

Compact Cylinder: Standard Double Acting, Double Rod CQ2W Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Without auto switch
ø12 to ø25

CQ2W B □ 20 □ - 30 D □ - □

Without auto switch
ø32 to ø100

CQ2W B □ 32 □ - 30 D □ Z - □

With auto switch

CDQ2W B □ 32 □ - 30 D M Z - M9BW □ - □

Mounting			
B	Through-hole (Standard)	LC	Compact foot
A	Both ends tapped	F	Flange
L	Foot		

* Mounting brackets are shipped together (but not assembled).
* Cylinder mounting bolts are not included. Order them separately referring to "Mounting Bolt for CQ2" on pages 802 and 805.

Type

Nil	Pneumatic
H	Air-hydro (Note 1)

Note 1) Bore sizes available for air-hydro type are ø20 to ø100.

With auto switch
(Built-in magnet)

Bore 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

Auto switch mounting groove	
Z	ø12 to ø25 2 surfaces
	ø32 to ø100 4 surfaces

Body option

Nil	Standard (Rod end female thread)
C	With rubber bumper (Note 4)
M	Rod end male thread

* Combination of body options ("CM") is available.
Note 4) Air-hydro type with rubber bumper is not available.

Number of auto switches

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

Auto switch

Nil	Without auto switch
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* Refer to the below table for applicable auto switches.

Made to Order

Refer to page 800 for details.

Action

D	Double acting
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Port thread type

Nil	M thread	ø12 to ø25
	Rc	
TN	NPT	ø32 to ø100
TF	G	
F	Built-in One-touch fittings (Note 2)	

Note 2) Bore sizes available with One-touch fittings are ø32 to ø63. Besides, it is not possible to use for air-hydro type.

Note 3) "TF" is not available for the air-hydro type.
* For cylinders without auto switch, M threads are compatible only for ø32-5 mm stroke.

Cylinder stroke (mm)

Refer to page 800 for standard strokes.

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) CDQ2WL32-25DZ

Applicable Auto Switches/Refer to pages 1575 to 1701 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	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)				
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	5 V,	—	M9NV	M9N	●	●	○	—	—	○	IC circuit		
				3-wire (PNP)	12 V		M9PV	M9P	●	●	○	—	○				
				2-wire	12 V		M9BV	M9B	●	●	○	—	○				
				3-wire (NPN)	5 V,		M9NVW	M9NW	●	●	○	—	○				
	Diagnostic indication (2-color indicator)			3-wire (PNP)	12 V		M9PWV	M9PW	●	●	○	—	○	IC circuit			
				2-wire	12 V		M9BWV	M9BW	●	●	○	—	○				
				3-wire (NPN)	5 V,		M9NAV*1	M9NA*1	○	○	●	—	○			IC circuit	
				3-wire (PNP)	12 V		M9PAV*1	M9PA*1	○	○	●	—	○				
Water resistant (2-color indicator)	2-wire	12 V	M9BAV*1	M9BA*1	○	○	●	—	○	—							
	2-wire (Non-polar)	—	—	P3DWA	●	—	●	—	○								
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	A96V	A96	●	—	—	—	—	—	IC circuit	—	
				2-wire	24 V	12 V	100 V	A93V*2	A93	●	●	●	—	—	—		Relay, PLC
				2-wire	24 V	5 V, 12 V	100 V or less	A90V	A90	●	—	●	—	—	—		IC circuit

*1 Water resistant type auto switches can be mounted on the above models, but in such case SMC cannot guarantee water resistance.

* Consult with 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) M9NV
1 m M (Example) M9NVW
3 m L (Example) M9NVW
5 m Z (Example) M9NVW

* Solid state auto switches marked with "○" are produced upon receipt of order.
* The D-P3DWA□ type is available from ø25 to ø100 only.

* There are other applicable auto switches other than the listed above. For details, refer to page 970.

* For details about auto switches with pre-wired connector, refer to pages 1648 and 1649.