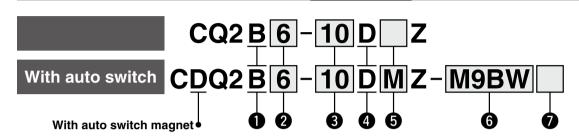
Compact Cylinder: Standard Double Acting, Single Rod CQ2 Series Ø4, Ø6, Ø10



How to Order



Mounting

Through-hole/Head end tapped

2 Bore size

4	4 mm
6	6 mm
10	10 mm

* Auto switches cannot be mounted on ø4.

3 Cylinder stroke

Bore size	Standard stroke
4, 6	5, 10
10	5, 10, 15, 20

4 Action

D	Double acting

Body option

Nil	Rod end female thread (Without thread for ø4)				
С	With rubber bumper				
М	Rod end male thread				

* Combined body options "CM" can be selected.

6 Auto switch

Nil	Without auto switch

* For applicable auto switches, refer to the table below.

Number of auto switches

Nil	2
S	1
n	n

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

Г	•	io Load voltage Aι						Auto swit	ch model	Lea	d wir	e len	ath [r	m]*2																
	Туре	Special function	Electrical entry	Indicator light	Wiring (Output)		DC .	AC	Perpendicular	In-line	0.5 (Nil)	1	3	<u> </u>		Pre-wired connector	Applic	able load												
					2 wire (NIDNI)				F8N	_	•	_	•	0	_	_														
	_		3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	—	0	IC															
	switch	_						3-wire (PNP)		12 V		F8P	_		_	•	0	_		circuit										
	Š				3-WITE (FINE)										M9PV	M9P	•	•	•	0	_	0								
						2-wire						12 V	12	12 \/	121		12 \/		12 V	12 V		F8B	_		_	•	0	_	_	
	auto		Grommet Yes	_	24 V	24 V		M9BV	M9B	•	•	•	0	_	0		Relay,													
	ige	Diagnostic indication (2-color indicator)	Diagnostic indication	Diagnostic indication	Grommet	163	3-wire (NPN)	24 V	5 V,		M9NWV	M9NW	•	•	•	0	_	0	IC	PLC										
	state					3-wire (PNP)]					12 V	12 V	12 V	M9PWV	M9PW	•	•	•	0	_	0	circuit	rcuit						
	ᅙ			(2-color indicator)	(2-color indicator)	2-wire 12 V M9BW\	M9BWV	M9BW	•	•	•	0	_	0	_															
		Motor registent	Water resistant (2-color indicator)	Mater registent	Water registant	Mater registent			3-wire (NPN)				5 V,		M9NAV*1	M9NA*1	0	0	•	0	_	0	IC							
								3-wire (PNP)]	12 V		M9PAV*1	M9PA*1	0	0	•	0		0	circuit										
		(2-color indicator)			2-wire		12 V		M9BAV*1	M9BA*1	0	0	•	0	—	0	_													

- *1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance.
- Please contact SMC regarding water-resistant types with the above model numbers. *2 Lead wire length symbols: 0.5 m ······· Nil (Example) M9N * Solid state auto switches marked with a "O" are produced upon receipt of order.

 - (Example) M9NM 3 m L (Example) M9NL
- 5 m Z (Example) M9NZ

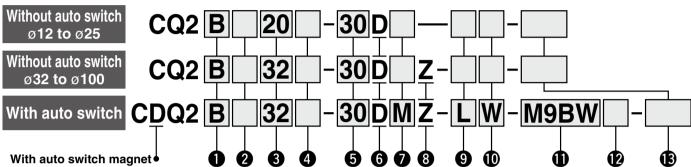
 * For 2-color indicator, use caution on hysteresis. Refer to the "Auto Switch Hysteresis" section in the **Web Catalog**.
- * For the detailed specifications of auto switches, refer to the Web Catalog.
- Auto switches are shipped together with the product but do not come assembled.

Compact Cylinder: Standard Double Acting, Single Rod

CQ2 Series

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



The overall length of the cylinder with an auto switch magnet is longer than that of the cylinder without an auto switch magnet by the length of the built-in magnet. For details, refer to the dimensions of each size.

Mounting

В	Through-hole					
Α	Both ends tapped					
L	Foot					
LC	Compact foot					
F	Rod flange					
G	Head flange					
D	Double clevis					

- * Mounting brackets are shipped together with the product but do not come assembled.
- * Refer to 9 for the through-hole type mounting bolt.
- For cylinders with mounting options "L," "LC," or "F," the cylinder rod protrusion dimensions (Dimensions L and L1) vary from the standard cylinder. When only ordering the cylinder, order the rod end length increased by 10 mm (-XC2) cylinder. For details ⇒ p. 178

2 Type

Nil	Pneumatic
Н	Air-hydro*1

*1 The bore sizes available for the air-hydro type are ø20 to ø100.

Bore size

12, 16

20, 25

32, 40

50, 63, 80, 100

3 Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	M thread	ø12 to ø25			
INII	Rc				
TN	NPT	ø32 to ø100			
TF	G				
F	Built-in	n One-touch fittings*1			

- *1 The bore sizes available with Onetouch fittings are ø32 to ø63. However. they cannot be selected for the airhydro type.
- * "TF" is not selectable for the air-hydro type.
- * For cylinders without an auto switch magnet, M threads are compatible only with ø32-5 mm stroke.

6 Action

D Double acting

5 Cylinder stroke (For details on the minimum stroke for auto switch mounting ⇒ p. 157)

[iiiii]
Standard stroke
5, 10, 15, 20, 25, 30
5, 10, 15, 20, 25, 30, 35, 40, 45, 50
5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

For long strokes exceeding the standard stroke range ⇒ p. 80

- For details on the manufacturing of intermediate strokes ⇒ p. 18
- * The bore sizes available for the air-hydro type are ø20 to ø100.

Through-hole type mounting bolt

	<u>, , , </u>
Nil	Rod end female thread
F	With boss on head end
С	With rubber bumper*1
М	Rod end male thread

Body option

- *1 The type with a rubber bumper is not selectable for the air-hydro type.
- * Combined body options, such as "FC," "FM," "FCM," and "CM" can be selected.

Auto audtob marathan anacua

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

<u> </u>	ough hold type mounting be
Nil	None
L	Shipped together

* Mounting bolt is shipped together with the product only when the mounting bracket is "B" (Through-hole). For details: Without auto switch magnet ⇒ p. 21

With auto switch magnet ⇒ p. 22

* When a made-to-order option is selected, the mounting bolt is not shipped together with the product. Please order it separately.

10 Rod end bracket (⇒ p. 34 to 36)

	· ' '						
Nil	None						
D	Type A mounting bracket + Joint						
E Type B mounting bracket + Joint							
V	Single knuckle joint						
W	Double knuckle joint						

- * Options "D" and "E" must be used in combination with body option (Nil), the rod end female thread, and options "V" and "W" must be used in combination with body option (M), the rod end male thread.
- * A knuckle pin is not provided with the single knuckle joint (V). If a pin is required, please order it separately. For details ⇒ p. 34
- * When a made-to-order option is selected, the rod end bracket cannot be selected. Please order it separately.

With End Lock
Double Acting, Single Rod
CBQ2

on specifications

Auto switch

_	
Nil	Without auto switch

* For applicable auto switches, refer to the table below.

1	Number	of	auto	switches
----------	--------	----	------	----------

	 o. aa.c	
Nil	2	
S	1	
n	n	

Made to order common specifications
For details ⇒ p. 17

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2L32-25DZ

For details on **auto switch mounting** ⇒ p. 149 to 165

- Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Proposals for Improving Water and Dust-resistance

SMC offers a wide range of models suitable for various operating environments. This includes models that can be used in environments that the basic model cannot, such as those where coolant liquid, water droplets/splashing, dust, etc., are present.

For details, refer to the Web Catalog.

