

## Angular Gripper

# VH Series



### ◆ Various Models

In the background of the miniature gripper demand expansion, we have provided large sizes (gripper inner diameter:  $\phi 40$  and  $\phi 50$ ) for the VH series.

### ◆ Easy maintenance

VH series is designed based on the space cylinder, so it is easy to disassemble and repair.

### ◆ Downsized

Many of the main parts are made of aluminum alloy, so this product has been drastically downsized.

### ◆ Improved Machine Strength

Extending the length of life is considered by increasing the mechanical strength of each part such as by inserting a spacer into the lever mount sliding part.

Model Code No.

**VH - 20 C**

Series Name

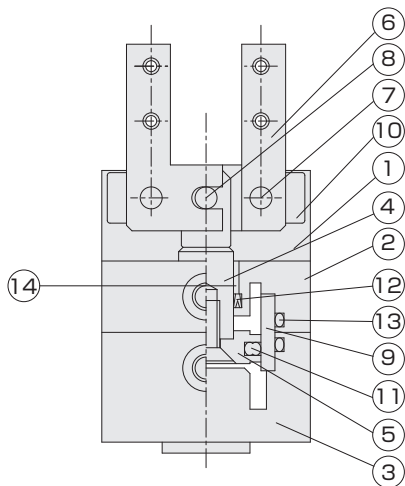
Bore Size

- 20:20mm
- 32:32mm
- 40:40mm
- 50:50mm

Action Type

- A: Single Acting Normally Open ( $\phi 20, \phi 32$  only)
- B: Single Acting Normally Close ( $\phi 20, \phi 32$  only)
- C: Double Acting

Internal Structure Diagram



Parts List

NO	Name	Material
1	Lever Mount Base	Aluminum Alloy
2	Rod Cover	Aluminum Alloy
3	Head Cover	Aluminum Alloy
4	Piston Rod	Carbon Steel
5	Piston	Brass
6	Lever	Carbon Steel
7	Fulcrum Pin	Carbon Steel
8	Press Fit Pin	Carbon Steel
9	Tube	Aluminum Alloy
10	Slide Plate	Hard Steel
11	Piston Packing	NBR
12	Rod Packing	NBR
13	O Ring	NBR
14	Metal	Oilless Bearing

## Specifications

Fluid	Air
Maximum Operating Pressure [MPa]	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 (VH-20, VH-32) Rc 1/8 (VH-40, VH-50)

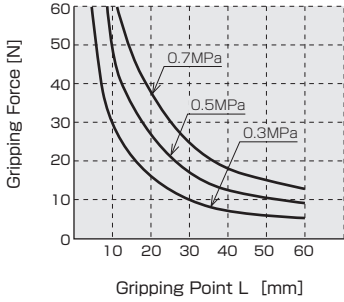
Action Type	Model	Bore Size [mm]	Minimum Operating Pressure [MPa]	Lever Screw		Gripping Force [N] <sup>Note)1</sup>		Outside Dimensions (T x W x L) [mm] <sup>Note)2</sup>	Product Mass [g]
						Close	Open		
Double Acting	VH-20C	20	0.1	M4×0.7 (x 4)	M3×0.5 (x 4)	18	23	38×38×49.5	220
	VH-32C	32	0.1	M6×1 (x 4)	M5×0.8 (x 4)	70	80	49×49×58	470
	VH-40C	40	0.1	M8×1.25 (x 4)	M6×1 (x 4)	140	170	65×65×83	1150
	VH-50C	50	0.1	M8×1.25 (x 4)	M6×1 (x 4)	280	330	77×77×93	1900
Single Acting Normally Open	VH-20A	20	0.2	M4×0.7 (x 4)	M3×0.5 (x 4)	14	—	38×38×49.5	220
	VH-32A	32	0.2	M6×1 (x 4)	M5×0.8 (x 4)	55	—	49×49×58	470
Single Acting Normally Close	VH-20B	20	0.2	M4×0.7 (x 4)	M3×0.5 (x 4)	—	18	38×38×49.5	220
	VH-32B	32	0.2	M6×1 (x 4)	M5×0.8 (x 4)	—	65	49×49×58	470

Note 1): L indicates the distance (cm) from the fulcrum pin to the grip point. This is an effective value when the pressure is 0.5 MPa.

