

# MCHG2 series

## LOWER HEIGHT of THREE JAW GRIPPERS

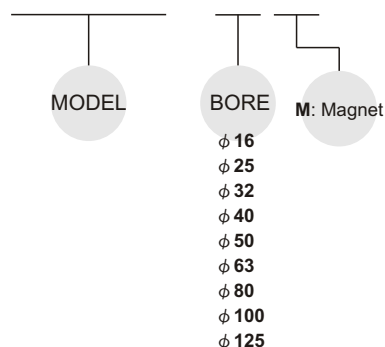


### Features:

- Through holes in body enable simple mounting.
- Body manufactured from high tensile, anodised aluminium giving good resistance to corrosion.
- Available with sensors.

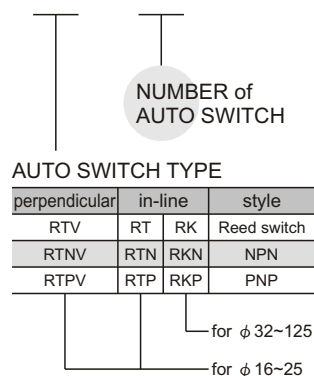
### Order example:

**MCHG2 – 16 M**



### Auto switch type:

**RT × 1**



### Specification:

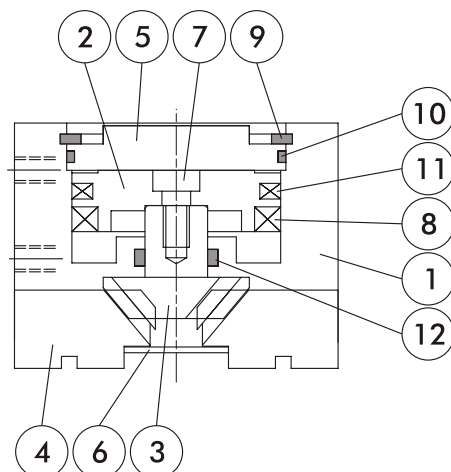
Model		MCHG2-16	MCHG2-25	MCHG2-32	MCHG2-40	MCHG2-50	MCHG2-63	MCHG2-80	MCHG2-100	MCHG2-125
Acting type		Double acting								
Tube I.D. (mm)		16	25	32	40	50	63	80	100	125
Stroke (mm)		4	6	8	8	12	16	20	24	32
Medium		Air								
Operating pressure (kgf/cm <sup>2</sup> )		2~6		1~6						
Ambient temperature		－10～＋60℃ (No freezing)								
Repeatability		±0.01 mm								
Max.operating frequency(c.p.m)		120		60				30		
Lubrication		Not required								
※Effective gripping force N(lbf) at (5kgf/cm <sup>2</sup> )	External	14(3.1)	42(9.4)	74(16.6)	118(26.5)	187(42)	335(75)	500(112)	750(169)	1270(285)
	Internal	16(3.6)	47(10.6)	82(18.4)	130(29)	204(46)	359(81)	525(118)	780(175)	1320(297)
Weight (g)		80	150	240	400	540	1020	1880	3300	6200

※ Values for 16 to 25 are with gripping point L=20mm, for 32 to 63 with gripping point L=30mm, and for 80 to 125 with gripping point L=50mm, Refer to the "Effective Holding force" data on pages 5 through 6 for the gripping force at each gripping position.

- Open and closed diameter values apply for external gripping of work pieces.

