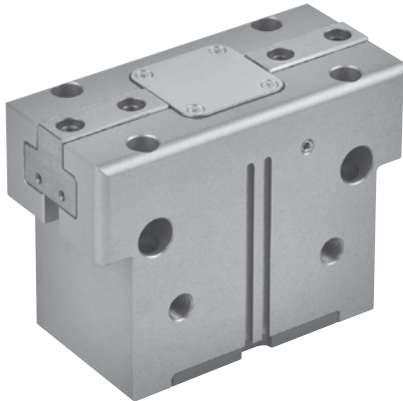


MCHS-OS series

PARALLEL GRIPPER (2-Finger)



Order example

MCHS — 100 — □ — OS

MODEL SIZE GRIPPING FORCE CLAMPING SAFETY DEVICE

80 100 Blank: Standard F: High

125 F: High

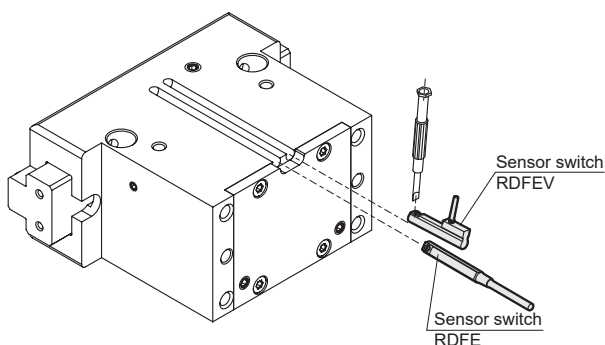
Features

- Clamping safety device: Gripping force safety device for O.D. gripping even with a drop pressure.
- 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.
- Magnetic as standard.

Specification

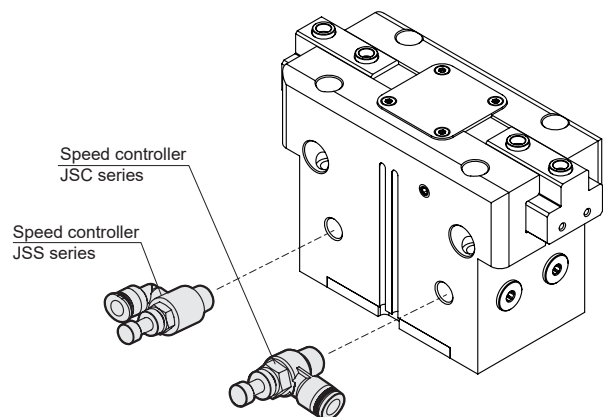
Model		MCHS-OS		
Acting type		Double acting		
Size		80	100	125
Stroke per-jaw (mm)	Standaerd	8	10	12
	High	4	5	6
Effective external gripping force (N) (*1)	Standaerd	314	372	684
	High	591	701	1287
Close / Open time(s)	Open	0.05	0.09	0.12
	Close	0.03	0.06	0.08
Medium		Air		
Operating pressure range		0.4~0.6 MPa		
Compressed air consumption(cm ³)		42	76.7	129
Ambient temperature		+5~+80°C		
Lubrication		Not required		
Sensor switch (*2)	2 wire	RDVE(V): Non-contact		
	3 wire	RNFE(V): NPN, RPFE(V): PNP		
Accessories		Accessory kits		
Weight (kg)		0.57	1	1.74

Installation of sensor switch & speed controller



*1. Under the condition of clamping length 40mm and operation pressure 0.6 MPa.

