

Compact Cylinder: Long Stroke Double Acting, Single Rod

CQ2 Series

ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Without auto switch

CQ2 **A** **32** - **200** DC **Z** -

With auto switch

CDQ2 **A** **32** - **200** DC **Z** - **M9BW** -

With auto switch
(Built-in magnet)

Mounting

A	Both ends tapped
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

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

Type

Nil	Pneumatic
H	Air-hydro

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	Rc
TN	NPT
TF	G
F	Built-in One-touch fittings <small>Note</small>

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

Cylinder stroke (mm)

Refer to page 857 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) CDQ2L40-200DCZ

Number of auto switches

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

Auto switch

Nil Without auto switch

* Refer to the below table for applicable auto switches.

Auto switch mounting groove

Z 4 surfaces

Body option

Nil	Standard (Rod end female thread)
M	Rod end male thread

Cushion

Nil	Without rubber bumper
C	With rubber bumper

* Pneumatic type: With rubber bumper only.
Air-hydro type: Without rubber bumper only

Action

D Double acting

Made to Order

Refer to page 857 for details.

Refer to pages 1575 to 1701 for further information on auto switches.

Applicable Auto Switches

Refer to pages 1630 and 1631 for the D-P3DW type.

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	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	○	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)				M9PV	M9P	●	●	○	○	○			
				2-wire				12 V	M9BV	M9B	●	●	○	○			○
				3-wire (NPN)				5 V, 12 V	M9NVW	M9NW	●	●	○	○			○
	Water resistant (2-color indicator)			3-wire (PNP)	12 V	M9PWV	M9PW	●	●	○	○	○	IC circuit				
				2-wire	12 V	M9BWV	M9BW	●	●	○	○	○					
				3-wire (NPN)	5 V, 12 V	M9NAV ^{*1}	M9NA ^{*1}	○	○	●	●	○					
				3-wire (PNP)	12 V	M9PAV ^{*1}	M9PA ^{*1}	○	○	●	●	○					
Magnetic field 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)	24 V	5 V	—	A96V	A96	●	—	—	—	—	IC circuit	—	
				12 V		100 V	A93V ^{*2}	A93	●	●	●	●	—	—			
				5 V, 12 V		100 V or less	A90V	A90	●	—	●	—	—	—			
			No	2-wire												IC circuit	Relay, PLC

*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) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NLW
5 m Z (Example) M9NZW

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

* 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.