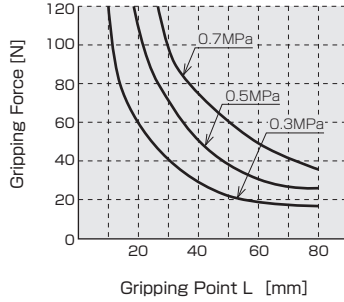
Note 2): The outside dimensions indicate the main body dimensions. (Excluding the levers)

Effective Gripping Force (Closing Force )

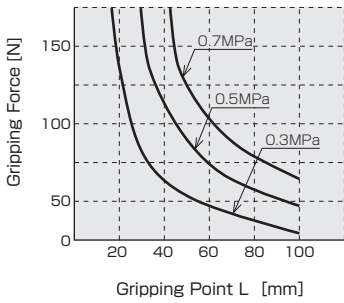
VH-20C



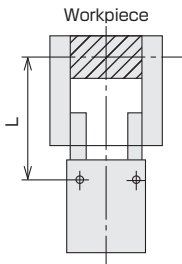
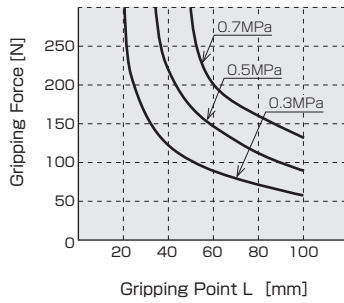
VH-32C



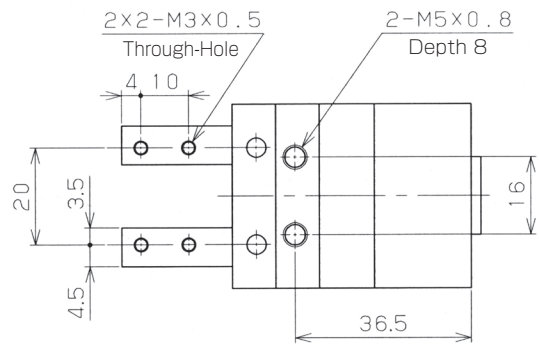
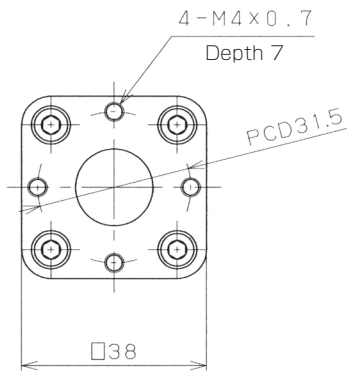
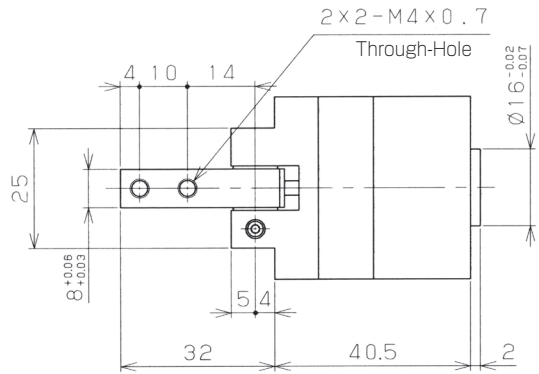
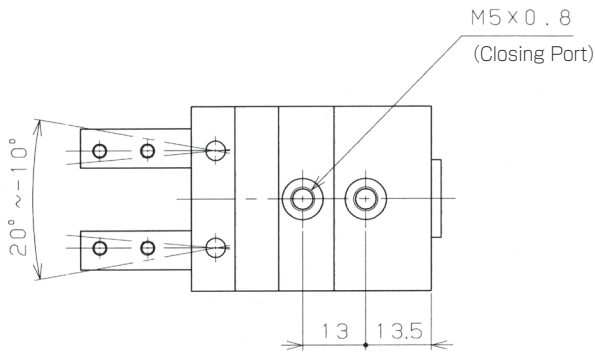
VH-40C