- · Water-resistant cylinder
- · Cylinder with Stable Lubrication Function (Lube-retainer)
- · Dust resistant cylinder

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

	ioabio Atato Ottito		ŗ			oad volta		Auto swit		Lead	d wir	e ler	ngth	[m]															
Туре	Special function	Electrical entry	Indicate light	Wiring (Output)	С	C	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applical	ble load												
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	-	0	IC circuit													
달				3-wire (PNP)		12 V		M9PV	M9P	•	•	•	0		0	ic circuit													
switch				2-wire		12 V		M9BV	M9B	•	•	•	0	 —	0	_													
	Di	7			3-wire (NPN)	1	5 V,		M9NWV	M9NW	•	•	•	0		0	IC airerit												
anto	Diagnostic indication (2-color indicator) Gromm	Crommot	Yes	3-wire (PNP)	24 V	12 V		M9PWV M9PW	•	•	•	0	-	0	IC circuit	Relay,													
		Grommet	Grommet	ies	2-wire	24 V	24 V	24 V	24 V	24 V	24 V	24 V	12 V	_	M9BWV	M9BW	•	•	•	0	-	0	_	PLC					
state				3-wire (NPN) 3-wire (PNP)	(PNP) vire	5 V,		M9NAV*1	M9NA*1	0	0	•	0	_	0	IC circuit													
	Water resistant (2-color indicator)					0														12 V		M9PAV*1	M9PA*1	0	0	•	0	-	0
Solid	,		2	2-wire													12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0			
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_		_	P3DWA	•	_	•	•	-	0														
_ 달	Grommet		Yes	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•	_	•	_	_	_	IC circuit	_												
Reed auto switch		Grommet	Grommet	Grommet	ies	2-wire	24 V	12 V	100 V	A93V*2	A93	•			•	_	_	_	Relay,										
at							No	2-wire	24 V	5 V,12 V	100 V or less	A90V	A90	•		•			_	IC circuit	PLC								

*1 Water-resistant type auto switches can be mounted on the models on page 15, but SMC cannot guarantee water resistance.
A water-resistant type cylinder (⇒ p. 107) is recommended for use in environments which require water resistance.

(Example) M9NWZ

- *2 The 1 m lead wire is only applicable to the D-A93.
- Lead wire length symbols: 0.5 m ······· Nil (Example) M9NW
 1 m ······ M (Example) M9NWM
 3 m ····· L (Example) M9NWL

5 m Z

- * Solid state auto switches marked with a "O" are produced upon receipt of order.
- * The D-P3DWA type is only available in sizes ø25 to ø100.

There are applicable auto switches other than those listed above. For details ⇒ p. 165

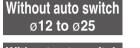
Aute

ade to Order

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 ø32 to ø100

With auto switch

CQ2WB 32 -30D Z-CQ2WB 32 -30D Z-CDQ2WB 32 -30DM Z-M9BW gnet opylinder

With auto switch magnet

The overall length of the cylinder with an auto switch magnet is longer than that of the cylinder without an auto switch magnet by the length of the built-in magnet. For details, refer to the dimensions of each size.

Mounting

В	Through-hole						
Α	Both ends tapped						
L	Foot						
LC	Compact foot						
F	Flange						

- Mounting brackets are shipped together with the product but do not come assembled.
- A through-hole type mounting bolt is available as an option.
 For details ⇒ p. 42
- * For cylinders with mounting options "L," "LC," or "F," the cylinder rod protrusion dimensions (Dimensions L and L₁) vary from the standard cylinder. When only ordering the cylinder, order the rod end length increased by 10 mm (-XC2) cylinder. For details ⇒ p. 178

2 Type

Nil	Pneumatic
Н	Air-hydro*1
. 4 Th -	la ana la s'anna anna lla la la la fan Alas

*1 The bore sizes available for the air-hydro type are ø20 to ø100.

3 Bore size

12	12 mm				
16	16 mm				
20	20 mm				
25	25 mm				
32	32 mm				
40	40 mm				
50	50 mm				
63	63 mm				
80 80 mm					
100	100 mm				

4 Port thread type

Nil	M thread	ø12 to ø25						
INII	Rc							
TN	NPT	ø32 to ø100						
TF	G							
F	Built-in One-touch fittings*1							

- *1 The bore sizes available with Onetouch fittings are ø32 to ø63. However, they cannot be selected for the airhydro type.
- * "TF" is not selectable for the air-hydro type.
- For cylinders without an auto switch magnet, M threads are compatible only with ø32-5 mm stroke.

5 Cylinder stroke (For details on the minimum stroke for auto switch mounting ⇒ p. 157)

	[mm]
Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

p. 157) **6 Action** [mm] **D** [

D Double acting

- For the manufacturing of intermediate strokes ⇒ p. 39
- * The bore sizes available for the air-hydro type are ø20 to ø100.

Body option

	- 7 - 1
Nil	Rod end female thread
C	With rubber bumper*1
M	Rod end male thread

- *1 The type with a rubber bumper is not selectable for the air-hydro type.
- * Combined body options "CM" can be selected.

8 Auto switch mounting groove

7	ø12 to ø25	2 surfaces
	ø32 to ø100	4 surfaces

Compact Cylinder: Standard Double Acting, Double Rod CQ2W Series



9 Auto switch

Nil Without auto switch

* For applicable auto switches, refer to the table below.

Nil	2
S	1
n	n

Made to order common specifications

For details ⇒ p. 39

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2WL32-25DZ

For details on auto switch mounting \Rightarrow p. 149 to 165

· Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height

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

* The D-P3DWA□ type is only available in sizes ø25 to ø100.

- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

Appi	Applicable Auto Switches / Refer to the web Catalog for further information on auto switches.																												
			tor	140	Lo	oad volta	age	Auto swit	ch model	Lead	d wir	e ler	ngth	[m]															
Туре	Special function	Electrical entry	Indicat	Wiring (Output)	D	С	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None	Pre-wired connector	Applical	ole load												
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC airearia													
등				3-wire (PNP)		12 V		M9PV	M9P	•	•	•	0	_	0	IC circuit													
switch			İ	2-wire		12 V		M9BV	M9B	•	•	•	0	_	0														
	D:		1 5			3-wire (NPN)	3-wire (NPN)		5 V,		M9NWV	M9NW	•	•	•	0	_	0	10 -114										
anto	Diagnostic indication	P-color indication Water resistant P-color indicator) Water resistant P-color indicator) Water resistant P-color indicator) Water resistant P-color indicator) Water resistant P-color indicator		3-wire (PNP)	0414	12 V		M9PWV	M9PW	•	•	•	0	_	0	IC circuit	Relay,												
	(2-color indicator)		Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	res	2-wire	24 V	12 V	_	M9BWV	M9BW	•	•	•	0	_	0		PLC
state	147		1								1				3-wire (NPN)	5 V,	7	M9NAV*1	M9NA*1	0	0	•	0	_	0	10 -11			
<u>5</u>				12 V		M9PAV*1	M9PA*1	0	0	•	0	_	0	IC circuit															
Solid	(2-color indicator)											2-wire	12	12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0						
"	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)	vire (Non-polar)			_	P3DWA	•	_	•	•	_	0	_													
뒫	,		V	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•	_	•	_	_	_	IC circuit	_												
Reed auto switch		—— Grommet Yes 2-wire 24 V 12 V 100 V AS	A93V*2	A93	•	•	•	•	_	_	_	Relay,																	
auto			No	∠-wire	∠4 V	5 V,12 V	100 V or less	A90V	A90	•	_	•	_	_	_	IC circuit	PLC												

- *1 Water-resistant type auto switches can be mounted on the models on page 37, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the model numbers on page 37.
- *2 The 1 m lead wire is only applicable to the D-A93.

* Lead wire length symbols: 0.5 m ······· Nil (Example) M9NW

1 m M (Example) M9NWM 3 m L (Example) M9NWL

5 m ······· Z (Example) M9NWZ

There are applicable auto switches other than those listed above. For details ⇒ p. 165

-7

or actano en auto en non mountain y pri rio to rec

Stant No bie Acting, Single Pod Double Acting, D

Water Resistant
De Ading Double Roff Double Acting, Single
Q2W-R/V CQ2-R/

Double Acting, Single Rod Dou

Single Acting. Spring Return External DC

Double Acting, Single Rod Sing

Auto Switch

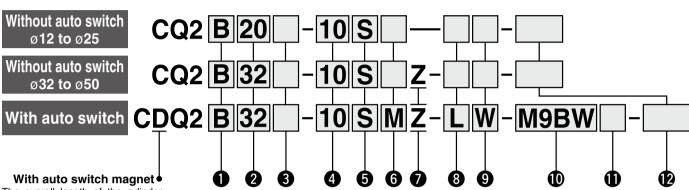
Made to

Compact Cylinder: Standard Single Acting, Single Rod

CQ2 Series

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50

How to Order



The overall length of the cylinder with an auto switch magnet is longer than that of the cylinder without an auto switch magnet by the length of the built-in magnet. For details, refer

to the dimensions of each size.

