



Technical data



Caution for safety
(Read before installing)



Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)
ø20	25,50,75,100,125,	300
ø25,32,40	150,200,250,300	500

* Intermediate stroke are available, please contact us.

Tightening torque

Tube I.D.	Rod thread	Tightening torque (kgf·cm)
ø20	M8×1.25	100
ø25,32	M10×1.25	190
ø40	M14×1.5	540

* Make sure the tightening torque of rod thread does not exceed the value above.

* The tolerance of tightening torque is ±5%.

Features

■ Non lubrication

- Special housing and bushing enables self lubrication of piston rod.

■ High quality long service life

- Cylinder with hexagonal rod design enables non-rotation of rod.
- Hard anodised stainless steel cylinder tubes offer a high resistance to corrosion and low internal friction.
- Cylinder mountings, available with a comprehensive range of accessories for rigid or flexible mounting.
- Magnetic as standard

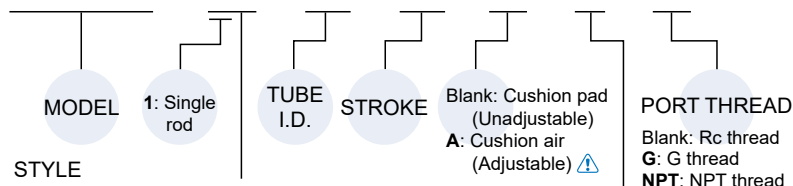
Specification

Model	MCKMB			
Tube I.D. (mm)	20	25	32	40
Port size	Rc1/8			Rc1/4
Medium	Air			
Operating pressure range	0.05~0.7 MPa			
Proof pressure	1 MPa			
Lubricator	Not required			
Ambient temperature	-5~+60°C (No freezing)			
Available speed range	50~750 mm/sec			
Max. allowable kinetic energy (J)	Cushion pad	0.27	0.4	0.65
	Cushion air	0.54	0.78	1.27
Rod non-rotating accuracy	±0.7°		±0.5°	
	2.0 kgf·cm	2.5 kgf·cm	2.5 kgf·cm	4.5 kgf·cm
Allowable rotational torque	2.0 kgf·cm	2.5 kgf·cm	2.5 kgf·cm	4.5 kgf·cm
Sensor switch	RDC, RQC, RCM			
Sensor switch band	R°C	BKC-1 (Not for R°CV angle cable)		
	RCM	BM20	BM25	BM32
				BM40

* The cylinder is allowed little leakage. Before the cylinder is sale, it has passed the standard of leakage test.

Order example

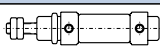
MCKMB — 11 — 40 — 50 — A — N — G



STYLE

Code	Symbol	Description
1 1		Double acting / Male thread

END COVER TYPE

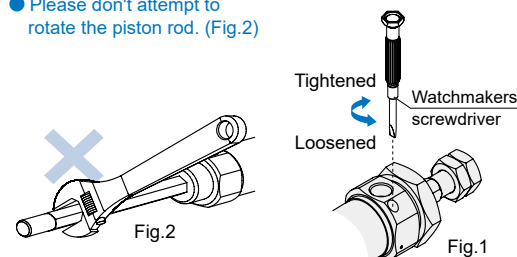
Code	Symbol	Description
Blank		Standard type
N		End-plain
E		With pivot type

⚠️ Caution

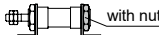
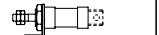
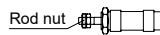
- For (A) Cushion air (Adjustable) (Fig.1)

1. To adjust a cushion needle, please slowly turn the needle valve from the fully closed status to the required status which needs to be within 2.5 turns.
2. If the needle valve loosen excessively, the buffer doesn't take effect and the lifetime of cylinder would be shortened.

- Please don't attempt to rotate the piston rod. (Fig.2)

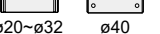


Accessories & Connector

Accessories						
Code	LB (LB×2, with cover nut ×1)	LB (LB×1, without cover nut)	NUT		CA	CB
Cover type	Standrad type	End-plain (N) With pivot type (E)	-		Standrad type	
Mounting Tube I.D.			Rod nut 			
ø20	LB-M2-20x2	LB-M2-20	NUT-M8x1.25x5Hx13B	NUT-M20x1.5x8Hx26B	CA-M2-20	CB-M2-20
ø25	LB-M2-25x2	LB-M2-25	NUT-M10x1.25x6Hx17B	NUT-M26x1.5x8Hx32B	CA-M2-25	CB-M2-25
ø32						
ø40	LB-M2-40x2	LB-M2-40	NUT-M14x1.5x8Hx22B	NUT-M32x2.0x10Hx41B	CA-M2-40	CB-M2-40

