



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.
- Oval piston-driven design ensure maximum gripping 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	MCHS							
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)	170	300	550	740	1290	1860	3175	6675
Opening force(N)	185	325	590	795	1370	1960	3330	6830
Close/Open time(s)	0.02	0.03	0.04	0.07	0.1	0.1	0.35	0.4
Medium	Air							
Operating pressure range	0.3~0.8 MPa							
Compressed air consumption(cm ³)	4.1	10.1	23.6	39.3	80	80	320	980
Ambient temperature	+5°C~ +80°C							
Repeatability(±mm)	0.01						0.02	0.04
Lubrication	Not required							
Sensor switch (※)	RDF, RDFV							
Proximity sensor	RDP8 (2 wire), RNP8 (3 wire)							
Accessories	Mounting block, Centering sleeve							
Weight (kg)	0.14	0.27	0.495	0.85	1.5	1.5	5.5	14
Recom. work piece weight (kg)	0.85	1.4	2.6	3.6	6.3	9.2	15	32

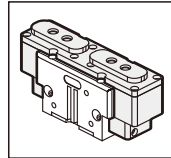
Order example

MCHS – 50 – SD

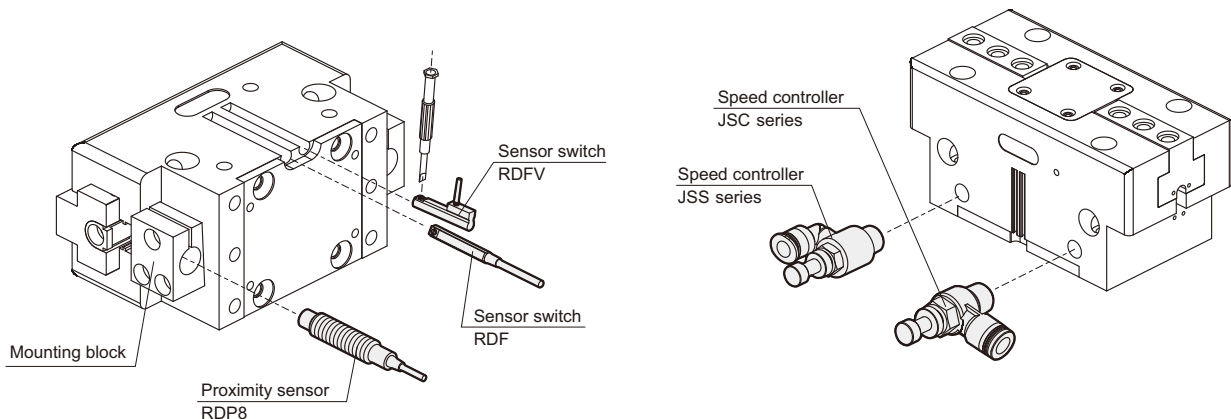
MODEL

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

DUST PROTECTION



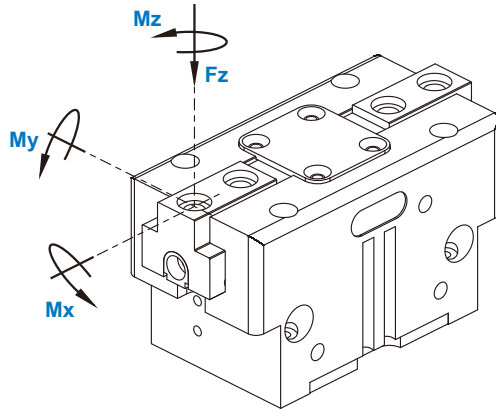
Installation of sensor switch & speed controller