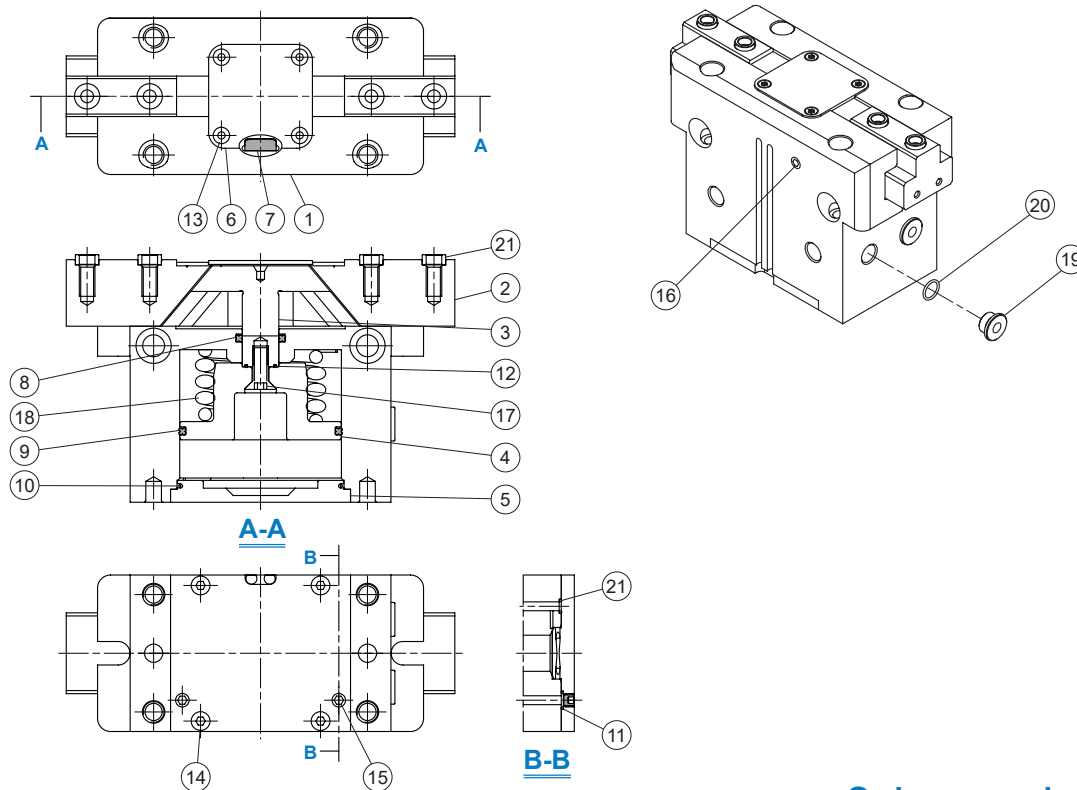
*2. R*FE(V) specification, please refer to page 5-11.



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

MCHS-OS Inside structure & Parts list

PARALLEL GRIPPER (2-Finger)



Material

No.	Part name	Material	Size & Q'ty			Repair kits (inclusion)	Accessory kits (inclusion)
			80	100	125		
1	Body	Aluminum alloy	1				
2	Finger	Carbon steel	2				
3	Rod	Carbon steel	1				
4	Piston	Aluminum alloy	1				
5	End cover	Aluminum alloy	1				
6	Plate cover	Stainless steel	1				
7	Magnet	Magnet material	1				
8	Rod packing	NBR	1			●	
9	Piston packing	NBR	1			●	
10	O-ring	NBR	1			●	
11	O-ring	NBR	4	2		●	
12	O-ring	NBR	1			●	
13	Screw	Alloy steel	4				
14	Hex bolt	Alloy steel	4				
15	Screw	Alloy steel	2				
16	Screw	Alloy steel	2				
17	Hex bolt	Alloy steel	1				
18	Spring	Spring steel	1				
19	Iron plug	Stainless steel	2				
20	O-ring	NBR	2				
21	O-ring	NBR	-	2		●	
22	Centering sleeve	Stainless steel	4				●
23	Pin	Bearing steel	2				●
24	Iron plug	Stainless steel	2				●
25	O-ring	NBR	2				●
26	O-ring	NBR	2				●