# MCHG2 Inside structure & Parts list

## LOWER HEIGHT of THREE JAW GRIPPERS

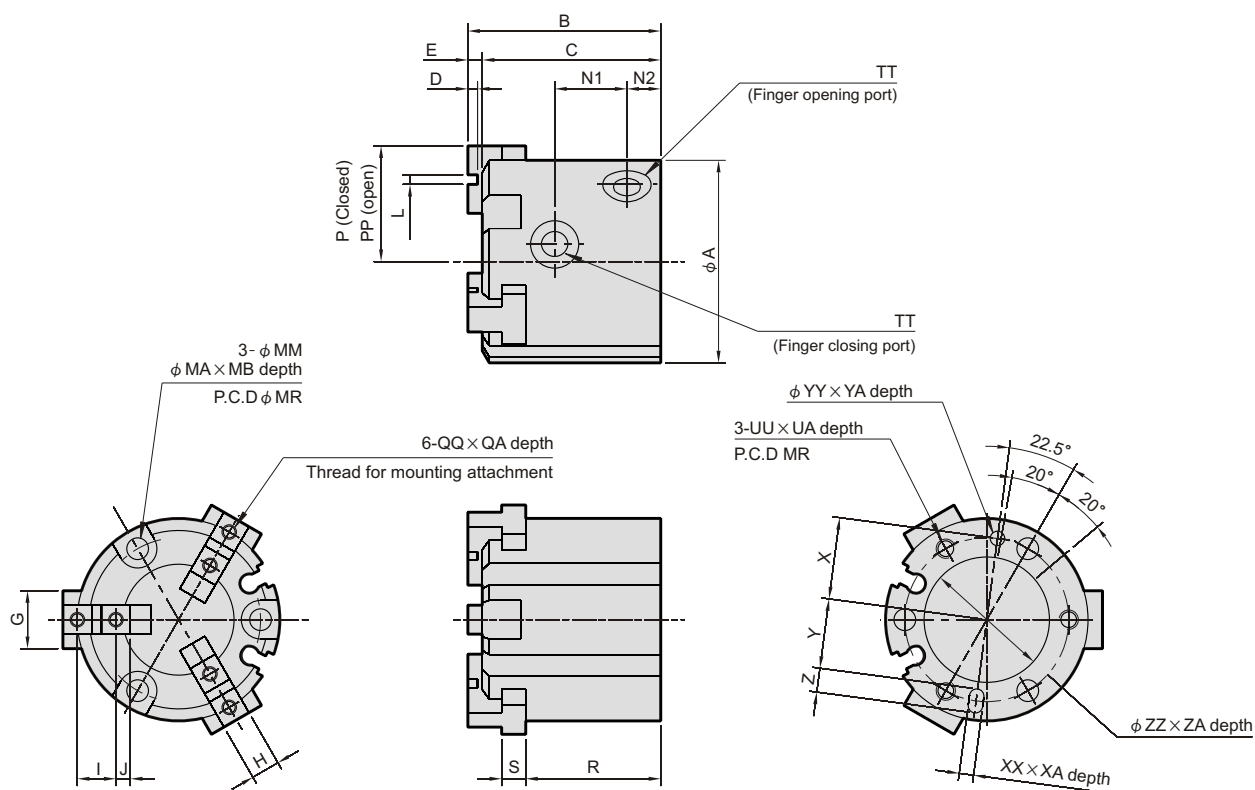


### Material

No.	Part name	Material
1	Body	Aluminum alloy
2	Piston	Aluminum alloy
3	Cam	Carbon steel
4	Finger	Carbon steel
5	Cap	Aluminum alloy
6	End plate	Stainless steel
7	Piston bolt	Stainless steel
8	Magnet ring	Magnet material
9	Snap ring	Carbon steel
10	Cover ring	NBR
11	Piston packing	NBR
12	Rod packing	NBR

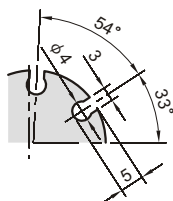
# MCHG2 Dimensions $\phi 16$ , $\phi 25$

