

Order example

MCHJ – 50

MODEL

BODY SPECIFICATION
50, 66, 80, 100,
125, 160, 200, 300

Features

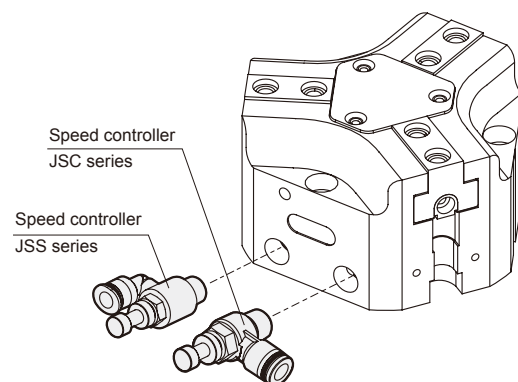
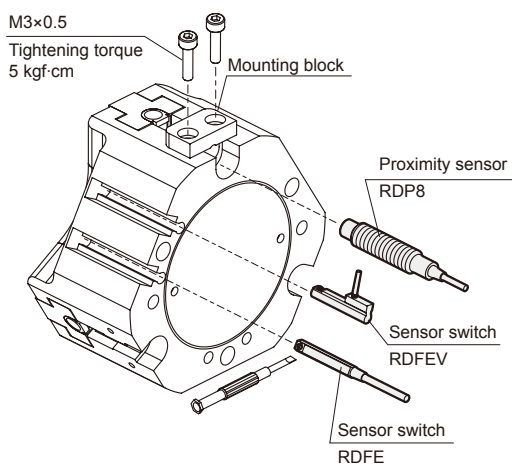
- Compact design to ensure minimum interference while operating; robust T rail design, ensure accurate gripping.
- Can reach maximum torque suitable for long jaws design.
- Circular piston-driven design ensure maximum clamping force.
- Hose-free direct connection: Air supply channel can connect directly without piping or through tread to assure the flexibility of supplying compressed air on any kind of automation system.

Specification

Model	MCHJ							
Acting type	Double acting							
Body specification	50	66	80	100	125	160	200	300
Stroke per-jaw (mm)	4	6	8	10	12	16	20	30
Closing force(N)	450	750	1200	2000	3500	6500	8200	15300
Opening force(N)	500	800	1300	2100	3600	6600	8450	15550
Close/Open time (1/s)	0.025	0.03	0.05	0.1	0.2	0.25	0.35	0.8
Medium	Air							
Operating pressure range	0.2~0.8 MPa							
Compressed air consumption (cm ³)	9.2	21.5	47	100	195	485	850	2300
Ambient temperature	+5°C~ +80°C							
Lubrication	Not required							
Sensor switch (*)	2 wire RDFE(V): Non-contact 3 wire RNFE(V): NPN, RPFE(V): PNP							
Proximity sensor	RDP8 (2 wire), RNP8 (3 wire)							
Accessories	Mounting block, Centering sleeve							
Weight (kg)	0.22	0.5	0.85	1.6	2.8	5.2	10.8	26.5
Recom. work piece weight (kg)	2.2	3.8	6.1	10.2	17.8	33.1	41.8	78

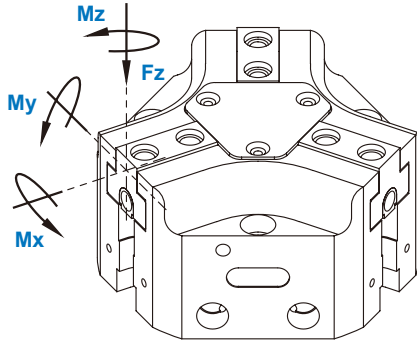
* R*FE(V) specification, please refer to page 5-10.

Installation of sensor switch & speed controller



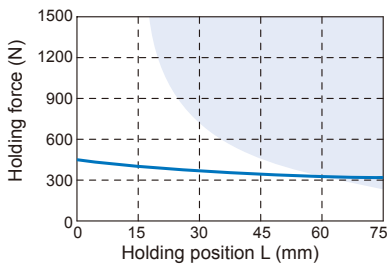
* Each gripper needs at least two speed control valves to control speed.
* Speed controller specification, please refer to page 8-15~17 (Vol.1).

