









Air Cylinder

Series CM2

ø20, ø25, ø32, ø40

Series Variations

Series	Action	Rod	Cushion	Basic	Standard variations					Bore size (mm)	Page
					Built-in One-touch fitting	With rod boot	Air-hydro	Clean series	Copper/Fluorine-free		
Standard Series CM2 	Double acting	Single rod	Rubber	●	●	●	●	●	20 25 32 40	128	
		Double rod	Rubber	●	●	●	●	●		146	
	Single acting	Single rod (Spring return/Spring extend)	Rubber	●	●	●	●	●		156	
		Double rod	Rubber	●	●	●	●	●		171	
Non-rotating Rod Series CM2K 	Double acting	Single rod	Rubber	●	●	●	●	●	20 25 32 40	176	
		Double rod	Rubber	●	●	●	●	●		181	
	Single acting	Single rod (Spring return/Spring extend)	Rubber	●	●	●	●	●		186	
Direct Mount Series CM2R 	Double acting	Single rod	Rubber	●	●	●	●	●	193		
Direct Mount, Non-rotating Rod Series CM2RK 	Double acting	Single rod	Rubber	●	●	●	●	●	198		
Low Friction Series CM2Q 	Use the new "Smooth Cylinder Series CM2Y" to realize both-direction low friction and low-speed operation. (Refer to Best Pneumatics No. 3.)									199	
Centralized Piping Series CM2□P 	Double acting	Single rod	Rubber	●	●	●	●	●	20	199	
With End Lock Series CBM2 	Double acting	Single rod	Rubber	●	●	●	●	●	32 40	204	
			Air	●	●	●	●	●			
Low-speed cylinder Series CM2X 	Refer to Best Pneumatics No. 3.										

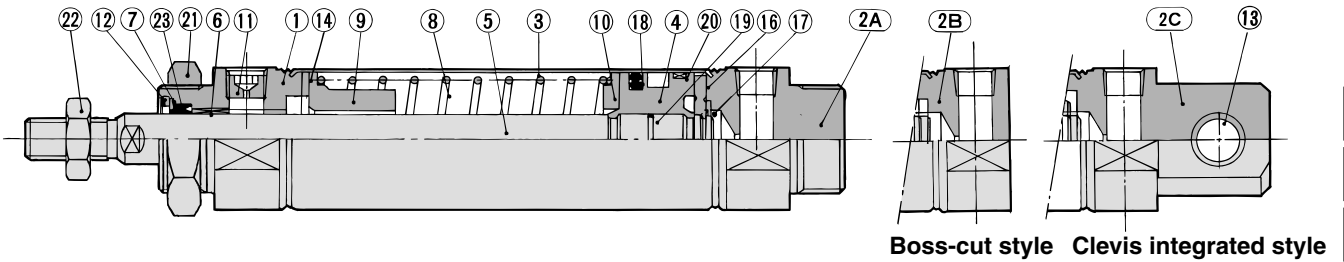
- CJ1
- CJP
- CJ2
- CM2**
- CG1
- MB
- MB1
- CA2
- CS1
- CS2

- D-□
- X□
- Individual -X□
- Technical data

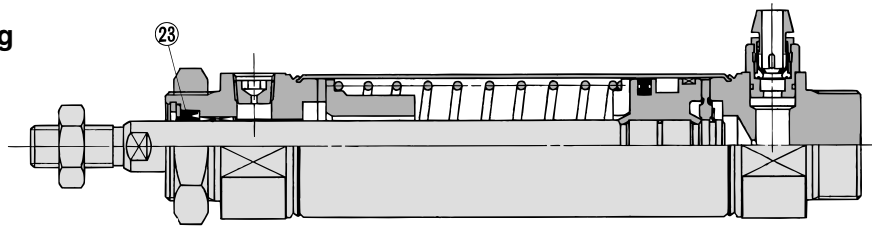
Air Cylinder: Standard Type Single Acting, Spring Return/Extend **Series CM2**