Accessories					Connector		
Code	FA	FB	SDB (with pin×1 + snap ring×2)	TA	TB	Y	I
Cover type	All applicable	Standard type	With pivot type (E)	All applicable	Standard type	All applicable	
Mounting Tube I.D.							
ø20	FA-M2-20		SDB-M2-20	TA-M2-20		Y-M2-20	I-M2-20
ø25	FA-M2-25			TA-M2-25		Y-M2-25	I-M2-25
ø32			SDB-M2-32				
ø40	FA-M2-40			TA-M2-40		Y-Q1-40	I-M2-40

Pin

Applicable	Y&I connector	CA&CB accessories	SDB accessories
Code	PIN-Y-P (with split pin / snap ring)	PIN-CB-P (with split pin / snap ring)	PIN-SDB (with split pin)
Fig Tube I.D.			
ø20	PIN-M2-20-1-P	PIN-M2-20-1-P	PIN-M2-20-2-P
ø25			PIN-M2-32-1-P
ø32			
ø40	PIN-M2-40-2-P	PIN-M2-40-1-P	

* For accessories dimensions, please refer to the MCKMB series [link](#).

Order example of self-assembled

The tube I.D. ø32 of LB accessories, Y connector and pin.

No.	Order number	Qty
1	LB-M2-25x2	1
2	Y-M2-25	1
3	PIN-M2-20-1-P	1

* To order accessories/ connectors/ pin separately, please place orders separately according to the order codes in the above table.

Order example of factory assembled

△ Cylinders and accessories are distinguished by the symbol " + ".

MCKMB — Standard model no. + LB
CYLINDER ACCESSORIES

Cylinder & accessories weight

Cylinder weight

Model	Basic weight MCKMB-11	Basic weight MCKMB-11-N	Basic weight MCKMB-11-E	Basic weight MCKMB-11-A	Basic weight MCKMB-11-A-N	Basic weight MCKMB-11-A-E	Stroke 25 mm MCKMB-11-*
Tube I.D.							
ø20	141	130	141	140	129	141	20
ø25	226	207	219	222	203	216	29
ø32	283	264	296	277	259	290	39
ø40	571	537	578	575	541	582	55

Unit: g

Accessories weight

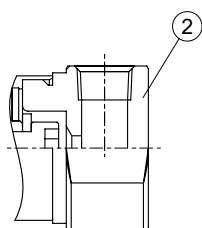
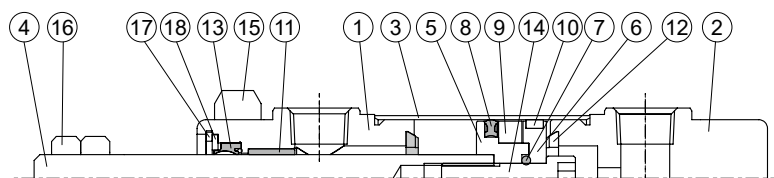
Model	LB	CA	CB	FA/FB	SDB	TA/TB	Y	I	Pin	Rod nut	Cover nut
Tube I.D.											
ø20	122	53	49	66	62	37	53	63	13	4	19
ø25	129	63	69	73	62	47	49	62	13	8	23
ø32	129	63	69	73	140	47	49	62	13	8	23
ø40	207	162	168	124	140	94	230	164	43	16	50

MCKMB Inside structure & Parts list

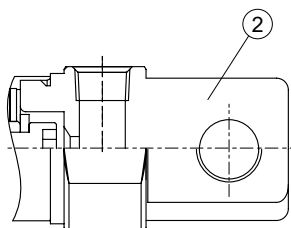
MINIATURE CYLINDER WITH NON-ROTATING ROD



Cushion pad Unadjustable



N type



E type

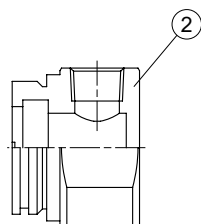
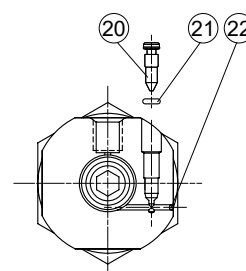
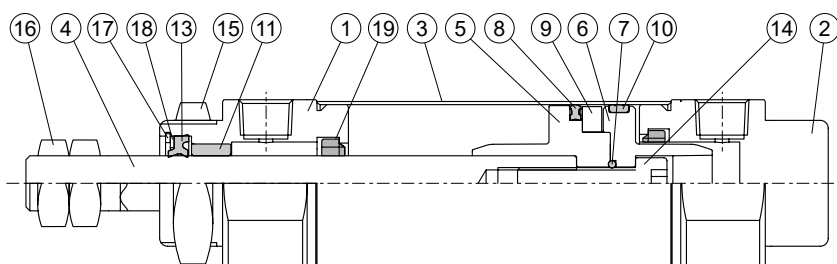
Order example of component parts

