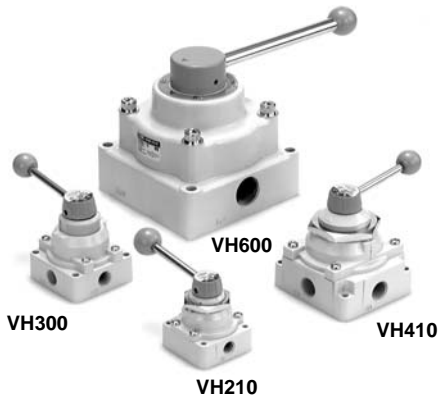


Hand Valve Series *VH*



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

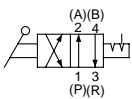
VH

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

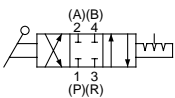
Models

Symbol

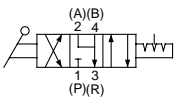
2 Position



Closed center

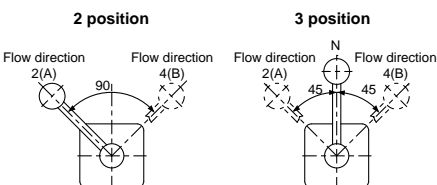


Exhaust center



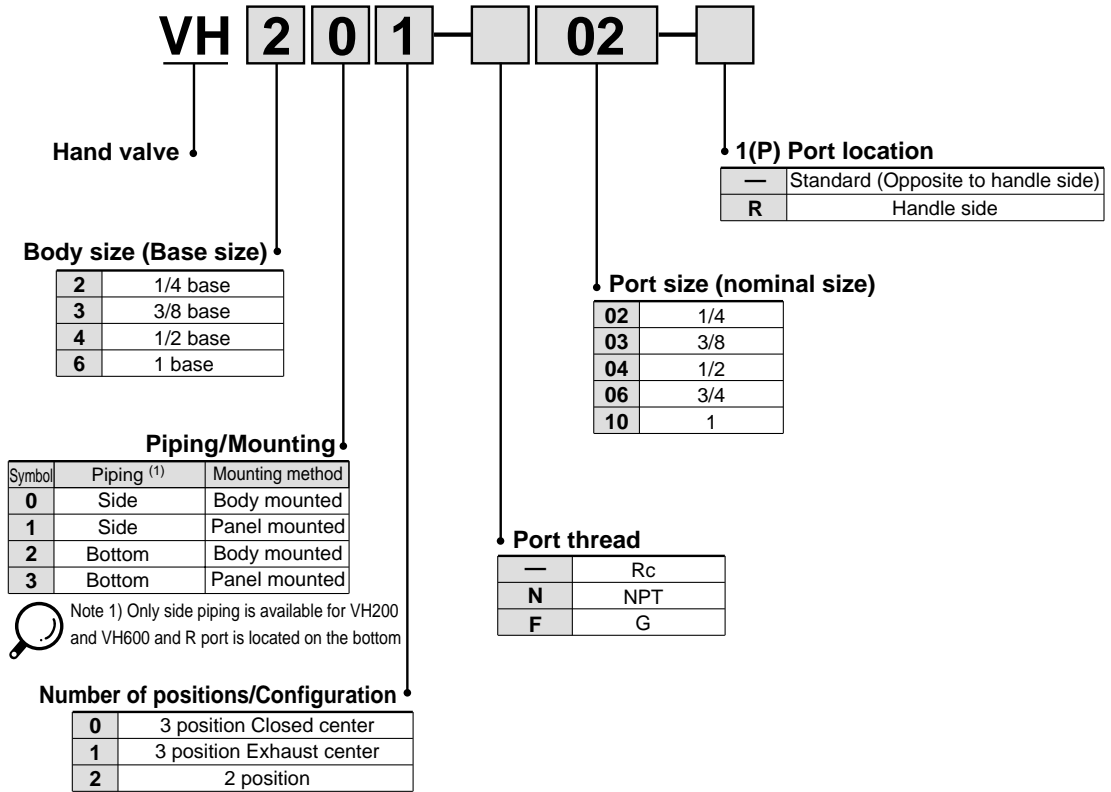
Handle operation angle and air flow direction

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

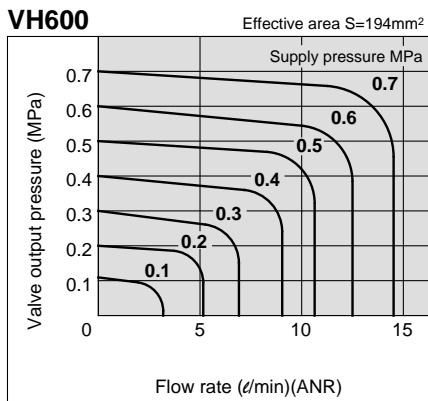
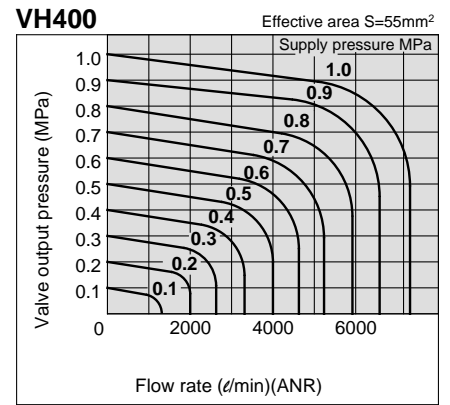
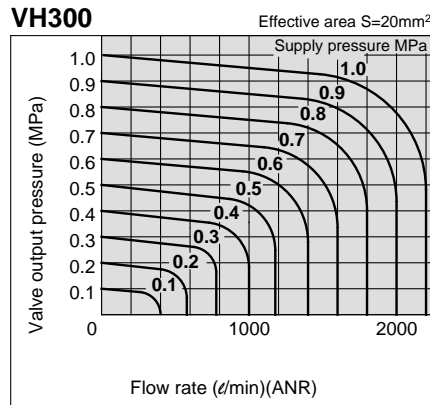
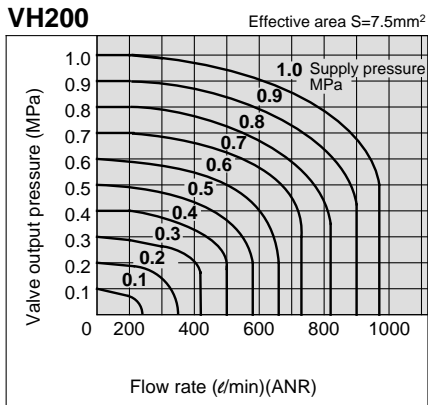