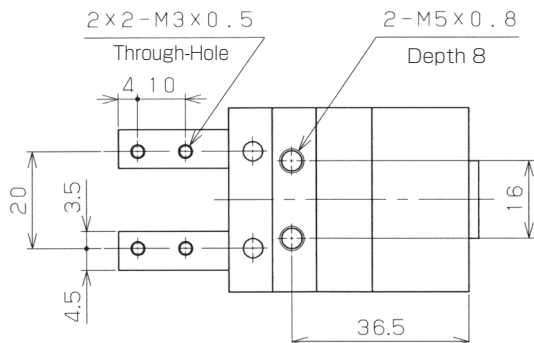
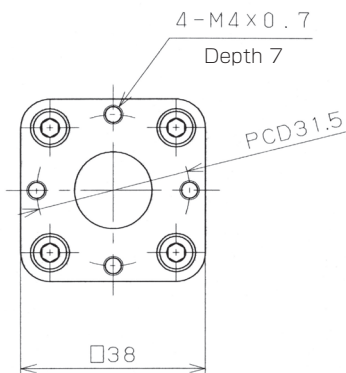
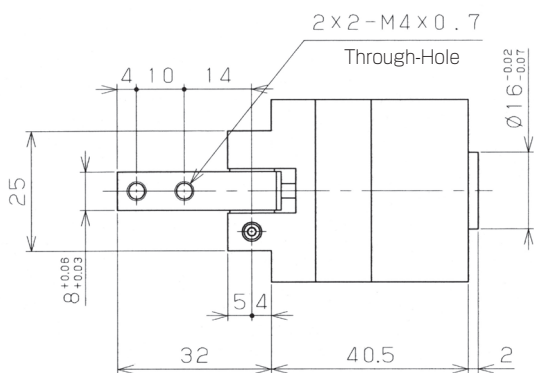
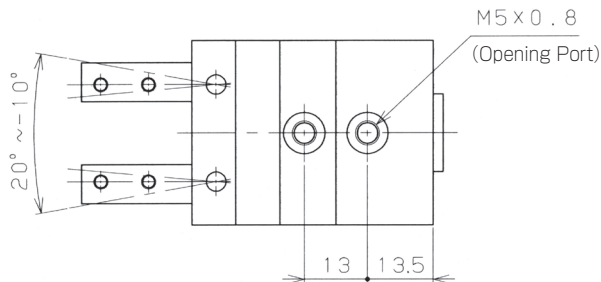
VH-50C