Order example of repair kits

Model	Repair kits
MCHS-80	PS-MCHS-80
MCHS-100	PS-MCHS-100
MCHS-125	PS-MCHS-125

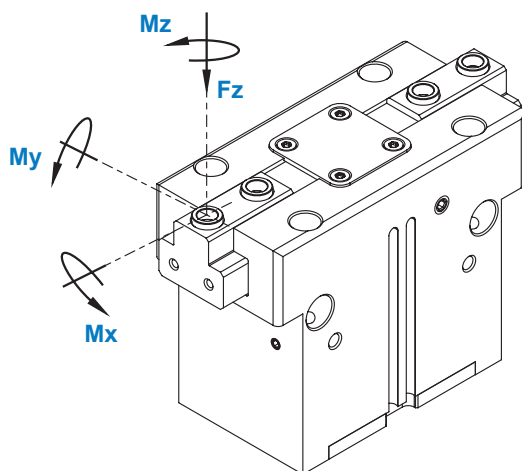
Order example of accessory kits

Model	Accessory kits
MCHS-80	AK-MCHS-80-OS
MCHS-100	AK-MCHS-100-OS
MCHS-125	AK-MCHS-125-OS

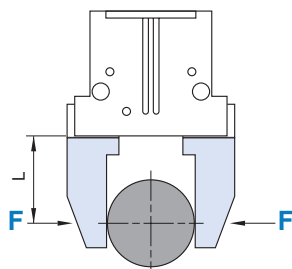
O-ring (×2) No.25	Iron plug (×2) No.24, 26
Pin (×2) No.23	Centering sleeve (×4) No.22

MCHS-OS Capacity 80~125

PARALLEL GRIPPER (2-Finger)



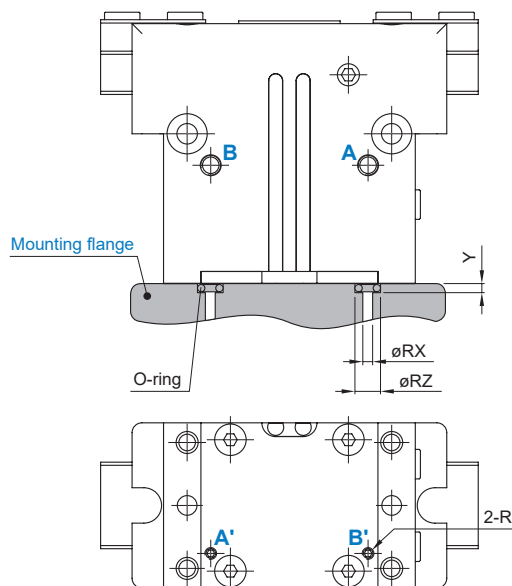
Code Size	Mx max. (Nm)	My max. (Nm)	Mz max. (Nm)	Fz max. (N)
80	80	60	50	1800
100	100	90	75	2500
125	120	120	100	3200



* Working pressure is 0.6 MPa.

* Clamping force = pneumatic clamping force + spring holding force

Hose-free direct connection

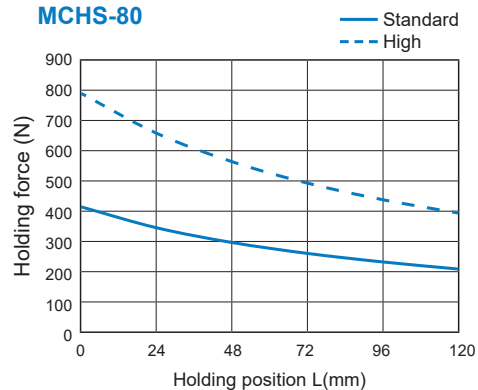


A/ A' : Gripper open
B/ B' : Gripper close

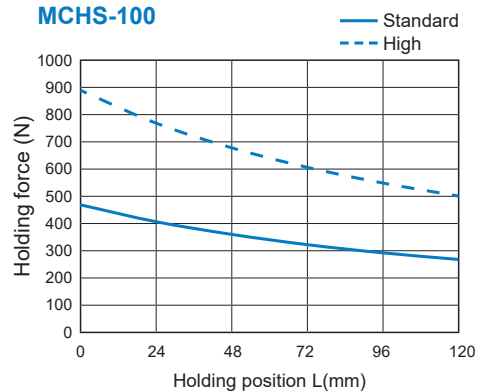
Code Size	R	RX	RZ	Y
80	M3	3	5	0.7
100	M5	5	8	1.1
125	M5	5	8	1.1

