

Compact Cylinder: Standard Single Acting, Single Rod

CQ2 Series

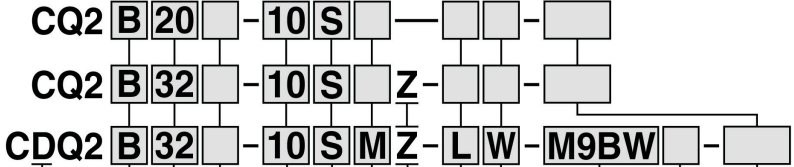
ø12, ø16, ø20, ø25, ø32, ø40, ø50

How to Order

Without auto switch
ø12 to ø25

Without auto switch
ø32 to ø50

With auto switch



With auto switch
(Built-in magnet)

Mounting

B	Through-hole (Standard)	F	Rod flange
A	Both ends tapped	G	Head flange
L	Foot	D	Double clevis
LC	Compact 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 822 and 825.

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

Nil	M thread	ø12 to ø25
TN	NPT	ø32 to ø50
TF	G	
F	Built-in One-touch fittings <small>Note 1)</small>	

Note 1) Bore sizes available with One-touch fittings are ø32 to ø50.

* For cylinders without auto switch, M threads are compatible only for ø32-5 mm stroke model.

Mounting bolt

Nil	None
L	Shipped together

- * Mounting bolt is shipped together only when the mounting bracket is "B".
- * For details about the mounting bolt sizes, refer to pages 822 and 825.
- * Mounting bolt is shipped together.
- * Order mounting bolts separately for made to order specifications.

Auto switch mounting groove

Z	ø12 to ø25 2 surfaces	ø32 to ø50 4 surfaces
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Body option

Nil	Standard
F	With boss on head end
M	Rod end male thread

* Combination of body options ("FM") is available.

Action

S	Single acting, Spring return
T	Single acting, Spring extend

Cylinder stroke (mm)

Refer to the next page for standard strokes.

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 the next page for details.

Rod end bracket

(Refer to pages 796 and 797.)

Nil	None
D	Simple joint A type + Joint
E	Simple joint B type + Joint
V	Single knuckle joint
W	Double knuckle joint

* The single knuckle joint and double knuckle joint cannot be mounted for the rod end female thread.

* A knuckle joint pin is not provided with the single knuckle joint.
* The simple joint A and B types cannot be mounted for the rod end male thread.
* Rod end bracket is shipped together.

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) CDQ2L32-10SZ

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)				
																5 V, 12 V	12 V
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	—	M9NV	M9N	●	●	●	○	—	○	IC circuit	Relay, PLC	
				3-wire (PNP)			M9PV	M9P	●	●	●	○	—	○			
				2-wire			M9VB	M9B	●	●	●	○	—	○			
				3-wire (NPN)			M9NwV	M9Nw	●	●	●	○	—	○			
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (PNP)	24 V	—	M9PwV	M9Pw	●	●	●	○	—	○	IC circuit	Relay, PLC	
				2-wire			M9BwV	M9Bw	●	●	●	○	—	○			
				3-wire (NPN)			M9NAV*1	M9NA*1	○	○	○	●	—	○			
				3-wire (PNP)			M9PAV*1	M9PA*1	○	○	○	●	—	○			
Water resistant (2-color indicator)	Grommet	Yes	2-wire	24 V	—	M9BAV*1	M9BA*1	○	○	○	●	—	○	IC circuit	Relay, PLC		
			3-wire (NPN)			M9BAV*1	M9BA*1	○	○	○	●	—	○				
			3-wire (PNP)			M9BAV*1	M9BA*1	○	○	○	●	—	○				
			2-wire			M9BAV*1	M9BA*1	○	○	○	●	—	○				
Read auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	24 V	—	A96V	A96	●	—	●	—	—	—	IC circuit	—	
				2-wire			A93V*2	A93	●	●	●	●	—	—			Relay, PLC
				—			A90V	A90	●	—	●	—	—	—			

*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) M9NwM
3 m L (Example) M9NwL
5 m Z (Example) M9NwZ

* 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.



CUJ
CU
CQS
JCQ
CQ2
RQ
CQM
CQU
MU

D-□
-X□
Technical Data