

Air Cylinder: Standard Type Double Acting, Single Rod Series *CM2* ø20, ø25, ø32, ø40

How to Order

Mounting style

B	Basic style
L	Axial foot style
F	Rod side flange style
G	Head side flange style
C	Single clevis style
D	Double clevis style
U	Rod side trunnion style
T	Head side trunnion style
E	Clevis integrated style
BZ	Boss-cut basic style
FZ	Boss-cut rod side flange style
UZ	Boss-cut rod side trunnion style

Bore size

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

Cylinder stroke (mm)
(Refer to "Standard Stroke" on page 129.)

Cushion

Nil	Rubber bumper
A	Air cushion

* Air-hydro cylinder: Rubber bumper only

Made to Order
(Refer to page 129 for details.)

With auto switch

With auto switch (Built-in magnet)

Type

Nil	Pneumatic
H	Air-hydro

Port thread type

Nil	Rc
TN	NPT
TF	G
F	Built-in one-touch fitting

* Air-hydro type: Rc only

Rod boot

Nil	None
J	Nylon tarpaulin
K	Heat resistant tarpaulin

Number of auto switches

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

Auto switch

Nil	Without auto switch
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* For the applicable auto switch model, refer to the table below.

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) CDM2F32-100

Ordering Example: CM2 [] [] L 40 [] - 150 A [] - []

Ordering Example with auto switch: CDM2 [] [] L 40 [] - 150 A [] - M9BW [] - []

Applicable Auto Switch/Refer to pages 1263 to 1371 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		0.5 (Nil)	1 (M)	3 (L)	5 (Z)	None (N)						
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24V	5V, 12V	—	M9N	●	●	●	○	—	○	IC circuit	Relay, PLC		
		3-wire (PNP)		12V		M9P		●	●	●	○	—	○					
		Connector		2-wire		5V, 12V		M9B	●	●	●	○	—	○				
				Terminal conduit		3-wire (NPN)		12V	H7C	●	●	●	●	—				
	Diagnostic indication (2-color indication)	Grommet		3-wire (NPN)	5V, 12V	G39A **	—	—	—	—	●	—	IC circuit					
				2-wire	12V	K39A **	—	—	—	—	●	—	—					
				3-wire (NPN)	5V, 12V	M9NW	●	●	●	○	—	○	IC circuit					
				3-wire (PNP)	12V	M9PW	●	●	●	○	—	○	IC circuit					
				Water resistant (2-color indication)	2-wire	5V, 12V	M9BW	●	●	●	○	—	○	—				
					With diagnostic output (2-color indication)	4-wire (NPN)	5V, 12V	H7BA	—	—	●	○	—	○	—			
Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5V	—	A96	●	—	●	—	—	—	IC circuit	—		
				2-wire	24V	12V	100V	A93	●	—	●	—	—	—	—	—		
							100V or less	A90	●	—	●	—	—	—	—	IC circuit		
							100V, 200V	B54 **	●	—	●	●	—	—	—	—	Relay, PLC	
	200V or less	B64 **					●	—	●	—	—	—	—					
	—	C73C					●	—	●	●	●	—	—					
	24V or less	C80C					●	—	●	●	●	—	IC circuit					
	Diagnostic indication (2-color indication)	Grommet					Yes	—	—	A33A **	—	—	—	—	●	—	—	PLC
								100V, 200V	A34A **	—	—	—	—	●	—	—	—	Relay, PLC
				—	A44A **	—		—	—	—	●	—	—					
—			B59W	●	—	●		—	—	—	—	—						

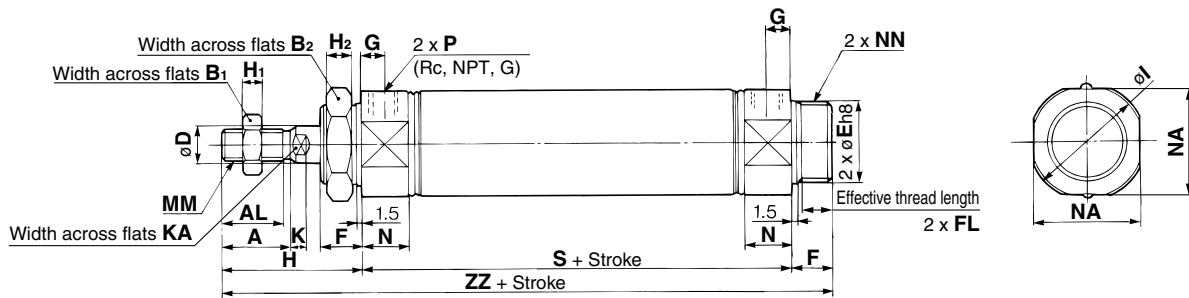
* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWZ
None N (Example) H7CN

* Solid state auto switches marked with "○" are produced upon receipt of order.
* D-A9□V/M9□V/M9□WV and D-M9□A(V)L cannot be mounted.
* Do not indicate suffix "N" for no lead wire on D-A3□A/A44A/G39A/K39A models.
* D-A3□A/A44A/G39A/K39A/B54/B64 cannot be mounted on bore sizes ø20 and ø25 cylinder with air cushion.