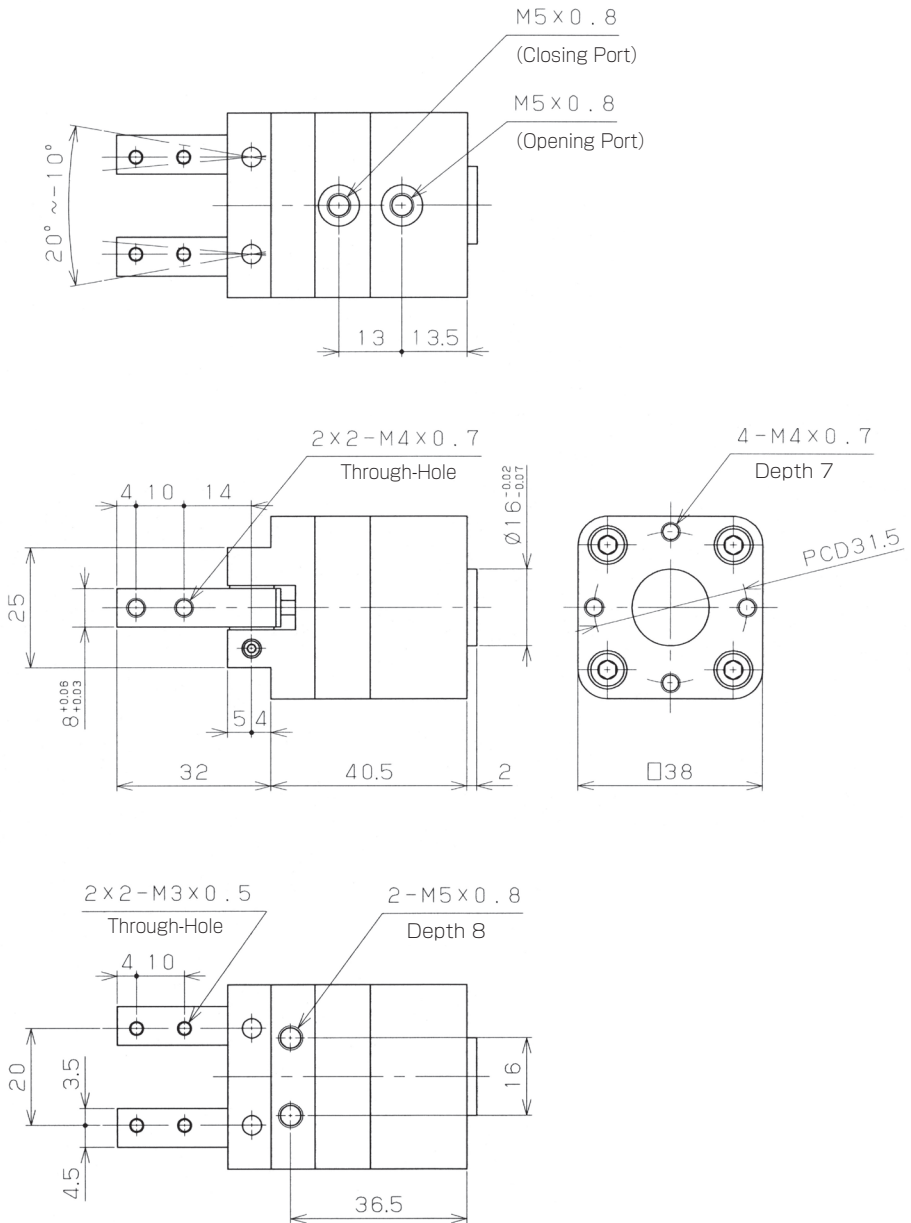
Dimensions **VH-20A**



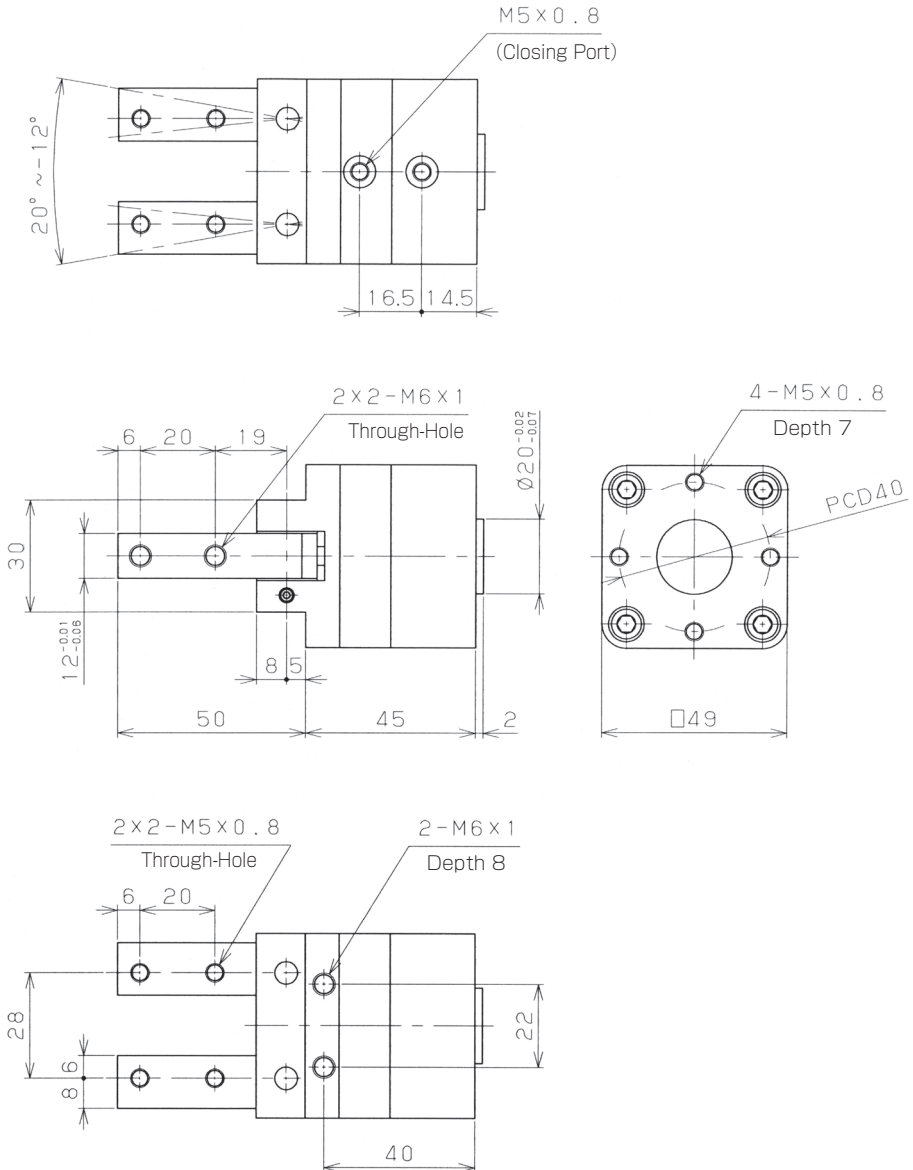
■ Dimensions **VH-20B**