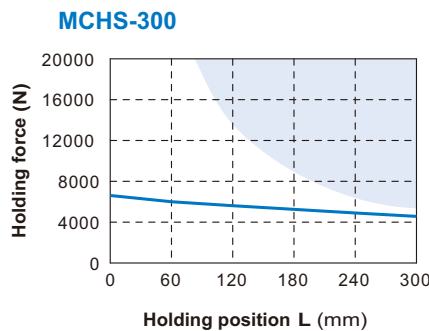
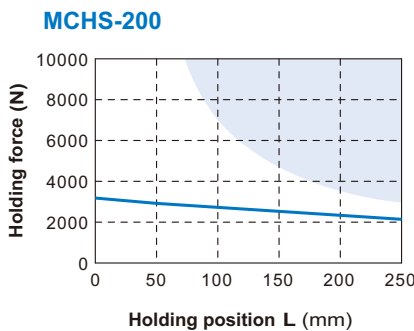
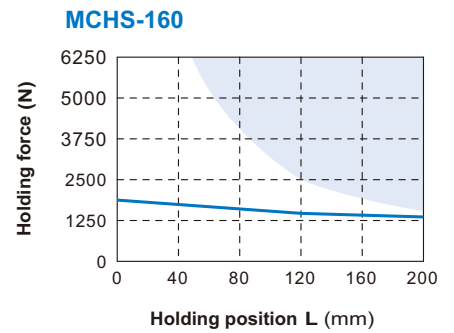
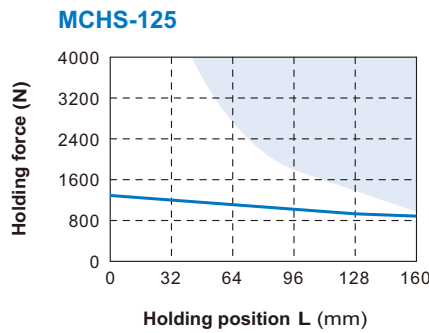
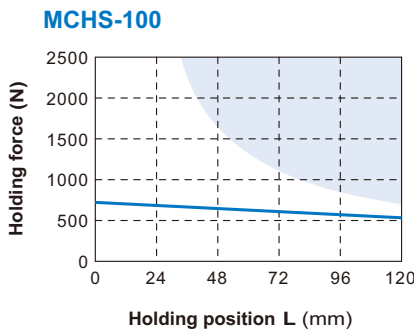
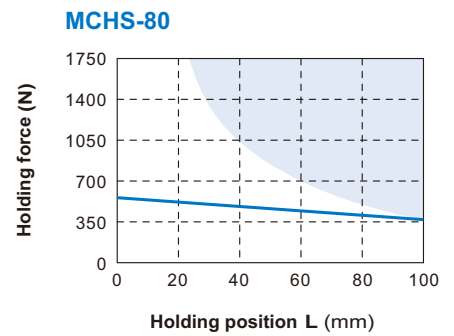
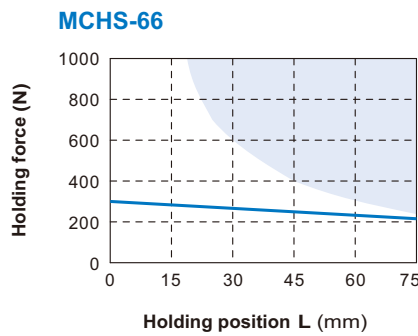
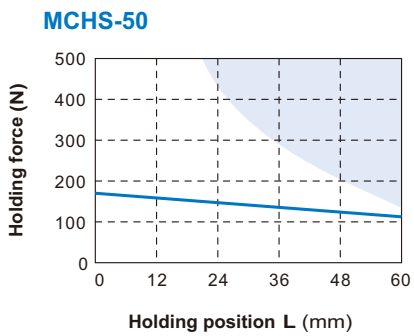
※ RDF, RDFV specification, please refer to page 5-10.

※ 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

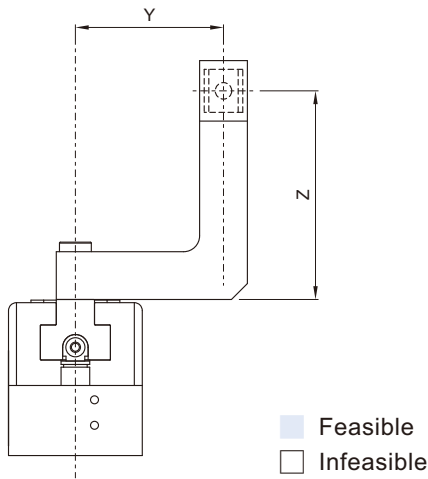


Code Model	Mx max. (Nm)	My max. (Nm)	Mz max. (Nm)	Fz max. (N)
MCHS-50	15	15	8	700
MCHS-66	50	45	35	1200
MCHS-80	80	60	50	1800
MCHS-100	100	90	75	2500
MCHS-125	120	120	100	3200
MCHS-160	160	180	140	5000
MCHS-200	180	220	170	7000
MCHS-300	275	300	200	9000

