

MCRPM series

MAGNETICALLY COUPLED RODLESS CYLINDER



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.
- All series are without switch types.

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					
	Slow motion grease: 50~100 mm/sec (*)					
Holding force (N)	53.9	137	231	363	588	922

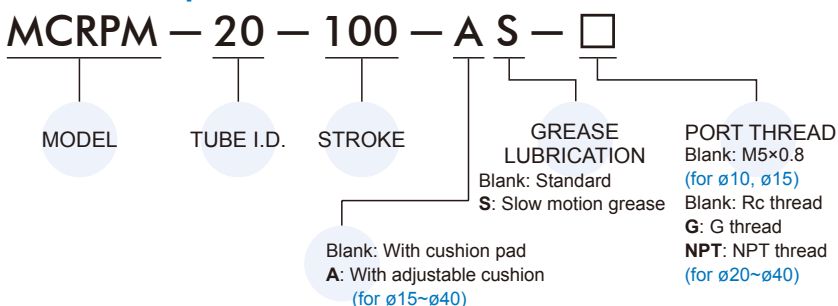
Table for standard stroke

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

* Minimum stroke unit 1mm.

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

Order example

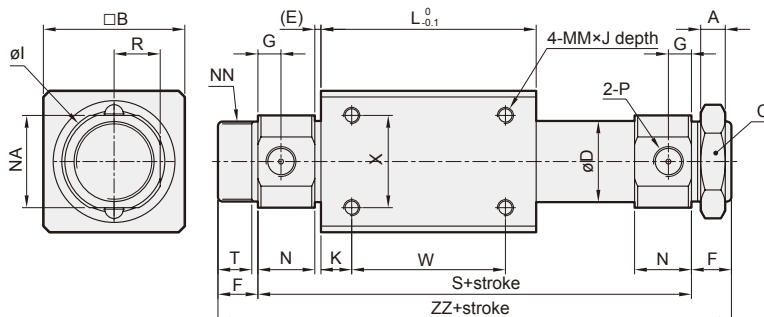


Cylinder weight

Unit: g

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

Dimensions

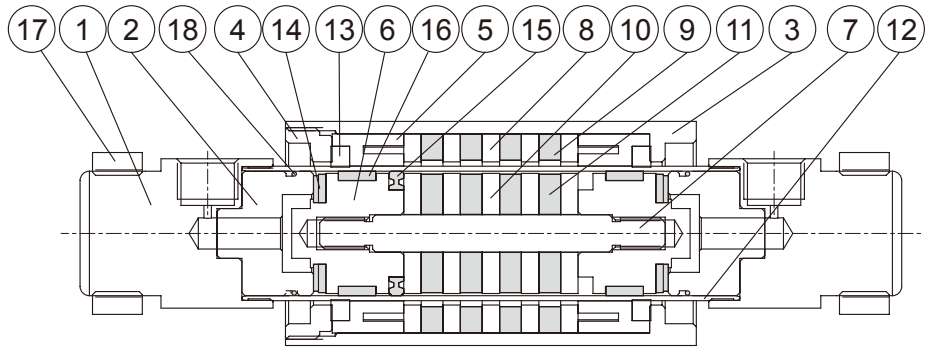


Code Tube I.D.	A	B	C	D	E	F	G	I	J	K	L	MM	N	NA	NN	R	S	T	W	X	ZZ	P
10	4	25	14	12	1.5	9	5	16	4.5	4	38	M3×0.5	11	14	M10×1.0	7	63	7.5	30	16	81	M5×0.8
15	4	35	14	16.6	2	10	5.5	22	5	11	57	M4×0.7	11	20	M10×1.0	10	83	8.5	35	19	103	M5×0.8
20	8	36	26	21.6	2	13	7.5	28	6	8	66	M4×0.7	18	24	M20×1.5	12	106	10.5	50	25	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

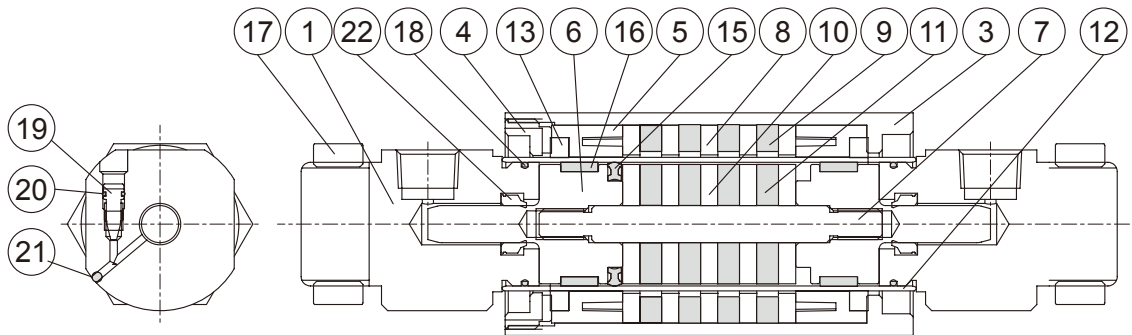
MCRPM Inside structure & Parts list $\varnothing 10 \sim \varnothing 40$

MAGNETICALLY COUPLED RODLESS CYLINDER

Cushion pad type



Cushion air type



Material

No.	Cushion		Part name	Material	Note
	Air	Pad			
1	●	●	Cover	Aluminum alloy	Anodized
2		●	End collar	Aluminum alloy	*1
3	●	●	Slider body	Aluminum alloy	Anodized
4	●	●	Body cover	Aluminum alloy	Anodized
5	●	●	Body wear ring	POM	
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. $\varnothing 10$, $\varnothing 15$ 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	POM	
17	●	●	Cover nut	Carbon steel	Ni plated
18	●	●	O ring	NBR	
19	●		Needle valve	*2	
20	●		O ring	NBR	
21	●		Steel ball	Stainless steel	
22	●		Cushion	NBR	

*2. Material: $\varnothing 15, \varnothing 20, \varnothing 25$ Stainless steel;
 $\varnothing 32, \varnothing 40$ Carbon steel.