Mounting

В	Through-hole						
Α	Both ends tapped						
L	Foot						
LC	Compact foot						
F	Rod flange						
G	Head flange						
D	Double clevis						

- Mounting brackets are shipped together with the product but do not come assembled.
- * Refer to 3 for the through-hole type mounting bolt.
- * For cylinders with mounting options "L," "LC," or "F," the cylinder rod protrusion dimensions (Dimensions L and L₁) vary from the standard cylinder. When only ordering the cylinder, order the rod end length increased by 10 mm (-XC2) cylinder. For details ⇒ p. 178

4 Cylinder stroke

(For details on the minimum stroke for auto switch mounting ⇒ p. 157) [mm]

Standard stroke		
5, 10		
10, 20		

* For the manufacturing of intermediate strokes ⇒ p. 53

Auto switch mounting groove

_			J J	
7	ø12	to ø25	2 surfa	aces
	ø32	to ø50	4 surfa	aces

2 Bore size

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

3 Port thread type

Nil	M thread	ø12 to ø25					
IVII	Rc						
TN	NPT	ø32 to ø50					
TF	G						
F	Built-in One-touch fittings*1						

- *1 The bore sizes available with One-touch fittings are ø32 to ø50.
- * For cylinders without an auto switch magnet, M threads are compatible only with ø32-5 mm stroke.

6 Action

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

Through-hole type mounting bolt

<u> </u>	ough hole type infounting bol
Nil	None
L	Shipped together

- Mounting bolt is shipped together with the product only when the mounting bracket is "B" (Through-hole). For details
 ⇒ p. 56
- * When a made-to-order option is selected, the mounting bolt is not shipped together with the product. Please order it separately.

6 Body option

	· / · · · ·
Nil	Rod end female thread
F	With boss on head end
M	Rod end male thread

Combined body options "FM" can be selected.

9 Rod end bracket (⇒ p. 34 to 36)

Nil	None
D	Type A mounting bracket + Joint
Е	Type B mounting bracket + Joint
٧	Single knuckle joint
W	Double knuckle joint

- * Options "D" and "E" must be used in combination with body option (Nil), the rod end female thread, and options "V" and "W" must be used in combination with body option (M), the rod end male thread.
- * A knuckle pin is not provided with the single knuckle joint (V). If a pin is required, please order it separately.
 For details ⇒ p. 34
- When a made-to-order option is selected, the rod end bracket cannot be selected. Please order it separately.

Compact Cylinder: Standard Single Acting, Single Rod CQ2 Series



Auto switch

Without auto switch

For applicable auto switches, refer to the table below.

Number of auto switches

Nil	2
S	1
n	n

Made to order common specifications

For details \Rightarrow p. 53

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2L32-10SZ

For details on **auto switch mounting** ⇒ p. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

			tor		L	oad volt	age	Auto swit	ch model	Lead	d wir	e ler	ngth	[m]																							
Туре	Special function	Electrical entry	Indicate light	Wiring (Output)	С	C	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	INone	Pre-wired connector	Applical	ble load																				
Ę				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC circuit																					
switch				3-wire (PNP)		12 V		M9PV	M9P	•	•	•	0	—	0	IC Circuit																					
				2-wire		12 V 5 V, 24 V 12 V —	5 V,	M9BV	M9B	•	•	•	0	_	0	_																					
auto	Diagnostic indication (2-color indicator)	Grommet		3-wire (NPN)				M9NWV	M9NW	•	•	•	0	_	0	IC circuit	Dalau																				
			Yes	3-wire (PNP)	24 V			M9PWV	M9PW	•	•	•	0	_	0	io circuit	Relay, PLC																				
state				2-wire 3-wire (NPN)]								j															12 V		M9BWV	M9BW	•	•	•	0	_
<u> </u>	Water resistant (2-color indicator)				5 V,]	M9NAV*1	M9NA*1	0	0	•	0	_	0	IC circuit																						
Solid									3-wire (PNP)		12 V		M9PAV*1	M9PA*1	0	0	•	0	_	0	IC CITCUIT																
	(2-color indicator)			2-wire		12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0	_																					
itch			Yes	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•		•	_		_	IC circuit	_																				
Reed auto switch		Grommet	t res	2-wire	24 V	12 V	100 V	A93V*2	A93	•	•	•	•	_	_	_	Relay,																				
antc					No	2-wire	24 V	5 V,12 V	100 V or less	A90V	A90	•	_	•	_	_	_	IC circuit	PLC																		

- *1 Water-resistant type auto switches can be mounted on the models on page 51, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the model numbers on page 51.
- *2 The 1 m lead wire is only applicable to the D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NW

5 m Z

1 m M (Example) M9NWM 3 m L (Example) M9NWL

(Example) M9NWZ

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

* There are applicable auto switches other than those listed above. For details ⇒ p. 165

Long Stroke

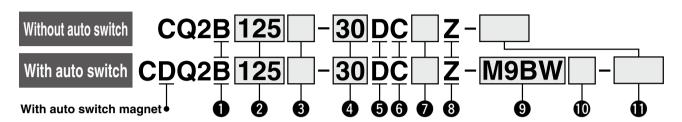
Double Acting, Double Rod

COP2 ouble Acting, Single Rod

Compact Cylinder: Large Bore Size Double Acting, Single Rod

CQ2 Series ø125, ø140, ø160, ø180, ø200

How to Order



Mounting

- B Through-hole/both ends tapped
- A through-hole type mounting bolt is available as an option. For details
 ⇒ p. 64

2 Bore size

125	125 mm
140	140 mm
160	160 mm
180	180 mm
200	200 mm

3 Port thread type

Nil	Rc
TN	NPT
TF	G

4 Cylinder stroke

(For details on the minimum st	roke for auto switch mounting 🗤 p. 145) [TTITT]
Bore size	Standard stroke
125, 140, 160 180, 200	10, 20, 30, 40, 50, 75 100, 125, 150, 175 200, 250, 300

* For the manufacturing of intermediate strokes ⇒ p. 62

5 Action

_	
D	Double acting

6	Cushion
---	---------

_	
С	Rubber bumper

7 Body option

Nil	Rod end female thread
M	Rod end male thread

8 Auto switch mounting groove 2 4 surfaces

9 Auto switch

Nil	Without auto switch

^{*} For applicable auto switches, refer to the table below.

Number of auto switches

Nil	2
S	1
n	n

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) CDQ2B140-30DCZ

Made to order common specifications

For details \Rightarrow p. 62

For details on **auto switch mounting** \Rightarrow p. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- Auto Switch Mounting Brackets/Part Nos.

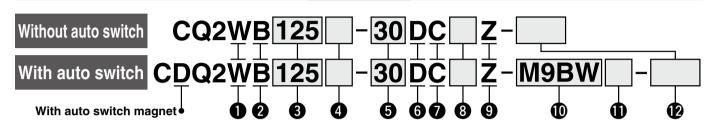
Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

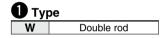
		Electrical	tor	\ \ \ (!!	Load voltage		Auto switch model		Lead wire length [m]			[m]	D																					
Туре	Special function	Electrical entry	Indicate	Wiring (Output)	С	C	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applical	ble load																	
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC circuit																		
switch				3-wire (PNP)	12 V		M9PV	M9P	•	•	•	0	-	0	ic circuit																			
Ž				2-wire		12 V		M9BV	M9B	•	•	•	0	—	0	_																		
	Diagnostic indication (2-color indicator) Water resistant	D			3-wire (NPN)		5 V,		M9NWV	M9NW	•	•	•	0	-	0	IC circuit																	
agt			t Yes	3-wire (PNP) 2-wire 24 V	, 12 V		M9PWV	19PWV M9PW	•	•	•	0	—	0	O IC CIICUII	Relay,																		
					_] L	12 V	12 V	_	M9BWV	M9BW	•	•	•	0	-	0	_	PLC															
sta				3-wire (NPN)									l	5 V,		M9NAV*1	M9NA*1	0	0	•	0	-	0	IC circuit										
.0				3-wire (PNP)	12 V	M9PAV*1	M9PA*1	0	0	•	0	-	0	ic circuit	arcuit																			
Solid	,																					2-wire		12 V		M9BAV*1	M9BA*1	0	0	•	0	-	0	
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_		_	P3DWA	•	_	•		—	0																			
_ =		Yes 3-wire (NPN equivalent) —	5 V	_	A96V	A96	•	_	•	_	-	_	IC circuit	_																				
Reed	Gromme Gromme	Grommet	ies	2-wire	24 V	12 V	100 V	A93V*2	A93	•		•	•	-	_	_	Relay,																	
			No	Z-WITE	24 V	5 V,12 V	100 V or less	A90V	A90	•			_	-	_	IC circuit	PLC																	