Holding force

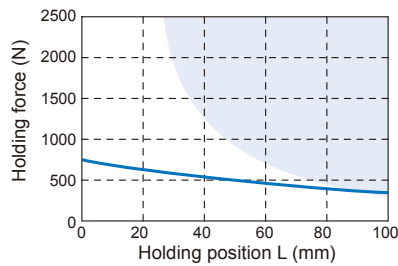


Code Model	Mx max. (Nm)	My max. (Nm)	Mz max. (Nm)	Fz max. (N)
MCHJ-50	15	15	8	700
MCHJ-66	50	45	35	1200
MCHJ-80	80	60	50	1800
MCHJ-100	100	90	75	2500
MCHJ-125	120	120	100	3200
MCHJ-160	160	180	140	5000
MCHJ-200	180	220	170	7000
MCHJ-300	275	300	200	9000

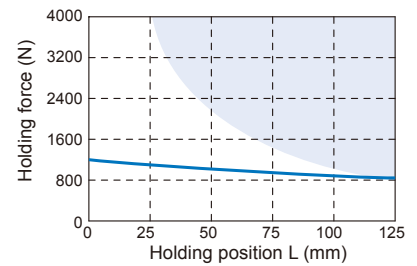
MCHJ-50



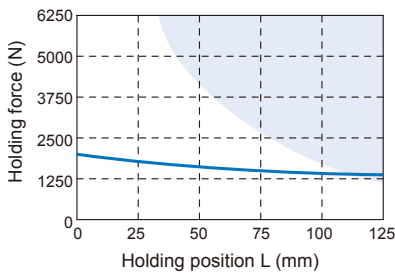
MCHJ-66



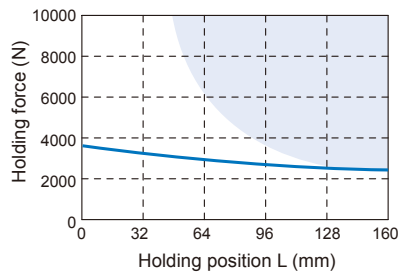
MCHJ-80



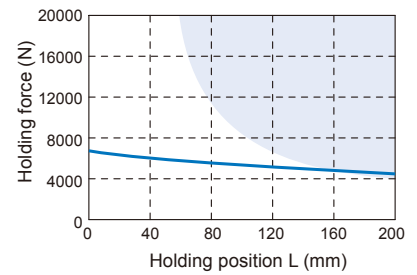
MCHJ-100



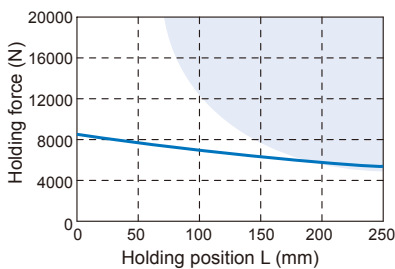
