

Wide Parallel Gripper

HP08 Series



◆ **Super-lightweight and thin**

◆ **Long Stroke**

Long opening/closing stroke, lightweight and compact.

◆ **Through Mounting Hole**

The main body has a through-mounting hole for easier mounting.

◆ **High Grip Force and High Rigidity**

High grip force realized by the double piston method.

◆ **Recessed Switches**

Use of the ZE type and ES type switches.

Model Code No.

HP08 - 12 * ZE235 A 2

Series Name

Bore Size

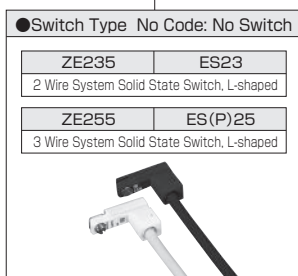
12:12mm
16:16mm
20:20mm
25:25mm

Number of Switches

1:1 Switch
2:2 Switches

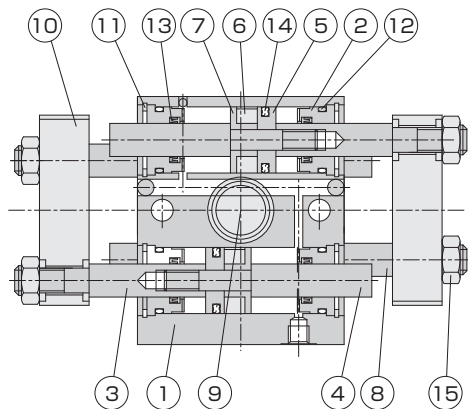
Switch Lead Wire Length

A:1m
B:3m



●Switch details→P.521~528

Internal Structure Diagram



Parts List

NO	Name	Material
1	Main Body	Aluminum Alloy
2	Rod Cover	Aluminum Alloy
3	Piston Rod A	Stainless Steel
4	Piston Rod B	Stainless Steel
5	Piston	Aluminum Alloy
6	Magnet	Resin
7	Magnet Support	Aluminum Alloy
8	Guide Rod	Stainless Steel
9	Pinion	Stainless Steel
10	Lever	Aluminum Alloy
11	Hole Locating Snap Ring	Carbon Steel
12	O Ring	NBR
13	Rod Packing	NBR
14	Piston Packing	NBR
15	Hexagon Nut	Carbon Steel

Specifications

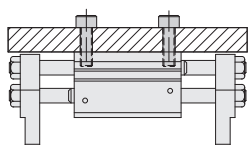
Fluid	Air
Maximum Operating Pressure [MPa]	0.7
Operating Pressure [MPa]	0.2~0.7
Proof Pressure [MPa]	1.05
Operating Temperature [°C]	0~60 (No Freezing)
Lubrication	Not Required (Required for sliding parts of the machine)
Pipe Bore	M5×0.8
Maximum Operating Cycle [Cycle/min]	120
Repeat Accuracy [mm]	±0.07
Applicable Switch	ZE, ES Type (Solid State Switch)

Action Type	Model	Bore Size [mm]	Opening/Closing Stroke [mm]	Lever Screw (x 4)	Gripping Force [N]		Outside Dimensions (T x W x L) [mm]	Product Mass [g]
					Close	Open		
Double Acting	HP08-12	φ12×2	24	M4×0.7	27	27	50×44×27	230
	HP08-16	φ16×2	32	M5×0.8	55	55	80×50×32	400
	HP08-20	φ20×2	40	M6×1	85	85	70×60×40	760
	HP08-25	φ25×2	50	M8×1.25	135	135	84×66×44	1100

Note) The grip force is measured at the intermediate position of the opening/closing stroke.
It is an effective value when the grip point L is 30 mm and the pressure is 0.5 MPa.

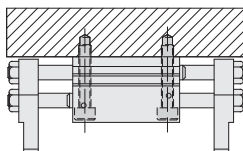
Air Gripper Mounting Example

Use of bottom face mounting screw



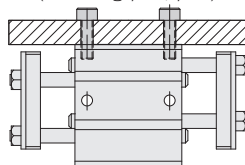
Use of through-hole

(The bolt head does not protrude.)



