

Standard: Single Acting Spring Return/Extend

Series CM2

ø20, ø25, ø32, ø40

How to Order

Mounting

B	Basic	T	Rear trunnion
L	Axial foot	E	Integrated clevis
F	Front flange	BZ	Boss-cut basic
G	Rear flange	FZ	Boss-cut front flange
C	Single clevis	UZ	Boss-cut front trunnion
D	Double clevis		
U	Front trunnion		

Piping

—	Screw-in
F	Built-in One-touch fitting

Cylinder stroke (mm)
Refer to p.1.4-34 for Standard Stroke Table.

Standard
CM2 L 32 F — 150 S

With auto switch
CDM2 L 32 F — 150 S C73

Number of auto switches

—	2
S	1
n	n

Auto switch

—	Without auto switch (Built-in magnet)
---	---------------------------------------

Action

S	Single acting/ Spring return
T	Single acting/ Spring extend

Bore size

20	20mm
25	25mm
32	32mm
40	40mm

Air cylinder with auto switch

Applicable Auto Switches/Refer to p.5.3-2 for further information on auto switches.

Style	Special function	Electrical entry	Indicator	Wiring (Output)	Load voltage		Auto switch model	Lead wire (m)*				Applicable load	
					DC	AC		0.5 (—)	3 (L)	5 (Z)	None (N)		
Reed switch	—	Grommet	Yes	3 wire (NPN)	—	5V	C76	●	●	—	—	IC	—
					—	12V	C73	●	●	●	—	Relay	—
					—	100V	C80	●	●	—	—	PLC	—
					5V, 12V	100V or less	B53	●	●	—	—	IC	—
					12V	—	B54	●	●	—	—	PLC	—
					12V	100V, 200V	B64	●	●	—	—	—	—
					12V	200V or less	C73C	●	●	—	—	Relay	—
					12V	—	C80C	●	●	—	—	PLC	—
					5V, 12V	24V or less	A33A	—	—	—	●	IC	—
					12V	—	A34A	—	—	—	●	PLC	—
Solid state switch	—	Grommet	Yes	3 wire (NPN)	—	100V, 200V	A44A	—	—	—	●	Relay	—
					—	—	B59W	●	●	—	—	PLC	—
					—	—	H7A1	●	●	—	—	IC	—
					—	—	H7A2	●	●	—	—	—	—
					—	—	H7B	●	●	—	—	—	—
					—	—	H7C	●	●	—	—	—	—
					—	—	G39A	—	—	—	●	IC	—
					—	—	K39A	—	—	—	●	—	—
					—	—	H7NW	●	●	—	—	Relay	—
					—	—	H7PW	●	●	—	—	PLC	—
					—	—	H7BW	●	●	—	—	—	—
					—	—	H7BA	—	●	—	—	—	—
					—	—	G5NT	—	●	—	—	IC	—
					—	—	H7NF	●	●	—	—	—	—
					—	—	H7LF	●	●	—	—	—	—



* Lead wire length

0.5m : —

3m : L

5m : Z

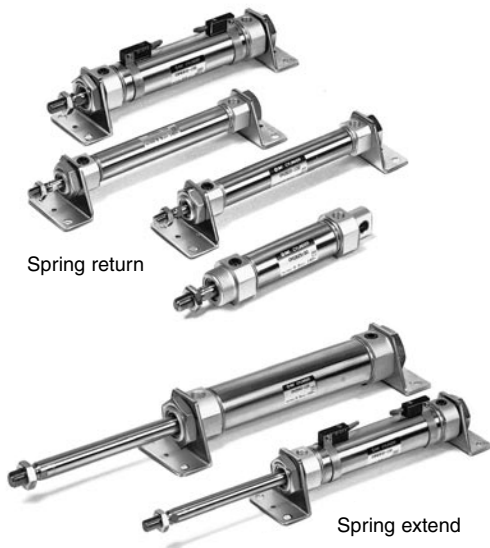
None: N

e.g.) C80CZ, C80CN

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

* Do not indicate symbol "N" for no lead wire on "D-A3□A", "A44A", "G39A" and "K39A" models.

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Specifications

Action	Single acting/Spring return	Single acting/Spring extend
Style	Air cylinder	
Cushion	Rubber bumper	
Fluid	Air	
Proof pressure	1.5MPa	
Max. operating pressure	1.0MPa	
Min. operating pressure	0.18MPa	0.23MPa
Ambient and fluid temperature	Without auto switch: -10°C to +70°C (No freezing) With auto switch: -10 to°C +60°C (No freezing)	
Lubrication	Non-lube	
Thread tolerance	JIS class 2	
Stroke tolerance	+1.4 0	
Piston speed	50 to 750mm/s	

Allowable Kinetic Energy

Bore size (mm)	20	25	32	40
Allowable kinetic energy	0.27	0.4	0.65	1.2

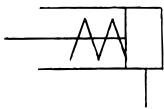
Standard Stroke

Bore size (mm)	Standard stroke (mm) ⁽¹⁾
20	25, 50, 75, 100, 125, 150
25	25, 50, 75, 100, 125, 150
32	25, 50, 75, 100, 125, 150, 200
40	25, 50, 75, 100, 125, 150, 200, 250

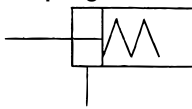
Note 1) Other intermediate strokes can be manufactured upon receipt of order.
Contact SMC for longer strokes.

JIS symbol

Single acting/
Spring return



Spring extend



Made to Order

Refer to p.5.4-1 for made to order specifications of series CM2R.

Minimum Strokes for Auto Switch Mounting

Auto switch model	Number of switches				1
	2		n		
	On different surfaces	On the same surface	On different surfaces	On the same surface	
D-C7 D-C8	15	50	15+45($\frac{n-2}{2}$) (n=2, 4, 6...)	50+45(n-2)	10
D-H7□ D-H7□W D-H7BAL D-H7NF	15	60		60+45(n-2)	10
D-C73C D-C80C D-H7C	15	65	15+50($\frac{n-2}{2}$) (n=2, 4, 6...)	65+50(n-2)	10
D-H7LF	20	65	20+50($\frac{n-2}{2}$) (n=2, 4, 6...)		10
D-B5 D-B6	15	75	15+50($\frac{n-2}{2}$) (n=2, 4, 6...)	75+55(n-2)	10
D-B59W	20	75	20+50($\frac{n-2}{2}$) (n=2, 4, 6...)		15
D-A3□A D-G39A D-K39A D-A44A	35	100	35+30(n-2)	100+100(n-2)	10

Mounting Bracket

Refer to p.1.4-35 for part numbers of the mounting brackets.

Auto Switch Mounting Band

Refer to p.1.4-35 for part numbers of the mounting bands.