

# Compact Cylinder: With End Lock

# CBQ2 Series

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

## How to Order

Without auto switch

CBQ2 B 40 [ ] - 30 DC [ ] - H N - [ ]

With auto switch

CDBQ2 B 40 [ ] - 30 DC [ ] - H N - M9BW [ ] - [ ]

With auto switch  
(Built-in magnet)

Mounting

ø20, ø25

ø32 to ø100

<b>B</b>	Through-hole (Both ends tapped common (Standard))	<b>B</b>	Through-hole (Standard) <sup>Note 2)</sup>
<b>L</b>	Foot	<b>A</b>	Both ends tapped
<b>LC</b>	Compact foot	<b>L</b>	Foot
<b>F</b>	Rod flange	<b>LC</b>	Compact foot
<b>G</b>	Head flange	<b>F</b>	Rod flange
<b>D</b>	Double clevis	<b>G</b>	Head flange
		<b>D</b>	Double clevis

Note 1) Mounting brackets are shipped together (but not assembled).  
 Note 2) At the 75 and 100 mm strokes with ø80, ø100, both ends tapped (A) is the standard. Through-hole (B) is not available.  
 Note 3) Mounting brackets are shipped together (but not assembled).

Bore size

<b>20</b>	20 mm	<b>50</b>	50 mm
<b>25</b>	25 mm	<b>63</b>	63 mm
<b>32</b>	32 mm	<b>80</b>	80 mm
<b>40</b>	40 mm	<b>100</b>	100 mm

Port thread type

<b>Nil</b>	M thread	ø20, ø25
	Rc	
<b>TN</b>	NPT	ø32 to ø100
<b>TF</b>	G	

Cylinder stroke (mm)

Refer to page 932 for standard strokes and intermediate strokes.

Action

**D** Double acting

Body option

**Nil** Rod end female thread  
**M** Rod end male thread

Cushion

**C** Rubber bumper

Lock position

**H** Head end lock  
**R** Rod end lock

Number of auto switches

<b>Nil</b>	2 pcs.
<b>S</b>	1 pc.
<b>n</b>	"n" pcs.

Auto switch

**Nil** Without auto switch

\* Refer to the below table for applicable auto switches.

Manual release type

**N** Non-lock type  
**L** Lock type

Made to Order

Refer to page 932 for details.

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) CDBQ2L32-30DC-RL

Applicable Auto Switches/Refer to pages 1575 to 1701 for further information on auto switches.

Type	Special function	Electrical entry	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	3-wire (NPN)	24 V	5 V, 12 V	M9NV	M9N	●	●	●	○	○	○	IC circuit	Relay, PLC
			3-wire (PNP)		12 V	M9PV	M9P	●	●	●	○	○			
		Connector	2-wire	12 V	M9BV	M9B	●	●	●	○	○				
			—	—	J79C	—	●	●	●	○	○				
	Diagnostic indication (2-color indicator)	Yes	3-wire (NPN)	24 V	5 V, 12 V	M9N9V	M9NW	●	●	●	○	○	IC circuit		
			3-wire (PNP)		12 V	M9PWV	M9PW	●	●	●	○	○			
		Grommet	2-wire	12 V	M9B9V	M9B9	●	●	●	○	○	IC circuit			
			3-wire (NPN)	5 V, 12 V	M9NAV <sup>*1</sup>	M9NA <sup>*1</sup>	○	○	●	○	○				
			3-wire (PNP)	12 V	M9PAV <sup>*1</sup>	M9PA <sup>*1</sup>	○	○	●	○	○				
			2-wire	12 V	M9BAV <sup>*1</sup>	M9BA <sup>*1</sup>	○	○	○	○	○				
With diagnostic output (2-color indicator)	No	4-wire	5 V, 12 V	—	—	F79F	●	●	●	○	○	IC circuit			
		Magnetic field resistant (2-color indicator)	2-wire (Non-polar)	12 V	—	—	P4DW	●	●	●	○		○		
Reed auto switch	—	Grommet	3-wire (NPN equivalent)	24 V	5 V	A96V	A96	●	—	●	—	—	IC circuit	Relay, PLC	
			—		200 V	—	A72	—	A72H	●	—	●			—
		Connector	No	2-wire	12 V	100 V	A93V <sup>*2</sup>	A93	●	●	●	—	—		IC circuit
				5 V, 12 V	100 V or less	A90V	A90	●	—	●	—	—	—		
	Grommet	Yes	2-wire	24 V	12 V	—	A73C	—	●	—	●	—	IC circuit		
					5 V, 12 V	24 V or less	A80C	—	●	—	●	—			—
					—	—	A79W	—	●	—	●	—			—
					—	—	—	—	●	—	●	—			—

\*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) M9N9M  
 3 m ..... L (Example) M9N9L  
 5 m ..... Z (Example) M9N9Z  
 None ..... N (Example) J79CN

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

\* The D-P4DW type is available from ø40 to ø100 only.

\* Only for the D-P4DW type, an auto switch is assembled and shipped with the cylinder.

\* There are other applicable auto switches other than the listed above. For details, refer to page 948.

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

\* When the D-A93(V)/M93(V)/M93(V)/M93(V)/M93(V) types with ø32 to ø50 are mounted on a surface other than the port side, order auto switch mounting brackets separately. Refer to page 947 for details.