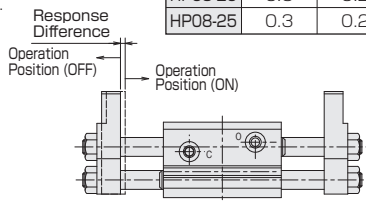
Use of side mounting screw

(Excluding φ12, φ16)



Switch Response Difference

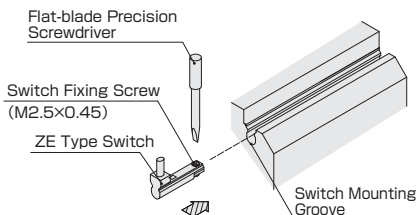
The distance from the position where the levers move and the switch turns on to the position where the levers move in the reverse direction and the switch turns off is called "response difference".



Model	Response Difference [mm]	Operation Position Accuracy [mm]
HP08-12	0.3	0.2
HP08-16	0.3	0.2
HP08-20	0.3	0.2
HP08-25	0.3	0.2

Switch Mounting

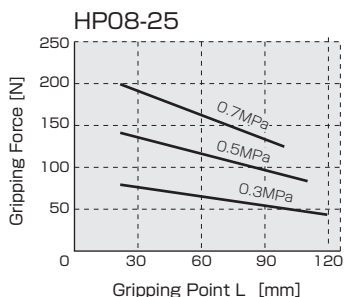
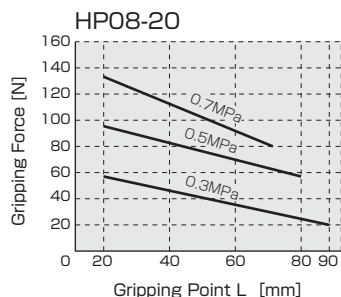
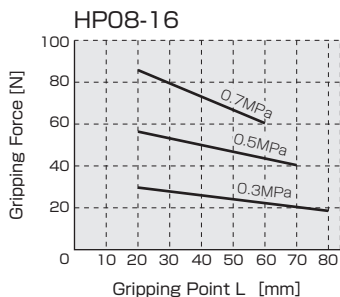
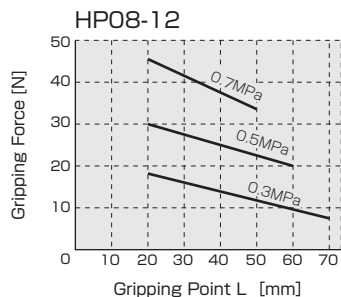
Insert the switch into the switch mounting groove.
After setting the mounting position, tighten the switch fixing screw with a precision screwdriver.
The tightening torque shall be 0.1 N·m or less.



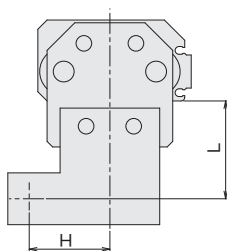
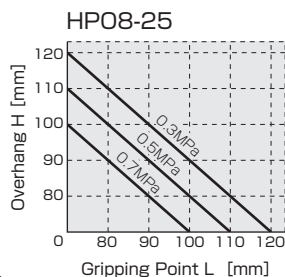
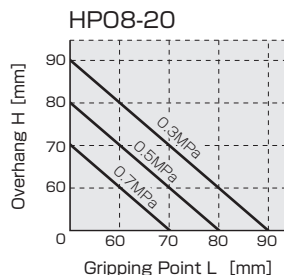
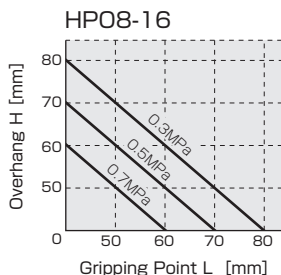
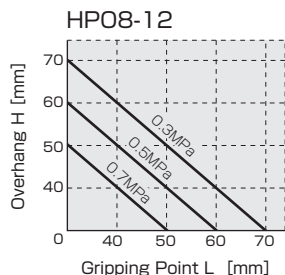
Switch Protrusion Distance

In the HP08 series, switches do not protrude.

