

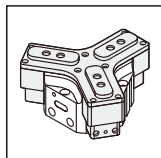
Order example

MCHJ – 50 – SD

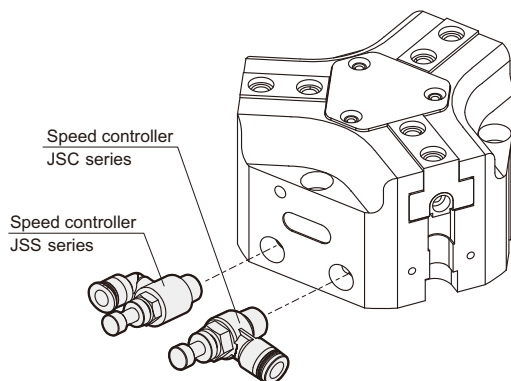
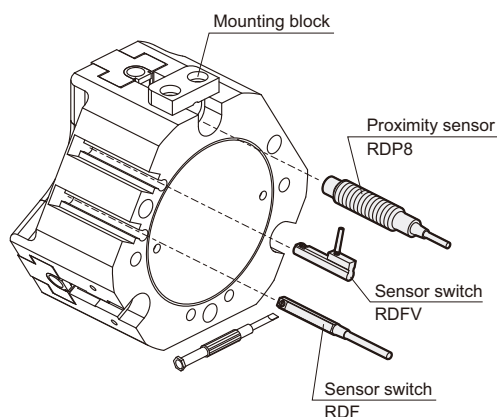
MODEL

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

DUST PROTECTION



Installation of sensor switch & speed controller



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.
- Options: Dust protection, heat-resistance, anti-corrosion, internal mechanical gripping force safety device. (Please contact our sales representative for options.)

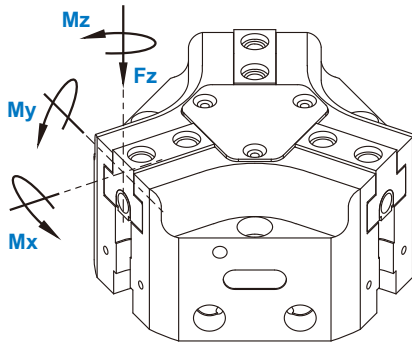
Specification

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	190	470	825	2270
Ambient temperature	+5°C~ +80°C							
Repeatability(±mm)	0.01			0.02		0.05		
Lubrication	Not required							
Sensor switch (※)	RDF, RDFV							
Proximity sensor	RDP8 (2 wire), RNP8 (3 wire)							
Accessories	Mounting block, Centering sleeve							
Weight (kg)	0.22	0.5	0.85	1.6	2.7	5.1	9.6	24
Recom. work piece weight (kg)	2.2	3.8	6.1	10.2	17.8	33.1	41.8	78

