

Smooth Cylinder Series CM2Y

ø20, ø25, ø32, ø40

Specifications and auto switch information not provided below are the same as those of the **standard, double acting, single rod type of Series CM2.**

How to Order

Standard

CM2Y L 40 150

With auto switch

CDM2Y L 40 150 H7BW S

Mounting

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

Bore size

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

Port thread type

Nil	Rc
TN	NPT
TF	G

Auto switch

Nil	Without auto switch (Built-in magnet)
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* Please select the applicable auto switch model from the table below.

Number of auto switches

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

Cylinder stroke (mm)
→ Refer to Standard stroke table on page 9.

Applicable auto switches

Type	Special function	Electrical entry	Indicator	Wiring (Output)	Load voltage		Auto switch model	Lead wire (m)*				Pre-wired connector	Applicable load							
					DC	AC		0.5 (Nil)	3 (L)	5 (Z)	None (N)									
Reed switch	—	Grommet	Yes	3-wire (Equiv. NPN)	24 V	5 V	C76	●	●	—	—	—	IC	—						
						12 V	C73	●	●	●	—	—	Relay, PLC							
		Connector		100 V, 200 V	B54	●	●	●	—	—										
				—	C73C	●	●	●	●	—	—									
	Diagnostic indication (2-color)	Grommet	—	—	—	—	100 V, 200 V	A33A	—	—	—	●	—	Relay, PLC						
							—	A34A	—	—	—	●	—							
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	H7A1	●	●	○	—	○	IC	Relay, PLC						
				3-wire (PNP)			H7A2	●	●	○	—	○								
				2-wire			H7B	●	●	○	—	○								
		Connector		12 V		H7C	●	●	●	●	—	—								
				5 V, 12 V		G39A	—	—	—	●	—	—	IC							
				12 V		K39A	—	—	—	●	—	—	—							
	Diagnostic indication (2-color)	Grommet	—	—	3-wire (NPN)	24 V	5 V, 12 V	H7NW	●	●	○	—	○	IC						
					3-wire (PNP)			H7PW	●	●	○	—	○							
					2-wire			H7BW	●	●	○	—	○							
					Water resistant (2-color)		Grommet	—	—	—	—	12 V	H7BA	—	●	○	—	○	—	
													With diagnostic output (2-color)	H7NF	●	●	○	—	○	IC
														Latch with diagnostic output (2-color)	H7LF	●	●	○	—	○

* Lead wire length 0.5 m Nil (Example) C73C
 3 m L (Example) C73CL
 5 m Z (Example) C73CZ
 None N (Example) C73CN

* ○: Manufactured upon receipt of order.
 * Do not add the suffix (N) indicating "no lead wire" to the part numbers of models D-A3□A, A44A, G39A and K39A.

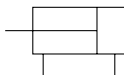
In addition to the models in the above table, there are some other auto switches that are applicable. For more information, please consult SMC.

Series CM2Y



Integral clevis

JIS symbol



Specifications

Bore size (mm)	20	25	32	40
Action	Double acting, single rod			
Piston speed	5 to 500 mm/s			
Fluid	Air			
Proof pressure	1.05 MPa			
Maximum operating pressure	0.7 MPa			
Ambient and fluid temperature	Without auto switch -10 to 70°C (with no freezing)			
	With auto switch -10 to 60°C (with no freezing)			
Lubrication	Non-lube			
Thread tolerance	JIS class 2			
Stroke length tolerance	+1.4 0 mm			
Cushion	Rubber bumper			
Allowable leakage rate	0.5 ℓ/min (ANR) or less			

Minimum Operating Pressure

Bore size (mm)	20	25	32	40
Minimum operating pressure	0.02			

Unit: MPa

Mounting Bracket and Accessory

Accessory	Standard			Option		
	Mounting nut	Rod end nut	Clevis pin	Single knuckle joint	Note 3) Double knuckle joint	Note 4) Clevis bracket
Basic	● (1 pc.)	●	–	●	●	–
Axial foot	● (2)	●	–	●	●	–
Front flange	● (1)	●	–	●	●	–
Rear flange	● (1)	●	–	●	●	–
Integral clevis	– Note1)	●	–	●	●	●
Single clevis	– Note1)	●	–	●	●	–
Double clevis Note 3)	– Note1)	●	●	●	●	–
Front trunnion	● (1) Note2)	●	–	●	●	–
Rear trunnion	● (1) Note2)	●	–	●	●	–
Boss-cut basic	● (1)	●	–	●	●	–
Boss-cut flange	● (1)	●	–	●	●	–
Boss-cut trunnion	● (1)	●	–	●	●	–



