

Features

- 50% space saving.
- Magnetic transit design. Magnetic force transmits the movement with piston side magnet and slider magnet.
- Stainless tube, light weighted and durable.

Specification

Model	MCRPM					
Acting type	Double acting					
Tube I.D. (mm)	10	15	20	25	32	40
Port size	M5×0.8		Rc1/8		Rc1/4	
Medium	Air					
Max. operating pressure	0.7 MPa					
Min. operating pressure	0.18 MPa					
Proof pressure	1 MPa					
Ambient temperature	+5°C ~+60°C					
Lubricator	Without lubrication					
Available speed range	Standard grease: 100~500 mm/sec (*1)					
	Slow motion grease: 50~100 mm/sec (*1,2)					
Holding force (N)	53.9	137	231	363	588	922
Sensor switch (*3)	-		RDFE(V)		RDFE RDFE(V)	

Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke	
		Cushion pad	Cushion air
ø10	100 ~ 500	500	-
ø15		900	900
ø20	100, 150, 200, 250,	1500	1000
ø25	300, 350, 400, 450,	2000	1000
ø32, 40	500, 600, 700, 800	2000	900

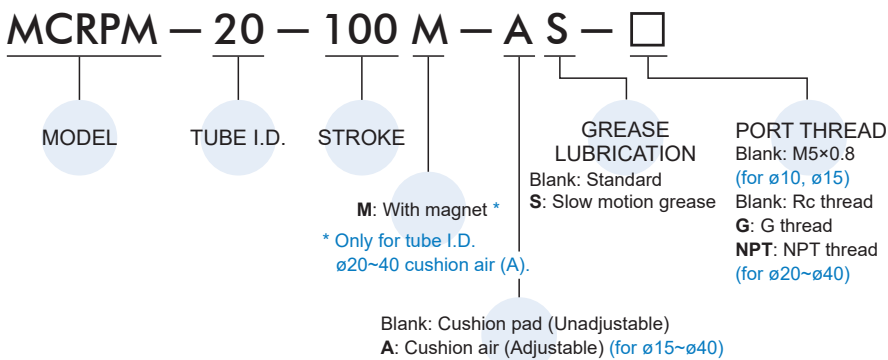
* Minimum stroke unit 1mm.

*1. The cylinder must be connected to a speed controller and gradually adjusted from fully closed to achieve the desired operating speed within the designed range.

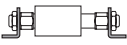
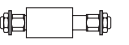
*2. Between the speed range limit the actuator stroke must not exceed to 2m/minute.

*3. RDFE(V) specification, please refer to page 8-20.

Order example





Order example of mounting accessories



Code	LB (Purchase 2 pcs)	FA (Purchase 2 pcs)
Mounting Tube I.D.		
ø10	LB-M4-16	FA-M4-16
ø15	LB-P2-15	
ø20	LB-M2-20	FA-M2-20
ø25	LB-M2-25	FA-M2-25
ø32	LB-P2-32	
ø40	LB-P2-40	FA-M2-40

Weight

Cylinder

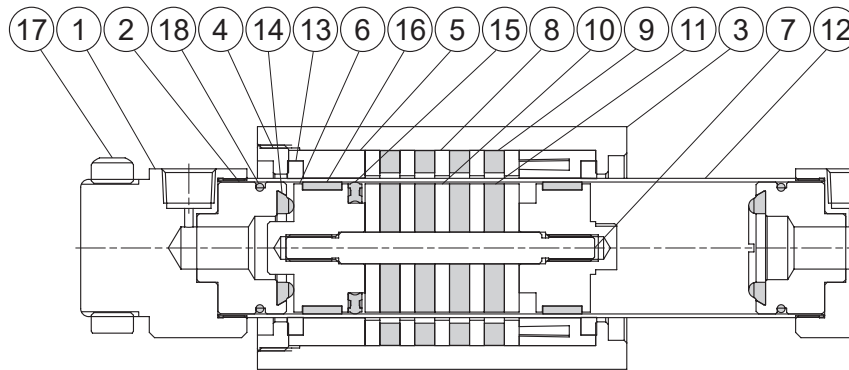
Model	Basic weight MCRPM	Stroke 100 mm MCRPM
Tube I.D.		
ø10	92	27
ø15	232	32
ø20	413	43
ø25	657	46
ø32	1,177	66
ø40	1,996	83

