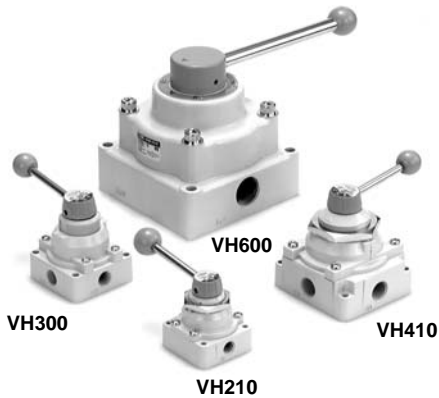


Hand Valve Series *VH*



Standard Specifications

| | | |
|-------------------------------|----------------|--|
| Fluid | | Air |
| Standard specifications | | 1.5MPa |
| Max.operating pressure | VH200, 300,400 | 1.0MPa |
| | VH600 | 0.7MPa |
| Ambient and fluid temperature | | -5 to 60°C (No freezing) |
| Operating angle | | 90° |
| Lubrication | | Not required/When lubricated, use turbine oil # 1 (ISO VG32) |

S□A

V□A

S□A

V□A

Optional Specifications

| | |
|--|------------------------|
| Bottom piping | VH300, 400 |
| Panel mount | VH200, 300, 400 |
| Different P port location (On handle side) | All models applicable* |

VM/VR

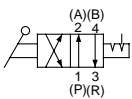
VH

* Note that 1(P) port of VH600 is located on handle side as standard.

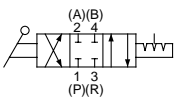
Models

Symbol

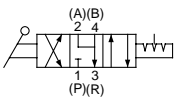
2 Position



Closed center

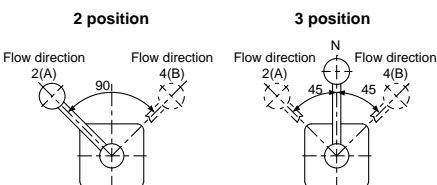


Exhaust center



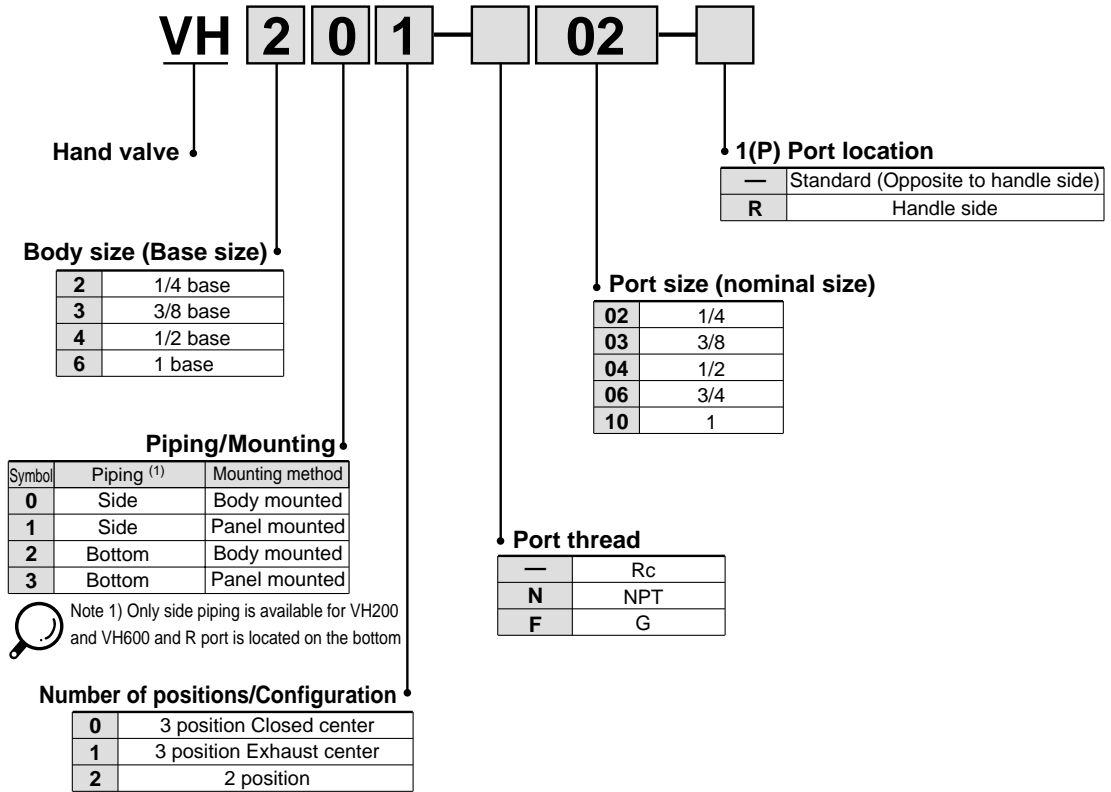
Handle operation angle and air flow direction

(Refer to figures of porting direction in the right.)