## LOWER HEIGHT of THREE JAW GRIPPERS

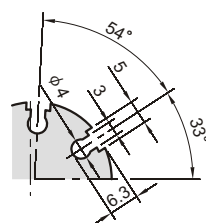


### Auto switch mounting groove position

$\phi 16$



$\phi 25$



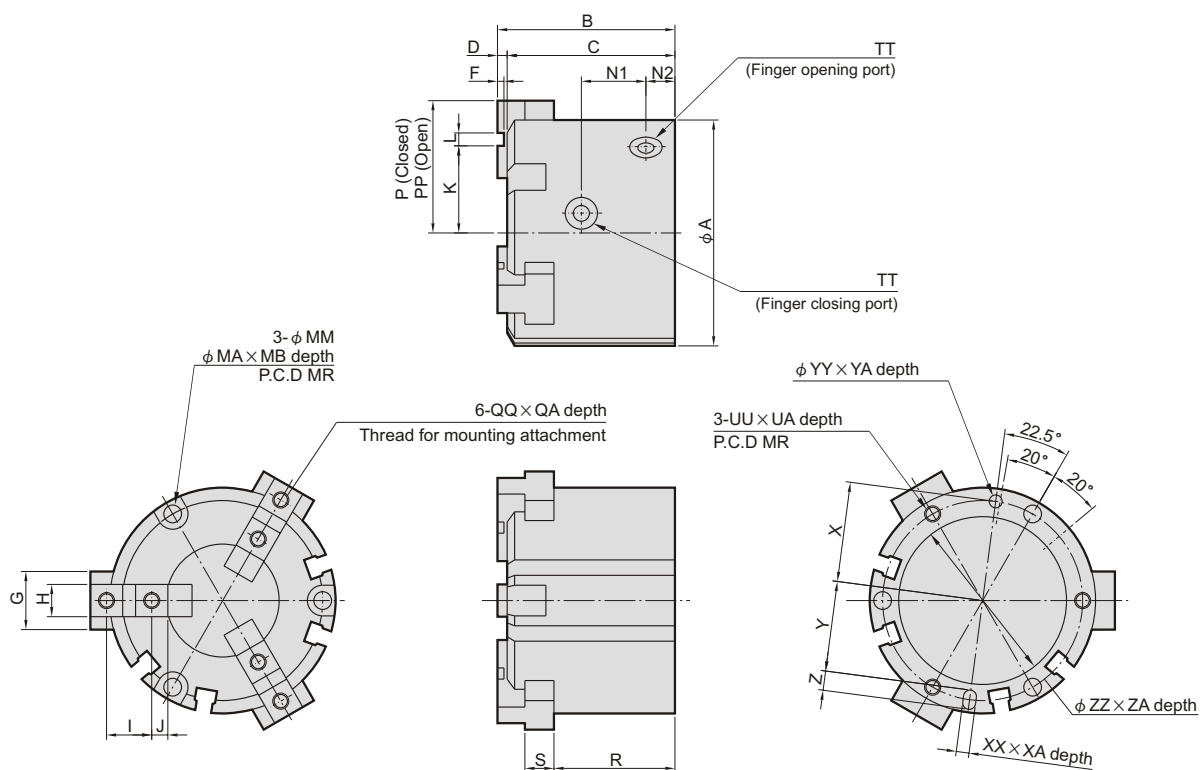
Code Tube I.D.	A	B	C	D	E	G	H	I	J	L	MA	MB	MM	MR	N1	N2	P	PP	QA	QQ	R	S	TT	UA
16	30	35	32	2	3	8	5h9 <sup>+0.025</sup> <sub>-0.030</sub>	6	2	2H9 <sup>+0.025</sup> <sub>-0</sub>	6	8	3.4	25	11	7	15	17.5	5	M3×0.5	25	4	M3×0.5	4.5
25	42	40	37	2	3	12	6h9 <sup>+0.025</sup> <sub>-0.030</sub>	8	3	2H9 <sup>+0.025</sup> <sub>-0</sub>	8	10	4.5	34	15	7	21	24	6	M3×0.5	28	5	M5×0.8	6

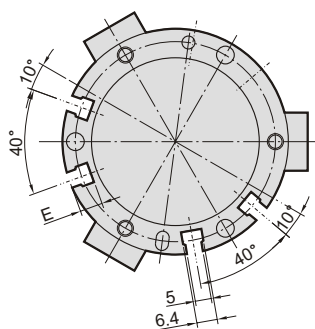
Code Tube I.D.	UU	X	XA	XX	Y	YA	YY	Z	ZA	ZZ
16	M3×0.5	12.5	2	2H9 <sup>+0.025</sup> <sub>-0</sub>	11	2	2H9 <sup>+0.025</sup> <sub>-0</sub>	3	1.5	17H9 <sup>+0.043</sup> <sub>-0</sub>
25	M4×0.7	17	3	2H9 <sup>+0.025</sup> <sub>-0</sub>	14.5	3	3H9 <sup>+0.025</sup> <sub>-0</sub>	5	1.5	26H9 <sup>+0.052</sup> <sub>-0</sub>