Accessoires Unit: g

LB	FA
	
21	13
27	13
64	68
66	75
108	75
179	129

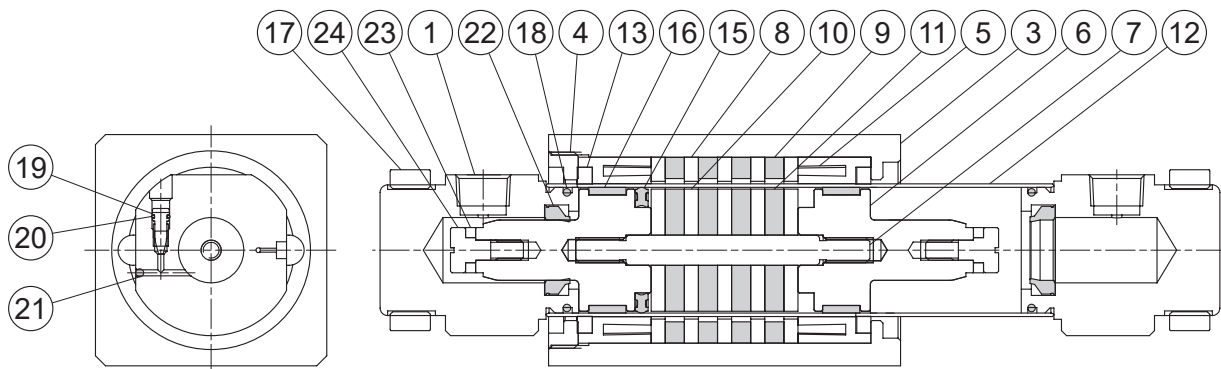
Cushion pad

Unadjustable



Cushion air

Adjustable



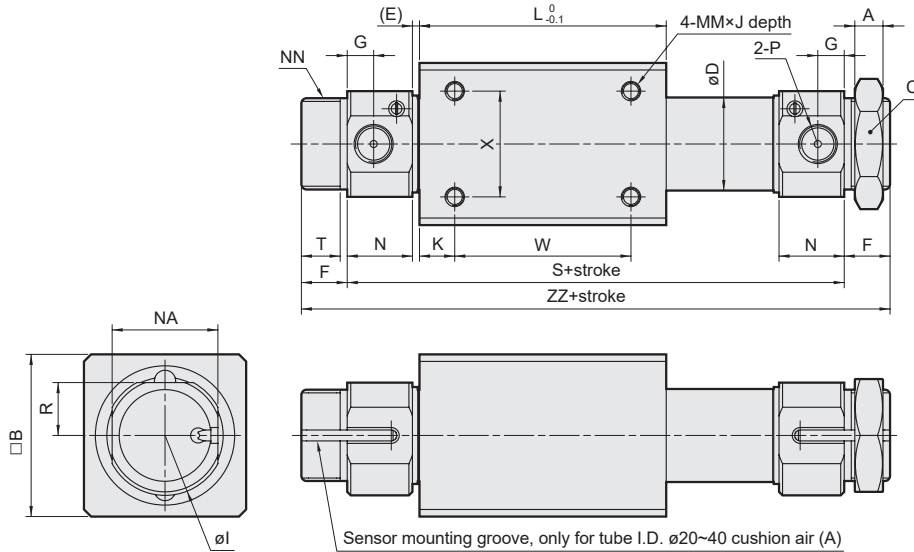
Material

No.	Cushion		Part name	Material	Note
	Air	Pad			
1	●	●	Cover	Aluminum alloy	Anodized
2		●	End collar *1	Aluminum alloy	
3	●	●	Slider body	Aluminum alloy	Anodized
4	●	●	Body cover	Aluminum alloy	Anodized
5	●	●	Body wear ring	Resin	
6	●	●	Piston	Aluminum alloy	
7	●	●	Shaft	Stainless steel	
8	●	●	Slider side yoke	Carbon steel	Ni plated
9	●	●	Slider side magnet	Magnet material	Ni plated
10	●	●	Piston side yoke	Carbon steel	Ni plated
11	●	●	Piston side magnet	Magnet material	Ni plated

*1. $\phi 10$, $\phi 15$ without end collar.

No.	Cushion		Part name	Material	Note
	Air	Pad			
12	●	●	Tube	Stainless steel	
13	●	●	Lub-retainer	Special resin	
14		●	Cushion	NBR	
15	●	●	Piston seal	NBR	
16	●	●	Wear ring	Resin	
17	●	●	Cover nut	Carbon steel	Ni plated
18	●	●	O ring	NBR	
19	●		Needle valve	Stainless steel *2	
20	●		O ring	NBR	
21	●		Steel ball	Stainless steel	
22	●		Cushion	NBR	
23	●		Magnet ring	Magnet material	For magnet
24	●		Fixing bolt	Stainless steel	For magnet

*2. Material: $\phi 32, \phi 40$ Carbon steel.