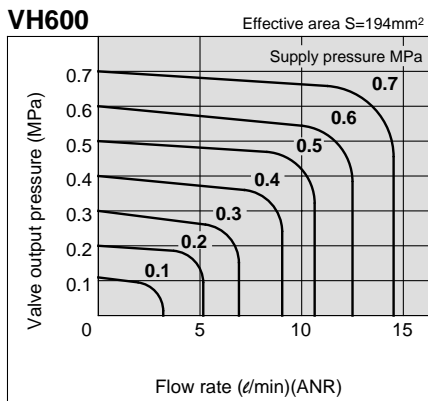
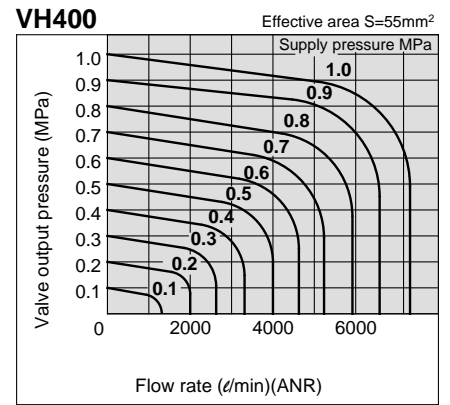
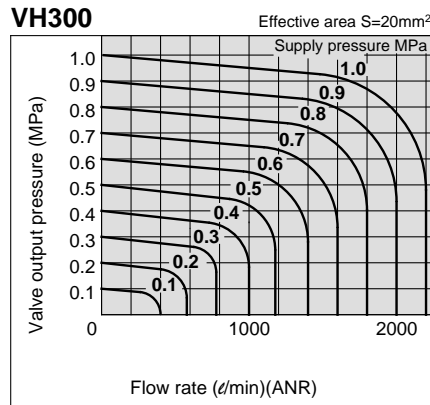
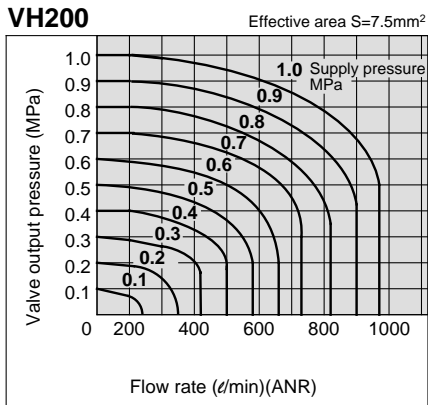


| Series | Port Size | Number of positions | Piping direction | Model | | Effective area (mm ²) (Nl/min factor) | Weight (kg) | |
|--------|------------|---------------------|------------------|----------------|----------------|---|-------------|---------------------|
| | | | | Body mounted | Panel mounted | | | |
| VH2 | 1/4 | 3 (Closed center) | | VH200-02 | VH210-02 | 7.5(356.60) | 0.42 | |
| | | 3 (Exhaust center) | | VH201-02 | VH211-02 | | | |
| | | 2 (Position) | | VH202-02 | VH212-02 | | | |
| VH3 | 1/4, 3/8 | 3 (Closed center) | | VH300-02, 03 | VH310-02, 03 | 1/4: 17(802.35) | 0.71 | |
| | | 3 (Exhaust center) | | VH301-02, 03 | VH311-02, 03 | | | |
| | | 2 (Position) | | VH302-02, 03 | VH312-02, 03 | | | |
| | | 3 (Closed center) | | VH320-02, 03 | VH330-02, 03 | | | 3/8: 20(980.65) |
| | | 3 (Exhaust center) | | VH321-02, 03 | VH331-02, 03 | | | |
| | | 2 (Position) | | VH322-02, 03 | VH332-02, 03 | | | |
| VH4 | 1/4 to 3/4 | 3 (Closed center) | | VH400-02 to 06 | VH410-02 to 06 | 1/4: 45(2228.75) | 1.28 | |
| | | 3 (Exhaust center) | | VH401-02 to 06 | VH411-02 to 06 | | | |
| | | 2 (Position) | | VH402-02 to 06 | VH412-02 to 06 | | | |
| | | 3 (Closed center) | | VH420-02 to 06 | VH430-02 to 06 | | | 3/8: 49(2407.05) |
| | | 3 (Exhaust center) | | VH421-02 to 06 | VH431-02 to 06 | | | |
| | | 2 (Position) | | VH422-02 to 06 | VH432-02 to 06 | | | |
| VH6 | 3/4, 1 | 3 (Closed center) | | VH600-06, 10 | — | 3/4: 185(9093.30) | 9.7 | |
| | | | | | | 1: 194(9360.75) | | |

