

Features

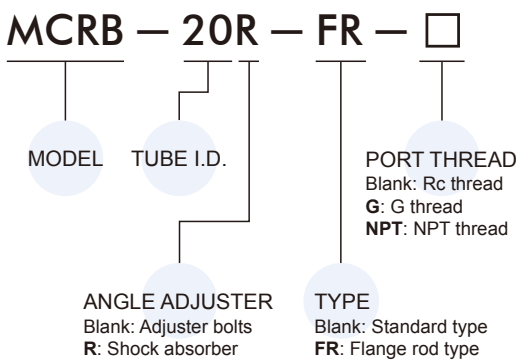
- Twin rack and pinion fitted as standard.
- Can be adjusted between 0 and 190 degrees.
- Simple mounting of sensors.
- Magnetic as standard.

Specification

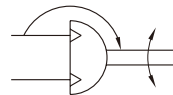
Model	MCRB				
Acting type	Double acting				
Tube I.D. (mm)	16	20	25	32	
Port size	Rc1/8				
Medium	Air				
Operating pressure range	0.1~1MPa				
Proof pressure	1.5MPa				
Ambient temperature	-5~+60°C (No freezing)				
Lubrication	Not required				
Cushion	NBR spacer				
Allowable kinetic energy	Cushion pad	0.007J	0.040J	0.081J	0.32J
	Cushion	0.039J	0.116J	0.294J	1.6J
Stable rotation time regulation range	0.2~1.0 s/90°				
Sensor switch (*)	RCD				
Weight (kg)	0.7	1.16	1.57	3.07	

* RCD specification, please refer to page 5-5.

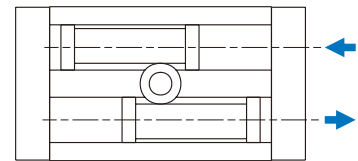
Order example



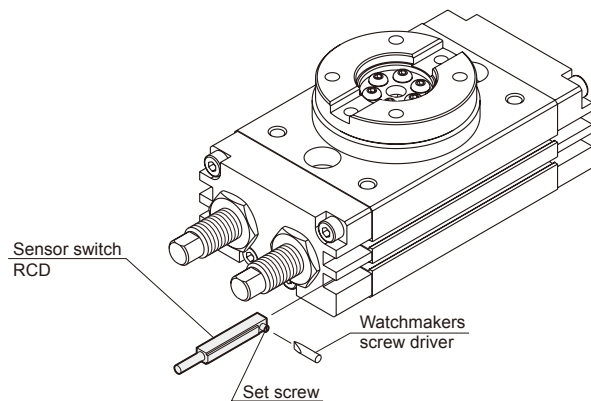
Symbol



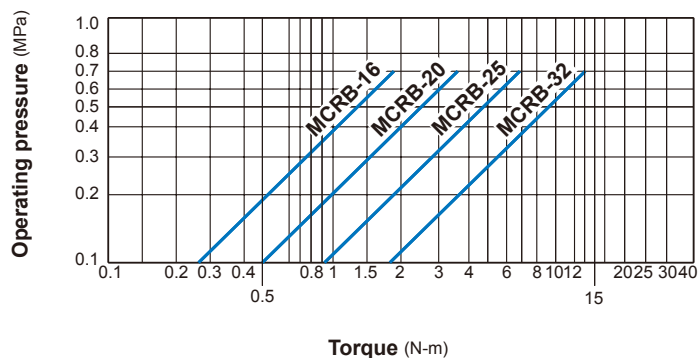
Action profile



Installation of sensor switch



Torque diagram



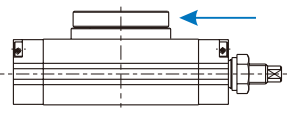
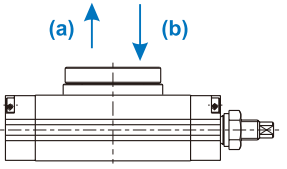
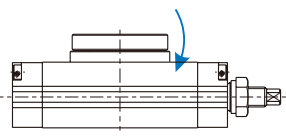
Theoretic force