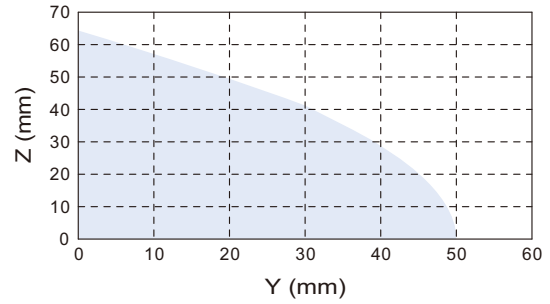


※ Blue area: Less durable performance can be expected.

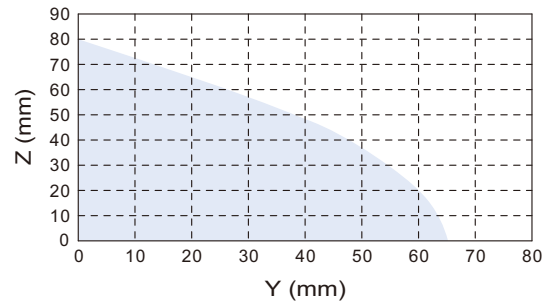
Max. feasible centrifugal degree



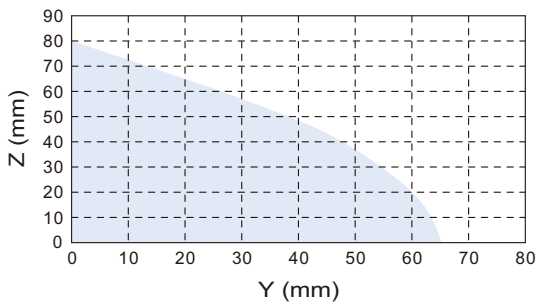
MCHS-50



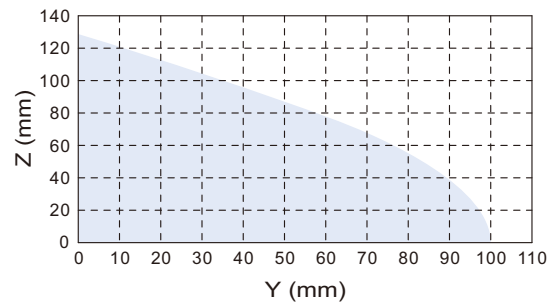
MCHS-66



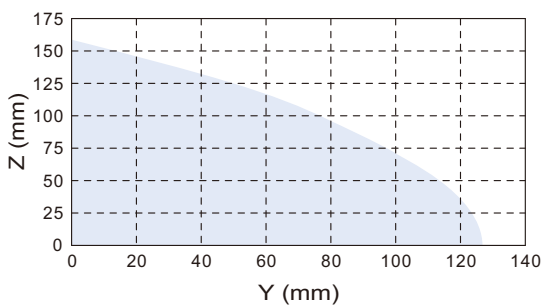
MCHS-80



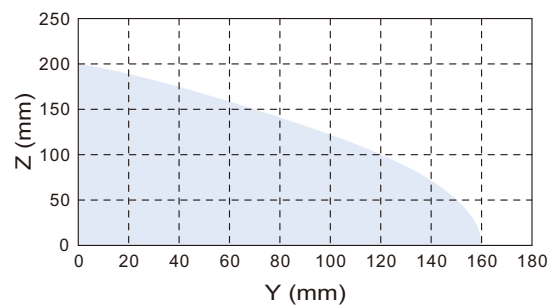
MCHS-100



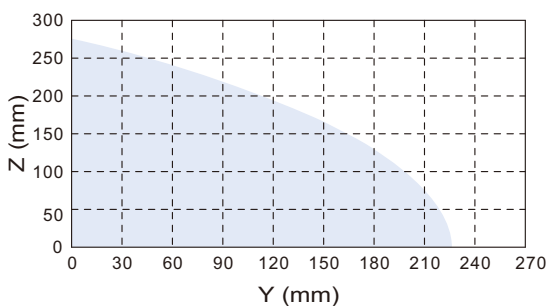
MCHS-125



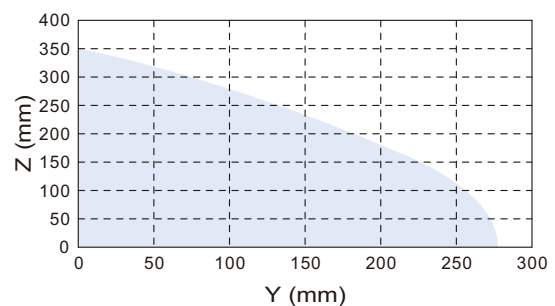
MCHS-160



MCHS-200



MCHS-300



Internal structure & Movement description

Compressed air will push or press the oval piston.

