



Technical data



Caution for safety
(Read before installing)



Features

■ Compact type

The cylinder can be directly mounted without bracket (You have bracket) the overall length is shorter and so it will fit into a more confined space. This gives the benefit of saving space when installing the cylinder.

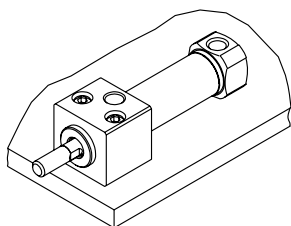
■ Improved strength and accuracy of installation.

■ Two installation methods.

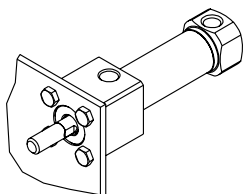
Cylinder can be front mounted or mounted from underneath.

■ Magnetic as standard.

Mounting



A: Bottom mounting



B: Front mounting

Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)
ø20,25,32,40	25,50,75,100,125, 150,200,250,300	900

* Intermediate stroke are available, please contact us.

Specification

Model	MCMBRA, MCMBRB			
Tube I.D. (mm)	ø20	ø25	ø32	ø40
Port size	Rc1/8			Rc1/4
Medium	Air			
Max. operating pressure	1 MPa			
Min. operating pressure	0.05 MPa			
Proof pressure	1.5 MPa			
Lubrication	Not required			
Ambient temperature	-5~+60°C (No freezing)			
Available speed range	50~750 mm/sec			
Max. allowable kinetic energy (J)	Cushion pad	0.12	0.18	0.29
	Cushion air	0.14	0.20	0.32
Sensor switch	RDC, RQC, RCM			
Sensor switch band	R*C	BKC-1 (Not for R*CV angle cable)		
	RCM	BM20	BM25	BM32
				BM40

Order example

MCMBRA — 11 — 25 — 100 — A — G

MODEL

1: Single rod

TUBE I.D.

STROKE

PORT THREAD

Blank: Rc thread
G: G thread
NPT: NPT thread

MOUNTING

A: Bottom mounting
B: Front mounting

Blank: Cushion pad (Unadjustable)
A: Cushion air (Adjustable) ⚠

STYLE

Code	Symbol	Description
1 1		Double acting / Male thread



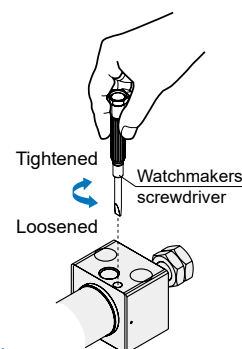
Caution

For (A) Cushion air (Adjustable)

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.

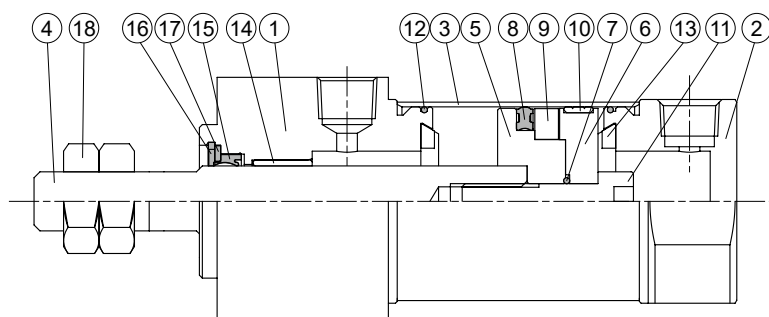
Accessories

Code	NUT
Mounting	Rod nut 
Tube I.D.	
ø20	NUT-M8x1.25x5Hx13B
ø25	NUT-M10x1.25x6Hx17B
ø32	
ø40	NUT-M14x1.5x8Hx22B



