

# Air Cylinder Short Type

## Standard: Double Acting, Single Rod

# CG3 Series

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

RoHS

### How to Order



**With auto switch** **CG3 L N 25 - 100** - **M9BW** - **C**

**With auto switch (Built-in magnet)**

**Mounting**

B	Basic
L	Foot
F	Rod flange
G	Head flange
D	Clevis

\* Mounting brackets are shipped together, (but not assembled).

**Cushion**

N Rubber bumper

**Bore size**

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

**Rod end thread**

Nil	Male thread
F	Female thread
G	Long male rod end*

\* G: Same rod end dimensions (A, AL, H) as CG1 series.

**Made to Order**

For details, refer to page 366.

**Auto switch mounting bracket** (Note)

Note) This symbol is indicated when the D-A9□ or M9□ type auto switch is specified. This mounting bracket does not apply to other auto switches (D-C7□ and H7□, etc.) (Nil)

**Number of auto switches**

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

**Auto switch**

Nil	Without auto switch
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\* For applicable auto switches, refer to the below table.

### 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) CDG3FN32-100

### Applicable Auto Switches

Refer to pages 1575 to 1701 in Best Pneumatics No. 2 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-wired connector	Applicable load							
					DC	AC	Applicable bore size			0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)									
							ø20 to ø63	ø80, ø100	Perpendicular								In-line	In-line					
Solid state auto switch	—	Grommet	—	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	G59	●	●	○	○	○	IC circuit								
				3-wire (PNP)						●	●	○	○	○									
		Connector		2-wire						12 V	—	—	—	—		—	—	—	—	—	—	—	
				—						—	—	—	—	—		—	—	—	—	—	—		
		Diagnostic indication (2-color indicator)		Grommet						Yes	3-wire (NPN)	24 V	5 V, 12 V	—		M9BV	M9B	K59	●	●	○	○	○
											3-wire (PNP)								●	●	○	○	○
	2-wire		12 V		—	—	—	—	—		—				—				—	—			
	—		—		—	—	—	—	—		—				—				—	—			
	3-wire (NPN)		5 V, 12 V		—	M9NWV	M9NW	G59W	●		●				○				○	○			
	3-wire (PNP)								●		●				○				○	○			
	Water resistant (2-color indicator)	Grommet	—	2-wire	24 V	5 V, 12 V	—	M9BWW	M9BW	K59W	●	●	○	○	○								
				3-wire (NPN)							○	○	○	○	○								
3-wire (PNP)				○							○	○	○	○									
2-wire				12 V							—	—	—	—	—	—	—	—	—				
—				—							—	—	—	—	—	—	—	—	—				
4-wire (NPN)				5 V, 12 V							—	M9NAV*1	M9NA*1	—	○	○	○	○	○				
3-wire (NPN)	○	○	○		○	○																	
Reed auto switch	—	Grommet	—	3-wire (NPN)	24 V	12 V	A96V	A96	—	●	●	○	○	○									
				3-wire (PNP)						●	●	○	○	○									
		Connector		2-wire						12 V	—	—	—	—	—	—	—	—	—	—			
				—						—	—	—	—	—	—	—	—	—	—				
		Diagnostic indication (2-color indicator)		Grommet						Yes	3-wire (NPN)	24 V	12 V	—	A93V*2	A93	—	●	●	○	○	○	
											3-wire (PNP)							●	●	○	○	○	
	2-wire		12 V		—	—	—	—	—		—							—	—	—			
	—		—		—	—	—	—	—		—							—	—	—			
	3-wire (NPN)		100 V or less		—	A90V	A90	—	●		●							○	○	○			
	3-wire (PNP)								●		●							○	○	○			
	Water resistant (2-color indicator)	Grommet	—	2-wire	24 V	12 V	—	—	—	B54	●	●	○	○	○								
				—							—	—	—	—	—	—	—	—	—				
—				—							—	—	—	—	—	—	—	—	—				
—				—							—	—	—	—	—	—	—	—	—				
—				—							—	—	—	—	—	—	—	—	—				
—				—							—	—	—	—	—	—	—	—	—				

\*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.  
 A water resistant type cylinder is recommended for use in an environment which requires water resistance. However, please contact SMC for water-resistant products of ø20 and ø25.  
 \*2 1 m type lead wire is only applicable to D-A93.  
 \*3 Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
 1 m..... M (Example) M9NWW  
 3 m..... L (Example) M9NWL  
 5 m..... Z (Example) M9NWX  
 None..... N (Example) H7CN  
 \* Solid state auto switches marked with "○" are produced upon receipt of order.  
 \* The D-G5□/K5□/B5□/B6□ types cannot be mounted on the bore size ø40.

\* Since there are other applicable auto switches than listed above, refer to page 376 for details.  
 \* For details about auto switches with pre-wired connector, refer to pages 1648 and 1649.  
 \* The D-A9□(V)/M9□(V)/M9□(V)/M9□(V) type auto switches are shipped together, (but not assembled). (However, auto switch mounting brackets are assembled when being shipped.)



- CJ1
- CJP
- CJ2
- JCM
- CM2
- CM3
- CG1
- CG3
- JMB
- MB
- MB1
- CA2
- CS1
- CS2

- D-□
- X□
- Technical Data