

Wide Parallel Gripper

HP01 Series



- ◆ Long stroke of 40 mm
- ◆ High grip force realized by the double piston method
- ◆ Highly rigid thanks to the 2 rods supporting the one side lever and the material of iron

Model Code No.

HP01 - 16 ※ **ZC230** **A** **2**

Series Name

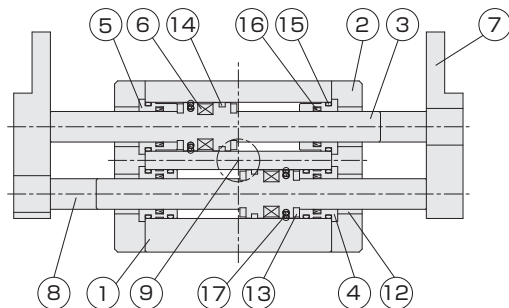
Bore Size

16:16mm
25:25mm

Switch Type	Switch Lead Wire Length	Number of Switches
ZC230: 2 Wire System Solid State	A:1m	1:1 Switch
ZC253: 3 Wire System Solid State	B:3m	2:2 Switches
EC22: 2 Wire System Solid State		
EC23: 3 Wire System Solid State		
Switch Type	Number of Switches	Switch Lead Wire Length
No Code: No Switch	—	—
RCA: 2 Wire System Contact	1:1 Switch	No Code:1.5m
RCB: 2 Wire System Contact	2:2 Switches	LA: 5m
RCM: 2 Wire System Solid State		

●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	Stainless Steel
4	Packing Housing A	Aluminum Alloy
5	Packing Housing B	Aluminum Alloy
6	Magnet	Resin
7	Lever	Carbon Tool Steel
8	Guide Rod	Carbon Tool Steel
9	Pinion	Carbon Steel
10	Pinion Cover	Aluminum Alloy
11	Parallel Pin	Carbon Steel
12	Oil-containing Metal	Oil-impregnated Sintered Bearing
13	Bumper	Urethane
14	Wearing	Resin
15	O Ring	NBR
16	Rod Packing	NBR
17	Piston Packing	NBR

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]	±0.05
Applicable Switch	ZC, RC, EC Type

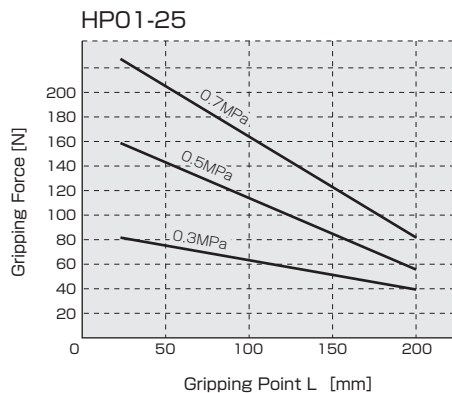
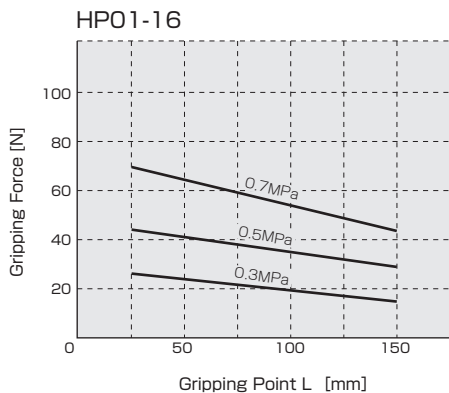
Action Type	Model	Bore Size [mm]	Opening/Closing Stroke [mm]	Minimum Operating Pressure [MPa]	Gripping Force [N] ^{Note) 1}		Outside Dimensions (T x W x L) [mm] ^{Note) 2}	Product Mass [g]
					Close	Open		
Double Acting	HP01-16	φ16×2	40	0.2	41	41	41×81×56	890
	HP01-25	φ25×2	40	0.2	145	145	51×86×77	1600

Note 1) The grip force is measured at the intermediate position of the opening/closing stroke.

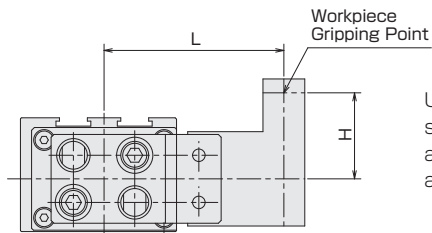
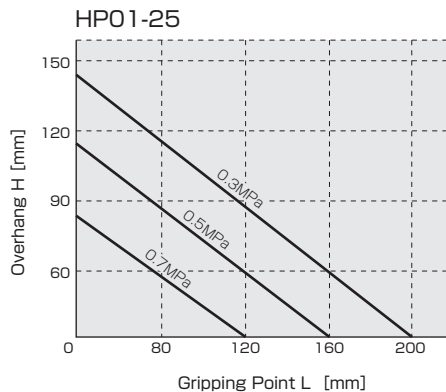
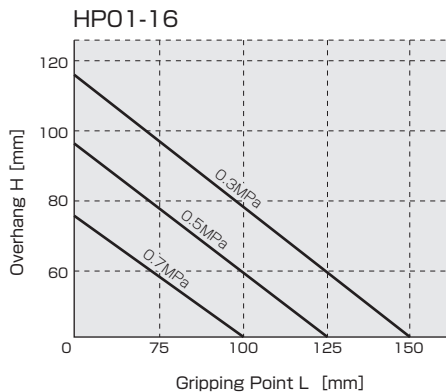
It is an effective value when the grip point L is 30 mm and the pressure is 0.5 MPa.