How to Order

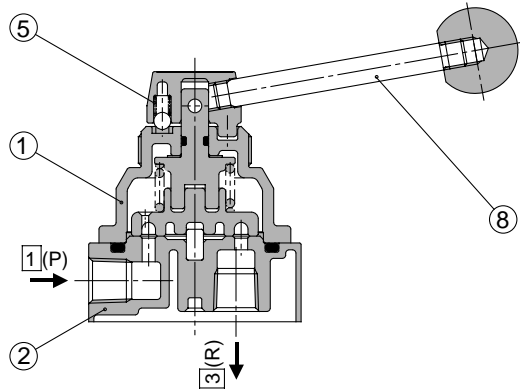
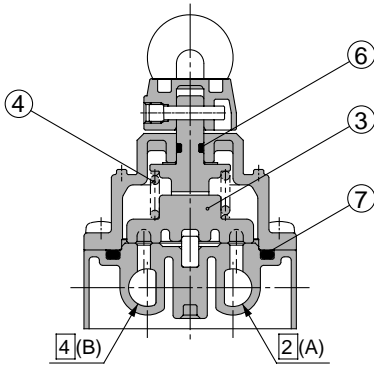


Flow Characteristics



Construction

VH200



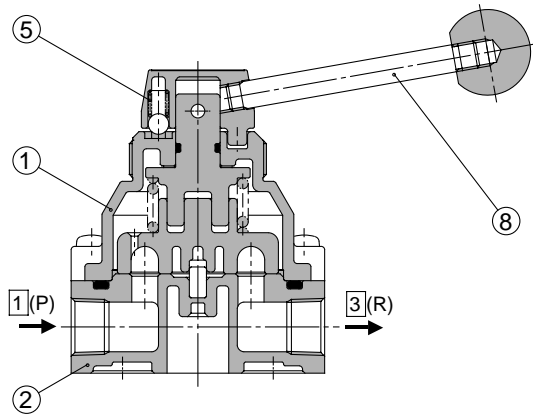
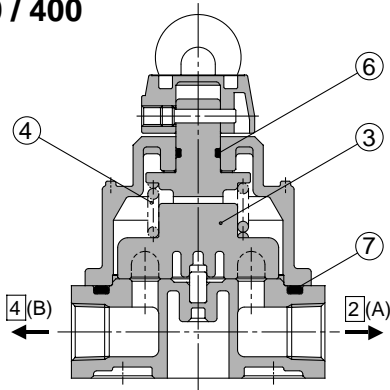
S□A

V□A

S□A

V□A

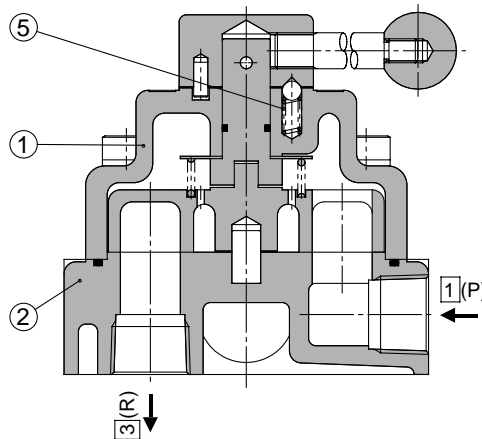
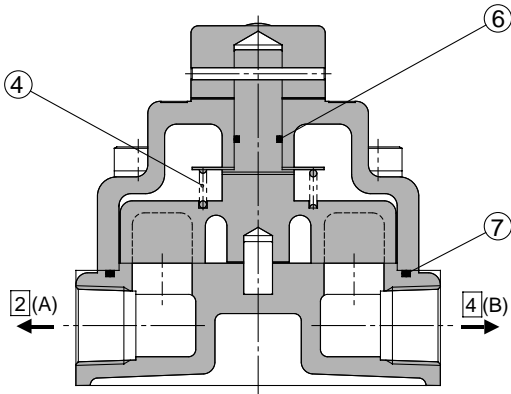
VH300 / 400



VM/VR

VH

VH600



Component Parts

| No. | Description | Material | |
|-----|-------------|--------------------|-----------|
| | | VH200/300/400 | VH600 |
| 1 | Cover | Zinc die cast | Cast iron |
| 2 | Body | Aluminium die cast | Cast iron |

Replacement Parts: Seal Kits

| No. | Description | Material | Part No. | | | |
|-----|---------------------|------------|--------------------|--------------------|--------------------|----------------|
| | | | VH200 | VH300 | VH400 | VH600 |
| 3 | Slide ring | Resin | 24404 (24404-1) | 24414 (24414-1) | 24423 (24423-1) | — |
| 4 | Slide ring spring | Piano wire | 24408 | 24416 | 24425 | 240417 |
| 5 | Slide ball spring | Piano wire | 24077 | 240359 | 240359 | 24047 |
| 6 | O ring | NBR | JIS B2401 P5 | JIS B2401 P10 | JIS B2401 P10 | JIS B2401 P15 |
| 7 | O ring | NBR | JIS B2401 P42 | JIS B2401 G55 | JIS B2401 P71 | JIS B2401 G120 |
| 8 | Handle rod assembly | — | 2407102A | 2407102A | 2407102A | — |