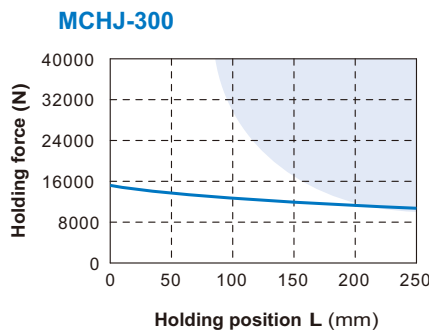
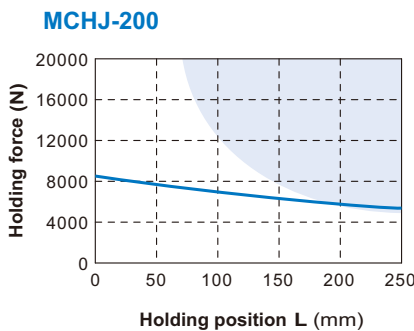
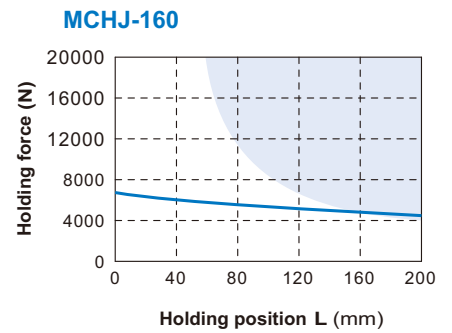
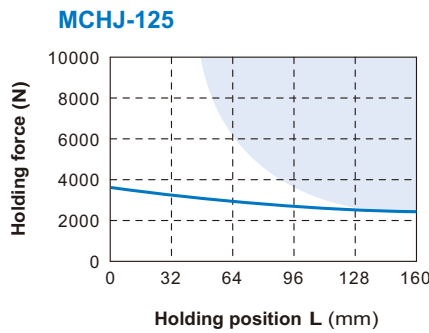
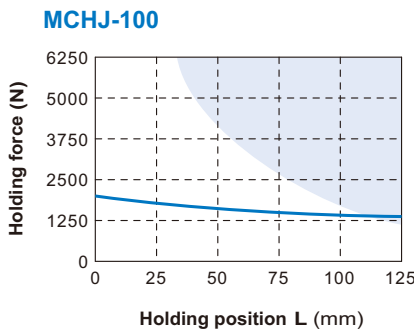
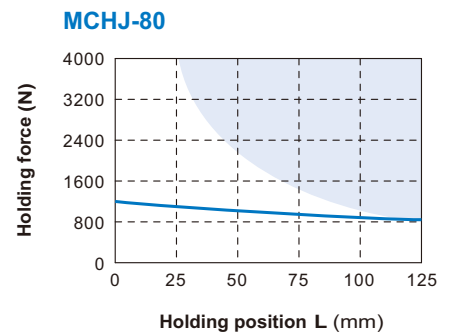
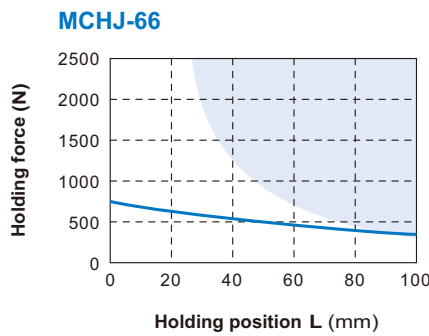
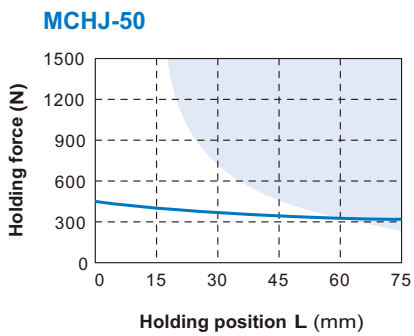
※ RDF, RDFV specification, please refer to page 5-10.