Dimensions **VH-20C**

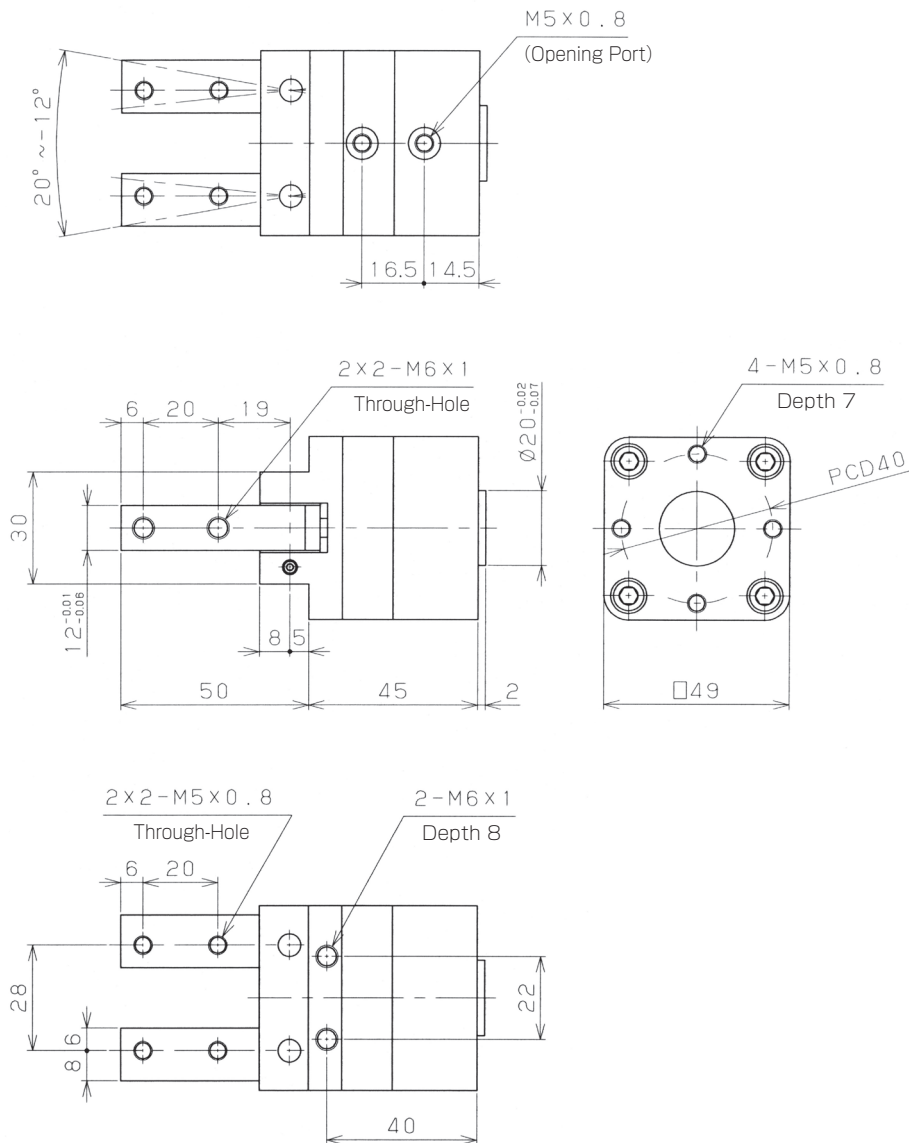


■ Dimensions **VH-32A**

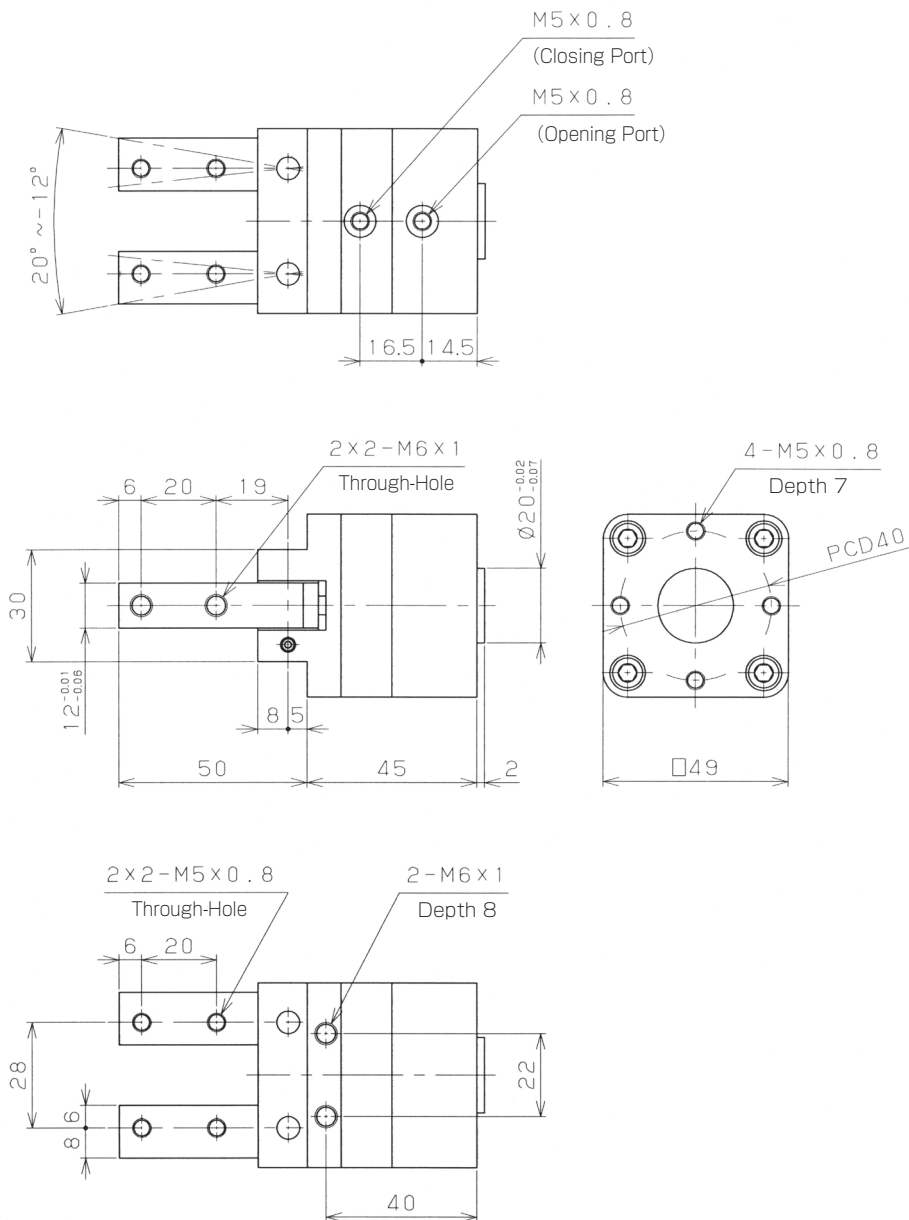