Part No. of lock nut for panel mount

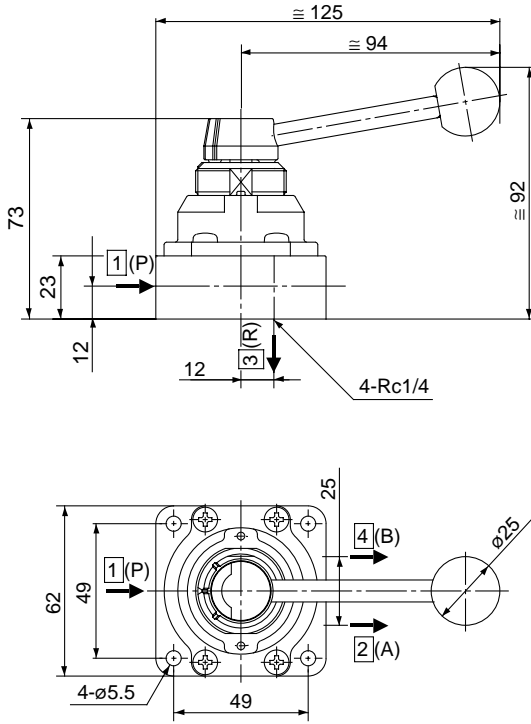
| Series | Part No. |
|--------|----------|
| VH200 | 244010 |
| VH300 | 24418 |
| VH400 | 240258 |

