

Features

- Slider design with drawbar mechanism enable larger operating angle.
- Compact design, ensure minimum interference while operating.
- Oval 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	MCHT				
Acting type	Double acting				
Body specification	80	100	125	160	200
Operating angle	Unilateral 20°				
Max. permitted finger length(mm)	80	100	100	150	150
Closing force(N)	240	650	1420	2740	4500
Close/Open time(s)	0.04/0.02	0.05/0.1	0.2/0.3	0.2/0.5	0.2/0.5
Medium	Air				
Operating pressure range	0.2~0.8 MPa				
Nominal operating pressure	0.6 MPa				
Compressed air consumption(cm ³)	8.1	22	65	166	345
Ambient temperature	+5°C~ +80°C				
Repeatability(±mm)	0.02	0.05			
Lubrication	Not required				
Enclosure classification	IEC60529 IP40				
Sensor switch (※)	RDF, RDFV				
Proximity sensor	RDP8 (2 wire), RNP8 (3 wire)				
Accessories	Centering sleeve				
Weight (kg)	0.4	0.9	1.9	3.5	8.6
Recom. work piece weight (kg)	1.2	3	6.4	12.8	20

Order example

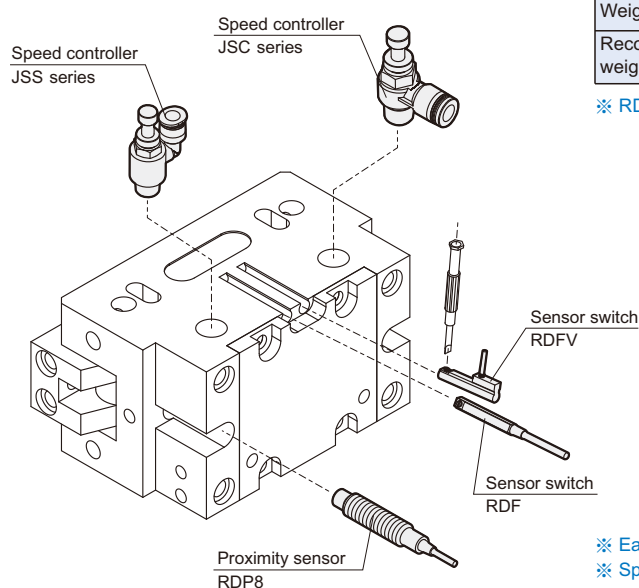
MCHT – 80

MODEL

BODY SPECIFICATION

80
100
125
160
200

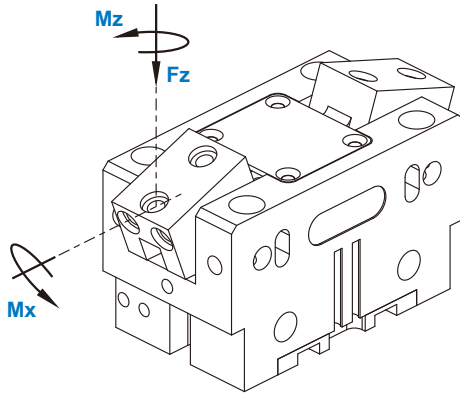
Installation of sensor switch & speed controller



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

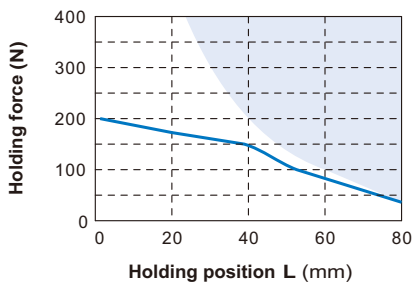
※ Each gripper needs at least two speed control valves to control speed.
 ※ Speed controller specification, please refer to page 8-15~17 (Vol.1).

Holding force

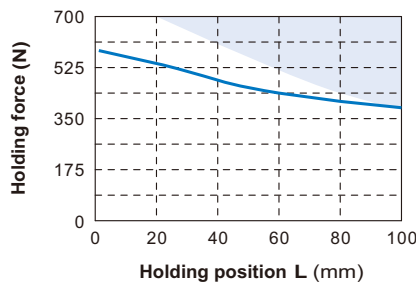


Code Model	Mx max. (Nm)	Mz max. (Nm)	Fz max. (N)
MCHT-80	11	12	180
MCHT-100	13	17	270
MCHT-125	16	28	280
MCHT-160	36	57	450
MCHT-200	36	57	450

