

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

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

Applicable auto switch

—	2
S	1
n	n

* 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.

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	12V	—	—	B53	●	●	●	—	—	PLC
			200V or less				—	B54	●	●	●	—	—	—	
			100V			—	B64	●	●	—	—				
		Connector	Yes			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		—	●		●	●	●	—	—				
	Grommet	3 wire (NPN)		5V, 12V	H7NW		G59W	●	●	○	—	IC			
		3 wire (PNP)		H7PW	G5PW		●	●	○	—	—				
		2 wire		12V	H7BW		K59W	●	●	○	—	—			
		H7BA		G5BA	—		●	○	—	—					
		—	G5NT	—	●	○	—	IC							
		3 wire (NPN)	5V, 12V	H7NF	G59F	●	●	○	—	—					
	Diagnostic indication (2 colour)	Grommet	Yes	4 wire (NPN)	—	H7LF	—	●	●	○	—	—			
	Water resistant (2 colour)														
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.

Series CG1W

Weight

		(kg)							
Bore size (mm)		20	25	32	40	50	63	80	100
Basic weight	Basic	0.13	0.22	0.33	0.55	1.02	1.37	2.64	4.09
	Axial foot	0.24	0.35	0.49	0.77	1.50	2.09	3.60	5.84
	Flange	0.21	0.32	0.47	0.75	1.36	1.87	3.35	5.44
	Trunnion	0.14	0.24	0.36	0.60	1.16	1.51	—	—
Pivot bracket		0.08	0.09	0.17	0.25	0.44	0.80	—	—
Single knuckle joint		0.05	0.09	0.09	0.10	0.22	0.22	0.39	0.57
Double knuckle joint (with pins)		0.05	0.09	0.09	0.13	0.26	0.26	0.64	1.31
Additional weight by each 50 stroke		0.07	0.10	0.13	0.23	0.34	0.38	0.54	0.77
Additional weight by air cushion		0.01	0.01	0.02	0.02	0.03	0.03	0.09	0.10

Calculation example: **CG1WLN32-100** (Foot, ø32, 100 stroke)

- Basic weight.....0.49 (Foot, ø32) • Cylinder stroke.....100 stroke
- Additional weight.....0.13/50 stroke 0.49+0.13 X 100/50=0.75kg

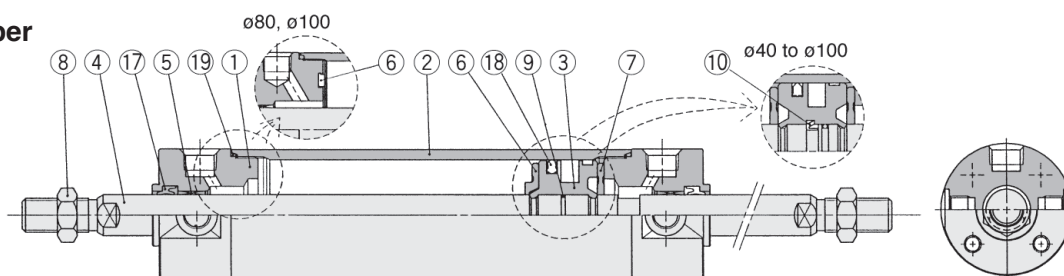


Precautions

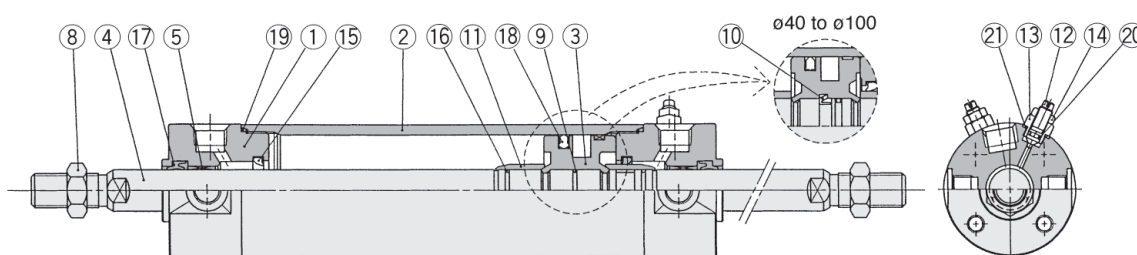
- Be sure to read before handling.
- Refer to p.0-39 to 0-46 for Safety Instructions and common precautions.
- Refer to p.1-1-6 for precautions on series CG1.

Construction

With rubber bumper



With air cushion



Component Parts

No.	Description	Material	Note
①	Rod cover	Aluminum alloy	White hard anodized
②	Cylinder tube	Aluminum alloy	Hard anodized
③	Piston	Aluminum alloy	Chromated
④	Piston rod A	Carbon steel	Hard chrome plated
⑤	Bushing	Oil impregnated sintered alloy	ø40 or more: Lead bronze cast
⑥	Bumper A	Urethane	
⑦	Bumper B	Urethane	ø40 or more: the same as bumper A
⑧	Rod end nut	Rolled steel	Nickel plated
⑨	Piston gasket	NBR	
⑩	Piston holder	Urethane	ø40 or more*
⑪	Cushion ring A	Brass	
⑫	Cushion valve	Rolled steel	Electroless nickel plated
⑬	Valve retainer	Rolled steel	Electroless nickel plated
⑭	Lock nut	Carbon steel	Nickel plated
⑮	Cushion seal A	Urethane	
⑯	Cushion ring gasket A	NBR	

Note) A rubber magnet is equipped on the piston of the cylinder with auto switch.

* The material is stainless steel on auto switch equipped styles ø20 and ø25.

Replacement Parts/With rubber bumper

No.	Description	Material	Bore size (mm)/Part No.							
			ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
⑰	Rod seal	NBR	PDU-8Z	PDU-10Z	PDU-12LZ	PDU-16Z	PDU-20Z	PDU-20Z	PDU-25Z	PDU-30Z
⑱	Piston seal	NBR	PPD-20	PPD-25-19	PPD-32	PPD-40	PPD-50	PPD-63	PPD-80	PPD-100
⑲	Tube gasket	NBR	CM-020-16-123	CM-025-16-124	CM-032-16-126	CM-040-16-127	CM-050-16-128	CM-063-16-129	CM-080-16-152	CM-100-16-153

With air cushion (Parts ⑰ to ⑲ are the same as rubber bumper style.)

⑳	Valve seal	NBR	O ring ø4.5 X ø2.5 X ø1				O ring ø5.5 X ø3.5 X ø1		O ring ø6.5 X ø4.5 X ø1	
㉑	Gasket for valve retainer	NBR	O ring ø6.4 X ø5.2 X ø0.6				O ring ø7.4 X ø5.8 X ø0.8		O ring ø11.4 X ø9.4 X ø1	