*(): Exhaust center

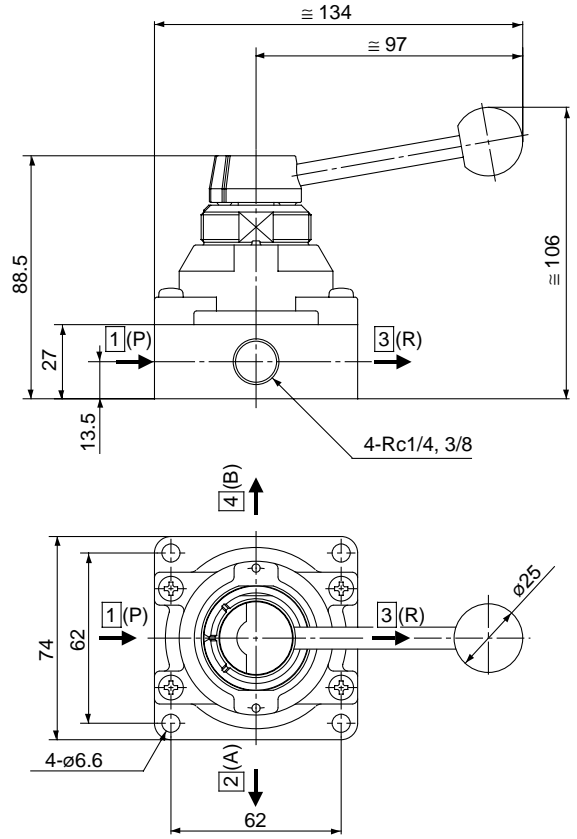
Series VH

Body Mounted/Dimensions

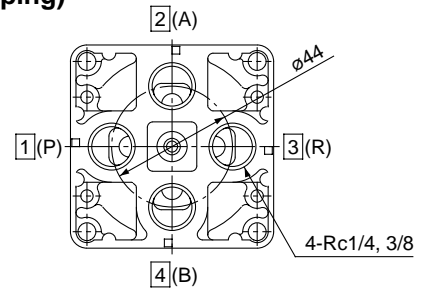
VH20□-02



VH30□-02 to 03

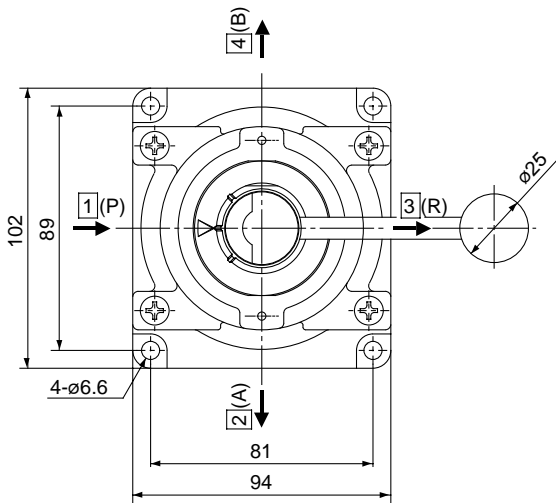
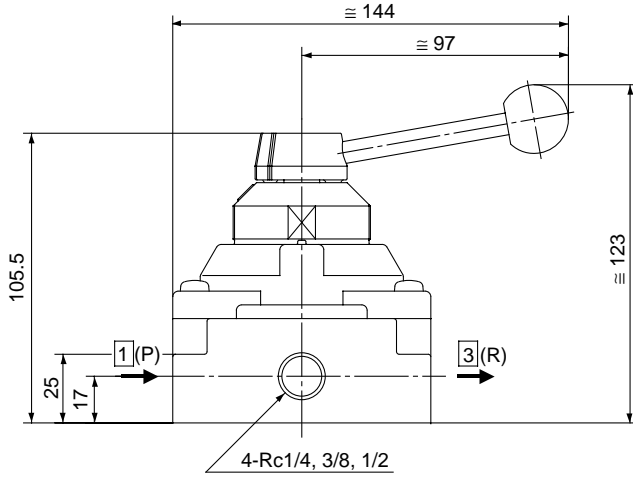


VH32□-02 to 03 (Bottom piping)

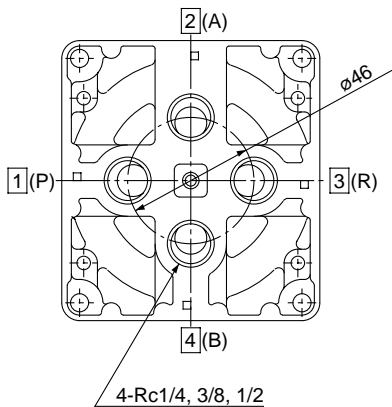


Body Mounted/Dimensions

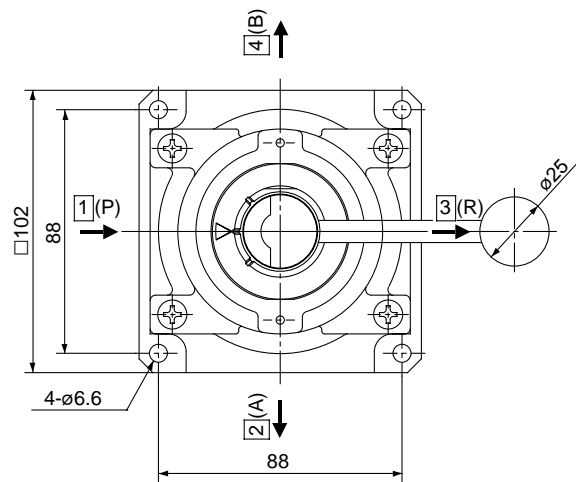
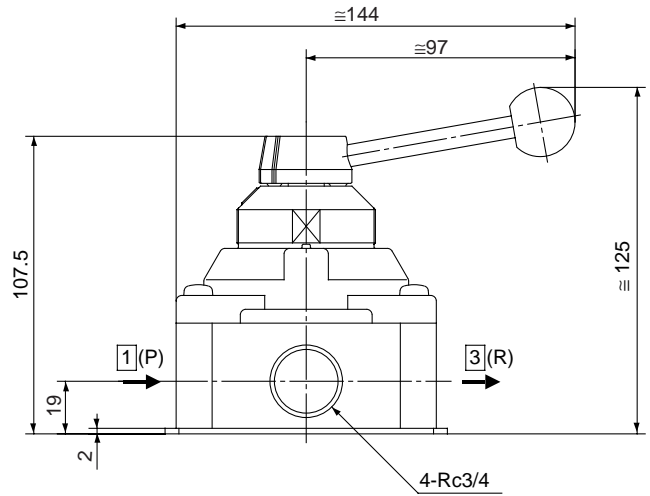
VH40□-02 to 04



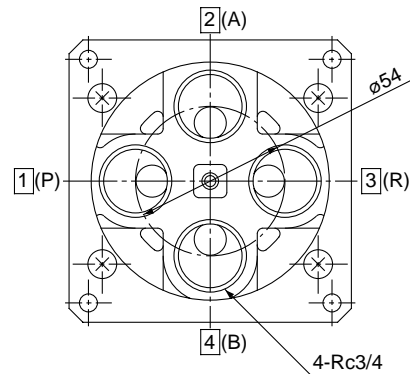
VH42□-02 to 04 (Bottom piping)



VH40□-06



VH42□-06 (Bottom piping)