MCMBR* Inside structure & Parts list – Cushion pad

MINIATURE CYLINDER



Material

No.	Tube I.D. Part name	20	25	32	40	Q'y	Component parts (inclusion)
1	Rod cover	Aluminum alloy				1	●
2	Head cover	Aluminum alloy				1	●
3	Tube	Stainless steel				1	
4	Piston rod	Carbon 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	Piston bolt	SCM				1	●
12	Cover ring *1	—	NBR			2	●
13	Cushion gasket	NBR				2	●
14	Rod bush	Bearing alloy				1	●
15	Rod packing *2	NBR				1	●
16	Snap ring	Spring steel				1	●
17	Washer	Carbon steel				1	●
18	Rod front nut	Carbon steel				2	●

*1. This part is not available for short strokes

[Short stroke range ø32: 400mm or less (inclusive), ø40: 300mm or less (inclusive)].

*2. Only the rod packing is repairable, please contact our sales if needed.

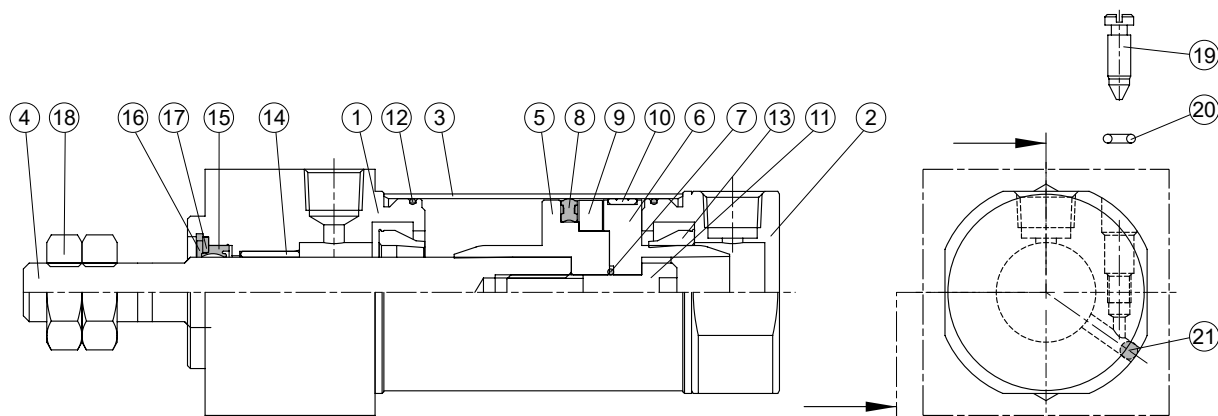
Order example of component parts

Tube I.D.	Component parts
ø20	CP-MCMBRA-20-□
	CP-MCMBRB-20-□
ø25	CP-MCMBRA-25-□
	CP-MCMBRB-25-□
ø32	CP-MCMBRA-32-□
	CP-MCMBRB-32-□
ø40	CP-MCMBRA-40-□
	CP-MCMBRB-40-□

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

MCMBR* Inside structure & Parts list – Cushion air

MINIATURE CYLINDER



Material

No.	Tube I.D. Part name	20	25	32	40	Q'y	Component parts (inclusion)
1	Rod cover	Aluminum alloy				1	●
2	Head cover	Aluminum alloy				1	●
3	Tube	Stainless steel				1	
4	Piston rod	Carbon 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	Piston bolt	SCM				1	●
12	Cover ring *1	-		NBR		2	●
13	Cushion gasket	NBR				2	●
14	Rod bush	Bearing alloy				1	●
15	Rod packing *2	NBR				1	●
16	Snap ring	Spring steel				1	●
17	Washer	Carbon steel				1	●
18	Rod front nut	Carbon steel				2	●
19	Needle valve	Stainless steel	Carbon steel			2	●
20	Needle valve packing	NBR				2	●
21	Steel ball	Stainless steel				2	●

*1. This part is not available for short strokes

[Short stroke range ø32: 400mm or less (inclusive), ø40: 300mm or less (inclusive)].

*2. Only the rod packing is repairable, please contact our sales if needed.