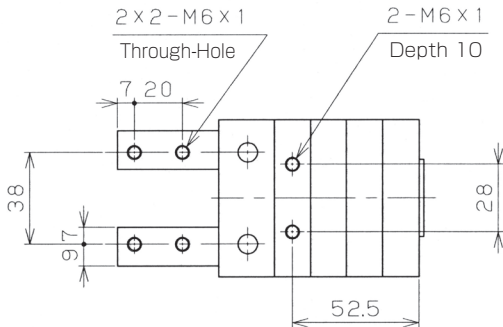
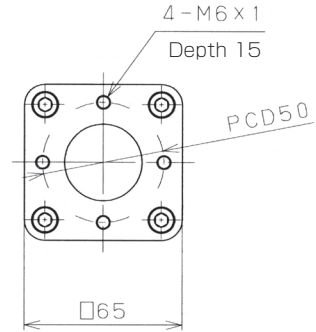
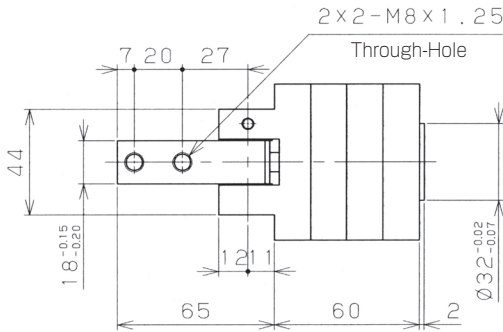
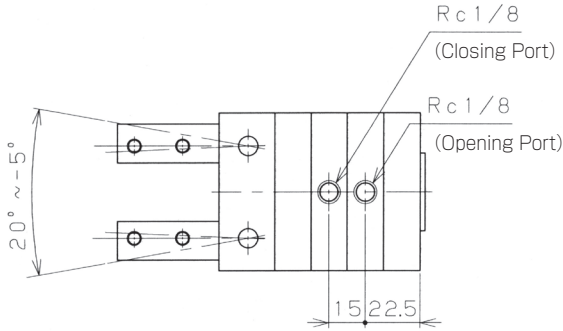
Dimensions **VH-32B**



**Dimensions** **VH-32C**



Dimensions **VH-40C**



**Dimensions** **VH-50C**