MCHJ-125



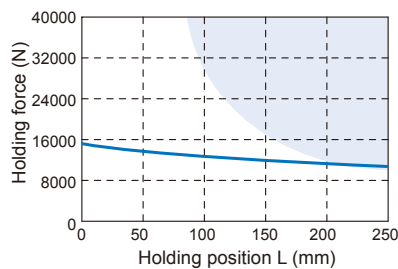
MCHJ-160



MCHJ-200



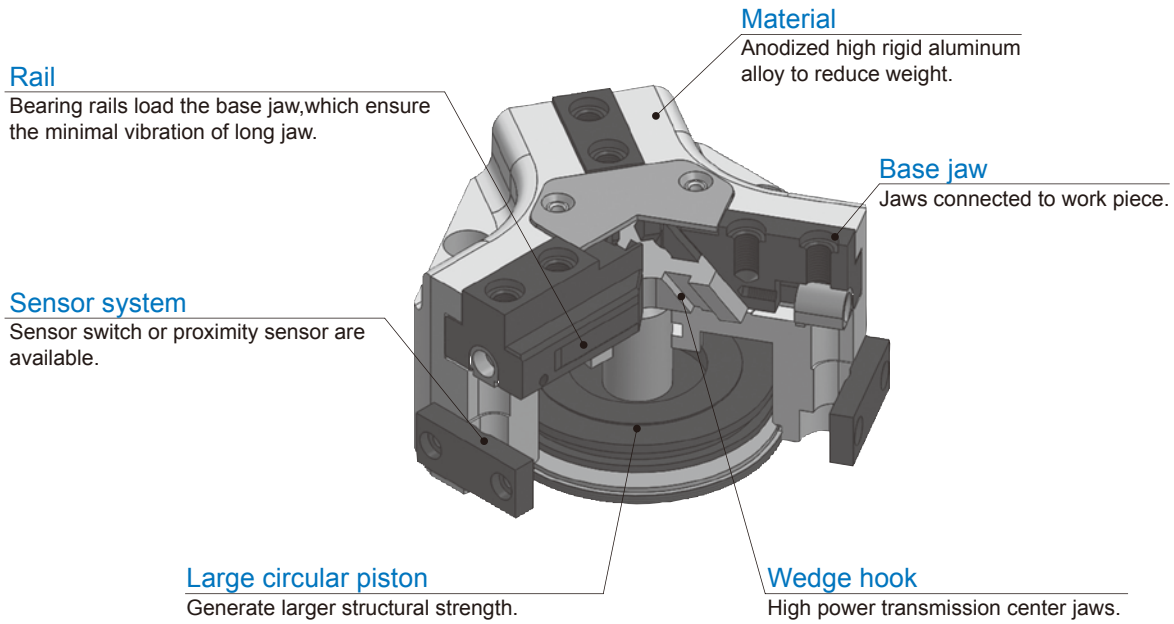
MCHJ-300



* Blue area: Less durable performance can be expected.

Internal structure & Movement description

Compressed air will push or press the circular piston.
By tilting the working surface, the wedge hook will transfer the movement to side movement, and initiate the action of the three base jaws simultaneously.

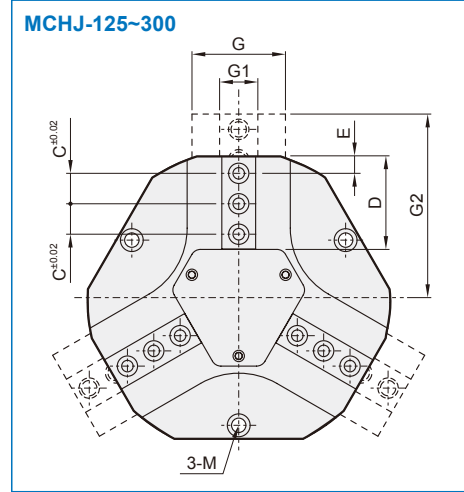
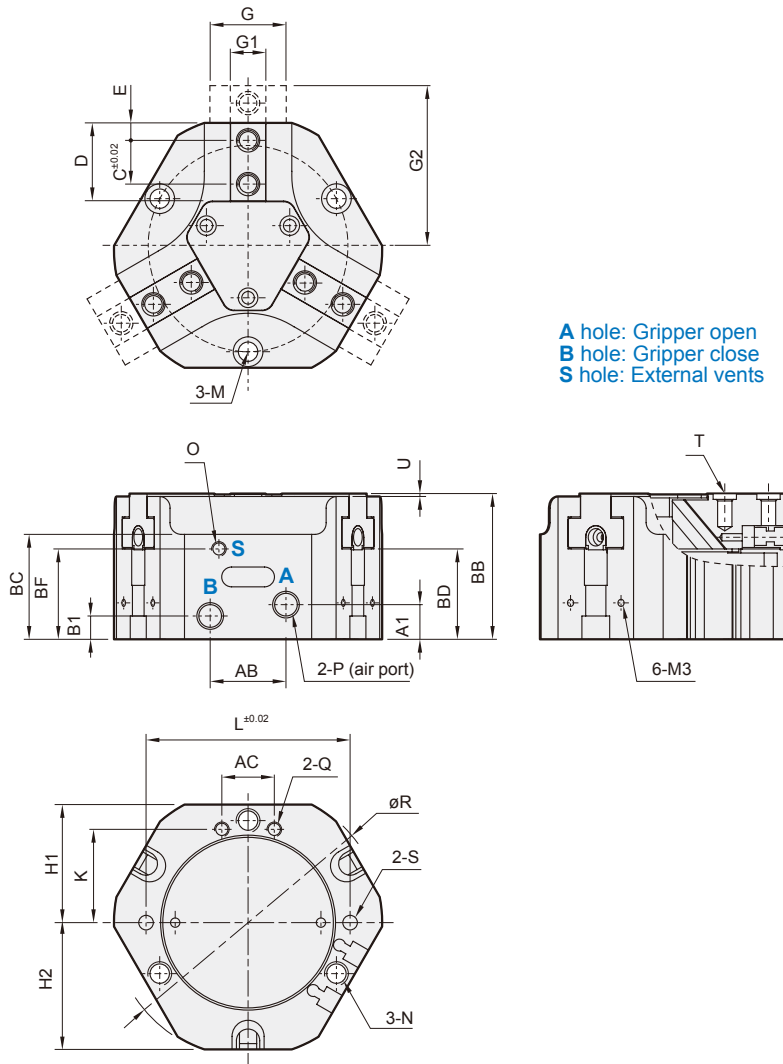