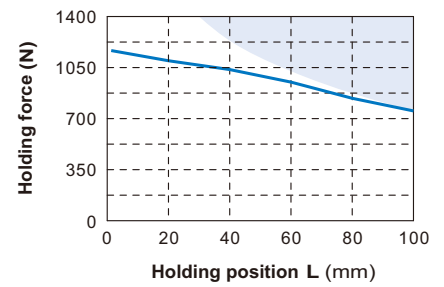
MCHT-80



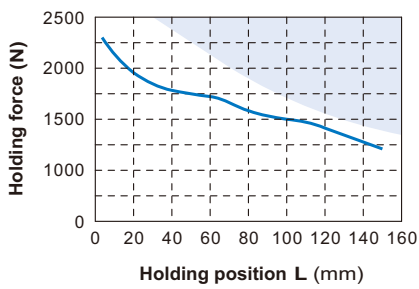
MCHT-100



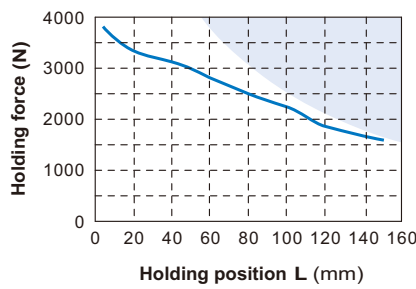
MCHT-125



MCHT-160



MCHT-200



※ Blue area: Less durable performance can be expected.

Internal structure & Movement description

Compressed air will push or press the oval piston. With the linkage mechanism between base jaw and drawbar, the movement of piston can initiate the action of the two base jaws simultaneously.

Base jaw

Jaws connected to work piece.

Gripper rivet

The connected interface of piston and gripper mechanism.

Material

Anodized high rigid aluminum alloy to reduce weight.

Drawbar

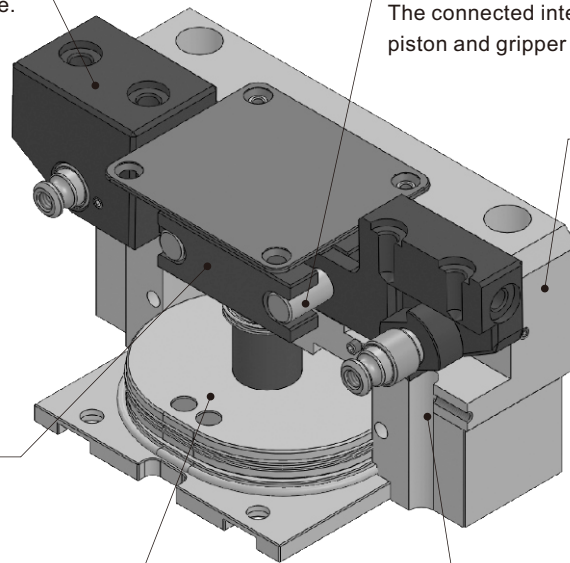
The connected interface for high power transmission.

Large oval piston

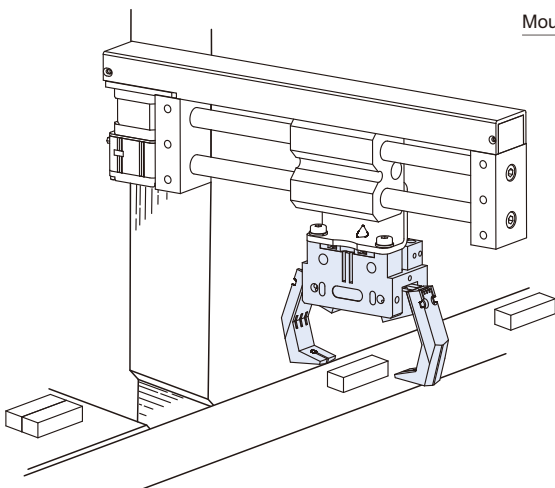
Generate larger structural strength.

Sensor systems

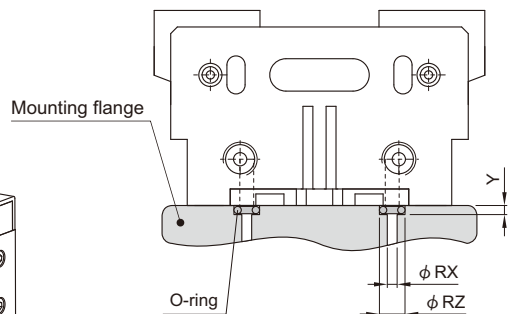
Sensor switch or proximity sensor are available



