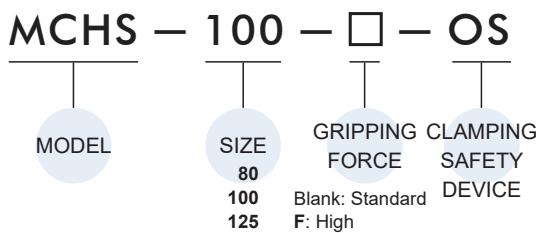


### Order example



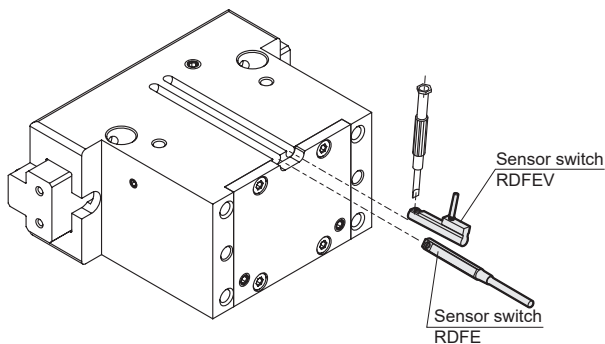
### Features

- 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

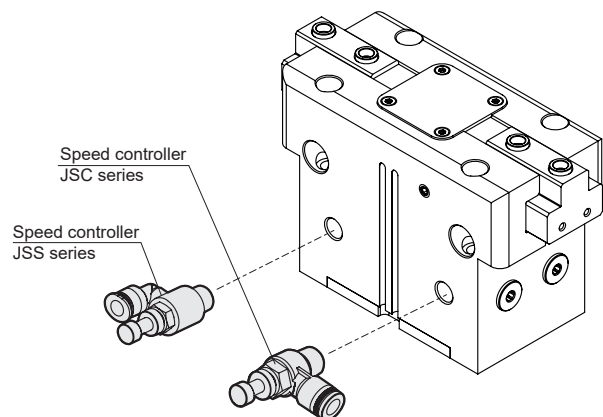
Model	MCHS-OS			
Acting type	Double acting			
Size	80	100	125	
Stroke per-jaw (mm)	Standaard	8	10	12
	High	4	5	6
Effective external gripping force (N) (*1)	Standaard	314	372	684
	High	591	701	1287
Close / Open time(s)	Open	0.05	0.09	0.12
	Close	0.03	0.06	0.08
Medium	Air			
Operating pressure range	0.4~0.6 MPa			
Compressed air consumption(cm <sup>3</sup> )	42	76.7	129	
Ambient temperature	+5~+80°C			
Lubrication	Not required			
Sensor switch (*2)	2 wire	RDFE(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.



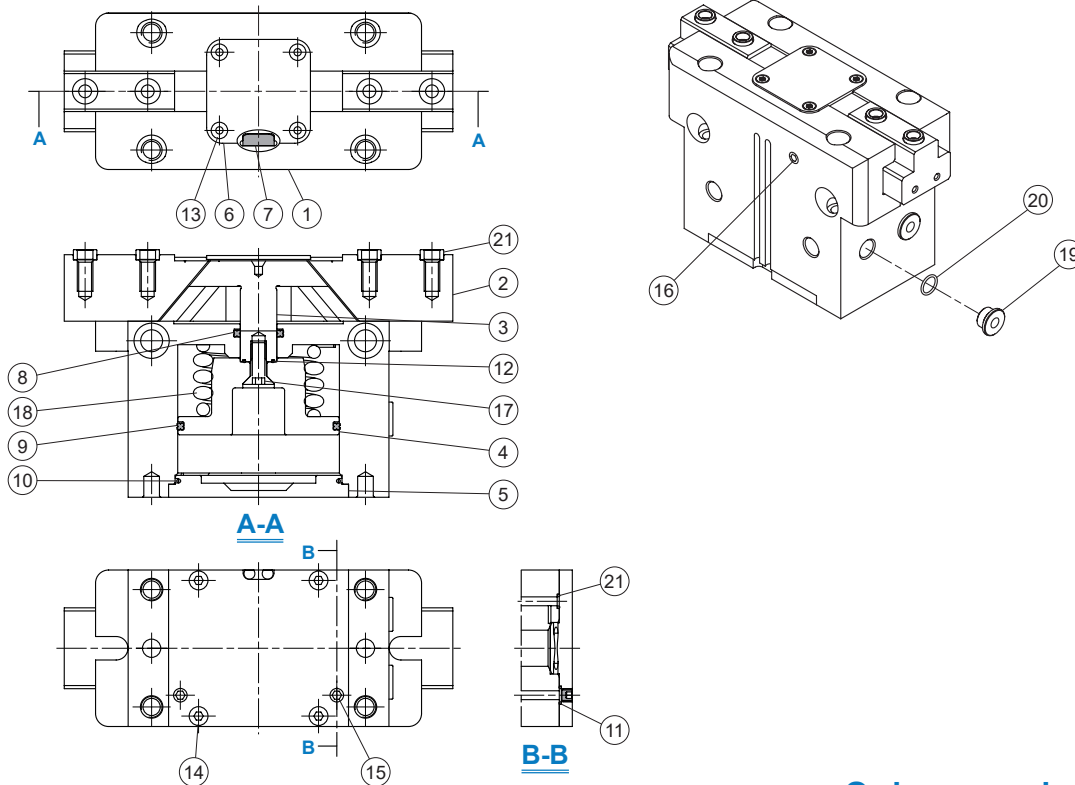
\* Each gripper needs at least two speed control valves to control speed.  
\* Speed controller specification, please refer to page 8-15~17 (Vol.1).