By tilting the working surface, the wedge hook will transfer the movement to side movement, and initiate the action of the two base jaws simultaneously.

Rail

Bearing rails load the base jaw, which ensure the minimal vibration of long jaw.

Material

Anodized high rigid aluminum alloy to reduce weight.

Base jaw

Jaws connected to work piece.

Large circular piston

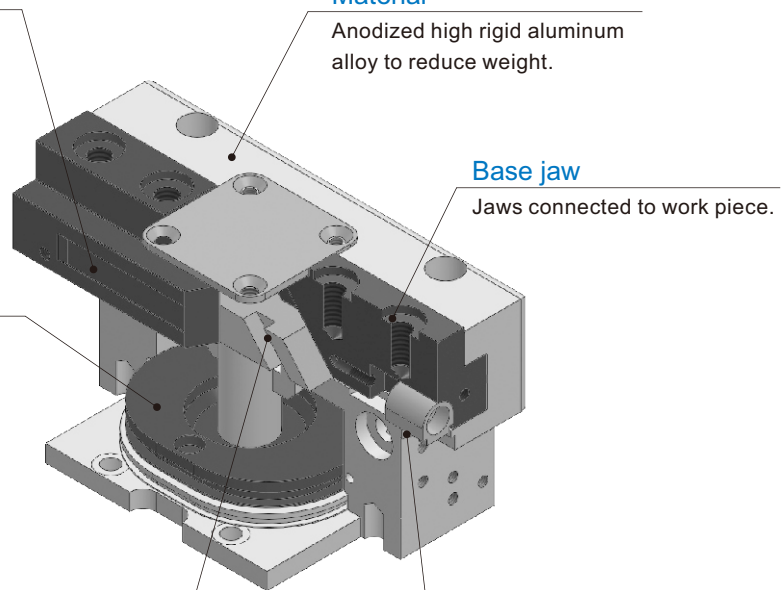
Generate larger structural strength.

Wedge hook

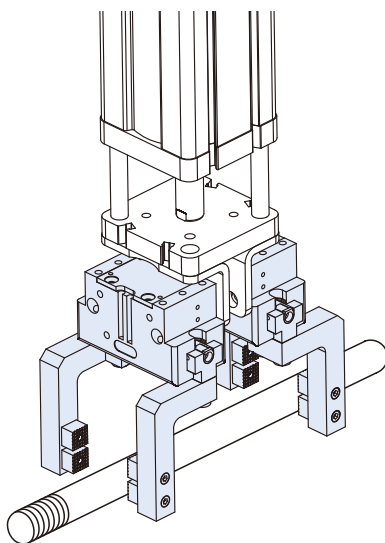
High power transmission center jaws.

Sensor system

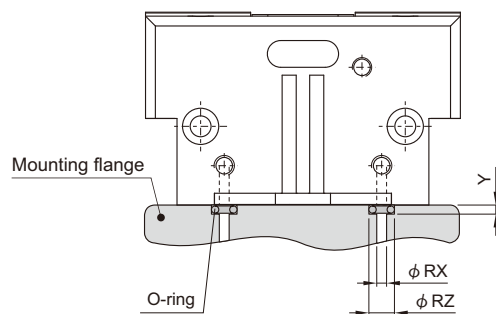
Sensor switch or proximity sensor are available.