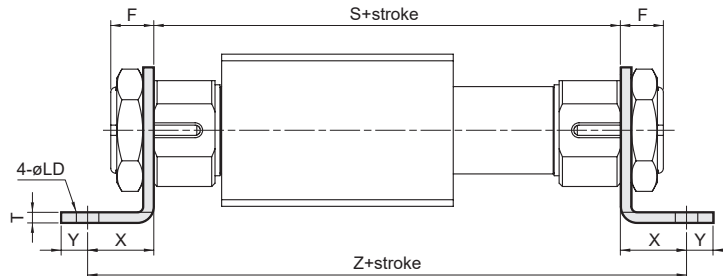
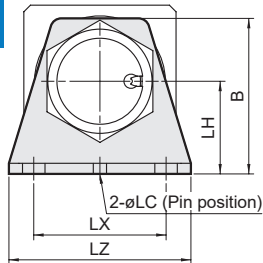


Sensor mounting groove, only for tube I.D. $\phi 20\sim 40$ cushion air (A)

Code Tube I.D.	A	B	C	D	E	F	G	I	J	K	L	MM	N	NA	NN	R	S	T	W	X	ZZ	P
10	4	25	14	12	1.5	9	5	16	4.5	4	38	M3×0.5	11	14	M10×1.0	7	63	7.5	30	16	81	M5×0.8
15	4	35	14	16.6	2	10	5.5	22	5	11	57	M4×0.7	11	20	M10×1.0	10	83	8.5	35	19	103	M5×0.8
20	8	36	26	21.6	2	13	7.5	28	6	8	66	M4×0.7	18	24	M20×1.5	12	106	10.5	50	25	132	Rc1/8
25	8	46	32	26.4	2	13	7.5	34	8	10	70	M5×0.8	18.5	30	M26×1.5	15	111	10.5	50	30	137	Rc1/8
32	8	60	32	33.6	2	16	8	40	8	15	80	M6×1.0	20	36	M26×1.5	18	124	14	50	40	156	Rc1/8
40	10	70	41	41.6	3	16	11	50	10	16	92	M6×1.0	26	46	M32×2.0	23	150	13	60	40	182	Rc1/4

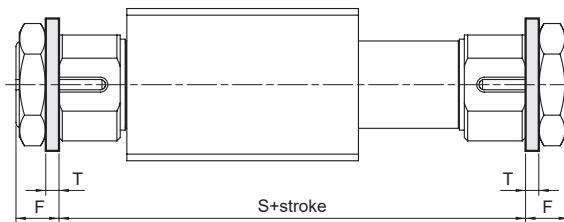
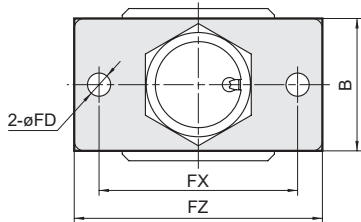
Accessories

LB

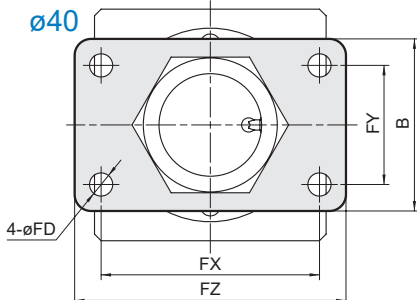


FA

$\phi 10\sim\phi 32$



$\phi 40$



Code Tube I.D.	B		F	FD	FX	FY	FZ	LC	LD	LH	LX	LZ	S	T		X	Y	Z
	LB	FA												LB	FA			
10	25	20	9	5.5	33	-	42	-	5.5	14	33	42	73	2.3	2.3	9	6	91
15	31	20	10	5.5	33	-	42	4	5.5	20	33	42	83	2.5	2.3	9	6	101
20	40	34	13	7	60	-	75	4	6.8	25	40	55	106	3.2	4	20	8	146
25	47	40	13	7	60	-	75	4	6.8	28	40	55	111	3.2	4	20	8	151
32	52	40	16	7	60	-	75	4	7	33	46	62	124	4	4	23	7	170
40	62	52	16	7	66	36	82	4	9	38	55	75	150	5	5	23	10	196