Construction

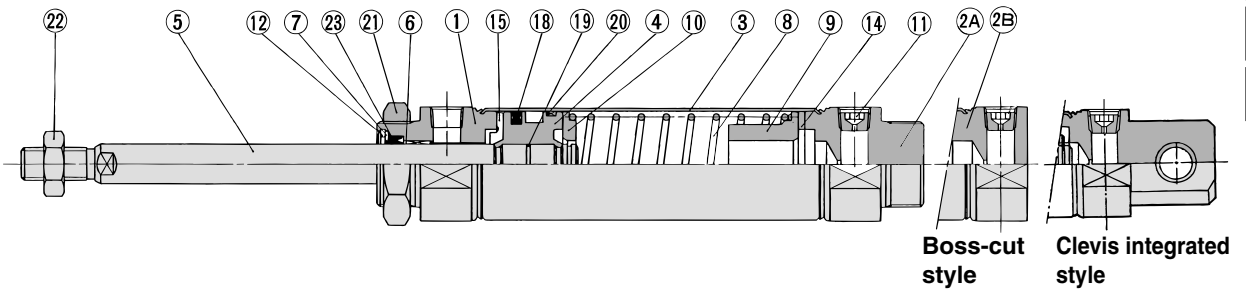
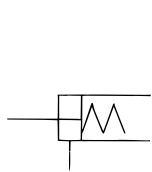
Spring return



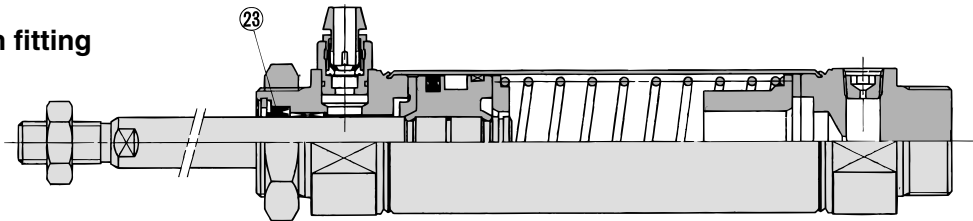
Spring return, Built-in One-touch fitting



Spring extend



Spring extend, Built-in One-touch fitting



Component Parts

No.	Description	Material	Note
1	Rod cover	Aluminum alloy	Clear anodized
2A	Head cover A	Aluminum alloy	Clear anodized *
2B	Head cover B	Aluminum alloy	Clear anodized **
2C	Head cover C	Aluminum alloy	Clear anodized ***
3	Cylinder tube	Stainless steel	
4	Piston	Aluminum alloy	Chromated
5	Piston rod	Carbon steel	Hard chromium electroplated
6	Bushing	Copper oil-impregnated sintered alloy	
7	Seal retainer	Stainless steel	
8	Return spring	Steel wire	Zinc chromated
9	Spring guide	Aluminum alloy	Chromated
10	Spring seat	Aluminum alloy	Chromated
11	Plug with fixed orifice	Alloy steel	Black zinc chromated
12	Retaining ring	Carbon steel	Phosphate coated

* Basic style, ** Boss-cut style, *** Clevis integrated style

No.	Description	Material	Note
13	Clevis bushing	Copper oil-impregnated sintered alloy	
14	Bumper	Urethane	
15	Bumper A	Urethane	
16	Bumper B	Urethane	
17	Retaining ring	Stainless steel	
18	Piston seal	NBR	
19	Piston gasket	NBR	
20	Wear ring	Resin	
21	Mounting nut	Carbon steel	Nickel plated
22	Rod end nut	Carbon steel	Nickel plated

Replacement Part: Seal

●With Rubber Bumper, Built-in One-touch Fitting

No.	Description	Material	Part no.			
			20	25	32	40
23	Rod seal	NBR	PDU-8Z	PDU-10Z	PDU-12LZ	PDU-14LZ

* Since the seal kit does not include a grease pack, order it separately.
Grease pack part no.: GR-S-010 (10 g)

- CJ1
- CJP
- CJ2
- CM2**
- CG1
- MB
- MB1
- CA2
- CS1
- CS2

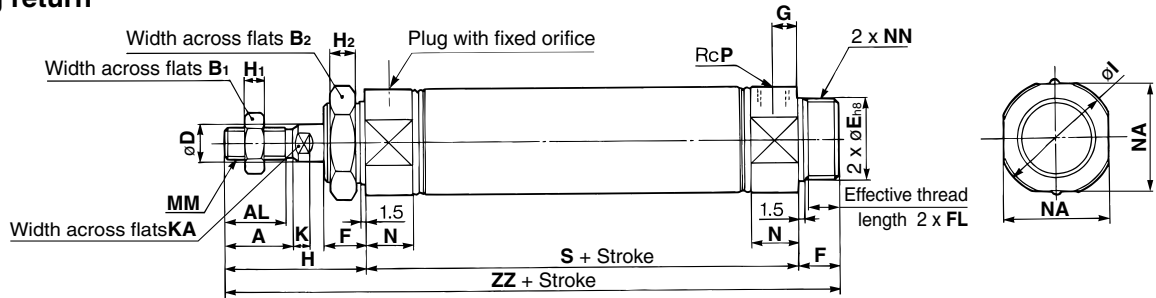
- D-□
- X□
- Individual -X□
- Technical data