External gripping force

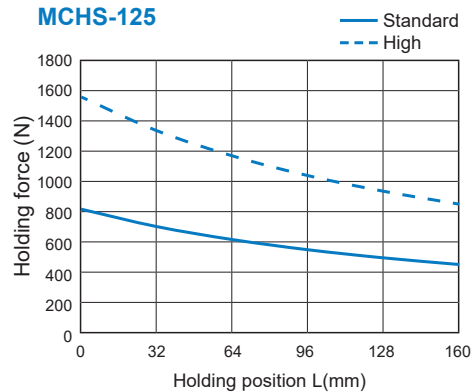
MCHS-80

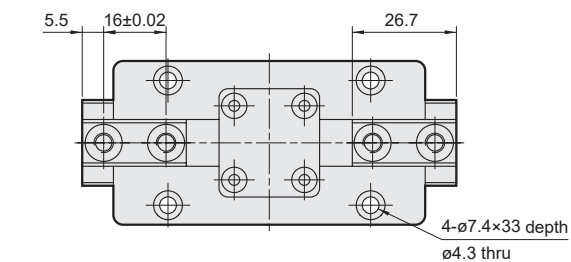


MCHS-100

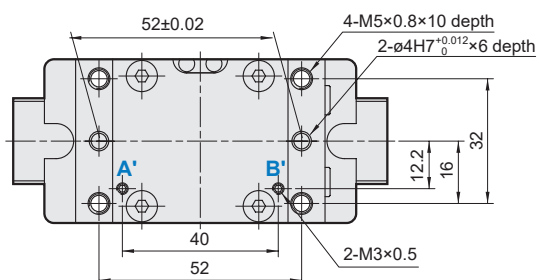
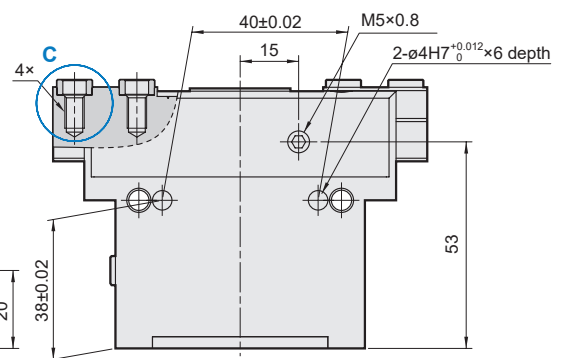
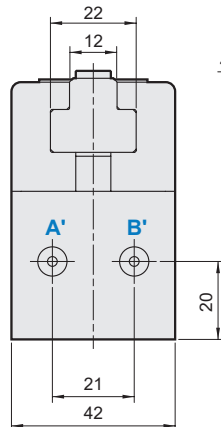
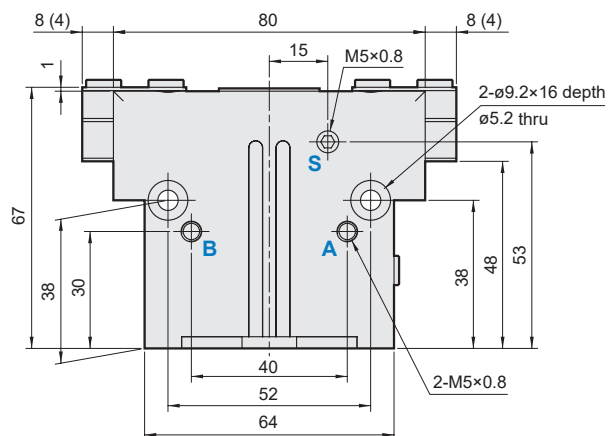
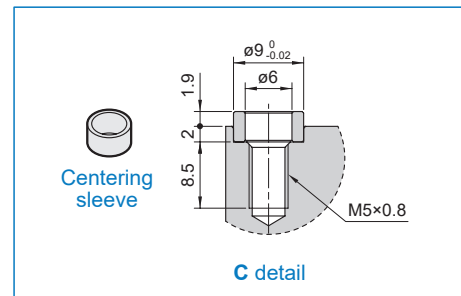