S□A

V□A

S□A

V□A

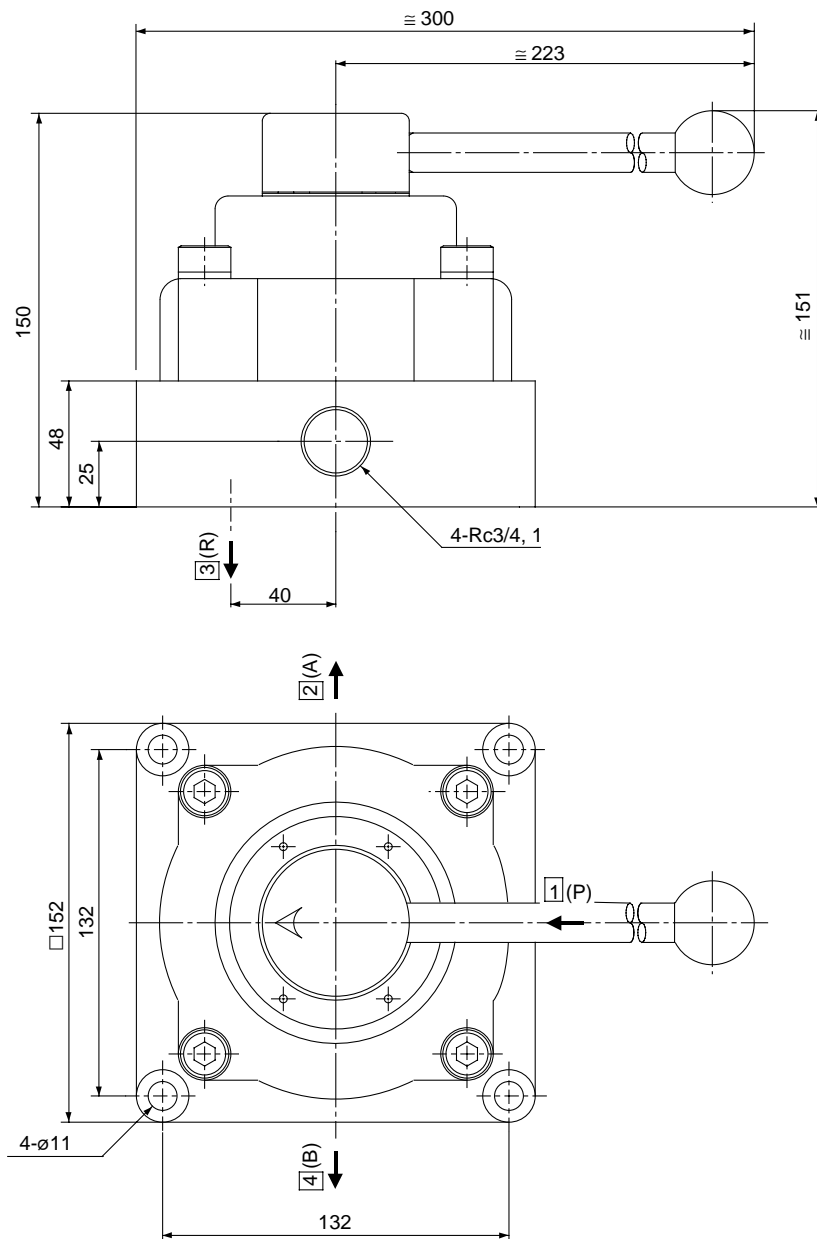
VM/VR

VH

Series VH

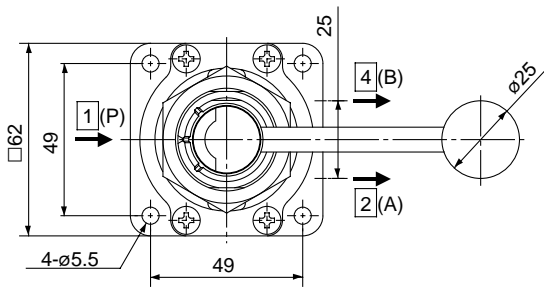
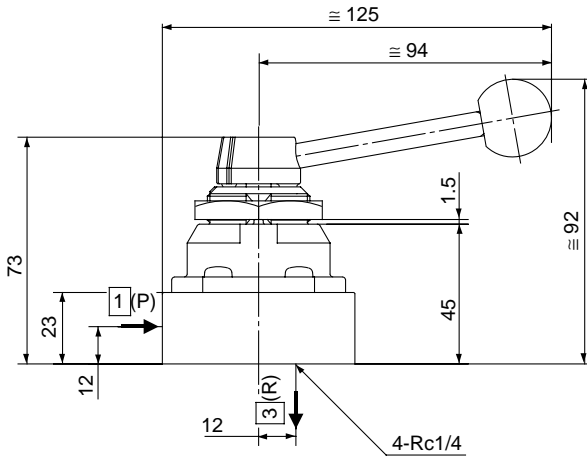
Body Mounted/Dimensions