- *1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the above model numbers.
- *2 The 1 m lead wire is only applicable to the D-A93.
- * Lead wire length symbols: 0.5 m ······· Nil (Example) M9NW
 - 1 m ······· M (Example) M9NWM 3 m ······ L (Example) M9NWL
 - 5 m ······· Z (Example) M9NWZ
- * Solid state auto switches marked with a "O" are produced upon receipt of order.
- * There are applicable auto switches other than those listed above. For details ⇒ p. 165

Compact Cylinder: Large Bore Size Double Acting, Double Rod CQ2V Series Ø125, Ø140, Ø160, Ø180, Ø200

How to Order





2 Mounting

B Through-hole/both ends tapped

* A through-hole type mounting bolt is available as an option. For details ⇒ p. 70

3 Bore	size
---------------	------

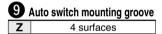
125	125 mm
140	140 mm
160	160 mm
180	180 mm
200	200 mm

4 Port thread type

	71
Nil	Rc
TN	NPT
TF	G

5 Cylinder stroke	For details on the minimum stroke for auto switch mounting \Rightarrow p. 157) $[mm]$
Bore size	Standard stroke
125, 140, 160	10, 20, 30, 40, 50, 75, 100, 125

For the manufacturing of intermediate strokes ⇒ p. 68



1	Auto	switch
----------	------	--------

150, 175, 200, 250, 300

Nil	Without auto switch

For applicable auto switches, refer to the table below.

Number of auto switches

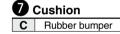
Nil	2
S	1
n	n

table below.		

Made to order common specifications
For details ⇒ p. 68

6 Action 8 Body option

Double acting	Nil	Rod end female thread
	M	Rod end male thread



Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) CDQ2WB140-30DCZ

For details on auto switch mounting \Rightarrow p. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

		Electrical entry	tor	145	Le	oad volta	age	Auto swit	ch model	Lead wire length [m]			[m]	D																				
Туре	Special function		Indicate light	Wiring (Output)	D	С	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applical	ole load																	
				3-wire (NPN)		5 V, 12 V	M9NV	M9N	•	•	•	0	_	0	IC circuit																			
달				3-wire (PNP)				M9PV	M9P	•	•	•	0	_	0	ic circuit																		
switch				2-wire				M9BV I	M9B	•	•	•	0	_	0	_																		
	Diagraphia indication			3-wire (NPN)		5 V,		M9NWV	M9NW	•	•	•	0	_	0	IC circuit																		
anto	Diagnostic indication (2-color indicator)		Vaa	3-wire (PNP)		12 V		M9PWV	M9PW	• (•	•	0 -	_	0	ic circuit	Relay,																	
	(2-color indicator)		Yes	3-wire (NPN) 3-wire (PNP) 2-wire	12 V	_	M9BWV	M9BW	•	•	•	0	_	0	— PLC	PLC																		
state	\\/		1 1		-	4 1	-		5 V,		M9NAV*1	M9NA*1	0	0	•	0	_	0	IC circuit															
<u> </u>	Water resistant (2-color indicator)								ĺ	ł							l	l	ı									12 V		M9PAV*1	M9PA*1	0	0	•
Solid	` ′					12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0																			
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_		_	P3DWA	•	_	•	•	_	0	7 -																		
Reed auto switch		V-	Yes	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•	_	•	-	_	_	IC circuit	_																	
		Grommet	ies	2 wire	24.1/	12 V	100 V	A93V*2	A93	•	•	•	•	_	_	_	Relay,																	
						No	2-wire	24 V	5 V,12 V	100 V or less	A90V	A90	•	_	•	—	_	_	IC circuit	PLC														

- *1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the above model numbers.
- *2 The 1 m lead wire is only applicable to the D-A93.
- * Lead wire length symbols: 0.5 m ······· Nil (Example) M9NW

1 m ······· M (Example) M9NWM

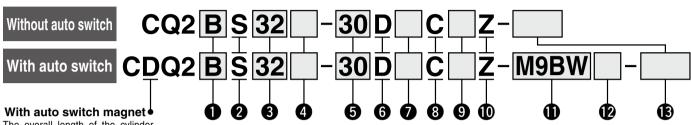
3 m ······· L (Example) M9NWL 5 m ······ Z (Example) M9NWZ st Solid state auto switches marked with a "O" are produced upon receipt of order.

* There are applicable auto switches other than those listed above. For details ⇒ p. 165

Compact Cylinder: Anti-lateral Load

CQ2 S Series ø32, ø40, ø50, ø63, ø80, ø100

How to Order



The overall length of the cylinder with an auto switch magnet is longer than that of the cylinder without an auto switch magnet by the length of the built-in magnet. For details, refer to the dimensions of each size.

Mounting

В	Through-hole
Α	Both ends tapped
L	Foot
LC	Compact foot
F	Rod flange
G	Head flange
D	Double clevis

- * Mounting brackets are shipped together with the product but do not come assembled.
- A through-hole type mounting bolt is available as an option.
 For details ⇒ p. 77
- * For cylinders with mounting options "L," "LC," or "F," the cylinder rod protrusion dimensions (Dimensions L and L₁) vary from the standard cylinder. When only ordering the cylinder, order the rod end length increased by 10 mm (-XC2) cylinder. For details ⇔ p. 178

2 Туре

<u> </u>	.
S	Anti-lateral load

3 Bore size

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

4 Port thread type

Nil	Rc
TN	NPT
TF	G
F	Built-in One-touch fittings*1

*1 The bore sizes available with Onetouch fittings are ø32 to ø63.

5 Cylinder stroke (For details on the minimum stroke for auto switch mounting ⇒ p. 157) [mm]

Bore size	Standard stroke
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

* For the manufacturing of intermediate strokes \Rightarrow p. 75

6 Action

D	Double acting

_			

O	Auto switch mounting groove
Z	4 surfaces

Body option 1

N	il	Standard			
F		With boss on head end			

8 Cushion					
С	Rubber bumper				

9	Body	option	2
NI:		Dadasal	4.

	.,
Nil	Rod end female thread
М	Rod end male thread

Auto switch

Nil	Without auto switch				
_	P 11 1 2 1				

For applicable auto switches
 ⇒ p. 74

Number of auto switches

Nil	2
S	1
n	n

Made to order common specifications
For details ⇒ p. 75

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2LS40-30DCZ

Compact Cylinder: Anti-lateral Load CQ2 Series



For details on **auto switch mounting** \Rightarrow p. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

	ioabio riato otrito		<u> </u>			oad volta		Auto swit		Lead	l wir	o lor	ath	[m]																																		
Туре	Special function	Electrical entry	Indicato	Wiring (Output)		C		Perpendicular	In-line	0.5 (Nil)	1	3	5	None		Applical	ble load																															
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC airauit																																
당				3-wire (PNP)	ire (NPN) (PNP) (PNP) (PNP) (NPN)	12 V 12 V 5 V,		M9PV	M9P	•	•	•	0	_	0	IC circuit																																
switch				2-wire				M9BV	M9B	•	•	•	0	_	0	_																																
	Diagnostic indication (2-color indicator) Gromme	- to alternation		3-wire (NPN) 3-wire (PNP)				VWN6W	M9NW	•	•	•	0	_	0	IC circuit																																
state aut		Crammat	Vaa			24 V	12 V		M9PWV	M9PW	•	•	•	0	_	0	Re	Relay,																														
		Grommet	3	2-wire																																	24 V	24 V	12 V	_	M9BWV	M9BW	•	•	•	0	_	0
	\Matau vaaiatamt			3-wire (NPN)																																		5 V,		M9NAV*1	M9NA*1	0	0	•	0	_	0	IC oirouit
<u>p</u>	Water resistant (2-color indicator)			3-wire (PNP)		12 V	M9PA	M9PAV*1	M9PA*1	0	0	•	0	_	0	IC circuit																																
Solid	,						2-wire				12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0																												
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_			P3DWA	•	_	•	•	_	0	_																																
itch			Yes	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•	_	•	_	_	_	IC circuit	_																															
Reed auto switch	—— Grommet	Grommet	Grommet No	2-wire 24 \	04.1/	12 V	100 V	A93V*2	A93	•	•	•	•	_	_		Relay,																															
antc					24 V	5 V,12 V	100 V or less	A90V	A90	•	_	•	_	_	_	IC circuit	PLC																															

- *1 Water-resistant type auto switches can be mounted on the models on page 73, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the model numbers on page 73.
- *2 The 1 m lead wire is only applicable to the D-A93.