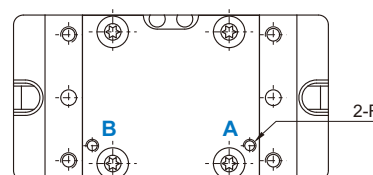
Application examples



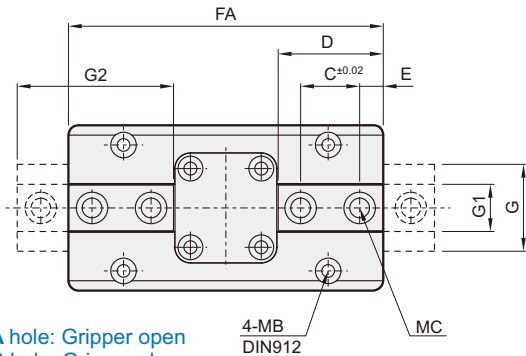
Hose-free direct connection



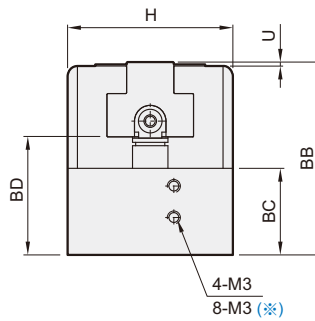
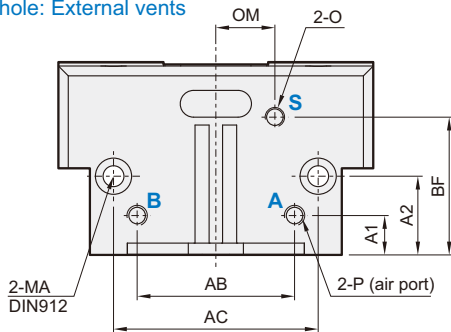
Code Model	R	RX	RZ	Y
50	M2	2	4	0.7
66	M3	3	5	0.7
80	M3	3	5	1.1
100	M5	5	8	1.1
125	M5	5	8	1.1
160	M5	5	8	1.1
200	M5	5	8	1.1
300	M5	5	8	1.1



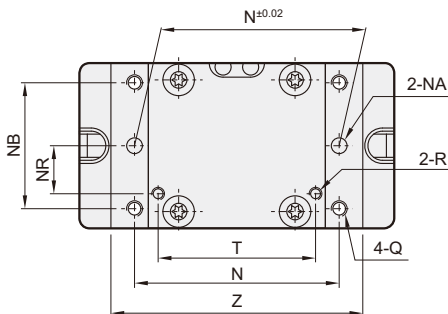
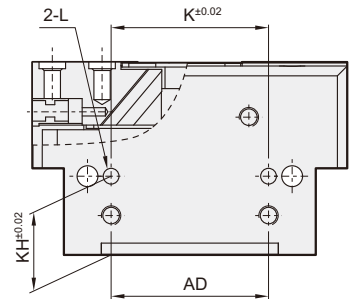
A hole: Gripper open
B hole: Gripper close



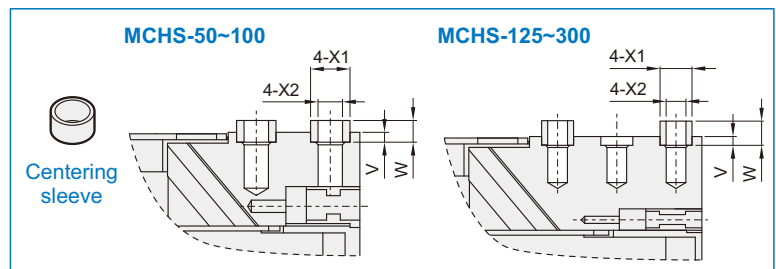
A hole: Gripper open
B hole: Gripper close
S hole: External vents



※ Only for MCHS-100~300



Centering sleeve



Code Model	A1	A2	AB	AC	AD	BB	BC	BD	BF	C	D	E	FA	G	G1	G2	H	K	KH	L
MCHS-50	5	15	25	35	25	31	15	19	22	8	16	4	50	12	6.5	20	27.8	25	15	φ 3H7×4.5dp
MCHS-66	5	18	28	42	28	39	18.5	23	27.5	12	22	5	64	17	10	28	36	20	18	φ 4H7×4dp
MCHS-80	10	20	40	52	40	49	22	30	35	15	26.7	6	80	22	12	34.7	42	40	20	φ 4H7×6dp
MCHS-100	12	25	48	66	54	55	28	33	38	18	34.3	10	100	26	14	44.3	50	50	25	φ 5H7×7dp
MCHS-125	13	30	62	82	65	64	32	38.5	45	12.5	42.3	12	125	31	15.5	54.3	60	60	30	φ 6H7×8dp
MCHS-160	15.5	28	78	100	82	78	39	46	53	18	54.8	16	160	39	20	70.8	72	76	28	φ 6H7×10dp
MCHS-200	19	44	102	128	102	98	48	59	69	22	67.5	20	200	42	22	87.5	95	100	44	φ 8H7×8dp
MCHS-300	19	66	150	180	150	130	67	78	92	30	87	30	260	66	32	117	139	140	66	φ 10H7×12dp