Series CM2

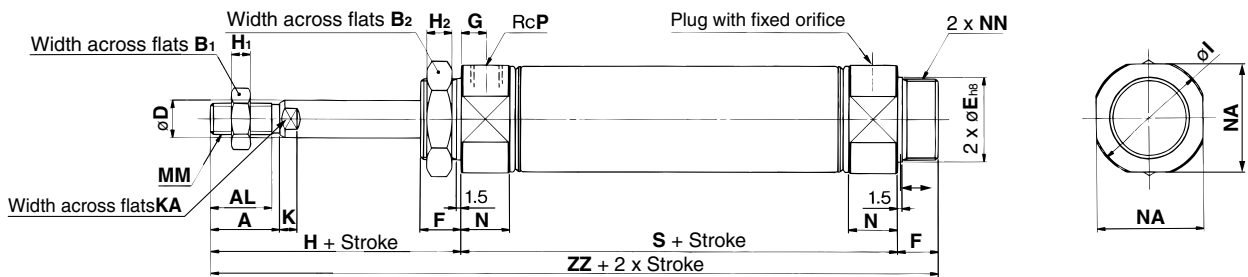
Basic Style (B)

CM2B Bore size — Stroke $\frac{S}{T}$

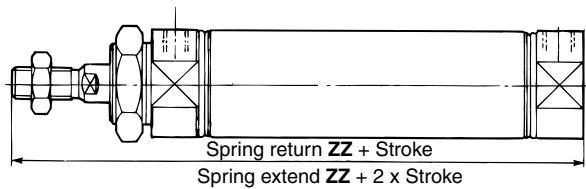
Spring return



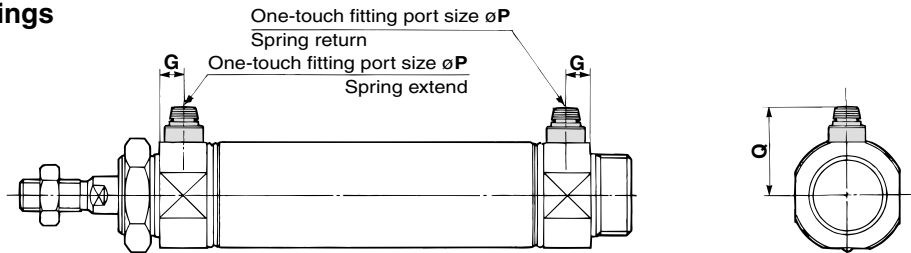
Spring extend



Boss-cut style



Built-in One-touch fittings



Bore size (mm)	A	AL	B ₁	B ₂	D	E	F	FL	G	H	H ₁	H ₂	I	K	KA	MM	N	NA	NN	P
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
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
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
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

Dimensions by Stroke

Bore size (mm)	Stroke Symbol		1 to 50		51 to 100		101 to 150		151 to 200		201 to 250	
	S	ZZ	S	ZZ	S	ZZ	S	ZZ	S	ZZ	S	ZZ
20	87	141	112	166	137	191	—	—	—	—	—	—
25	87	145	112	170	137	195	—	—	—	—	—	—
32	89	147	114	172	139	197	164	222	—	—	—	—
40	113	179	138	204	163	229	188	254	213	279	—	—

Boss-cut Style

Bore size (mm)	Stroke Symbol		1 to 50		51 to 100		101 to 150		151 to 200		201 to 250	
	ZZ	ZZ	ZZ	ZZ	ZZ	ZZ	ZZ	ZZ	ZZ	ZZ	ZZ	
20	128	153	178	—	—	—	—	—	—	—	—	
25	132	157	182	—	—	—	—	—	—	—	—	
32	134	159	184	209	—	—	—	—	—	—	—	
40	163	188	213	238	263	—	—	—	—	—	—	

Built-in One-touch Fittings (mm)

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