# MCHG2 Dimensions $\phi 32 \sim \phi 80$

## LOWER HEIGHT of THREE JAW GRIPPERS



### Auto switch mounting groove position



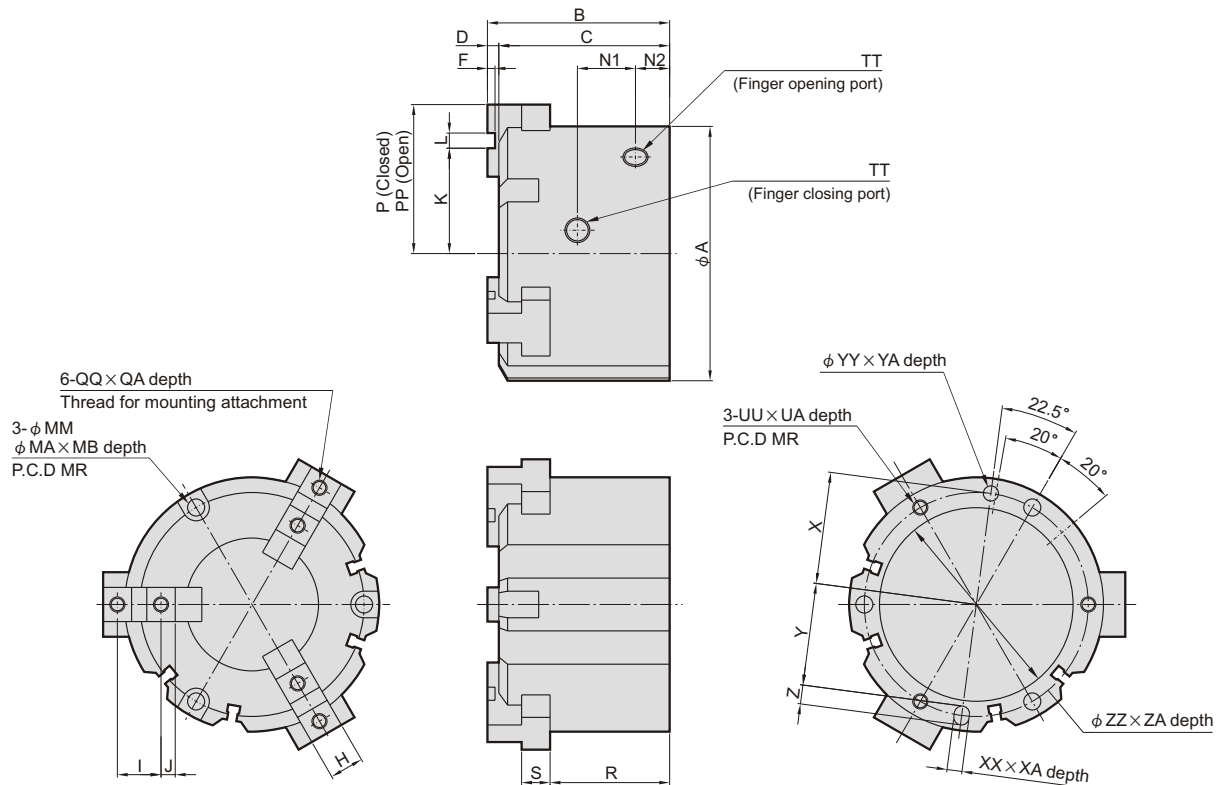
Code Tube I.D.	A	B	C	D	E	F	G	H	I	J	K	L	MA	MB	MM	MR	N1	N2	P	PP	QA	QQ	R	S	TT
32	52	44	41	3	6	2	14	8h9 <sup>+0</sup> <sub>-0.036</sub>	11	4.5	17	2H9 <sup>+0.025</sup> <sub>-0</sub>	8	9	4.5	44	16	8	28	32	8	M4 $\times$ 0.7	30.5	6	M5 $\times$ 0.8
40	62	47	44	3	8	2	16	8h9 <sup>+0</sup> <sub>-0.036</sub>	12	4.5	19	3H9 <sup>+0.025</sup> <sub>-0</sub>	9.5	9	5.5	53	17	9	31	35	8	M4 $\times$ 0.7	32	7	M5 $\times$ 0.8
50	70	55	52	3	7	2	18	10h9 <sup>+0</sup> <sub>-0.036</sub>	14	5	21	4H9 <sup>+0.030</sup> <sub>-0</sub>	9.5	12	5.5	62	20	9	35	41	10	M5 $\times$ 0.8	37.5	9	M5 $\times$ 0.8
63	86	66	62	4	7.5	3	24	12h9 <sup>+0</sup> <sub>-0.043</sub>	17	5.5	26	6H9 <sup>+0.030</sup> <sub>-0</sub>	11	14	6.6	76	22	12	43	51	10	M5 $\times$ 0.8	44	11	M5 $\times$ 0.8
80	106	82	77	5	9	4	28	14h9 <sup>+0</sup> <sub>-0.043</sub>	20	6	33.5	8H9 <sup>+0.036</sup> <sub>-0</sub>	11	19	6.6	95	27	13.5	53.5	63.5	12	M6 $\times$ 1	56	12	Rc1/8