MCHS-125

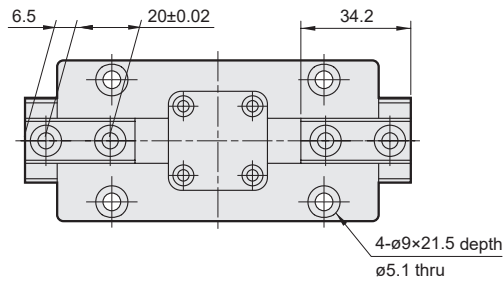




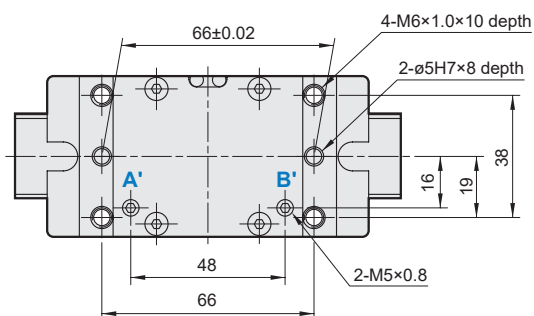
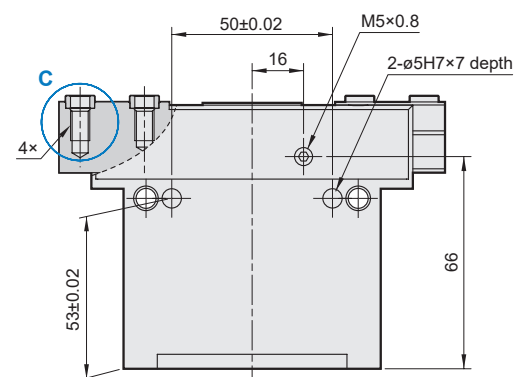
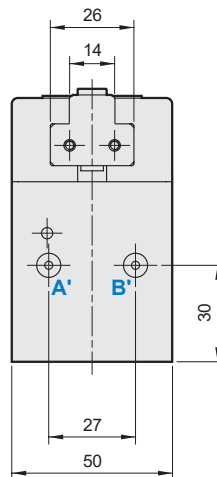
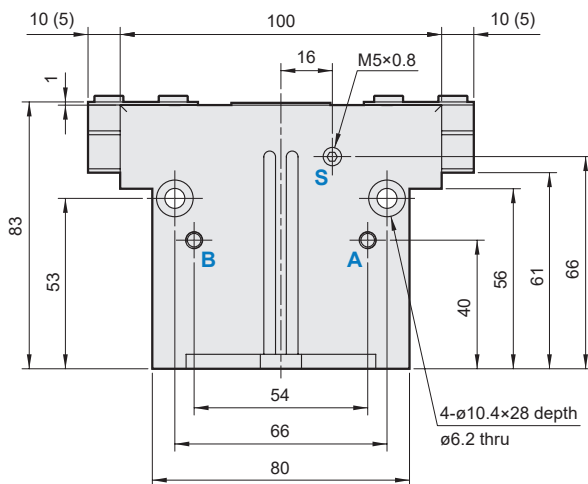
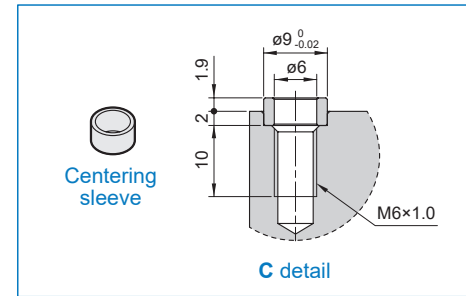
Centering sleeve