# MCHS-OS Inside structure & Parts list



## PARALLEL GRIPPER (2-Finger)

Mindman



### Material





No.	Part name	Material	Size & Q'y			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	Sprin	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	<b>PS-MCHS-80</b>
MCHS-100	<b>PS-MCHS-100</b>
MCHS-125	<b>PS-MCHS-125</b>

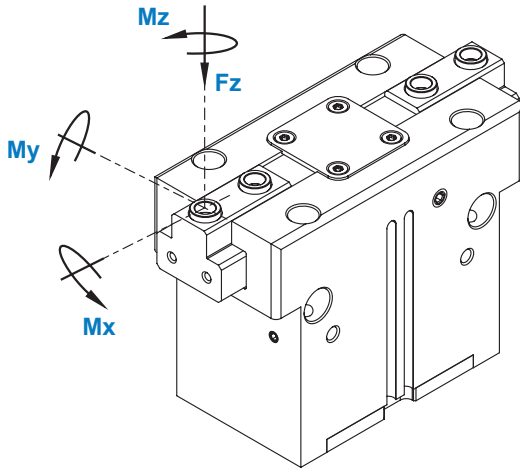
### Order example of accessory kits

Model	Accessory kits
MCHS-80	<b>AK-MCHS-80-OS</b>
MCHS-100	<b>AK-MCHS-100-OS</b>
MCHS-125	<b>AK-MCHS-125-OS</b>

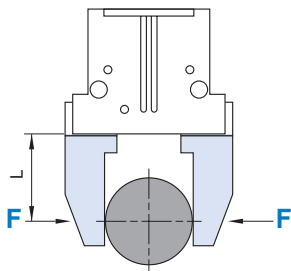
	
O-ring (×2) No.25	Iron plug (×2) No.24, 26
	
Pin (×2) No.23	Centering sleeve (×4) No.22

# MCHS-OS Capacity 80~125

## PARALLEL GRIPPER (2-Finger)

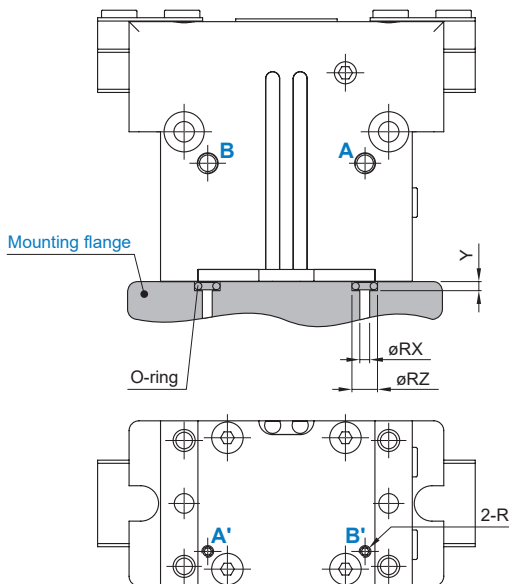


Code Size	Mx max. (Nm)	My max. (Nm)	Mz max. (Nm)	Fz max. (N)
80	80	60	50	1800
100	100	90	75	2500
125	120	120	100	3200