Code Model	MA	MB	MC	N	NA	NB	NR	O	OM	P	Q	R	T	U	V	W	X1	X2	Z
MCHS-50	M3	M3	4-M3	35	φ 3H7	20	8	M3	10	M5	M4	M2	25	1	2	4	φ 5	φ 3	42
MCHS-66	M4	M4	4-M4	42	φ 4H7	27	11	M5	12	M5	M5	M3	28	1	2	4	φ 6	φ 4	52
MCHS-80	M4	M4	4-M6	52	φ 4H7	32	12.2	M5	15	M5	M5	M3	40	1	2	4	φ 8	φ 6	64
MCHS-100	M5	M5	4-M6	66	φ 5H7	38	16	M5	16	G1/8	M6	M5	48	1	2	4	φ 10	φ 6	80
MCHS-125	M6	M6	6-M6	82	φ 6H7	45	18	M5	20	G1/8	M8	M5	60	1	2	4	φ 10	φ 6	100
MCHS-160	M6	M6	6-M8	100	φ 6H7	56	22	M5	27	G1/8	M8	M5	76	1	2	5	φ 12	φ 8	125
MCHS-200	M12	M10	6-M10	128	φ 10H7	68	24	M5	34.5	G1/4	M12	M5	100	1	2.5	4.9	φ 14	φ 10	160
MCHS-300	M12	M10	6-M12	180	φ 10H7	100	24	M5	43	G1/4	M12	M5	150	2	2.5	5	φ 18	φ 12	220

LOWER HEIGHT PARALLEL GRIPPER

mindman

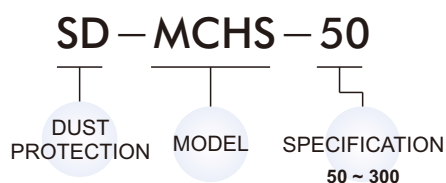
Dust protection module

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

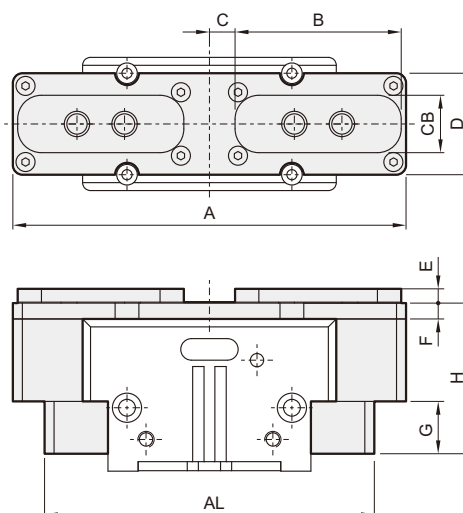
The length of fingers need to be measured from the surface of dust cover.

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

Order example



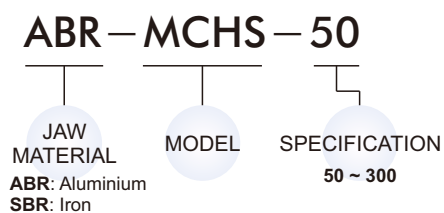
Code Model	A	AL	B	C	CB	D	E	F	G	H
50	81.2	58.6	30	6	13	24	4.5	5	12	32
66	104	92	41	6.5	16.2	30	4.5	5	16.5	41
80	124	104	52.4	8.3	18.1	32	4.5	5	16.5	52
100	144	124	61	10.5	22	38	4.5	5	16.5	53.5
125	177	157	72	16	22	45	4.5	5	23	63.5
160	231	182	93	21.5	25	56	4.5	6	18	66.5
200	292	247	118	27	30	68	6.3	6	18	78.3
300	394	318	162	34	38	100	8.3	6	20	95.3