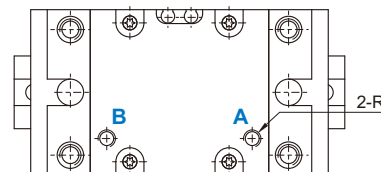
Application examples



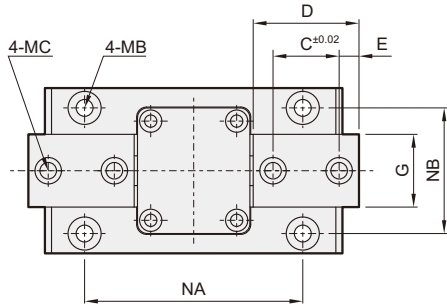
Hose-free direct connection



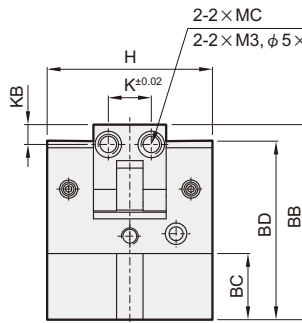
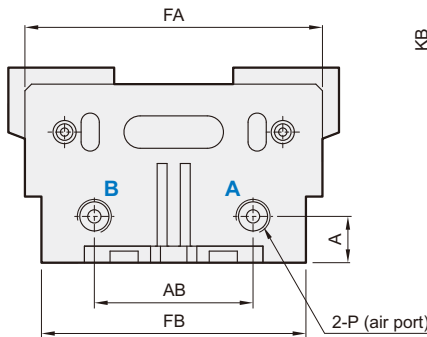
Code Model	R	RX	RZ	Y
80	M5×0.8	5	8	1.2
100	Rc1/8	8.2	12.1	1.8
125	Rc1/8	8.2	12.1	1.8
160	Rc1/8	8.2	12.1	1.8
200	Rc1/4	10.9	14.8	1.8



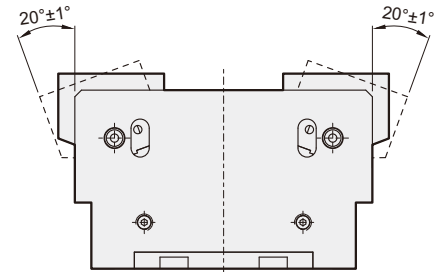
A hole: Gripper open
B hole: Gripper close



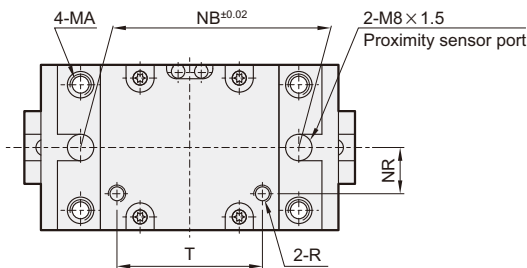
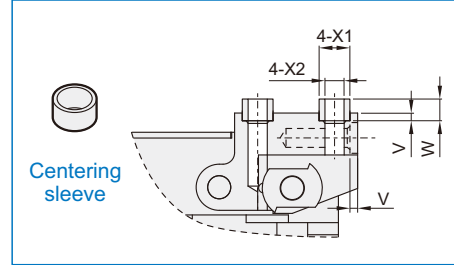
A hole: Gripper open
B hole: Gripper close



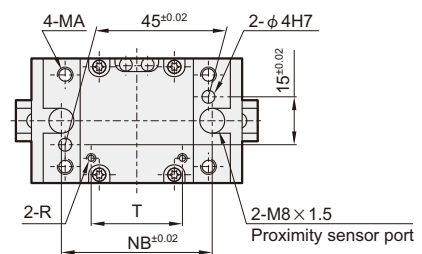
※ Only for MCHT-80



Centering sleeve



MCHT-80



Code Model	A	AB	BB	BC	BD	C	D	E	FA	FB	G	H	K	KB	MA	MB
MCHT-80	7	30	47	18	42	14	24	5	60	52	16	36	10	5	M5×0.8	φ 4.3 thru, φ 8×4.2 sink
MCHT-100	14	48	59	23	54	20	32	6	90	80	22	50	13	6	M6×1.0, φ 8H7 sink	φ 5.1 thru, φ 9.1×5.4 sink
MCHT-125	18	74	75	31.5	70	22	40	9	130	120	28	72	15	9	M8×1.25, φ 10H7 sink	φ 6.6 thru, φ 11×50 sink
MCHT-160	22	98	89.5	40	85	30	50	10	160	150	34	90	19	10	M10×1.5, φ 12H7 sink	φ 8.5 thru, φ 14×66 sink
MCHT-200	32.5	136	120	57	115	46	70	12	220	210	40	120	23	12	M16×2.0, φ 20f7×3 sink	φ 14 thru, φ 20×67.5 sink

Code Model	MC	NA	NB	NR	R	T	V	W	X1	X2
MCHT-80	M4, φ 6×2 sink	45	46	11.5	M5×0.8	31	2	4	φ 6	φ 4
MCHT-100	M6, φ 8×2 sink	66	66	12	Rc1/8	44	2	4	φ 8	φ 6
MCHT-125	M6, φ 10×2 sink	100	100	20	Rc1/8	70	2	4	φ 10	φ 6
MCHT-160	M8, φ 12×2 sink	130	130	24.5	Rc1/8	94	2	5	φ 12	φ 8
MCHT-200	M10, φ 14×2.5 sink	180	180	27	Rc1/4	128	2.5	4.9	φ 14	φ 10