting Band

Refer to p.1.7-19 for part numbers of the mounting bands.

With Auto Switch

The auto switch can be mounted. Refer to p.1.7-12 to 1.7-14 for the details.

Rod Boot Materials

| Symbol | Material | Max. operating temp |
|--------|--------------------------|---------------------|
| J | Nylon tarpaulin | 70°C |
| K | Heat resistant tarpaulin | 110°C* |

* Maximum ambient temperature for the rod boot only.