



### Order example:

**MCHA — 20**

MODEL

TUBE I.D.

### Features:

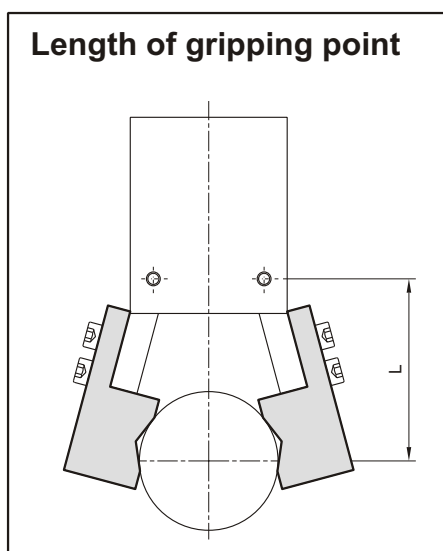
- Available with comprehensive range of bore sizes 12 ~ 32mm.
- Highly accurate air driven device for holding work-piece.
- Magnetic as standard.

### Specification:

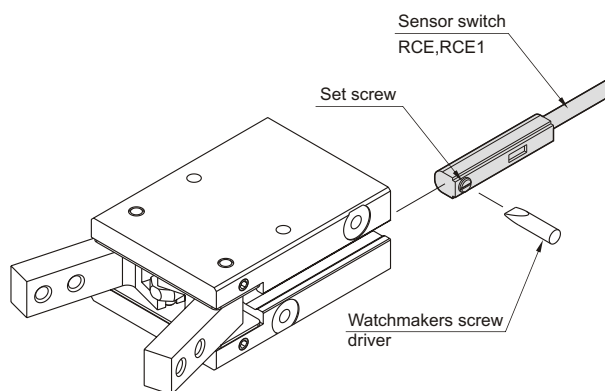
Model	MCHA					
Acting type	Double acting					
Tube I.D. (mm)	12	16	20	25	32	
Port size	M3×0.5	M5×0.8				
Medium	Air					
Operating pressure range	1.5~7 kgf/cm <sup>2</sup> (0.15~0.7 MPa)					
Ambient temperature	-5~+60°C (No freezing)					
Max frequency	180 Cycles/min					
Lubrication	Cylinder	Not required				
	Lever	Grease				
Max arm length (L) ※	30	40	60	70	85	
Clamp / Release angle	-10~30°					
Theorem moment (M) ※	Closed	0.4×P	0.9×P	1.7×P	3.4×P	6.1×P
	Open	0.5×P	1.2×P	2.3×P	4.4×P	8.1×P
Clamping force (F) ※	$F = M / L \times 0.85$					
Sensor switch	RCE, RCE1					
Weight (g)	53	103	193	327	525	

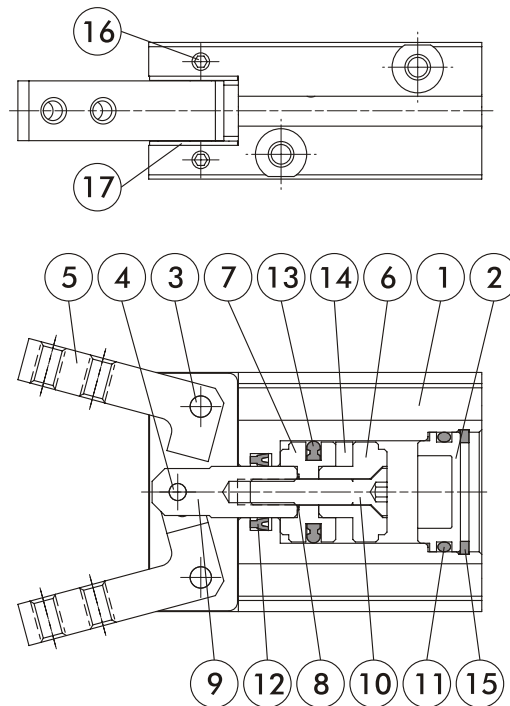
※ L : Arm length (mm), M : Theorem moment (kgf-cm),  
F : Clamping force (kgf), P : Operating pressure (kgf/cm<sup>2</sup>).