Note 2) The outside dimensions indicate the main body dimensions. (Excluding the lever)

Effective Gripping Force

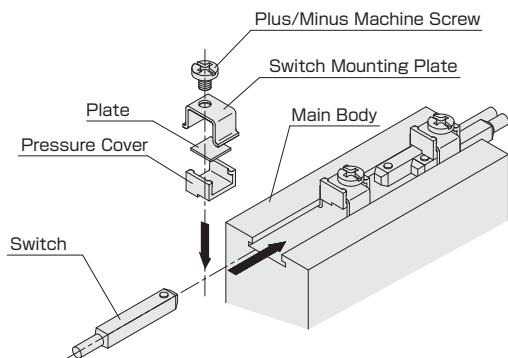


Gripping Point Limit Range



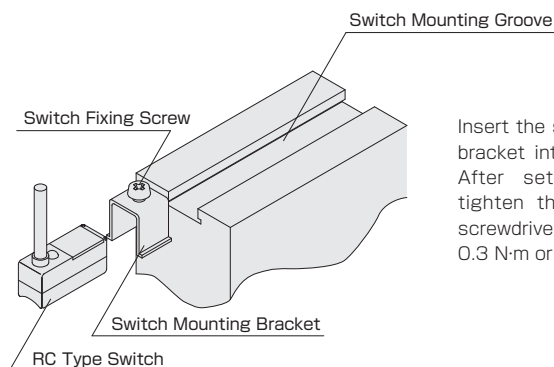
Use the gripper with the workpiece position so that the grip point (L) and the overhang (H) are within the range specified in the table above due to the working pressure.

■ Switch Mounting (ZC Type Switch)



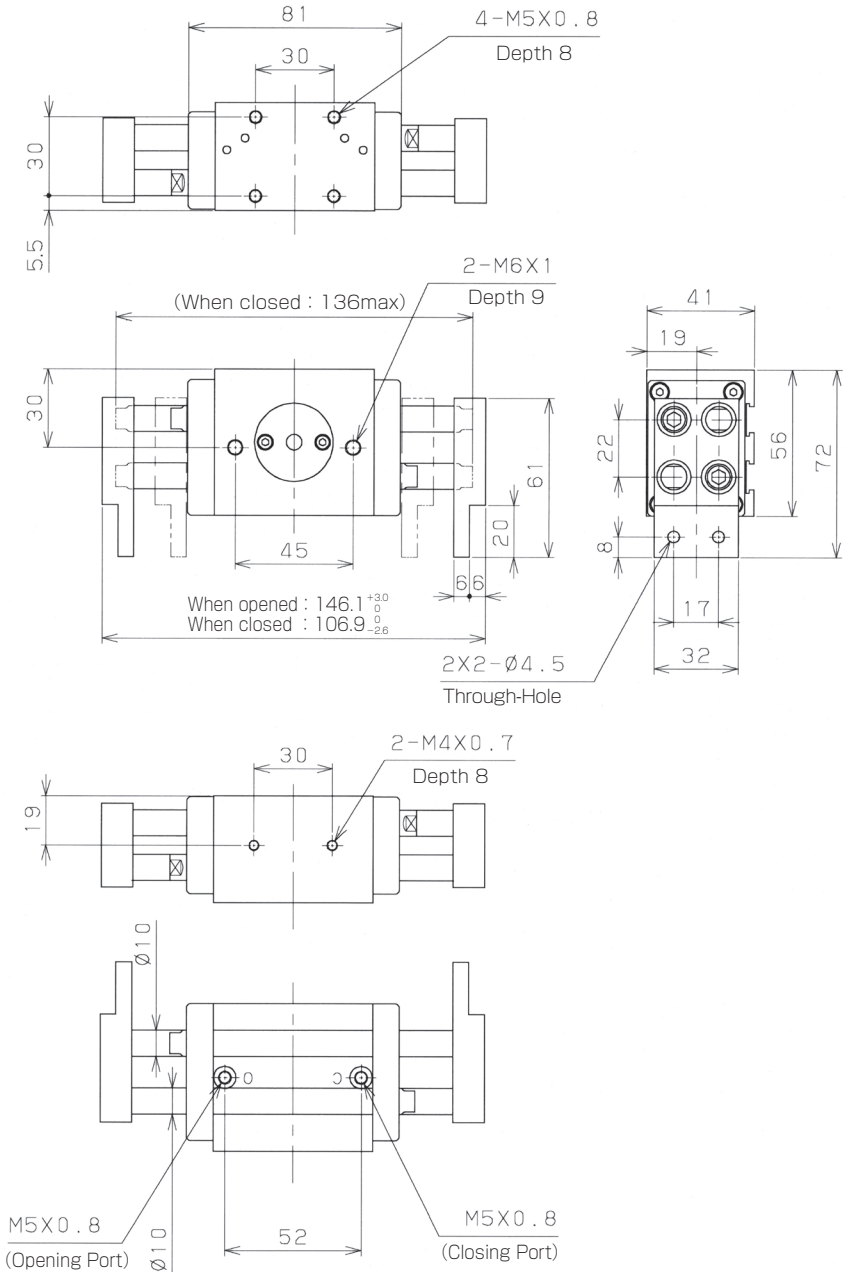
1. Place the plate between the switch mounting plate and the pressure cover and fit the switch mounting plate and the pressure cover.
2. Mount the switch mounting plate to the switch mounting groove.
3. Insert the switch in the direction of arrow.
4. After setting the detection position, fix the switch with a plus/minus machine screw. The tightening torque shall be 0.3 N·m or less.
5. You can move the switch by loosening the plus/minus machine screw.

■ Switch Mounting (RC Type Switch)



Insert the switch and the switch mounting bracket into the switch mounting groove. After setting the mounting position, tighten the switch fixing screw with a screwdriver. The tightening torque shall be 0.3 N·m or less.

Dimensions HP01-16



■ Dimensions HP01-25