Order example of component parts

Tube I.D.	Component parts
ø20	CP-MCMBRA-20A-□
	CP-MCMBRB-20A-□
ø25	CP-MCMBRA-25A-□
	CP-MCMBRB-25A-□
ø32	CP-MCMBRA-32A-□
	CP-MCMBRB-32A-□
ø40	CP-MCMBRA-40A-□
	CP-MCMBRB-40A-□

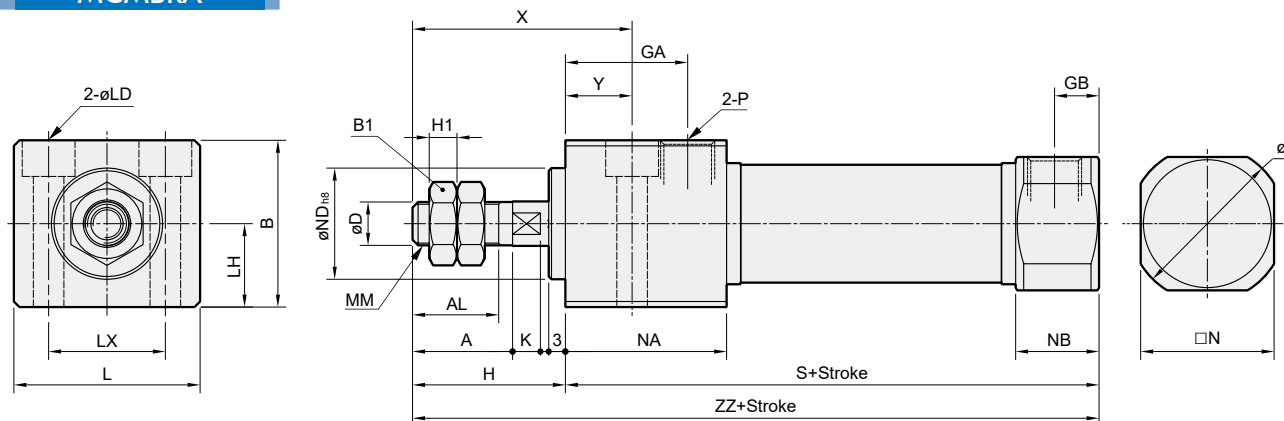
* □ Port thread: Blank: Rc thread,
G: G thread, NPT: NPT thread