\* Clamping force = pneumatic clamping force + spring holding force

### Hose-free direct connection

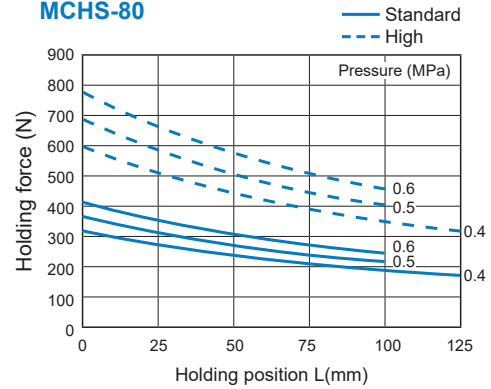


A/ A' : Gripper open  
B/ B' : Gripper close

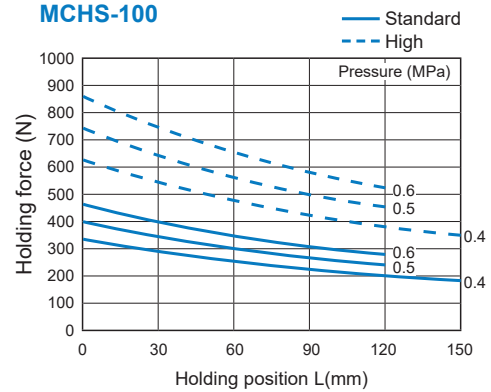
Code Size	R	RX	RZ	Y
80	M3	3	5	0.7
100	M5	5	8	1.1
125	M5	5	8	1.1

### External gripping force

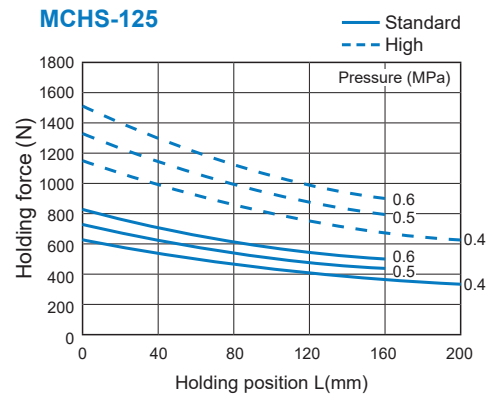
#### MCHS-80

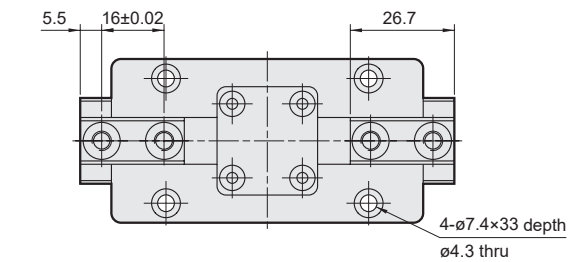


#### MCHS-100

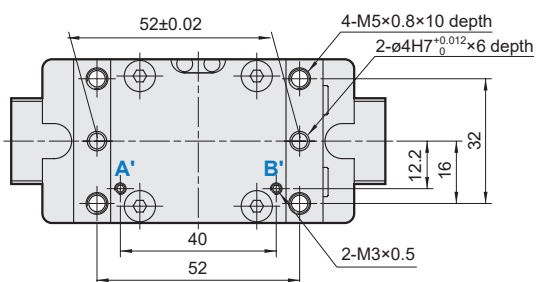
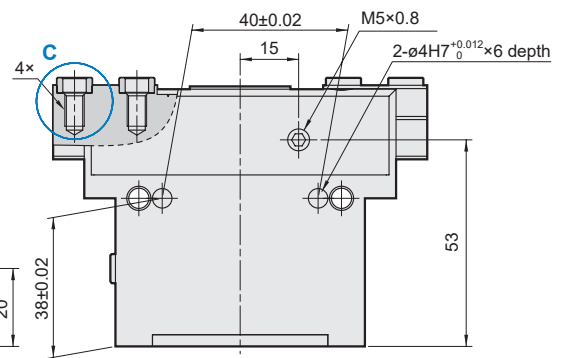
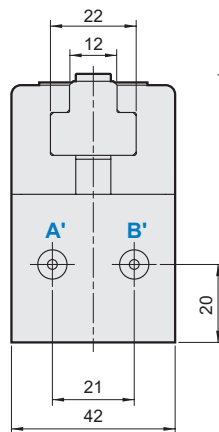
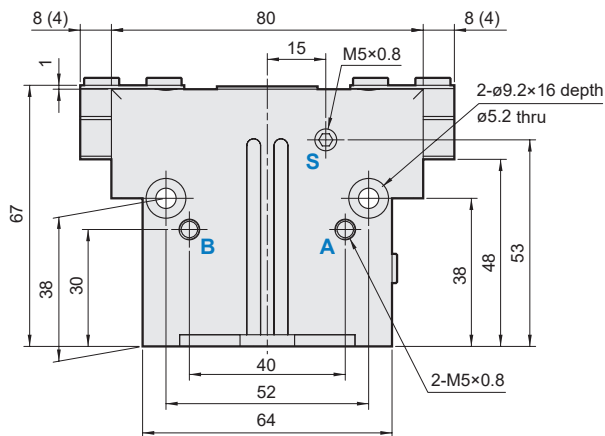
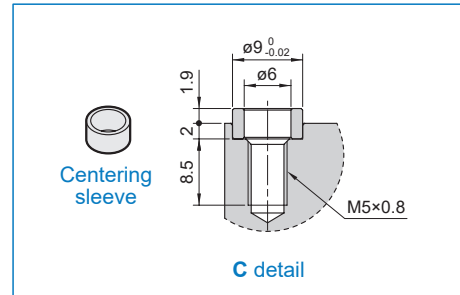