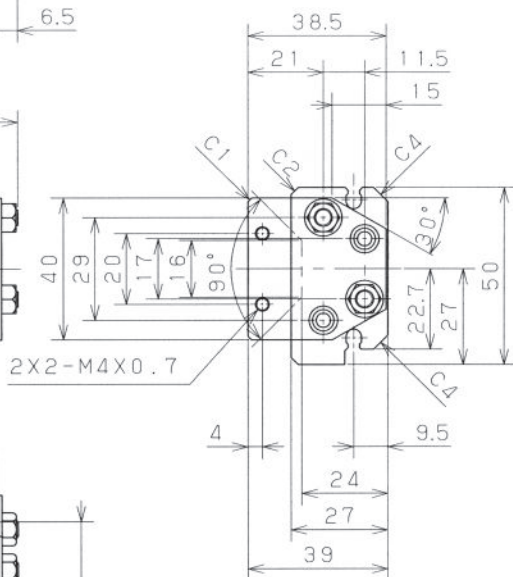
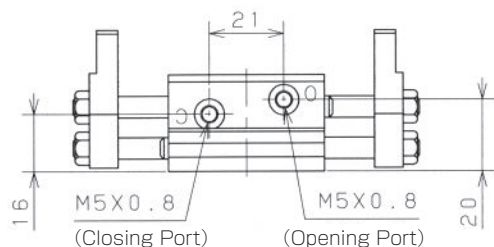
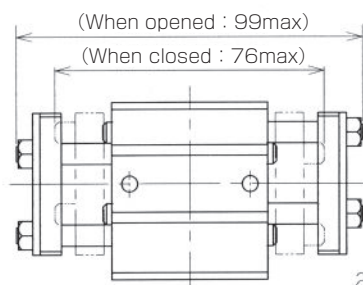
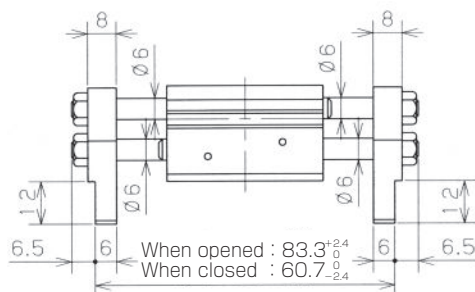
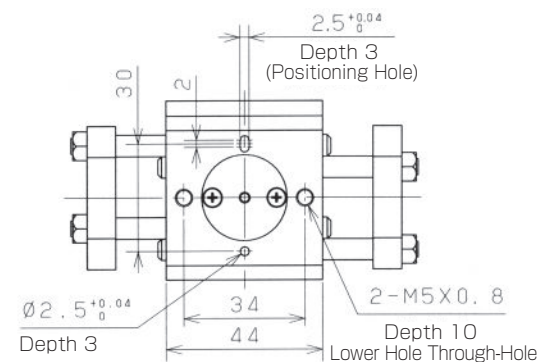
Effective Gripping Force



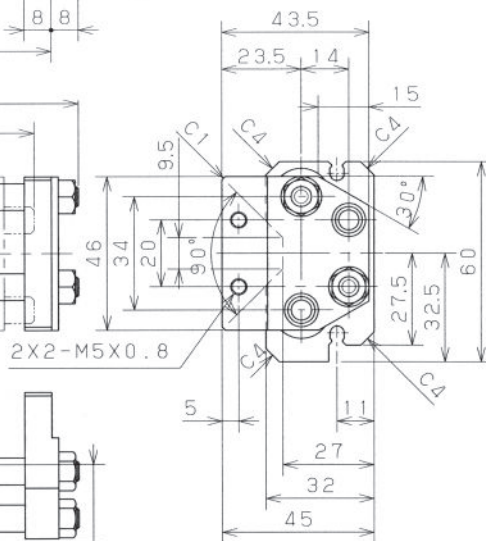
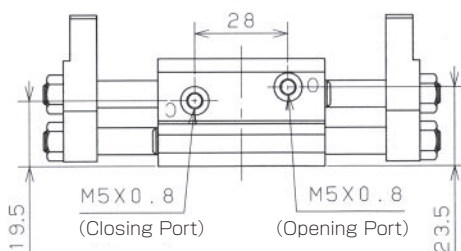
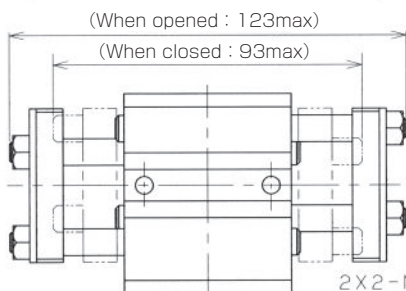
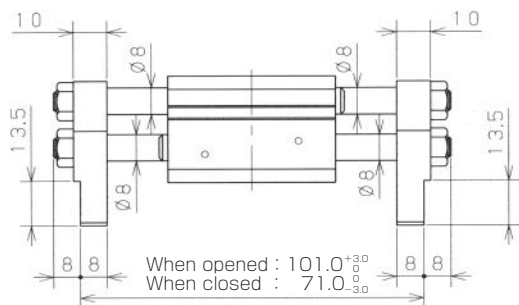
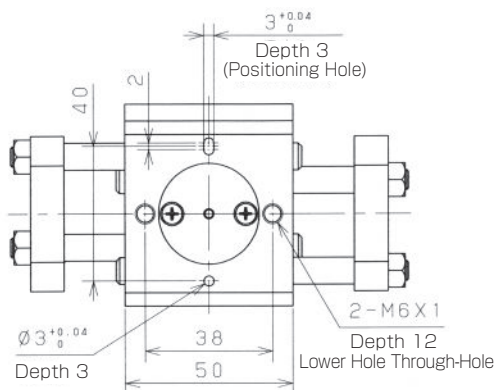
Gripping Point Limit Range