※ 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



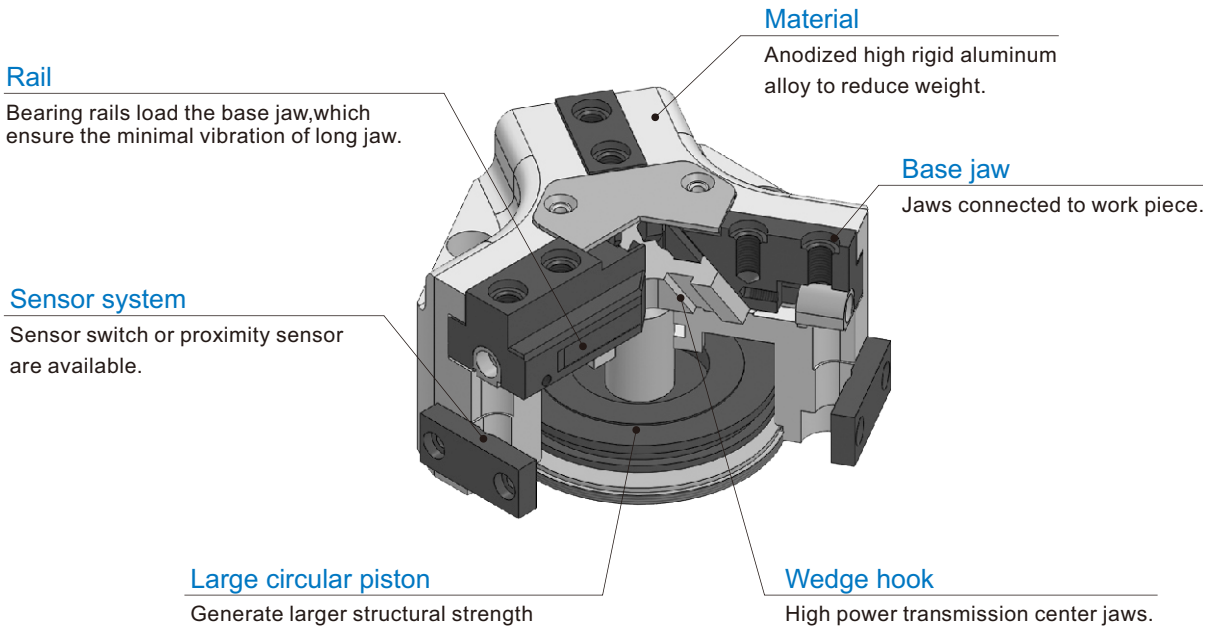
Code Model	Mx max. (Nm)	My max. (Nm)	Mz max. (Nm)	Fz max. (N)
MCHJ-50	15	15	8	700
MCHJ-66	50	45	35	1200
MCHJ-80	80	60	50	1800
MCHJ-100	100	90	75	2500
MCHJ-125	120	120	100	3200
MCHJ-160	160	180	140	5000
MCHJ-200	180	220	170	7000
MCHJ-300	275	300	200	9000



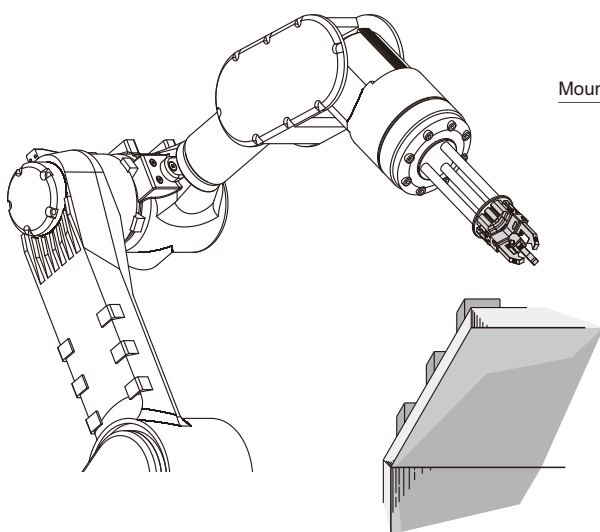
※ Blue area: Less durable performance can be expected.

Internal structure & Movement description

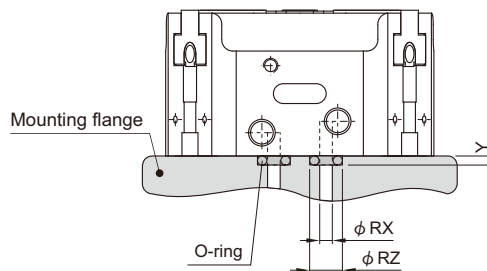
Compressed air will push or press the circular piston.
By tilting the working surface, the wedge hook will transfer the movement to side movement, and initiate the action of the three base jaws simultaneously.