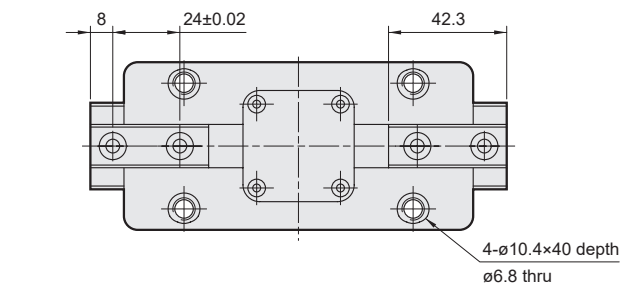
A/ A': Gripper open
B/ B': Gripper close
S: External vents
() for high gripping force



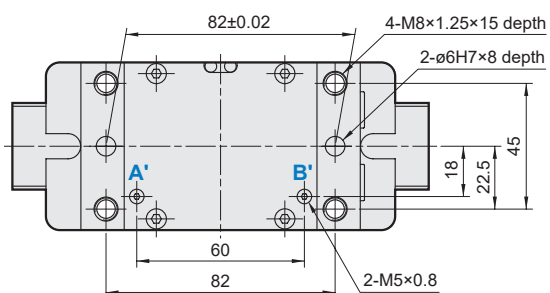
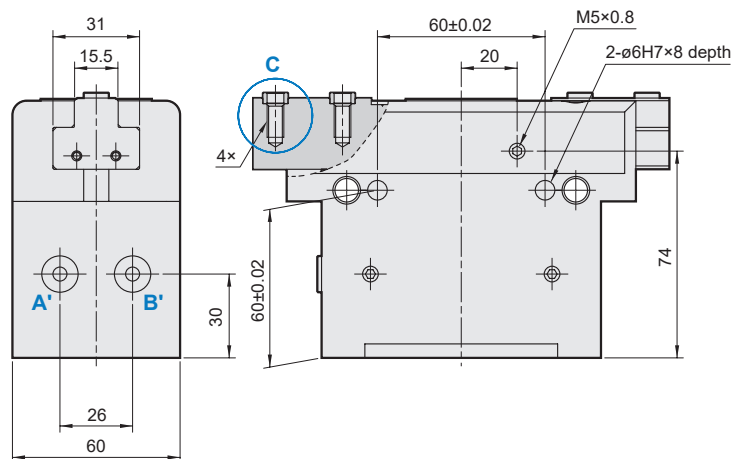
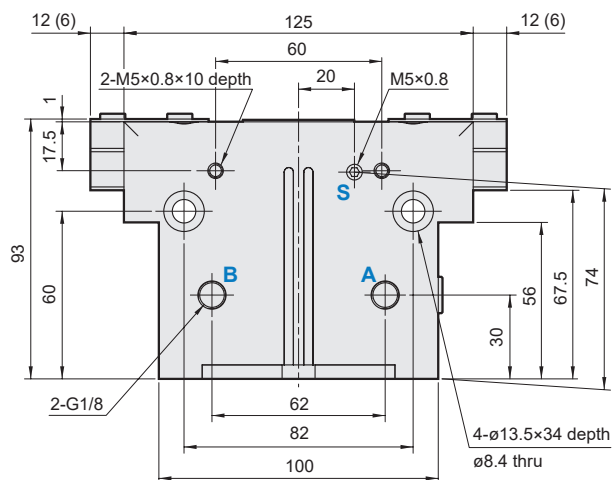
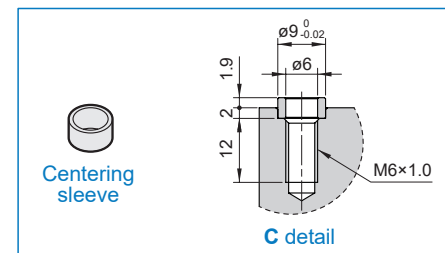
Centering sleeve



A/ A': Gripper open
B/ B': Gripper close
S: External vents
() for high gripping force



Centering sleeve



A/ A': Gripper open
B/ B': Gripper close
S: External vents
() for high gripping force