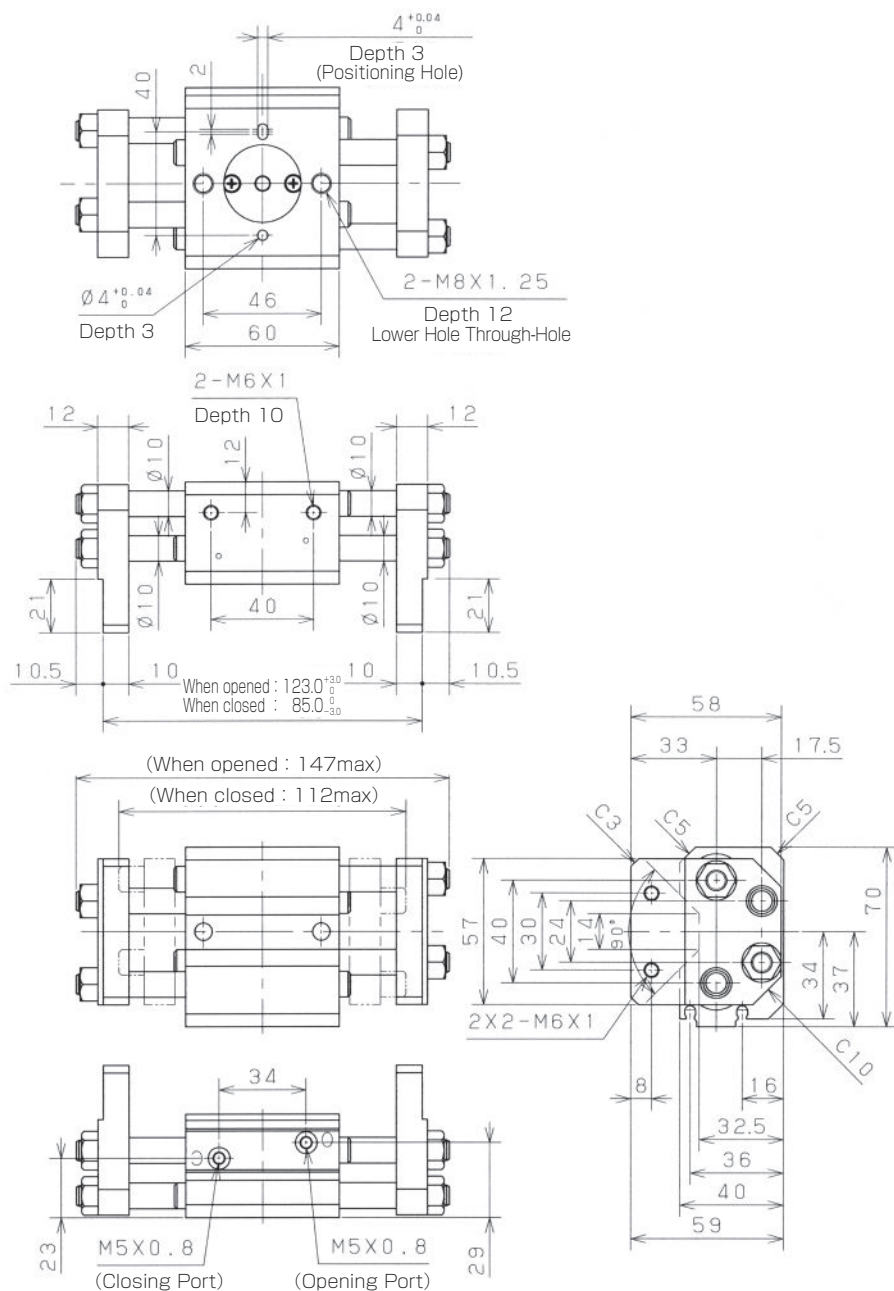
Dimensions HP08-12



Dimensions HP08-16



Dimensions HP08-20



Dimensions HP08-25