MCMBR* Dimensions – Double acting ø20~ø40

MINIATURE CYLINDER



MCMBRA

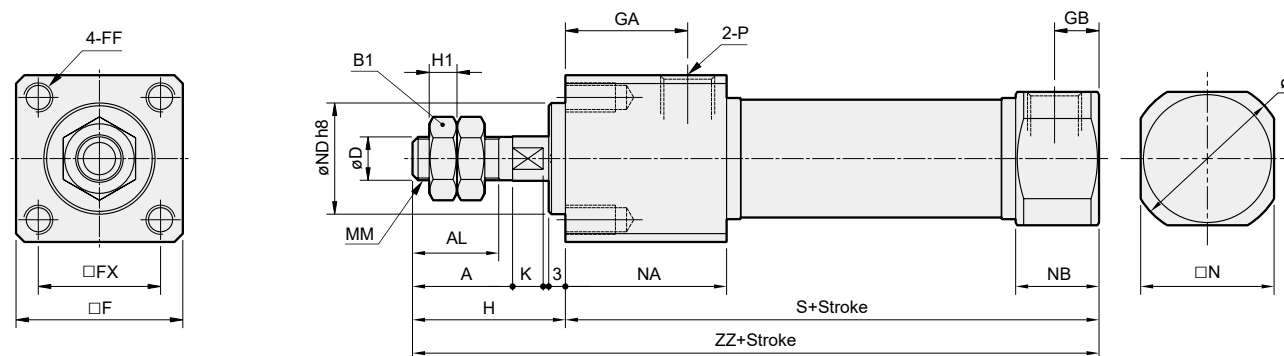


Unit: mm

Code Tube I.D.	A	AL	B	B1	D	GA	GB	H	H1	I	K	L	LD	LH	LX	MM	N	NA	NB	ND
20	18	15.5	30	13	8	22	8	27	5	28	5	33.5	ø5.5thru, ø9.5×6.5depth	15	21	M8×1.25	24	29	15	20 ⁰ _{-0.033}
25	22	19.5	36	17	10	22	8	31	6	33.5	5	39	ø6.6thru, ø11×7.5depth	18	25	M10×1.25	30	29	15	26 ⁰ _{-0.033}
32	22	19.5	42	17	12	22	8	31	6	37.5	5.5	47	ø9thru, ø14×10depth	21	30	M10×1.25	34.5	29	15	26 ⁰ _{-0.033}
40	24	21	52	22	14	27	11	34	8	46.5	7	58.5	ø11thru, ø17.5×12.5depth	26	38	M14×1.5	42.5	37.5	21.5	32 ⁰ _{-0.039}

Code Tube I.D.	P	S	X	Y	ZZ
20	Rc1/8	76	39	12	103
25	Rc1/8	76	43	12	107
32	Rc1/8	78	43	12	109
40	Rc1/4	104	49	15	138

MCMBRB



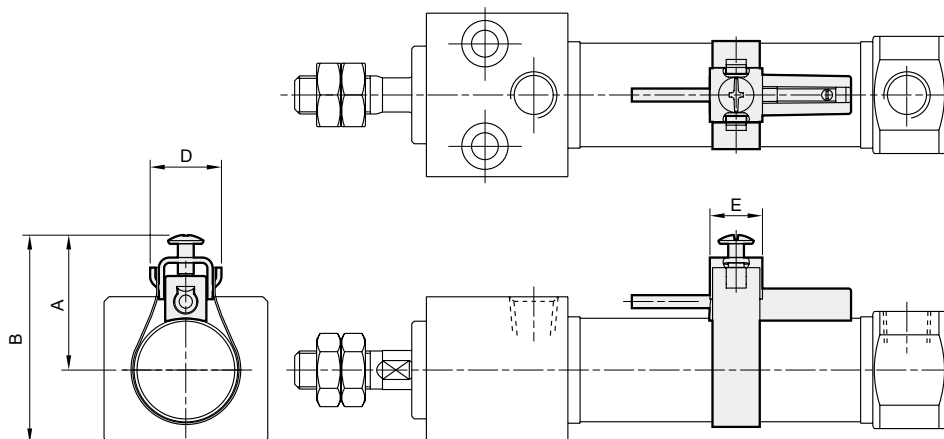
Unit: mm

Code Tube I.D.	A	AL	B1	D	F	FF	FX	GA	GB	H	H1	I	K	MM	N	NA	NB	ND	P	S	ZZ
20	18	15.5	13	8	30	M5×0.8×9depth	22	22	8	27	5	28	5	M8×1.25	24	29	15	20 ⁰ _{-0.033}	Rc1/8	76	103
25	22	19.5	17	10	36	M6×1.0×11depth	26	22	8	31	6	33.5	5	M10×1.25	30	29	15	26 ⁰ _{-0.033}	Rc1/8	76	107
32	22	19.5	17	12	42	M6×1.0×11depth	30	22	8	31	6	37.5	5.5	M10×1.25	34.5	29	15	26 ⁰ _{-0.033}	Rc1/8	78	109
40	24	21	22	14	52	M8×1.25×14depth	36	27	11	34	8	46.5	7	M14×1.5	42.5	37.5	21.5	32 ⁰ _{-0.039}	Rc1/4	104	138

Sensor switch: R*C

Band: BKC-1

Code Tube I.D.	A	B	D	E
20	26.5	41.5	13.5	27
25	29	47	13.5	27
32	33	54	13.5	27
40	37	63	13.5	27



Sensor switch: RCM

Band: BM**

Code Tube I.D.	A	B	C	D	E
20	22	37	10	16	28
25	25	43	10	16	28
32	28	50	10	16	28
40	32	59	10	16	28