VH600-06/10

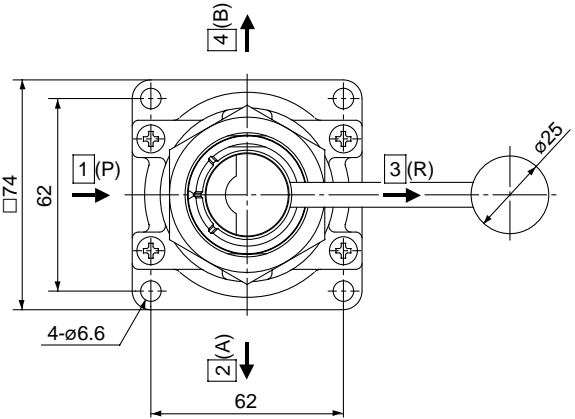
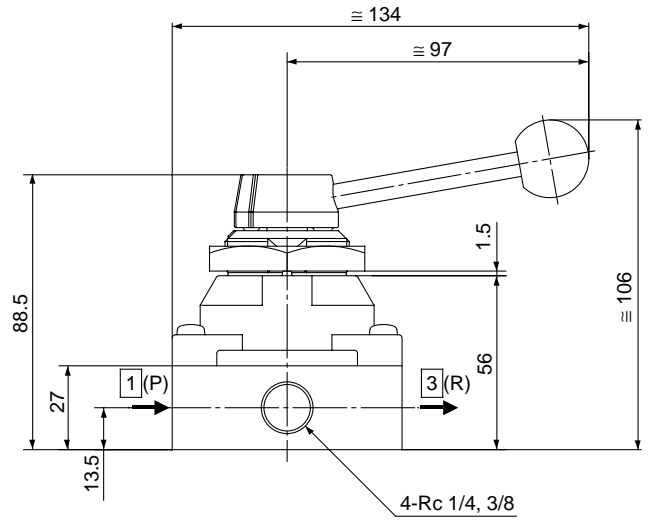


Panel Mounted/Dimensions

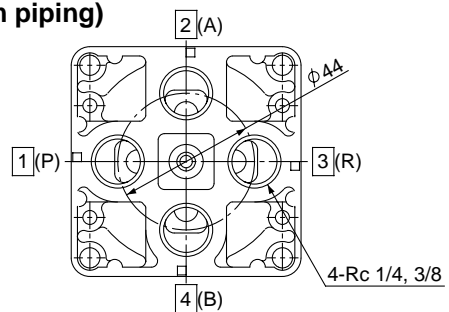
VH21□-02



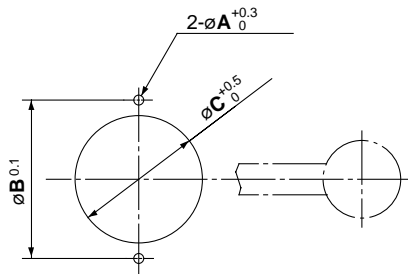
VH31□-02 to 03



VH33□-02 to 03 (Bottom piping)



Panel cut dimension



Max. panel thickness D

| Model | A | B | C | D (mm) |
|-------|-----|----|----|--------|
| VH200 | 3.2 | 40 | 35 | 3.5 |
| VH300 | 3.2 | 51 | 41 | 6 |
| VH400 | 3.2 | 64 | 51 | 8 |