Application examples

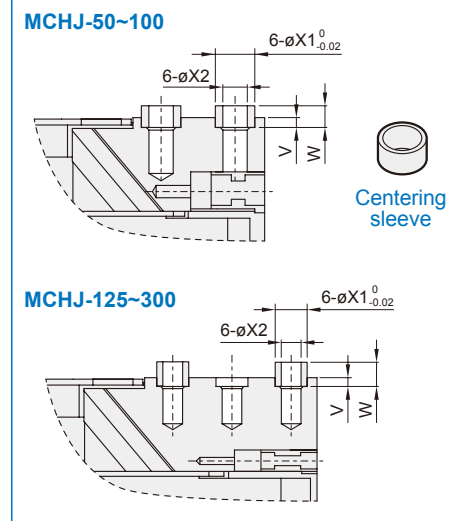
Hose-free direct connection

Code Model	Q	RX	RZ	Y
50	M3	3	5	0.7
66	M5	5	8	1.2
80	M5	5	8	1.2
100	M5	5	8	1.2
125	M5	5	8	1.2
160	M5	5	8	1.2
200	M6	6	9	1.2
300	G1/8	8.5	12.1	1.8

A hole: Gripper open
B hole: Gripper close



Centering sleeve



Code Model	A1	AB	AC	B1	BB	BC	BD	BF	C	D	E	G	G1	G2	H1	H2	K	L	M	N
MCHJ-50	5	12	12	5	35	26	23	23	8	16	4	12	6.5	31	26	27	19	45	M4 DIN912	M5
MCHJ-66	11.5	12	18	5	43	32	27	27	12	22	5	17	10	41	33	35	25	56	M5 DIN912	M6
MCHJ-80	8	26	18	8	50	36	31	31	15	26.7	6	22	12	51.5	40.5	43.5	32	70	M6 DIN912	M8
MCHJ-100	13.5	24	24	10	60	41	38	34	18	34.2	10	26	14	64	51	54	42	90	M6 DIN912	M8
MCHJ-125	17	30	30	10	68	49	42.5	37	12.5	42.3	10	31	15.5	79	64	67	53	112	M8 DIN912	M10
MCHJ-160	20	44	38	10.5	80	55	48	43.8	18	54.8	10	39	20	102	81	86	67.5	146	M8 DIN912	M10
MCHJ-200	22	54	54	12.5	100	75	61	57	22	67.5	12	42	22	126	100	106	75	180	M10 DIN912	M12
MCHJ-300	35	80	80	14	138	90	86	72	30	91	15	66	32	172	132.5	142	105	240	M12 DIN912	M16

Code Model	O	P	Q	R	S	T	U	V	W	X1	X2
MCHJ-50	M3	M5	M3	57	ø4H7	6-M3	1	2	4	5	3
MCHJ-66	M5	M5	M5	74	ø4H7	6-M4	1	2	4	6	4
MCHJ-80	M5	G1/8	M5	92	ø5H7	6-M6	1	2	4	8	6
MCHJ-100	M5	G1/8	M5	114	ø5H7	6-M6	1	2	4	10	6
MCHJ-125	M5	G1/8	M5	139	ø6H7	9-M6	1	1.9	3.9	10	6
MCHJ-160	M5	G1/8	M5	179	ø6H7	9-M8	1	1.9	3.9	12	8
MCHJ-200	M5	G1/4	M6	218	ø10H7	9-M10	1	1.4	3.9	14	10
MCHJ-300	M5	G1/4	G1/8	292	ø10H7	9-M12	2	2.4	4.9	18	12