#### MCHS-125

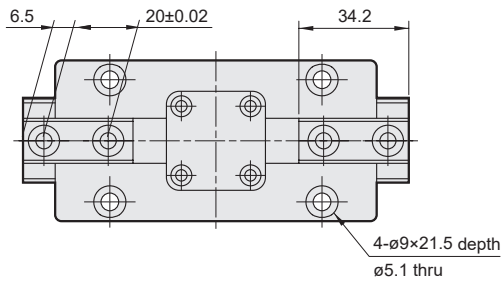




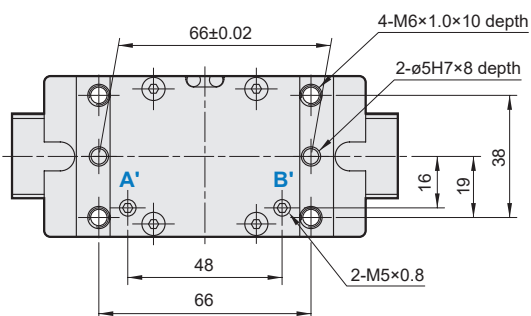
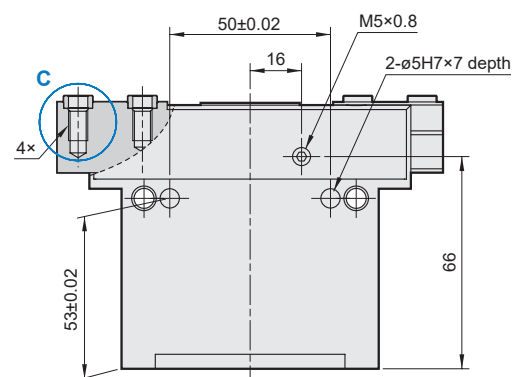
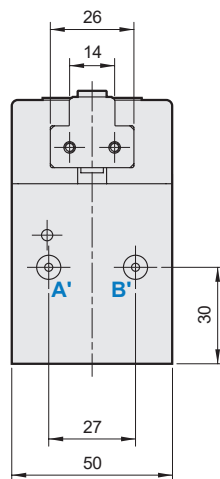
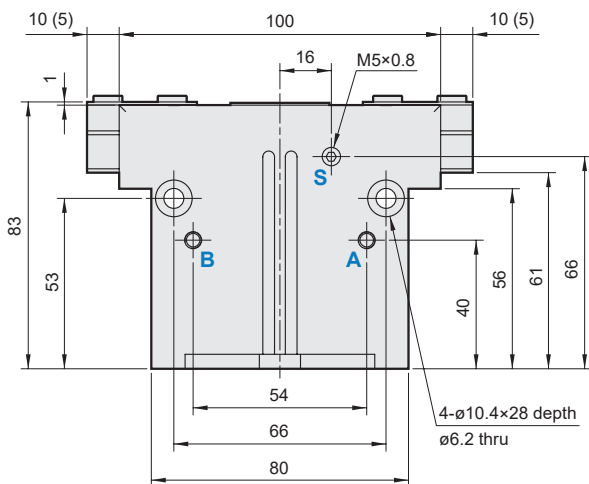
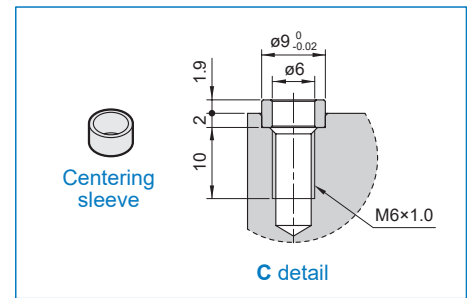
### Centering sleeve