* Lead wire length symbols: 0.5 m Nil	(Example) M9NW	* Solid state auto switches marked with a "O" are produced upon receipt of order.
1 m M	(Example) M9NWM	
3 m L	(Example) M9NWL	
5 m 7	(Example) M9NW7	

* There are applicable auto switches other than those listed above. For details ⇒ p. 165

CQ2

Standard
Souble Adring, Double Rod
CQ2W

Singe Acting Spring ReturnE)

drig, Double Rod Double Acting,

Double Acting, Single Rod Dou

Double Acting, Single Rod

Double Acting, Single Rod

N CQ2KW

Rod Double Acting Double Rod CO2W-R/V CQ2-R/

g, Sprig ReumEdend Double Acting, Si

With End Lock | | Double Acting, Single Rod | Sin CBQ2

> Auto Switch

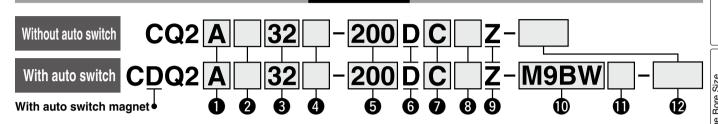
Made to Order

Compact Cylinder: Long Stroke Double Acting, Single Rod

CQ2 Series

Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



Mounting

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

Mounting brackets are shipped together with the product but do not come assembled

2 Type

Nil	Pneumatic
Н	Air-hydro

3 Bore size

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

*1 The bore sizes available with One-touch fittings are ø32 to ø63. However, they cannot be selected for the air-hydro type. * "TF" is not selectable for the air-hydro type.

Port thread type

Rc

NPT

G Built-in One-touch fittings*1

5 Cylinder stroke

(For details on the minimum stroke for auto switch mounting \Rightarrow p. 157) [mm]

ioi aato oiiitoii iiiot	21.1di.19 / pr 101/[
Bore size	Standard stroke
32, 40, 50	125, 150, 175
63, 80, 100	200, 250, 300

For the manufacturing of intermediate strokes ⇒ p. 81

6 Action

Auto switch

D Double acting
Double acting

Cushion

Nil	Without rubber bumper
С	With rubber bumper

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

Number of auto switches

8 Body option

Nil

ΤN

TF

Nil	Rod end female thread
M	Rod end male thread

Auto switch mounting groove 4 surfaces

Cylinder Model with Auto Switch Magnet If a cylinder with an auto switch magnet and without an auto switch

is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2L40-200DCZ

Without auto switch Nil S

For applicable auto switches, refer to the table below.

n

Made to order common specifications For details \Rightarrow p. 81

For details on auto switch mounting pp. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches

Thhi	Applicable Auto Owneries / heler to the web catalog for further information on auto switches.																		
		-	tor	140	L	oad volta	age	Auto swit	ch model	Lea	d wir	e lei	ngth	[m]				П	
Type	Special function	Electrical entry	Indicator	Wiring (Output)	D	C	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applical	ble load		
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	 —	0	IC airerit			
달				3-wire (PNP)		12 V		M9PV	M9P	•	•	•	0	 —	0	IC circuit			
switch				2-wire		12 V		M9BV	M9B	•	•	•	0	_	0	_			
0	Dia ana a sala in alia sala a			3-wire (NPN)		5 V,		M9NWV	M9NW	•	•	•	0	_	0	IC circuit			
anto	Diagnostic indication (2-color indicator)	C ====================================	V	3-wire (PNP)	24 V	12 V		M9PWV	M9PW	•	•	•	0	-	0	ic circuit	Relay,		
	(2-color indicator)	Grommet	res	2-wire	24 V	12 V	-	M9BWV	M9BW	•	•	•	0	_	0	_	PLC		
state	10/-1			3-wire (NPN)		5 V,		M9NAV*1	M9NA*1	0	0	•	0	-	0	IC airerit			
<u>.</u>	Water resistant (2-color indicator)			3-wire (PNP)		12 V		M9PAV*1	M9PA*1	0	0	•	0	-	0	IC circuit			
Solid	(2-color indicator)			2-wire		12 V		M9BAV*1	M9BA*1	0	0	•	0	-	0			٦	
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)			_		_	P3DWA	•	_	•	•	-	0			
듇			Yes	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•	_	•	-	-	_	IC circuit	_		
Reed auto switch		Grommet	res		24 V	12 V	100 V	A93V*2	A93	•	•	•	•	-	_	_	Relay,		
aft —			No	2-wire	24 V	5 V,12 V	100 V or less	A90V	A90	•	_		—	-	_	IC circuit	PLC	Ιl	

- *1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the above model numbers.
- *2 The 1 m lead wire is only applicable to the D-A93
- * Lead wire length symbols: 0.5 m Nil (Example) M9NW (Example) M9NWM 1 m M
 - 3 mL (Example) M9NWL 5 m Z (Example) M9NWZ
- * Solid state auto switches marked with a "O" are produced upon receipt of order.

There are applicable auto switches other than those listed above. For details ⇒ p. 165

CQ2W-R/V CQ2-R/V

CQ2KW

Double Acting, Single Rod

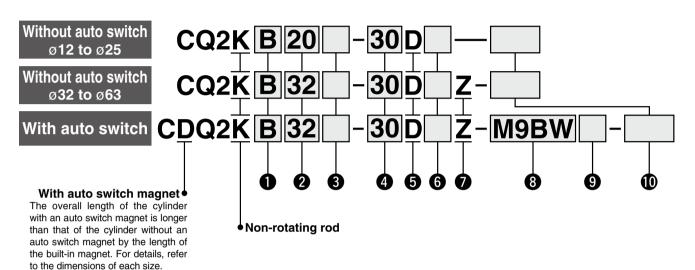
Auto Switch

Made to Order

Compact Cylinder: Non-rotating Rod Double Acting, Single Rod CQ2K Series

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63

How to Order



1 Mounting

В	Through-hole	ø12 to ø63
Α	Both ends tapped	
L	Foot	
LC	Compact foot	~40 ~E0 ~G2
F	Rod flange	ø40, ø50, ø63
G	Head flange	
D	Double clevis	

- Mounting brackets are shipped together with the product but do not come assembled.
- A through-hole type mounting bolt is available as an option. For details:

Without auto switch magnet ⇒ p. 89 With auto switch magnet ⇒ p. 90

* For cylinders with mounting options "L," "LC," or "F," the cylinder rod protrusion dimensions (Dimensions L and L₁) vary from the standard cylinder. When only ordering the cylinder, order the rod end length increased by 10 mm (-XC2) cylinder.

For details ⇒ p. 178

2 Bore size

12* ¹	12 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

*1 When ø12 with auto switch magnet is required, the body option should be with rubber bumper (C).

Example) CDQ2KB12-30DCZ

3 Port thread type

Nil	M thread	ø12 to ø25						
INII	Rc							
TN	NPT	ø32 to ø63						
TF	G							
F	Built-in One-touch fittings*1							

- *1 The bore sizes available with One-touch fittings are ø32 to ø63.
- For cylinders without an auto switch magnet, M threads are compatible only with ø32-5 mm stroke.

4 Cylinder stroke

(For details on the minimum stroke for auto switch mounting ⇒ p. 157)							
Bore size	Standard stroke						
12, 16	5, 10, 15, 20, 25, 30						
20, 25	5, 10, 15, 20, 25, 30, 35 40, 45, 50						
32, 40	5, 10, 15, 20, 25, 30, 35 40, 45, 50, 75, 100						
50, 63	10, 15, 20, 25, 30, 35, 40 45, 50, 75, 100						

* For the manufacturing of intermediate strokes ightharpoons p. 87

5 Action

D	Double acting
_	Double deting

6 Body option

Nil	Rod end female thread
F	With boss on head end
С	With rubber bumper (ø12 with auto switch magnet only)
M	Rod end male thread

* Combined body options "FM" can be selected.

Compact Cylinder: Non-rotating Rod Double Acting, Single Rod CQ2K Series



Auto switch mounting groove

		.9 9
7	ø12 to ø25	2 surfaces
	ø32 to ø63	4 surfaces

8 Auto switch

to the table below.

	Nil Without auto swite					
*	For an	onlicable auto switches refe				

9 Number of auto switches

	Nil	2
	S	1
	n	n

Made to order common specifications

For details ⇒ p. 87

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2KB32-30DZ

For details on **auto switch mounting** ⇒ p. 149 to 165

- \cdot Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the **Web Catalog** for further information on auto switches.