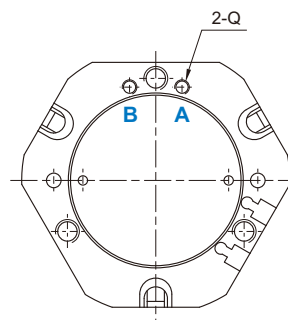
Application examples



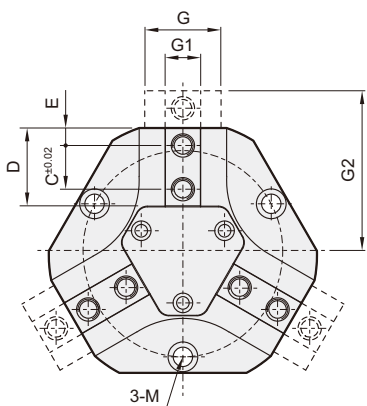
Hose-free direct connection



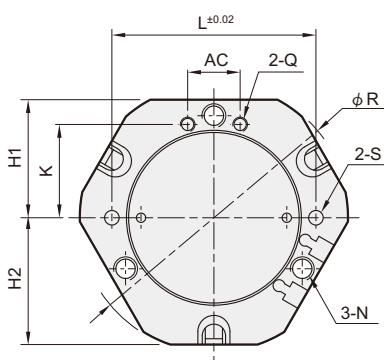
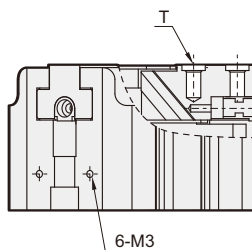
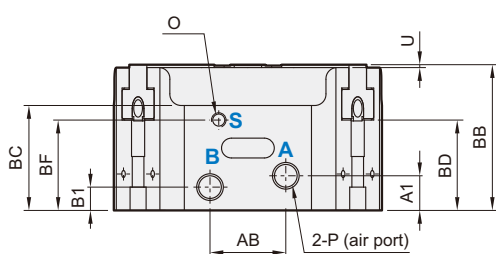
Code Model	Q	RX	RZ	Y
50	M3	3	5	0.7
66	M5	5	8	1.2
80	M5	5	8	1.2
100	M5	5	8	1.2
125	M5	5	8	1.2
160	M5	5	8	1.2
200	M6	6	9	1.2
300	G1/8	8.5	12.1	1.8



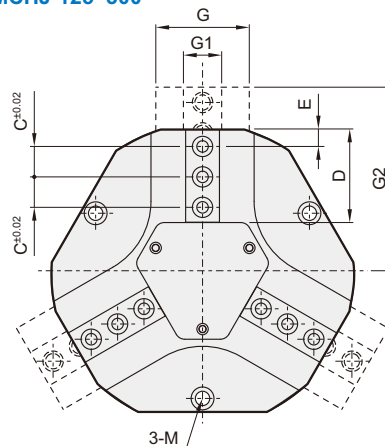
A hole: Gripper open
B hole: Gripper close



A hole: Gripper open
B hole: Gripper close
S hole: External vents

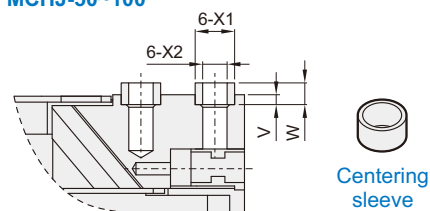


MCHJ-125~300

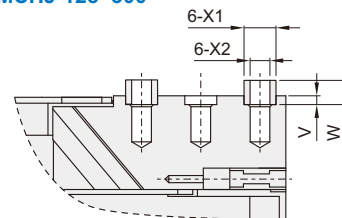


Centering sleeve

MCHJ-50~100



MCHJ-125~300



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	17	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	34.5	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	67.8	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	φ 4H7	6-M3	1	2	4	φ 5	φ 3
MCHJ-66	M5	M5	M5	74	φ 4H7	6-M4	1	2	4	φ 6	φ 4
MCHJ-80	M5	G1/8	M5	92	φ 5H7	6-M6	1	2	4	φ 8	φ 6
MCHJ-100	M5	G1/8	M5	114	φ 5H7	6-M6	1	2	4	φ 10	φ 6
MCHJ-125	M5	G1/8	M5	139	φ 6H7	9-M6	1	2	4	φ 10	φ 6
MCHJ-160	M5	G1/8	M5	179	φ 6H7	9-M8	1	2	5	φ 12	φ 8
MCHJ-200	M5	G1/4	M6	218	φ 10H7	9-M10	1	2.5	4.9	φ 14	φ 10
MCHJ-300	M5	G1/4	G1/8	292	φ 10H7	9-M12	2	2.5	5	φ 18	φ 12

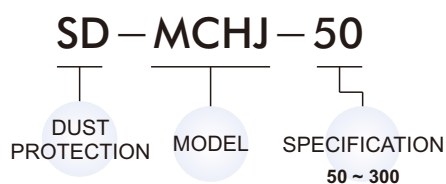
Dust protection module

Dust protection upgraded the IP class to prevent dust entering the gripper, suitable for dirty environment.