- Note 1) Mounting nuts are not attached to the integral clevis, single clevis and double clevis types.
 Note 2) Trunnion nuts are mounted on the front trunnion type and rear trunnion type.
 Note 3) Pins and snap rings (cotter pins in case of ø40) are packed with the double clevis and double knuckle joint types.
 Note 4) Pins and snap rings are packed with clevis brackets.

Grease Pack for Maintenance

When only grease for maintenance is necessary, please order by the following part numbers.

Grease pack GR-L-005 (5 g)
 GR-L-010 (10 g)
 GR-L-150 (150 g)

Standard Stroke Table

Bore size (mm)	Standard stroke (mm)
20, 25, 32, 40	25, 50, 75, 100, 125, 150, 200, 250, 300

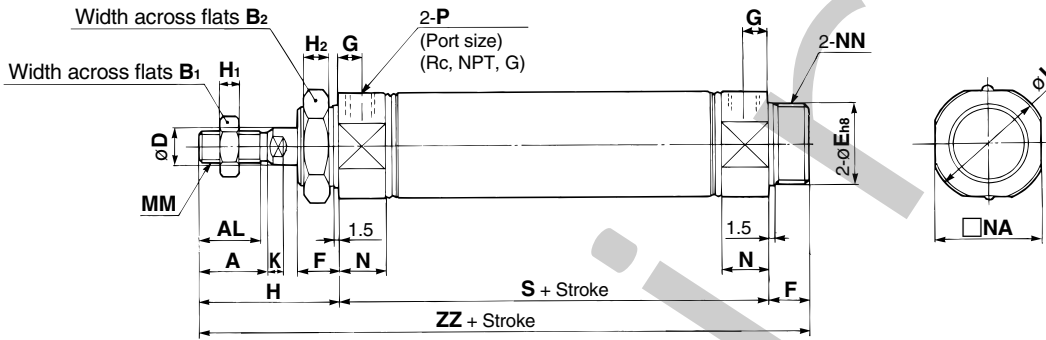


- Note 1) Intermediate strokes not listed above are also available.
 Note 2) As the stroke increases, more sliding resistance may result due to the deflection of the piston rod and other factors. Take measures such as the installation of a guide.

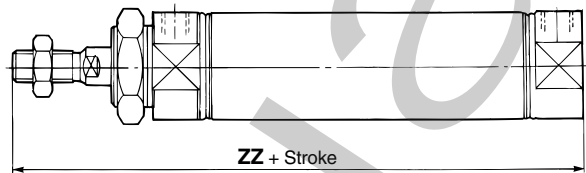
Mounting bracket dimensions are the same as those of the standard, double acting, single rod type of Series CM2.

Dimensions/ø20 to ø40

Basic/CM2YB



Boss-cut



Bore size (mm)	A	AL	B ₁	B ₂	D	E	F	G	H	H ₁	H ₂	I	K	MM	N	NA	NN	P	S	ZZ
20	18	15.5	13	26	8	20 ⁰ _{-0.033}	13	8	41	5	8	28	5	M8 x 1.25	15	24	M20 x 1.5	1/8	62	116
25	22	19.5	17	32	10	26 ⁰ _{-0.033}	13	8	45	6	8	33.5	5.5	M10 x 1.25	15	30	M26 x 1.5	1/8	62	120
32	22	19.5	17	32	12	26 ⁰ _{-0.033}	13	8	45	6	8	37.5	5.5	M10 x 1.25	15	34.5	M26 x 1.5	1/8	64	122
40	24	21	22	41	14	32 ⁰ _{-0.039}	16	11	50	8	10	46.5	7	M14 x 1.5	21.5	42.5	M32 x 2	1/4	88	154

Boss-cut (mm)

Bore size (mm)	ZZ
20	103
25	107
32	109
40	138