<u> Thhi</u>	Applicable Auto Switches / herer to the web catalog for further information on auto switches.																	
			tor	140.	Le	oad volta	age	Auto swit	ch model	Lea	d wir	e ler	ngth	[m]				
Туре	Special function	Electrical entry	Indicator light	Wiring (Output)	D	С	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applical	ole load	
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC circuit		
당				3-wire (PNP)		12 V		M9PV	M9P	•	•	•	0		0	ic circuit		
switch				2-wire		12 V		M9BV	M9B	•	•	•	0	_	0	_		
	D			3-wire (NPN)		5 V,	1	M9NWV	M9NW	•	•	•	0	<u> </u>	0	IC airearia		
anto	Diagnostic indication	Crommot	V	3-wire (PNP)	24 V	04.7/ 12	12 V		M9PWV	M9PW	•	•	•	0	_	0 "	IC circuit	Relay,
	(2-color indicator)	Grommet	res	2-wire	24 V	12 V	1 —	M9BWV	M9BW	•	•	•	0	_	0		PLC	
state	\\/			3-wire (NPN)		5 V,	1	M9NAV*1	M9NA*1	0	0	•	0	_	0	IC airearia		
<u>.</u>	Water resistant (2-color indicator)			3-wire (PNP)		12 V		M9PAV*1	M9PA*1	0	0	•	0	_	0	IC circuit		
Solid	,			2-wire		12 V	1	M9BAV*1	M9BA*1	0	0	•	0	_	0			
0,	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_		_	P3DWA	•	_	•	•	_	0	_		
뒫			V	3-wire (NPN equivalent)	_	5 V	_	A96V	A96	•	_	•	_	_	_	IC circuit	_	
Reed auto switch		Grommet	Yes		24 V	12 V	100 V	A93V*2	A93	•	•	•	•	_	_	_	Relay,	
ante			No	2-wire	24 V	5 V,12 V	100 V or less	A90V	A90	•	_	•	_	<u> </u>	_	IC circuit	PLC	

- *1 Water-resistant type auto switches can be mounted on the models on page 85, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the model numbers on page 85.
- *2 The 1 m lead wire is only applicable to the D-A93.

* Lead wire length symbols: 0.5 m Nil (Example) M9NW

1 m ······· M (Example) M9NWM

3 m ······· L (Example) M9NWL 5 m ······ Z (Example) M9NWZ

- * Solid state auto switches marked with a "O" are produced upon receipt of order.
- * The D-P3DWA□ type is only available in sizes ø25 to ø63.

* There are applicable auto switches other than those listed above. For details ⇒ p. 165

Double Acting, Single

Double Acting, Double Ro

Single Acting Spring ReturnE CQ2

Large Bore Siz

Anti-lateral Load
Double Acting, Single Rod
CQ2 S

Long Stroke
Double Acting, Single Rod

Type Depth Section 19 Programme Prog

Vater Resistant

Double Rod Double Acting, Single Rod Double

-R/V CQ2-R/V CO

Event Double Acting, Single Rod Couble A

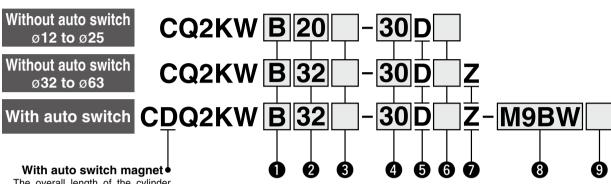
ouble Acting, Single Rod Single, CBQ2

Auto Switch

Nade to Order

Compact Cylinder: Non-rotating Rod Double Acting, Double Rod CQ2KW Series Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63

How to Order



The overall length of the cylinder with an auto switch magnet is longer than that of the cylinder without an auto switch magnet by the length of the built-in magnet. For details, refer to the dimensions of each size.

Mounting 1

В	Through-hole	ø12 to ø63
Α	Both ends tapped	
L	Foot	ø40 to ø63
LC	Compact foot	Ø40 t0 Ø63
F	Flange	

- * Mounting brackets are shipped together with the product but do not come assembled.
- * A through-hole type mounting bolt is available as an option. For details: Without auto switch magnet ⇒ p. 101
- * For cylinders with mounting options "L," "LC," or "F," the cylinder rod protrusion dimensions (Dimensions L and L₁) vary from the standard cylinder. When only ordering the cylinder, order the rod end length increased by 10 mm (-XC2) cylinder. For details \Rightarrow p. 178

2 Bore size

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

3 Port thread type

Nil	M thread	ø12 to ø25		
INII	Rc			
TN	NPT	ø32 to ø63		
TF	G			
F	Built-in One-touch fittings*1			

- *1 The bore sizes available with One-touch fittings are ø32 to ø63.
- For cylinders without an auto switch magnet, M threads are compatible only with ø32-5 mm stroke.

Cylinder stroke

(For details on the minin	num stroke for auto switch mounting 🖒 p. 157) [mm
Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35 40, 45, 50, 75, 100
50, 63	10, 15, 20, 25, 30, 35, 40 45, 50, 75, 100

For the manufacturing of intermediate strokes ⇒ p. 99

\mathbf{U}	Action
D	Double acting

6 Body option

_	
Nil	Rod end female thread
С	With rubber bumper
C	(ø12 with auto switch magnet only)
M	Rod end male thread

Auto switch mounting groove

7	ø12 to ø25	2 surfaces
	ø32 to ø63	4 surfaces

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) CDQ2KWB32-30DZ

8 Auto switch

Nil Without auto switch

* For applicable auto switches, refer to the next page.

Number of auto switches

Nil	2
S	1
n	n

Compact Cylinder: Non-rotating Rod Double Acting, Double Rod CQ2KW Series



For details on **auto switch mounting** \Rightarrow p. 149 to 165

· Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height

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

* The D-P3DWA□ type is only available in sizes ø25 to ø63.

- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

		Flootwicel	tor	\A/:i	L	oad volta	age	Auto swit	ch model	Lead	l wir	e ler	ngth	[m]	Due suived																									
Туре	Special function	Electrical entry	Indicate	Wiring (Output)	С	C	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	Pre-wired connector	Applical	ble load																							
_				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC circuit																								
switch		ostic indication olor indicator) Grommet Yes			3-wire (PNP)		12 V		M9PV	M9P	•	•		0	_	0	io circuit																							
, Š					2-wire	12 V		M9BV	M9B	•	•	•	0	_	0																									
	Diagnostic indication										3-wire (NPN)	5 V,		M9NWV	M9NW	•		•	0	_	0	IC circuit																		
auto			Vaa	3-wire (PNP)	24 V	12 V		M9PWV	M9PW	•	•	•	0	_	0	io circuit	Relay,																							
			Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	Grommet	162	2-wire										24 V	24 V	24 V	24 V	27 V	24 V	27 V	24 V	12 V	_	M9BWV	M9BW	•		•	0	_	0		PLC
state	Water resistant	Water resistant (2-color indicator)								3-wire (NPN)	-										5 V,		M9NAV*1	M9NA*1	0	0	•	0	_	0	IC circuit									
_ <u>⊡</u>									3-wire (PNP)]																														
Solid	,			2-wire	2-wire		12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0																								
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_			P3DWA	•	_	•	•	_	0																									
_ 달		3-wire	5 V	_	A96V	A96	•	_	•	_	_	_	IC circuit	_																										
Reed auto switch			Grommet res	2-wire	24 V	12 V	100 V	A93V*2	A93	•	•	•	•	_	_	_	Relay,																							
at _			No	Z-WIFE	24 V	5 V,12 V	100 V or less	A90V	A90	•	_	•	_	_	_	IC circuit	PLC																							

- *1 Water-resistant type auto switches can be mounted on the models on page 97, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the model numbers on page 97.
- *2 The 1 m lead wire is only applicable to the D-A93.
- * Lead wire length symbols: 0.5 m ······· Nil (Example) M9NW

1 m ······ M (Example) M9NWM

3 m ······ L (Example) M9NWL

- 5 m ······· Z (Example) M9NWZ
- * There are applicable auto switches other than those listed above. For details \Rightarrow p. 165

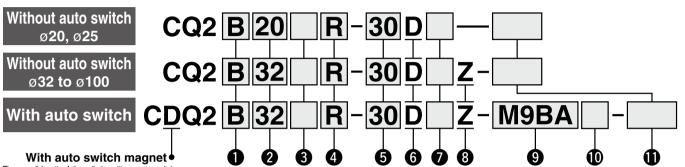
COP2

Compact Cylinder: Water Resistant Double Acting, Single Rod

CQ2-R/V Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



The overall length of the cylinder with an auto switch magnet is longer than that of the cylinder without an auto switch magnet by the length of the built-in magnet. For details, refer to the dimensions of each size.