Tube I.D.	Cushion pad
ø20	CP-MCKMB-20-□
ø25	CP-MCKMB-25-□
ø32	CP-MCKMB-32-□
ø40	CP-MCKMB-40-□

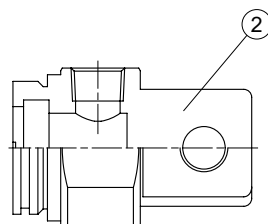
Tube I.D.	Cushion air
ø20	CP-MCKMB-20A-□
ø25	CP-MCKMB-25A-□
ø32	CP-MCKMB-32A-□
ø40	CP-MCKMB-40A-□

* □ Port thread: Blank: Rc thread,
G: G thread, NPT: NPT thread

Cushion air Adjustable



N type



E type

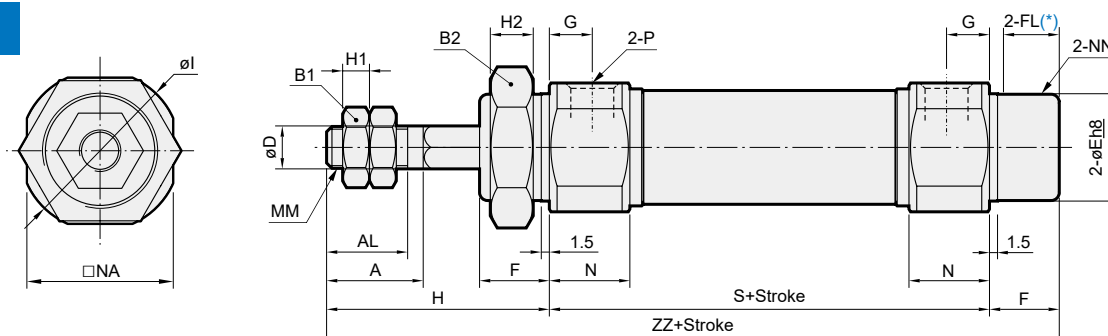
Material

* CP: Component parts (inclusion)

No.	Cushion		Part name	Material	Q'y	CP *	
	Pad	Air				Pad	Air
1	●	●	Rod cover	Aluminum alloy	1	●	●
2	●	●	Head cover	Aluminum alloy	1	●	●
3	●	●	Tube	Stainless steel	1		
4	●	●	Piston rod	Stainless steel	1		
5	●	●	Piston-R	Aluminum alloy	1	●	●
6	●	●	Piston-H	Aluminum alloy	1	●	●
7	●	●	Piston gasket	NBR	1	●	●
8	●	●	Piston packing	NBR	1	●	●
9	●	●	Magnet ring	Magnet material	1	●	●
10	●	●	Wear ring	Resin	1	●	●
11	●	●	Rod bush	Bearing alloy	1	●	●

No.	Cushion		Part name	Material	Q'y	CP *	
	Pad	Air				Pad	Air
12	●		Cushion gasket	NBR	2	●	
13	●	●	Rod packing	NBR	1	●	●
14	●	●	Piston bolt	SCM	1	●	●
15	●	●	Tie nut	Carbon steel	1	●	●
16	●	●	Rod front nut	Carbon steel	2	●	●
17	●	●	Snap ring	Spring steel	1	●	●
18	●	●	Washer	Carbon steel	1	●	●
19		●	Cushion packing	NBR	2		●
20		●	Needle valve packing	NBR	2		●
21		●	Needle valve	Carbon steel	2		●
22		●	Steel ball	Stainless steel	2		●

