

# Compact Cylinder: Standard Type

## Double Acting, Single Rod

# CQS Series

ø12, ø16, ø20, ø25

### How to Order

**With auto switch** CQDS B 20-30 D [ ] - [ ] - [ ] - M9BW [ ] - [ ]

**With auto switch** (Built-in magnet)  
**Mounting type**  
**Bore size**  
**Number of auto switches**  
**Auto switch**  
**Body option**  
**Action**

B	Through-hole/Both ends tapped common (Standard)
L	Foot type
LC	Compact foot type
F	Rod side flange type
G	Head side flange type
D	Double clevis type

12	12 mm
16	16 mm
20	20 mm
25	25 mm

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

Nil	Without auto switch
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\* In the case of long strokes, use either ends tapped mounting or bracket mounting.  
 \* Mounting brackets are shipped together (but not assembled).  
 \* Cylinder mounting bolts are not included. Order them separately referring to "Mounting Bolt for CQS" on pages 700 and 701.

**Cylinder stroke (mm)**

Bore size	Standard stroke	Long stroke
12, 16	5, 10, 15, 20, 25, 30	35, 40, 45, 50, 75, 100, 125, 150, 175, 200
20	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	75, 100, 125, 150, 175, 200, 250, 300
25		75, 100, 125, 150, 175, 200, 250, 300

Nil	Standard
C	With rubber bumper
M	Rod end male thread
F	Boss on head end

C	With rubber bumper Rod end female thread (Standard)
CM	With rubber bumper Rod end male thread

\* Combination of body options is available. CM, FC, FM, FCM  
 \* Rubber bumper is standard equipment for long stroke type.

**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) CDQSL25-30D

**CUJ**  
**CU**  
**CQS**  
**JCQ**  
**CQ2**  
**RQ**  
**CQM**  
**CQU**  
**MU**

### 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) (M)	1 (L)	3 (Z)	5					
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit		
				3-wire (PNP)				M9PV	M9P	●	●	●	○	○			
				2-wire				M9BV	M9B	●	●	●	○	○		○	
				3-wire (NPN)				M9NVW	M9NW	●	●	●	○	○		IC circuit	
	3-wire (PNP)	M9VWV	M9PW	●	●	●	○	○	○								
	Water resistant (2-color indicator)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NAV*1	M9NA*1	○	○	●	○	○	IC circuit		
				3-wire (PNP)				M9PAV*1	M9PA*1	○	○	●	○	○			
	Magnetic field resistant (2-color indicator)	Grommet	No	2-wire	24 V	12 V	—	M9BAV*1	M9BA*1	○	○	○	○	○	—		
				2-wire (Non-polar)				—	—	●	●	●	○	○			
				3-wire (NPN equivalent)				—	5 V	—	A96V	A96	●	●		●	○
2-wire				—				24 V	12 V	100 V 100 V or less	A93V**2	A93	●	●		●	○
—	—	—	—	—	—	—	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) M9VWL

5 m..... Z (Example) M9VWZ

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

\*\* Available only for ø25.

It is mounted away from the port side to avoid interference with fittings.

\* Since there are other applicable auto switches than listed, refer to page 749 for details.

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

\* Auto switches are shipped together (not assembled).

Note) There is the case D-A9□V/M9□V/M9□VW/M9□AV type auto switches cannot be mounted on the port surface, depending on the cylinder's stroke and the fitting size for piping. Consult with SMC for details.