Mounting

В	Through-hole	(ø20 to ø100)
Α	Both ends tapped	
L	Foot	
LC	Compact foot	(ø40 to ø100)
F	Rod flange	(040 (0 0 100)
G	Head flange	
D	Double clevis	

- Mounting brackets are shipped together with the product but do not come assembled.
- * A through-hole type mounting bolt is available as an option. For details 🖒 p. 110

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

3 Port thread type

Nil	M thread
INII	Rc
TN	NPT
TF	G

4 Water-resistant cylinder

_	
R	NBR seal (Nitrile rubber)
٧	FKM seal (Fluororubber)

5 Cvlinder stroke (For details on the minimum stroke for auto switch mounting □ p. 157) [mm]

<u> </u>	- (- · · · · · · · · · · · · · · · · ·
Bore size	Standard stroke
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

For the manufacturing of intermediate strokes ⇒ p. 108

6 Action

D Double acting

7 Body option

Nil	Rod end female thread
M	Rod end male thread

Auto switch mounting groove

7	ø20 to ø25	2 surfaces
~	ø32 to ø100	4 surfaces

9 Auto switch

7.00	
Nil	Without auto switch

* For applicable auto switches, refer to the table below.

Number of auto switches

•						
Nil	2					
S	1					
n	n					

Made to order common specifications

For details \Rightarrow p. 108

For details on auto switch mounting \Rightarrow p. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2B32R-25DMZ

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches

	J.P.P.	TOURIO / LUITO O ITILI	7 1101	<u>υ. ι</u>	o tilo trob out	uiog ioi	Tartifor I	monnati	on on auto	O 111101100.							
	Type Special function		Ele et de el	to.	\A(!:::!:= =:	Lo	ad volta	ge	Auto swit	ch model	Lead	wire l	ength	[m]	Due suine d		
-			Electrical entry	Indicato	Wiring (Output)	D	С	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)		Pre-wired connector	Applicable load	
	d state switch				3-wire (NPN)		5 V,		M9NAV	M9NA	0	0	•	0	0	IC circuit	.
id st	(2-color indicator)	Water resistant (2-color indicator) Grommet	Yes	3-wire (PNP)	(PNP) 24 V	12 V	_	/ _	M9PAV	M9PA	0	0	•	0	0	Cilcuit	Relay, PLC
Solid auto s				2-wire		12 V		M9BAV	M9BA	0	0	•	0	0		1 20	

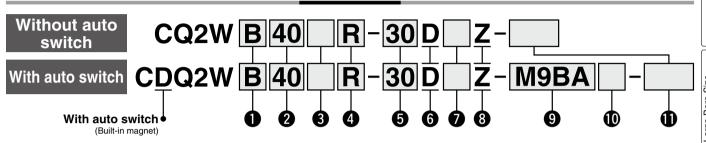
^{*} Lead wire length symbols: 0.5 m Nil (Example) M9BA 1 m ······ M (Example) M9BAM

3 m L (Example) M9BAL 5 m ······ Z (Example) M9BAZ

^{*} Solid state auto switches marked with a "O" are produced upon receipt of order.

Compact Cylinder: Water Resistant Double Acting, Double Rod CQ2W-R/V Series Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



Mounting

В	Through-hole				
Α	Both ends tapped				
L	Foot				
LC	Compact foot				
F	Rod flange				

- * Mounting brackets are shipped together with the product but do not come assembled.
- * A through-hole type mounting bolt is available as an option. For details ⇒ p. 119

6 Action

D	Double acting
	Double deling

9 Auto switch

Nil	Without auto switch

For applicable auto switches, refer to the table below.

2 Bore size

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

Port thread type

	Nil	M thread
	INII	Rc
	TN	NPT
	TF	G

49 Water-resistant cylinder

	_	irator roototarit oyiiraoi
	R	NBR seal (Nitrile rubber)
	٧	FKM seal (Fluororubber)

Cylinder stroke [mm]

For standard strokes ⇒ p. 117

Body option ø40 to ø100

Nil	Rod end female thread
M	Rod end male thread

10 Number of auto switches

•	
Nil	2
S	1
n	n

Auto switch mounting groove

Made to order common specifications

For details on auto switch mounting p. 149 to 165

- · Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQ2B40R-50DMZ

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

		Electrical	tor '	\A (!!	Lo	ad volta	ge	Auto swit	ch model	Lead	wire l	ength	[m]	D			
Туре	Special function	Electrical entry	Indicate light	Wiring (Output)	D	С	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)		Pre-wired connector	Applicat	ole load	
ate itch				3-wire (NPN)		5 V,		M9NAV	M9NA	0	0	•	0	0	IC circuit		
Solid state auto switch	Water resistant (2-color indicator)	Grommat Mac 3	3-wire (PNP)	24 V	12 V	—	M9PAV	М9РА	0	0	•	0	0	Concuit	Relay, PLC	Н	
aft So	(2-color indicator)			2-wire		12 V		M9BAV	M9BA	0	0	•	0	0		1 20	Н

- * Lead wire length symbols: 0.5 m Nil (Example) M9BA
 - 1 m M (Example) M9BAM 3 m L (Example) M9BAL 5 m Z (Example) M9BAZ
- * Solid state auto switches marked with a "O" are produced upon receipt of order.

COP2

Long Stroke

CQ2KW

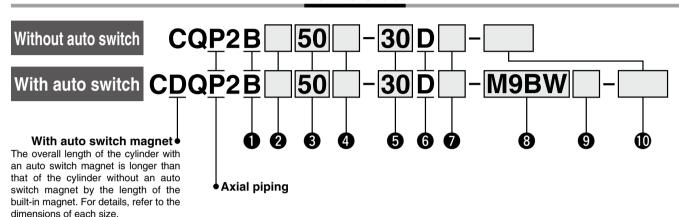
Double Acting, Single Rod CQ2-R/V

Compact Cylinder: Axial Piping Double Acting, Single Rod

CQP2 Series

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

How to Order



Mounting

В	Through-hole

* A through-hole type mounting bolt is available as an option. For details \Rightarrow p. 127

О турс							
Nil	Pneumatic						
Н	Air-hydro*1						

*1 The bore sizes available for the air-hydro type are ø20 to ø100.

3 Bore size

O D O I O O I D O					
12	12 mm				
16	16 mm				
20	20 mm				
25	25 mm				
32	32 mm				
40	40 mm				
50	50 mm				
63	63 mm				
80	80 mm				
100	100 mm				

4 Port thread type

	Nii	M thread	ø12 to ø25				
	INII	Rc					
ĺ	TN	NPT	ø32 to ø100				
	TF	G					

5 Cylinder stroke (For details on the minimum stroke for auto switch mounting \Rightarrow p. 157)

		[mm]	
Bore size Standard stroke			
12, 16	5, 10, 15, 20, 25, 30		
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50		
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100		
50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100		

- For the manufacturing of intermediate strokes ⇒ p. 125
- * The bore sizes available for the air-hydro type are ø20 to ø100.

7 Body option						
Nil	Rod end female thread					
С	With rubber bumper*1					
М	Rod end male thread					

- *1 The type with a rubber bumper is not selectable for the air-hydro type.
- Combined body options "CM" can be selected.

8 Auto switch

	Nil	Without auto switch					
* For applicable auto switch							

🖒 p. 124

6 Action

_	
D	Double acting

9	Nu	mber	of	auto	switches	

Nil	2
S	1
n	n

Made to order common specifications

Compact Cylinder: Axial Piping Double Acting, Single Rod CQP2 Series



Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQP2B32-30D

For details on **auto switch mounting** \Rightarrow p. 149 to 165

- \cdot Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.