### Length of gripping point



### Installation of sensor switch



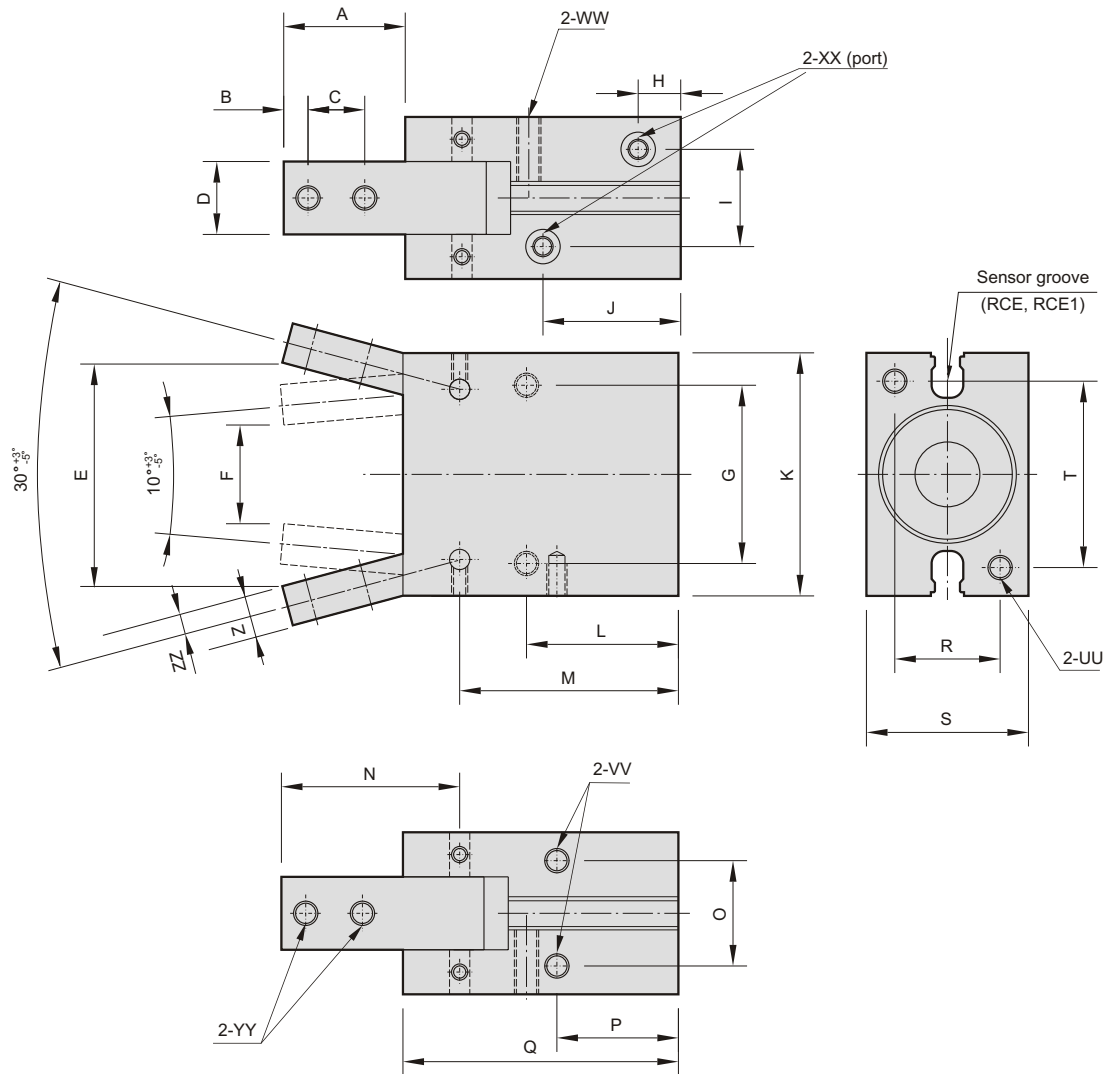


### Material

No.	Part name	Material
1	Body	Aluminum alloy
2	Head cover	Aluminum alloy
3	Grip rivet	Medium carbon steel
4	Spindle rivet	Bearing steel
5	Y grip per	Medium carbon steel
6	Piston-R	Aluminum alloy
7	Piston-H	Aluminum alloy
8	Gasket	NBR
9	Piston rod	Stainless steel
10	Screw	Stainless steel
11	Cover ring	NBR
12	Rod packing	NBR
13	Piston packing	NBR
14	Magnet ring	Magnet material
15	Stop ring	Spring steel
16	Screw	SCM
17	Washer	Stainless steel

# MCHA Dimensions $\phi 12 \sim \phi 32$

## GRIPPERS



Code Tube I.D.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	UU	VV	WW	XX	YY	Z	ZZ
12	15.4	3	6	7	26.3	9	20	7.5	10.2	23.5	28	20	32.9	21.5	10.2	16	39	10	16	22	M3	M3	M3	M3	M3	5	2.5
16	17.5	3	8	9	31.1	14	24	7.5	12	22	34	22.5	35	25	14	18	42.5	14	22	26	M4	M4	M4	M5	M3	6	3
20	22	4	10	12	40.1	18	30	8	13	25	45	25	39.5	32.5	16	19	50	16	26	35	M5	M5	M5	M5	M4	7	3.5
25	26	5	12	14	47.9	21	36	8.5	18	28	52	28.5	45.5	38.5	20	21.5	58	20	32	40	M6	M6	M6	M5	M5	9	4
32	30	6	14	18	55.1	24	42	10.5	24	34	60	37.5	54	44	26	30	68	26	40	46	M6	M6	M6	M5	M6	10	5