S□A

V□A

S□A

V□A

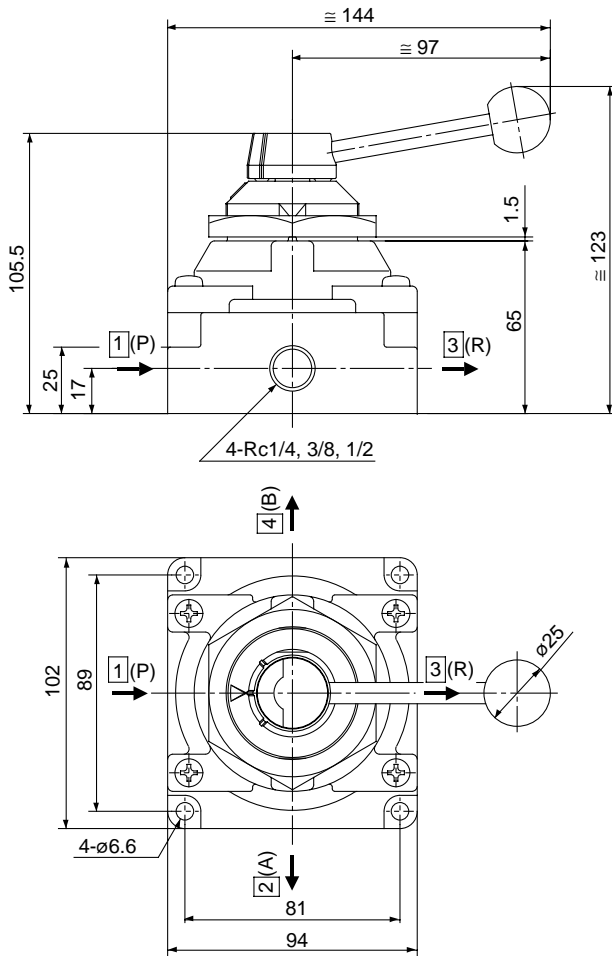
VM/VR

VH

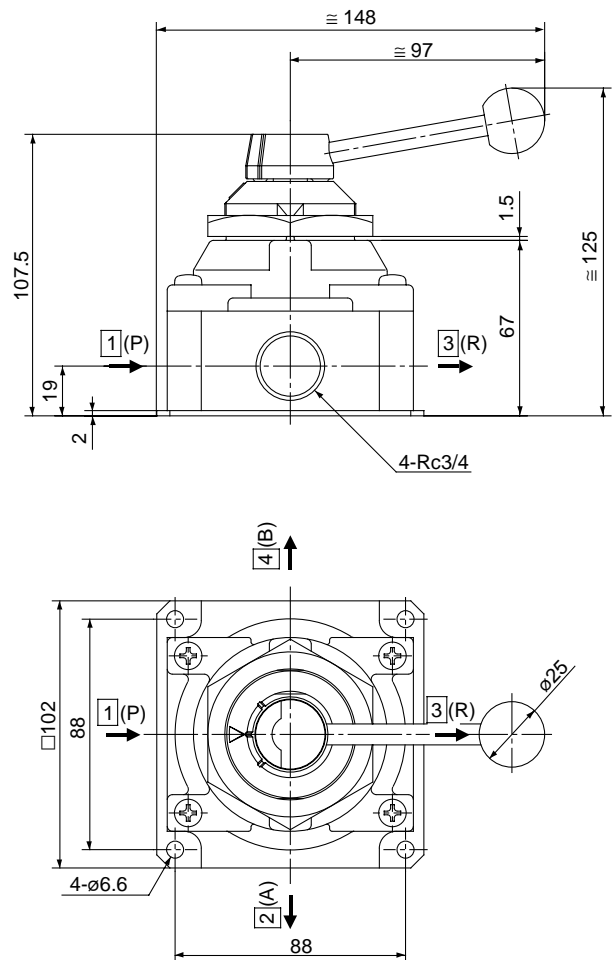
Series VH

Panel Mounted/Dimensions

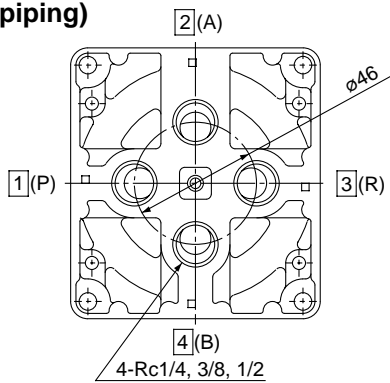
VH41□-02 to 04



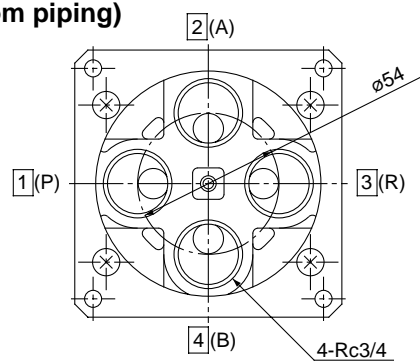
VH41□-06



VH43□-02 to 04 (Bottom piping)



VH43□-06 (Bottom piping)



Precautions

Be sure to read before handling. Refer to p. 0-33 to 0-36 for Safety Instructions and common precautions

Design

Warning

- ① **Not suitable for use as a selector valve or a divider valve.**
The valve can malfunction due to air leakage
- ② **Not suitable for vacuum applications.**
The valve can malfunction due to air leakage.
- ③ **Do not supply air pressure from other ports than 1(P) port.**
The valve may have air leakage when air pressure is supplied from other ports.

Selection

Caution

- ① **Use in low temperature environments**
The valve can be used at a temperature down to -5°C . Take appropriate measures to avoid freezing of drainage, moisture, etc.
- ② **Operation method**
To stop the valve midway can cause malfunction.
Switch the valve to each position quickly and firmly.

Piping

Caution

- ① **Ensure connection so that air is supplied to the port "1(P)"**
Valve may have air leakage when air pressure is supplied from other ports.
- ② **Note that in case of the option of different "1(P)" porting position, porting indication on the body and flow direction by handle operation are reversed.**

Environment

Warning

- ① **When the valve is installed in an atmosphere where there is a lot of dust, install a silencer into the port "3(R)".**
When dust enters the valve from the port "3(R), it may cause malfunction.

S□A

V□A

S□A

V□A

VM/VR

VH