11

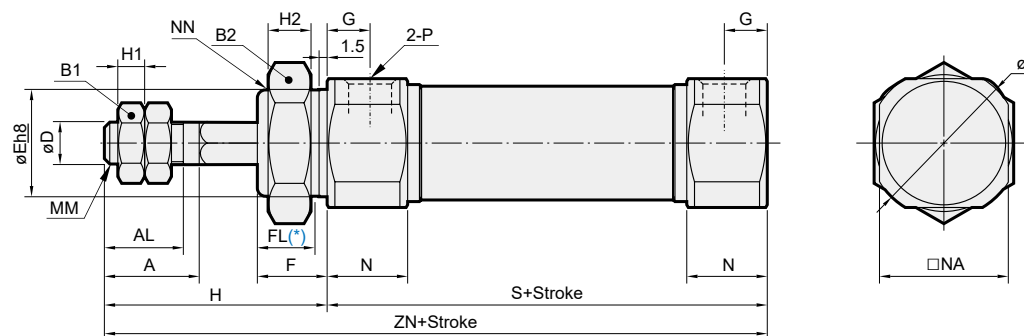


* FL: Effective thread length

Unit: mm

Code Tube I.D.	A	AL	B1	B2	D	E	F	FL	G	H	H1	H2	I	MM	N	NA	NN	P	S	ZZ
20	18	15.5	13	26	8	20 _{-0.03}	13	10.5	8	41	5	8	28	M8×1.25	15	24	M20×1.5	Rc1/8	62	116
25	22	19.5	17	32	10	26 _{-0.03}	13	10.5	8	45	6	8	33.5	M10×1.25	15	30	M26×1.5	Rc1/8	62	120
32	22	19.5	17	32	12	26 _{-0.03}	13	10.5	8	45	6	8	37.5	M10×1.25	15	34.5	M26×1.5	Rc1/8	64	122
40	24	21	22	41	14	32 _{-0.04}	16	13.5	11	50	8	10	46.5	M14×1.5	21.5	42.5	M32×2.0	Rc1/4	88	154

N

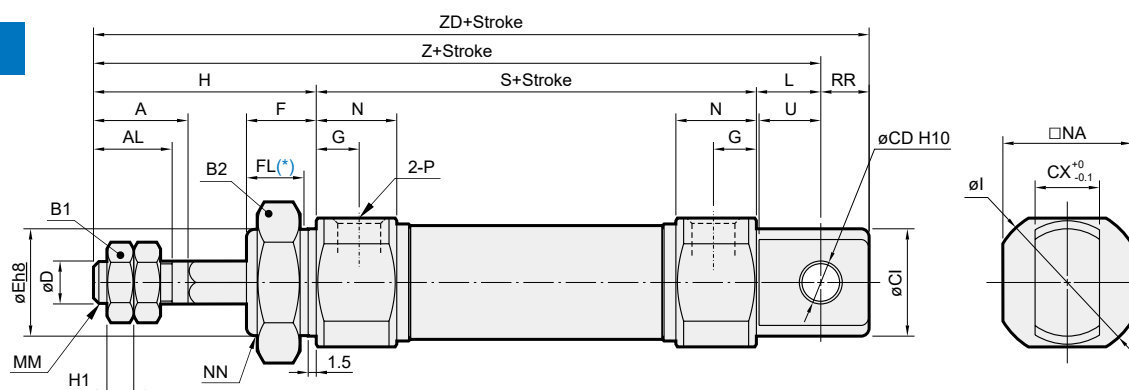


* FL: Effective thread length

Unit: mm

Code Tube I.D.	A	AL	B1	B2	D	E	F	FL	G	H	H1	H2	I	MM	N	NA	NN	P	S	ZN
20	18	15.5	13	26	8	20 _{-0.03}	13	10.5	8	41	5	8	28	M8×1.25	15	24	M20×1.5	Rc1/8	62	103
25	22	19.5	17	32	10	26 _{-0.03}	13	10.5	8	45	6	8	33.5	M10×1.25	15	30	M26×1.5	Rc1/8	62	107
32	22	19.5	17	32	12	26 _{-0.03}	13	10.5	8	45	6	8	37.5	M10×1.25	15	34.5	M26×1.5	Rc1/8	64	109
40	24	21	22	41	14	32 _{-0.04}	16	13.5	11	50	8	10	46.5	M14×1.5	21.5	42.5	M32×2.0	Rc1/4	88	138

E



* FL: Effective thread length

Unit: mm

Code Tube I.D.	A	AL	B1	B2	CD	CX	CI	D	E	F	FL	G	H	H1	I	L	MM	N	NA	NN	P	RR	S	U	Z	ZD
20	18	15.5	13	26	8	12	20	8	20 _{-0.03}	13	10.5	8	41	5	28	12	M8×1.25	15	24	M20×1.5	Rc1/8	9	62	11.5	115	124
25	22	19.5	17	32	8	12	22	10	26 _{-0.03}	13	10.5	8	45	6	33.5	12	M10×1.25	15	30	M26×1.5	Rc1/8	9	62	11.5	119	128
32	22	19.5	17	32	10	20	27	12	26 _{-0.03}	13	10.5	8	45	6	37.5	15	M10×1.25	15	34.5	M26×1.5	Rc1/8	12	64	14.5	124	136
40	24	21	22	41	10	20	33	14	32 _{-0.04}	16	13.5	11	50	8	46.5	15	M14×1.5	21.5	42.5	M32×2.0	Rc1/4	12	88	14.5	153	165