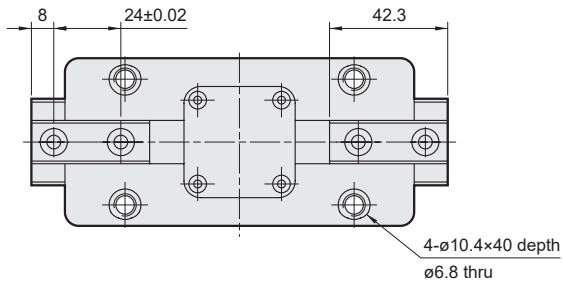
A/ A': Gripper open  
B/ B': Gripper close  
S: External vents  
( ) for high gripping force



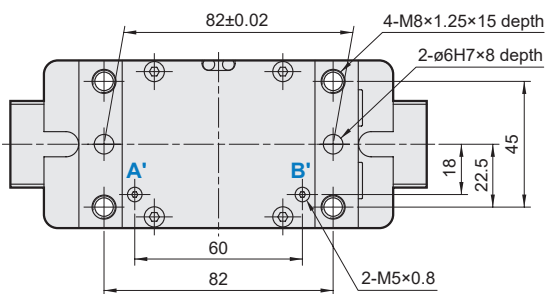
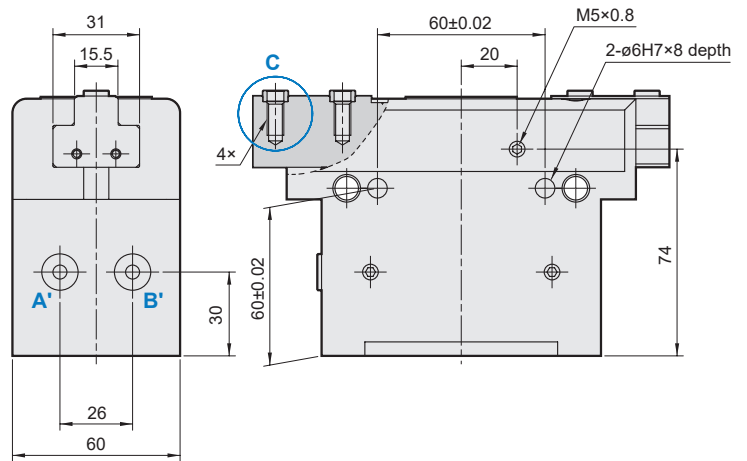
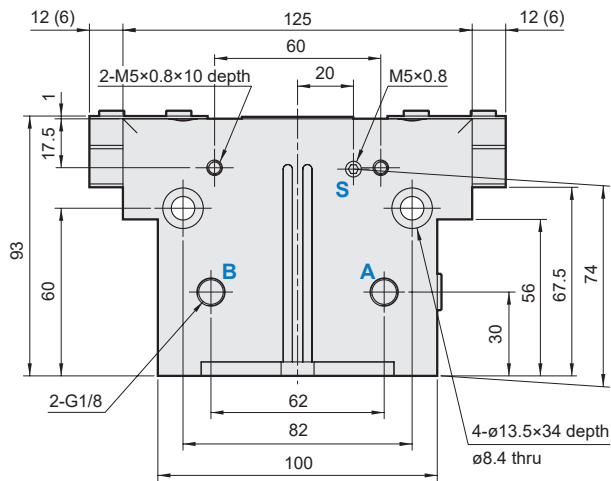
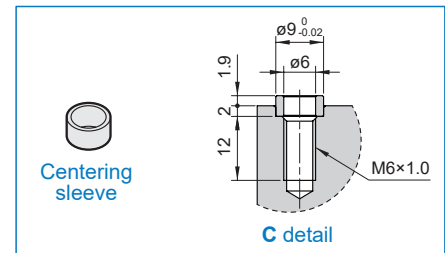
### Centering sleeve



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