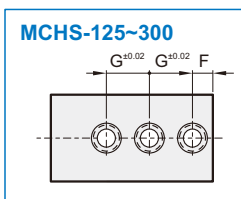
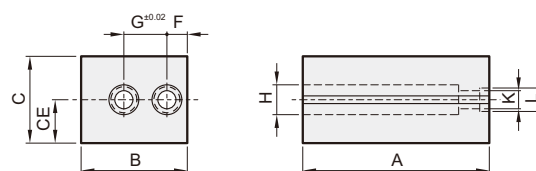
Universal jaw set

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

Order example



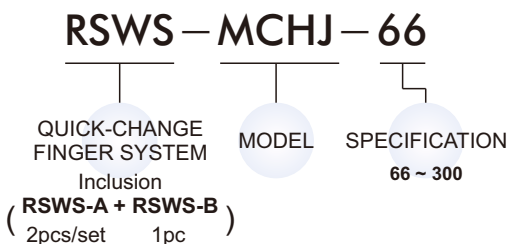
Code Model	A	B	C	CE	F	G	H	K	L
50	35	25	19	9.5	4	8	2-φ 5.9	2-φ 3.2	2-φ 5 ^{HT} × 2dp
66	50	32	24	12	5	12	2-φ 7.4	2-φ 4.3	2-φ 6 ^{HT} × 2dp
80	65	40	28	14	6	15	2-φ 10.1	2-φ 6.3	2-φ 8 ^{HT} × 2dp
100	80	50	34	17	10	18	2-φ 10.4	2-φ 6.3	2-φ 10 ^{HT} × 2dp
125	100	62.5	40	20	10	12.5	3-φ 10.4	2-φ 6.2	3-φ 10 ^{HT} × 2dp
160	120	80	50	25	10	18	3-φ 13.5	3-φ 8.4	3-φ 12 ^{HT} × 2dp
200	140	100	70	35	12	22	3-φ 16.5	3-φ 10.5	3-φ 14 ^{HT} × 2.5dp
300	160	129.5	70	35	15	30	3-φ 20	3-φ 12.5	3-φ 18 ^{HT} × 2.5dp



Quick-change finger system

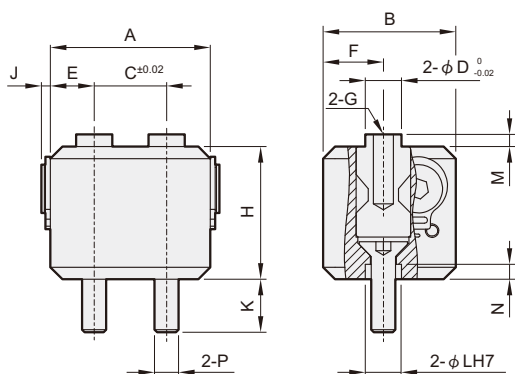
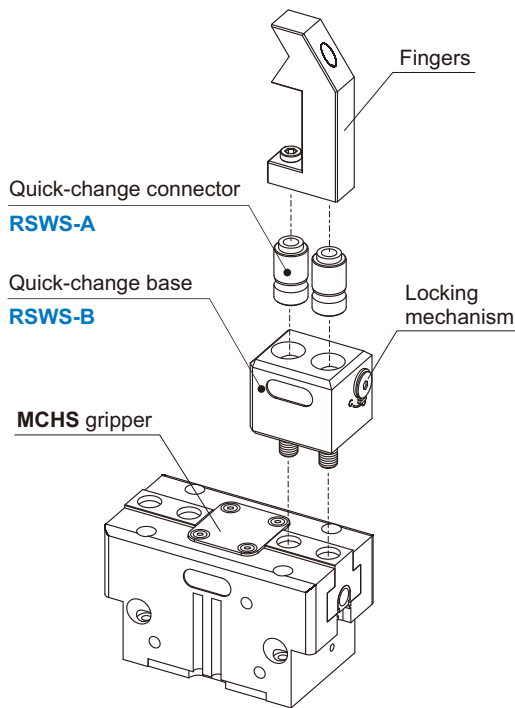
- Easy and quick to change finger manually.
- Re-calibrate not required.
- Suitable for MCHJ and MCHS grippers.

Order example ※ Share the same accessories with MCHJ



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	0.3
	RSWS-B	0.04	0.08	0.1	0.27	0.48	0.9	1.5

- ※ 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