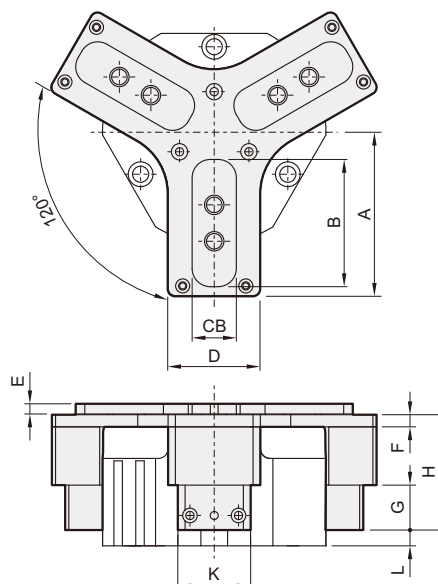
The length of fingers need to be measured from the surface of dust cover.

(Anti corrosion & heat-resistance are available, please contact us.)

Order example



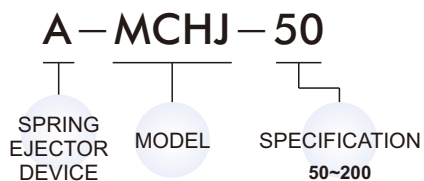
Code Model	A	B	CB	D	E	F	G	H	K	L
50	43	30	13	17	4.5	5	16	35.5	19	3.5
66	51	41	16.2	24	4.5	5	19.8	44.8	24	2.3
80	67.5	52.4	18.1	38	4.5	5	18.5	47.5	30	6.5
100	80	61	22	37	4.5	5	15	43	37	21
125	95	72	22	50	4.5	5	17	47	37	25
160	121	93	25	60	4.5	6	16.3	54.3	50	30.7
200	151	118	30	74	6.3	6	28	66	52	39
300	197	162	38	112	8.3	6	19.5	78.5	68	63.5



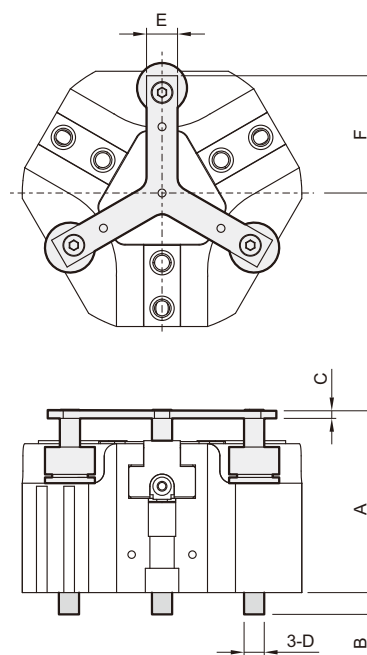
Spring ejector device

Customized design for 3-jaw gripper, to avoid gripper fasten the work piece after gripper opening.

Order example

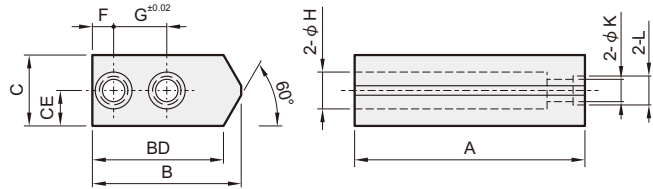


Code Model	A	B	C	D	E	F
50	48.9	5	2	M4	8	30
66	60.9	5.6	2	M5	10	35
80	66.9	5.6	4	M6	12	40
100	71.6	7.9	4	M6	14	50
125	89.8	9.2	4	M8	16	65
160	102.9	9.6	6	M8	18	85
200	132.8	11.7	6	M10	24	100



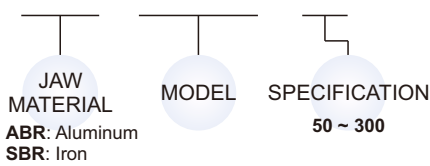
Universal jaw set

Jaws sets are available for customer to design and machined for their own demand.