<u> </u>	Applicable Auto Switches / Refer to the Web Catalog for further information on auto switches.																		
		Electrical	ţţ.	Wiring	Load voltage			Auto swit	ch model	Lead wire length [Pre-wired				
Type	Type Special function	entry	Indicator light	(Output)	DC		AC	Perpendicular In-line		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)	connector	Applica	ble load		
				3-wire (NPN)		5 V,		M9NV	M9N	•			0	—	0	IC circuit			
switch		Grommet		3-wire (PNP)		12 V		M9PV	M9P	•			0	_	0	ic circuit			
				2-wire		12 V		M9BV	M9B	•			0	_	0				
		Connector		2-WIIE		12 V		J79C	_	•	-			•	_				
uto 8	Diagnostic indication			3-wire (NPN)		5 V,		M9NWV	M9NW	•			0	_	0	IC circuit			
art	(2-color indicator)		Yes	3-wire (PNP)	24 V	24 V 12 V — — 5 V,		M9PWV	M9PW	•	•	•	0	—	0	io circuit	Relay,		
후	(2-color indicator)		169	2-wire			_	M9BWV	M9BW	•	•	•	0	_	0	_	PLC		
state	Water resistant	Grommet		3-wire (NPN)				M9NAV*1	M9NA*1	0	0	•	0	_	0	IC circuit			
멸	(2-color indicator)			3-wire (PNP) 2-wire				12 V		M9PAV*1	M9PA*1	0	0	•	0	_	0	10 Circuit	
Solid	,						12 V		M9BAV*1	M9BA*1	0	0	•	0	_	0	_		
	With diagnostic output (2-color indicator)			4-wire		5 V, 12 V		_	F79F	•	<u> — </u>	•	0	_	0	IC circuit			
	Magnetic field resistant (2-color indicator)			2-wire (Non-polar)		_			P4DW	_	-	•	•	_	0	_			
듯				3-wire (NPN equivalent)		5 V	_	A96V	A96	•	<u> —</u>		_	_	_	IC circuit	_		
switch		Grommet	Yes			_	200 V	A72	A72H	•	<u> —</u>	•	_	_	_	_			
		aronninet				12 V	100 V	A93V*2	A93	•	•	•		_	_				
anto			No	2-wire		5 V, 12 V	100 V or less	A90V	A90	•	<u> — </u>	•	_	_	_	IC circuit	Relay,		
ā		Connector	Yes	2-44116	24 V	12 V	_	A73C	_	•	<u> — </u>	•	•	•	_	_	PLC		
Reed		Cominector	No			5 V, 12 V	24 V or less	A80C	_	•	-			•	_	IC circuit			
Œ	Diagnostic indication (2-color indicator)	Grommet	Yes			_	_	A79W	_	•	-	•	_		_	_			

- *1 Water-resistant type auto switches can be mounted on the models on page 123, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the model numbers on page 123.
- *2 The 1 m lead wire is only applicable to the D-A93.
- * Lead wire length symbols: 0.5 m Nil (Example) M9NW
 - 1 m ······ M (Example) M9NWM
 - 3 m ······ L (Example) M9NWL
 - 5 m ······ Z (Example) M9NWZ
 - None N (Example) J79CN
- * Solid state auto switches marked with a "O" are produced upon receipt of order.
- $\ast\,$ The D-P4DW type is only available in sizes ø40 to ø100.
- * Only for the D-P4DW type, an auto switch is assembled and shipped with the cylinder.
- * There are applicable auto switches other than those listed above. For details ⇒ p. 165

CQ2

Startidard
Subje Ading, Double Rod
CQ2W

nge Ading Sping RetumEnts CQ2

uble Rod Double Acting, Single

Anti-lateral Load

Double Acing, Single Rod

CQ2 S

Long Stroke

Double Acting, Single Rod

CQ2

Double Acting, Double Rod

CQ2KW

CQ2

With End Lock
Double Acting, Single Rod
CBQ2

Switch

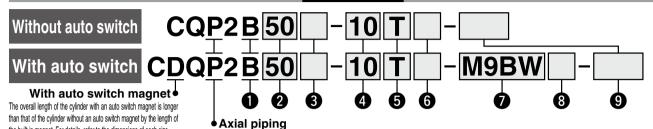
Made to

Compact Cylinder: Axial Piping Single Acting, Single Rod

CQP2 Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50

How to Order



the built-in magnet. For details, refer to the dimensions of each size.

Mounting

B Through-hole

 A through-hole type mounting bolt is available as an option. For details
 ⇒ p. 134

Action

S	Single acting, Spring return
Т	Single acting, Spring extend

8 Number of auto switches

Nil	2
S	1
n	n

2 Bore size

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

6 Body option

Nil	Rod end female thread
M	Rod end male thread

Made to order common specifications

For details \Rightarrow p. 131

3 Port thread type

Nil	M thread	ø12 to ø25
IVII	Rc	
TN	NPT	ø32 to ø50
TF	G	

Auto switch

Nil Without auto switch

* For applicable auto switches, refer to the table below.

4 Cylinder stroke

(For details on the minimum stroke								
for auto switch mounting	p. 157) [mm]							
Bore size	Standard stroke							
12, 16, 20, 25, 32, 40	5, 10							
50	10, 20							

 For the manufacturing of intermediate strokes ⇒ p. 131

Cylinder Model with Auto Switch Magnet

If a cylinder with an auto switch magnet and without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) CDQP2B32-10S

For details on **auto switch mounting** ⇒ p. 149 to 165

- \cdot Auto Switch Proper Mounting Position (Detection at stroke end) and Mounting Height
- · Minimum Stroke for Auto Switch Mounting
- · Operating Range
- · Auto Switch Mounting Brackets/Part Nos.

Applicable Auto Switches / Refer to the **Web Catalog** for further information on auto switches.

		Electrical	tor	M/inim m	Load voltage			Auto swit	Lead wire length [m]								11		
Туре	Type Special function		Indicator light	Wiring (Output)	DC		AC	Perpendicular	In-line	0.5 1 3 (Nil) (M) (L)		5 (Z)	None (N)	Pre-wired connector	Applica	Applicable load			
				3-wire (NPN)		5 V,		M9NV	M9N	•	•	•	0	_	0	IC circuit			
چ ا		Grommet		3-wire (PNP)		12 V		M9PV	M9P	•	•		0	—	0	IC CITCUIT			
switch				O suiro		12 V		M9BV	M9B	•	•	•	0	_	0				
S		Connector		2-wire		12 V		J79C	_	•	-		•	•	_				
auto	Dia manatia indication			3-wire (NPN)		5 V,		M9NWV	M9NW	•	•	•	0	_	0	IC airquit	D-I		
	Diagnostic indication (2-color indicator)	Grommet	Yes	3-wire (PNP)	wire (NPN) (PNP) wire	24 V 1	12 V	_	M9PWV	M9PW	•	•		0	_	0	1	Relay, PLC	
state				2-wire		12 V		M9BWV	M9BW	•	•		0	_	0	_	1 LC		
S	Water resistant (2-color indicator)			3-wire (NPN)		5 V,		M9NAV*1	M9NA*1	0	0	•	0	_	0	IC circuit			
Solid				3-wire (PNP)		l –	12 V 12 V		M9PAV*1	M9PA*1	0	0		0	—	0	io circuit	ouit	
Ň	,			2-wire					M9BAV*1	M9BA*1	0	0	•	0	_	0	_		
	With diagnostic output (2-color indicator)			4-wire		5 V, 12 V		_	F79F	•	_	•	0	_	0	IC circuit			
ᇨ				3-wire (NPN equivalent)		5 V		A96V	A96	•	_	•	_	_	_	IC circuit			
switch		Grommet	Yes			_	200 V	A72	A72H	•	_	•	_	_	_				
		aronninet				12 V	100 V	A93V*2	A93	•	•	•	•	_	_				
auto			No	2-wire		5 V, 12 V	100 V or less	A90V	A90	•	_	•	_	_	_	IC circuit			
		Connector	Yes	2 4/116	24 V	12 V	_	A73C	_	•	_	•	•	•	_	_	PLC		
Reed		Connector	No			5 V, 12 V	24 V or less	A80C		•	<u> — </u>	•	•	•	_	IC circuit			
Œ	Diagnostic indication (2-color indicator)	Grommet	Yes			-	-	A79W	_		-		 —	—	—	_			

- *1 Water-resistant type auto switches can be mounted on the above models, but SMC cannot guarantee water resistance. Please contact SMC regarding water-resistant types with the above model numbers.
- *2 The 1 m lead wire is only applicable to the D-A93.
- * Lead wire length symbols: 0.5 m Nil (Example) M9NW
 - 1 m ······· M (Example) M9NWM 3 m ······ L (Example) M9NWL
 - 5 m Z (Example) M9NWZ None N (Example) J79CN
- * Solid state auto switches marked with a "O" are produced upon receipt of order.

Auto

CQ2KW

Made to Order

* There are applicable auto switches other than those listed above. For details ⇒ p. 165