Unit: N-m

Type	MCRB				
Tube I.D.	16	20	25	32	
Operating pressure (MPa)	0.1	0.26	0.5	0.91	1.88
	0.2	0.52	1	1.81	3.78
	0.3	0.78	1.5	2.72	5.66
	0.4	1.04	2.01	3.62	7.56
	0.5	1.31	2.51	4.55	9.44
	0.6	1.57	3	5.45	11.32
	0.7	1.83	3.5	6.36	13.23

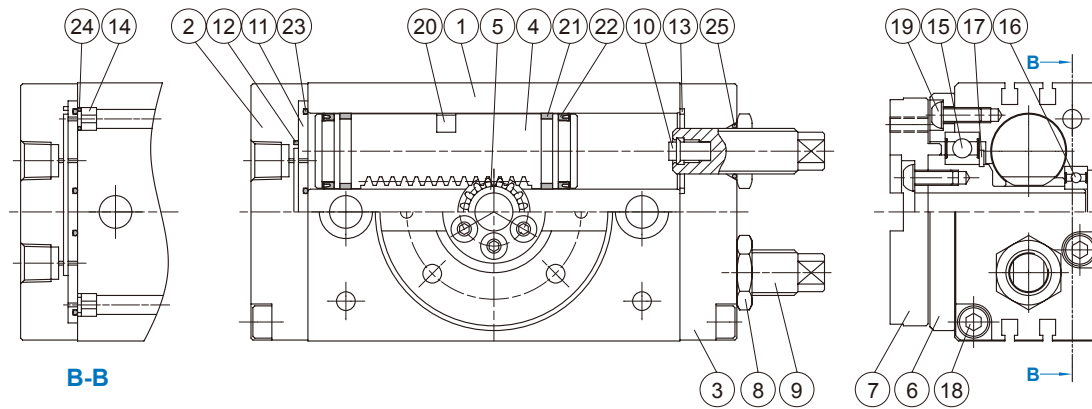
Allowable load

Set the load and moment to be applied to the table within the allowable values shown in the table below. (Values outside of limitations will cause excessive play, deteriorate accuracy, and shorten service life.)

Pictures				
Tube I.D.	Allowable radial load (N)	Allowable thrust load (N)		Allowable moment (N.m)
		(a)	(b)	
16	78	74	78	2.4
20	196	197	363	5.3
25	314	296	451	9.7
32	390	493	708	18

ROTARY ACTUATOR

Mindman



Material

No.	Part name	Material	Q'y	Repair kits (inclusion)
1	Body	Aluminum alloy	1	
2	Cover	Aluminum alloy	1	
3	End cover	Aluminum alloy	1	
4	Piston	Stainless steel	2	
5	Pinion	SCM	1	
6	Bearing retainer	Aluminum alloy	1	
7	Table	Aluminum alloy	1	
8	Seal nut	Stainless steel	2	
9	Shock absorber	Stainless steel	2	
10	Cushion pad	NBR	2	●
11	Plate	Aluminum alloy	1	
12	Packing	NBR	1	●
13	Gasket	NBR	2	●
14	Fixed	Copper	2	
15	Ball bearing	Bearing steel	1	
16	Ball bearing	Bearing steel	1	
17	Snap ring	Spring steel	1	
18	Screw	SCM	8	
19	Screw	SCM	12	
20	Magnet	Magnet material	2	
21	Wearing	Teflon	4	
22	Piston packing	NBR	4	●
23	O-ring	NBR	2	●
24	O-ring	NBR	2	●
25	O-ring	NBR	2	●

Order example of repair kits

Tube I.D.	Repair kits
ø16	PS-MCRB-16
ø20	PS-MCRB-20
ø25	PS-MCRB-25
ø32	PS-MCRB-32