Order example

ABR-MCHJ-50



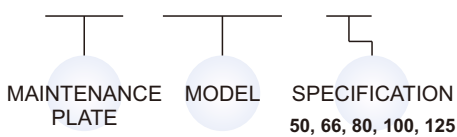
Code Model	A	B	BD	C	CE	F	G	H	K	L
50	35	26.5	23.7	11	5.5	3.5	8	5.9	3.2	$\phi 5^{H7+0.01}_0 \times 2dp$
66	50	34	30	16	8	5	12	7.4	4.3	$\phi 6^{H7+0.01}_0 \times 2dp$
80	65	42	37	20	10	6	15	10.4	6.3	$\phi 8^{H7+0.01}_0 \times 2dp$
100	80	52	46.5	24	12	10	18	10.4	6.3	$\phi 10^{H7+0.01}_0 \times 2dp$
125	100	65	58.5	28	14	10	25	10.4	6.2	$\phi 10^{H7+0.01}_0 \times 2dp$
160	120	84	75.6	34	17	10	36	13.5	8.4	$\phi 12^{H7+0.01}_0 \times 2dp$
200	140	104	95.6	34	17	12	44	16.5	10.5	$\phi 14^{H7+0.02}_0 \times 2.5dp$
300	160	140	128.5	44	22	15	60	18.5	12.5	$\phi 18^{H7+0.02}_0 \times 2.5dp$

Maintenance plate

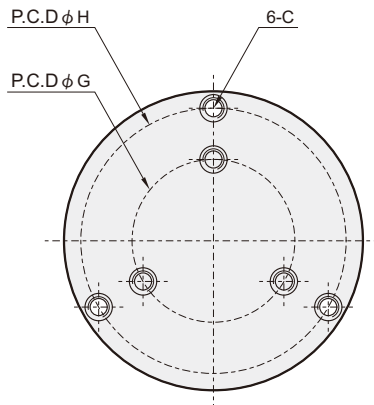
Maintenance plate needs to use traditional or CNC to process with universal jaws, please refer to technical manual.

Order example

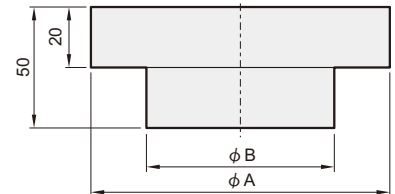
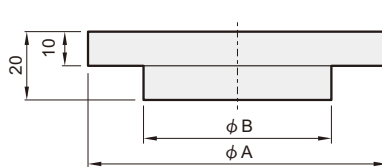
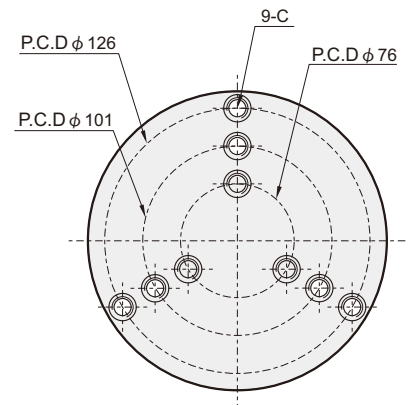
RMP-MCHJ-50