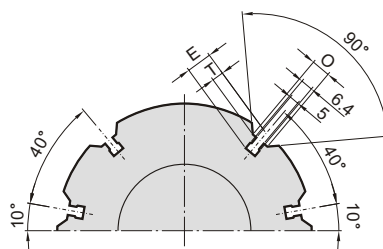
Code Tube I.D.	UA	UU	X	XA	XX	Y	YY	Z	ZA	ZZ
32	6	M4 $\times$ 0.7	22	3	3H9 <sup>+0.025</sup> <sub>-0</sub>	19.5	3H9 <sup>+0.025</sup> <sub>-0</sub>	5	2	34H9 <sup>+0.062</sup> <sub>-0</sub>
40	7.5	M5 $\times$ 0.8	26.5	4	4H9 <sup>+0.030</sup> <sub>-0</sub>	23.5	4H9 <sup>+0.030</sup> <sub>-0</sub>	6	2	42H9 <sup>+0.062</sup> <sub>-0</sub>
50	10	M5 $\times$ 0.8	31	4	4H9 <sup>+0.030</sup> <sub>-0</sub>	28	4H9 <sup>+0.030</sup> <sub>-0</sub>	6	2	52H9 <sup>+0.074</sup> <sub>-0</sub>
63	9	M6 $\times$ 1	38	5	5H9 <sup>+0.030</sup> <sub>-0</sub>	34.5	5H9 <sup>+0.030</sup> <sub>-0</sub>	7	2.5	65H9 <sup>+0.074</sup> <sub>-0</sub>
80	12	M6 $\times$ 1	47.5	6	6H9 <sup>+0.030</sup> <sub>-0</sub>	43.5	6H9 <sup>+0.030</sup> <sub>-0</sub>	8	3	82H9 <sup>+0.087</sup> <sub>-0</sub>

# MCHG2 Dimensions $\phi 100$ , $\phi 125$

## LOWER HEIGHT of THREE JAW GRIPPERS



### Auto switch mounting groove position (4 places)



Code Tube I.D.	A	B	C	D	E	F	G	H	I	J	K	L	MA	MB	MM	MR	N1	N2	O	P	PP	QA	QQ	R	S	T
100	134	96	90	6	13	4	34	18h9 <sup>+0</sup> <sub>-0.043</sub>	23	7.5	43	8H9 <sup>+0.036</sup> <sub>-0</sub>	14	21	9	118	30.6	18	10	66	78	16	M8 $\times$ 1.25	63	15	5
125	166	122	114	8	15	6	40	22h9 <sup>+0</sup> <sub>-0.052</sub>	31	10.5	50	10H9 <sup>+0.036</sup> <sub>-0</sub>	17.5	34	11	148	38	23.5	12	82	98	20	M10 $\times$ 1.5	84	18	7

Code Tube I.D.	TT	UA	UU	X	XA	XX	Y	YA	YY	Z	ZA	ZZ
100	Rc1/4	16	M8 $\times$ 1.25	59	6	8H9 <sup>+0.036</sup> <sub>-0</sub>	54	6	8H9 <sup>+0.036</sup> <sub>-0</sub>	10	4	102H9 <sup>+0.087</sup> <sub>-0</sub>
125	Rc3/8	20	M10 $\times$ 1.5	74	8	10H9 <sup>+0.036</sup> <sub>-0</sub>	68	8	10H9 <sup>+0.036</sup> <sub>-0</sub>	12	6	130H9 <sup>+0.100</sup> <sub>-0</sub>