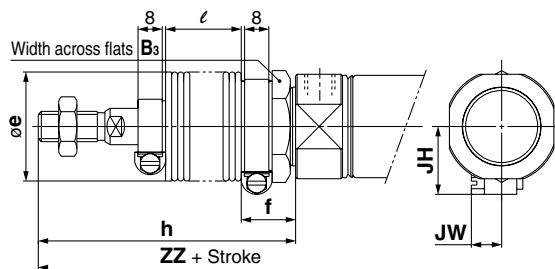
* Since there are other applicable auto switches than listed above, refer to page 218 for details.
* For details about auto switches with pre-wired connector, refer to pages 1328 and 1329.
* D-A9□/M9□/M9□W auto switches are shipped together (not assembled). (However, auto switch mounting brackets are assembled when being shipped.)

Basic Style (B)

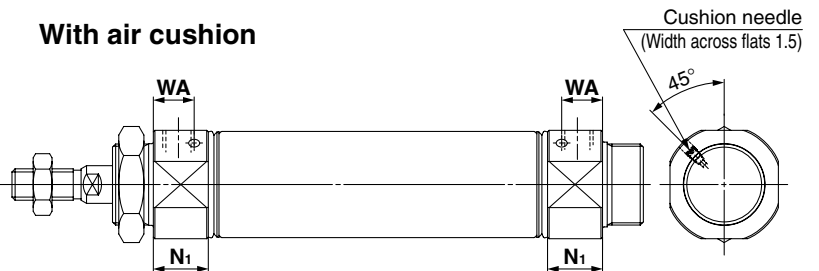
CM2B Bore size — Stroke



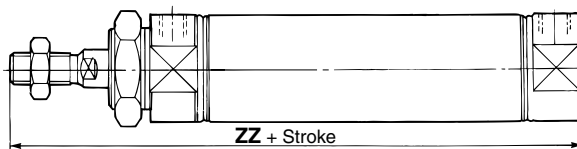
With rod boot



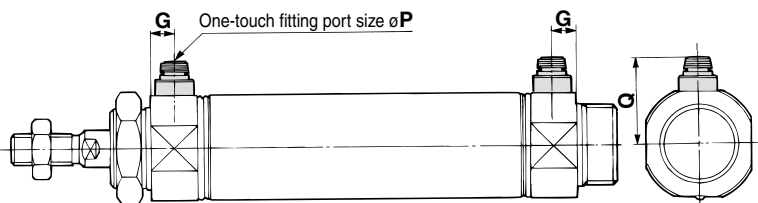
With air cushion



Boss-cut style



Built-in One-touch fittings



Bore size	A	AL	B ₁	B ₂	D	E	F	FL	G	H	H ₁	H ₂	I	K	KA	MM	N	NA	NN	P	S	ZZ
20	18	15.5	13	26	8	20 ⁰ _{-0.033}	13	10.5	8	41	5	8	28	5	6	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	10.5	8	45	6	8	33.5	5.5	8	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	10.5	8	45	6	8	37.5	5.5	10	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	13.5	11	50	8	10	46.5	7	12	M14 x 1.5	21.5	42.5	M32 x 2	1/4	88	154

With Rod Boot

Symbol Stroke		B ₃	e	f	h								ℓ								ZZ							
					1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500	1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500	1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500			
Bore size	20	30	36	18	68	81	93	106	131	156	181	12.5	25	37.5	50	75	100	125	143	156	168	181	206	231	256			
	25	32	36	18	72	85	97	110	135	160	185	12.5	25	37.5	50	75	100	125	147	160	172	185	210	235	260			
	32	32	36	18	72	85	97	110	135	160	185	12.5	25	37.5	50	75	100	125	149	162	174	187	212	237	262			
	40	41	46	20	77	90	102	115	140	165	190	12.5	25	37.5	50	75	100	125	181	194	206	219	244	269	294			

With Rod Boot (mm)

Bore size	JH	JW
20	23.5	10.5
25	23.5	10.5
32	23.5	10.5
40	27	10.5

Boss-cut Style

Bore size	Without rod boot	ZZ									
		1 to 50	51 to 100	101 to 150	151 to 200	201 to 300	301 to 400	401 to 500	1 to 50	51 to 100	101 to 150
20	103	130	143	155	168	193	218	243	103	130	143
25	107	134	147	159	172	197	222	247	107	134	147
32	109	136	149	161	174	199	224	249	109	136	149
40	138	165	178	190	203	228	253	278	138	165	178

With Air Cushion (mm)

Bore size	N _i	WA
20	17.5	13
25	17.5	13
32	17.5	13
40	21.5	16

Built-in One-touch Fittings (mm)

Bore size	G	P	Q
20	8	6	21.5
25	8	6	24.5
32	8	6	27
40	11	8	32.5

CJ1

CJP

CJ2

CM2

CG1

MB

MB1

CA2

CS1

CS2

D-□

-X□

Individual

-X□

Technical data