RMP-MCHJ-50~100



RMP-MCHJ-125

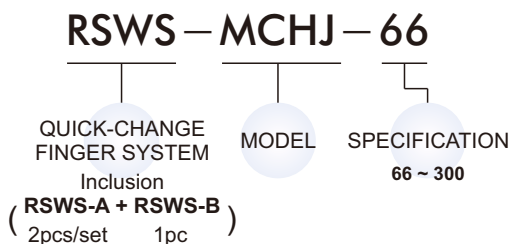


Code Model	A	B	C	G	H
50	60	55	sink $\phi 5^{H7} \times 2dp$, M3 $\times 0.5 \times 6dp$	30	46
66	70	55	sink $\phi 6^{H7} \times 2dp$, M4 $\times 0.7 \times 8dp$	36	60
80	87	55	sink $\phi 8^{H7} \times 2dp$, M6 $\times 1.0 \times 12dp$	45	75
100	108	60	sink $\phi 10^{H7} \times 2dp$, M6 $\times 1.0 \times 12dp$	52	88
125	150	85	sink $\phi 10^{H7} \times 2dp$, M6 $\times 1.0 \times 12dp$	—	—

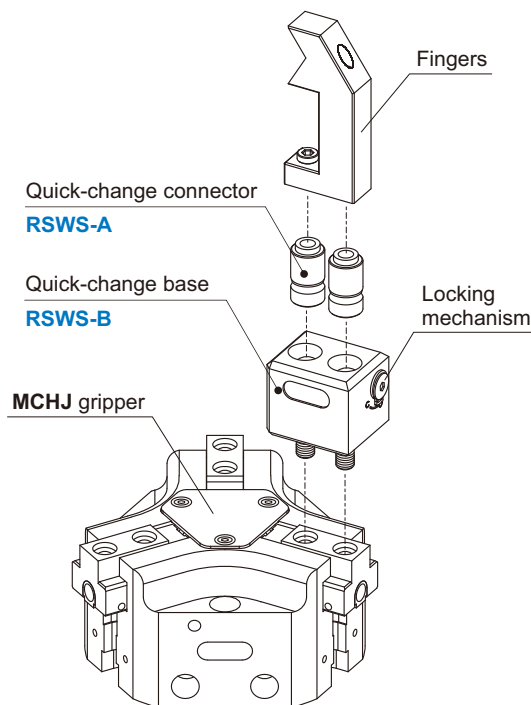
Quick-change finger system

- Easy and quick to change finger manually.
- Re-calibrate not required.
- Suitable for MCHJ and MCHS grippers.

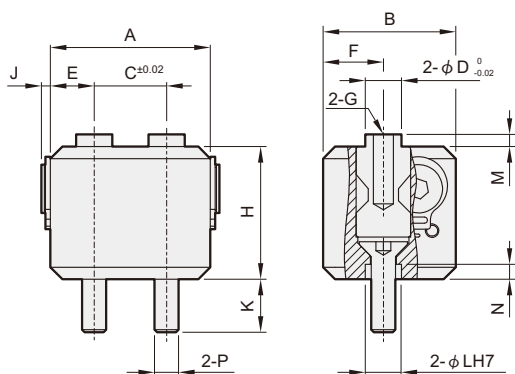
Order example



Model	RSWS						
Body specification	66	80	100	125	160	200	300
Weight (kg)	RSWS-A	0.005	0.011	0.024	0.046	0.077	0.16
	RSWS-B	0.04	0.08	0.1	0.27	0.48	0.9



- ※ Each set of RSWS-B base has to go with 2pcs RSWS-A connectors.
- ※ Please consult us if you demand only one of the part.



Code Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P
66	26.5	22	12	6	7.25	10	M4 × 11.5 dp	22	1.5	8.8	6	2	2.5	M4
80	32	26.5	15	8	8.5	12.5	M6 × 17 dp	28	1.5	11.1	8	2	2.5	M6
100	41	32	18	10	11.5	15	M6 × 17 dp	35	1.5	10.6	10	2	2.5	M6
125	49.5	38.5	25	10	12.25	17.5	M6 × 17 dp	42	1.65	11.8	10	2	2.5	M6
160	65	46	36	12	14.5	20	M6 × 17 dp	52	2.15	13	12	2	2.5	M8
200	77	55	44	14	16.5	24	M10 × 27.5 dp	75	2.15	15.6	14	2.4	2.5	M10
300	104	76	60	18	22	25.25	M12 × 32.75 dp	95	2.15	19.1	18	2.4	3	M12