Series	Port Size	Number of positions	Piping direction	Model		Effective area (mm ²) (Nl/min factor)	Weight (kg)	
				Body mounted	Panel mounted			
VH2	1/4	3 (Closed center)		VH200-02	VH210-02	7.5(356.60)	0.42	
		3 (Exhaust center)		VH201-02	VH211-02			
		2 (Position)		VH202-02	VH212-02			
VH3	1/4, 3/8	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	—	1/2: 55(2763.65)	9.7	
						3/4: 58(2852.80)		

How to Order

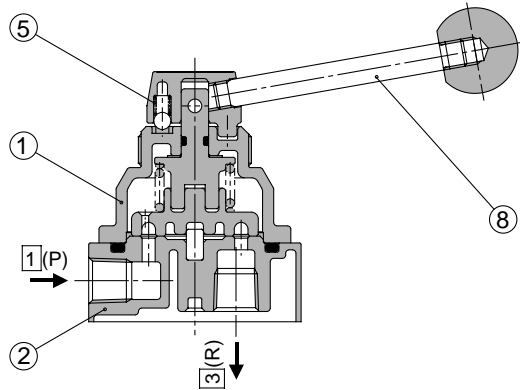
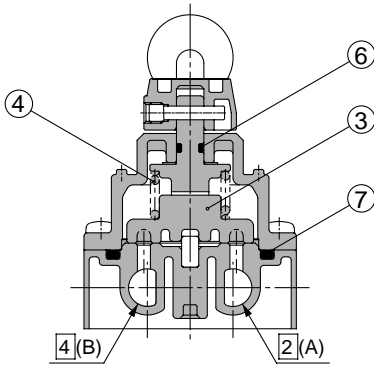


Flow Characteristics

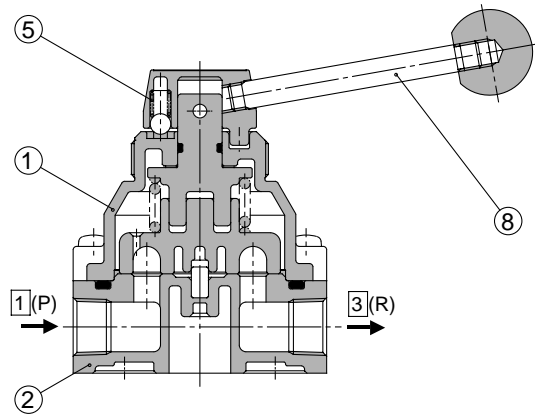
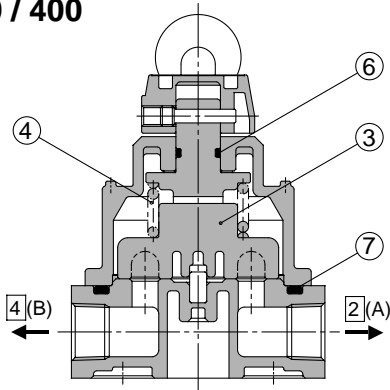


Construction

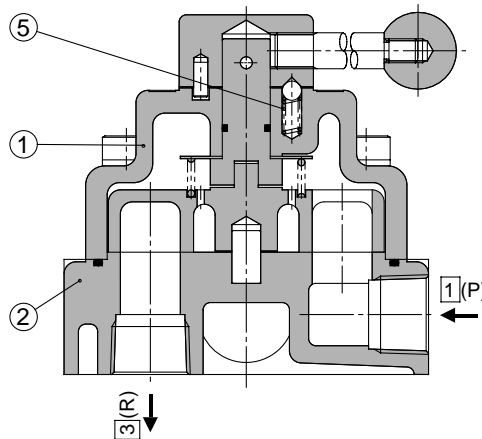
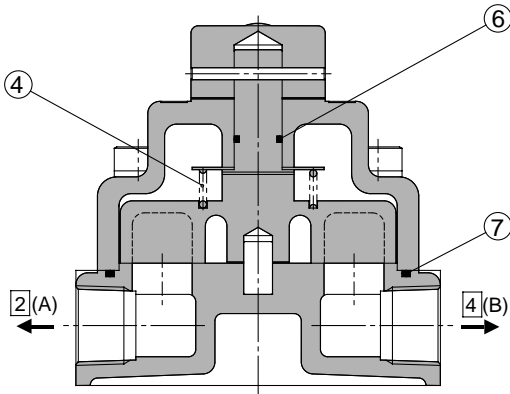
VH200



VH300 / 400



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

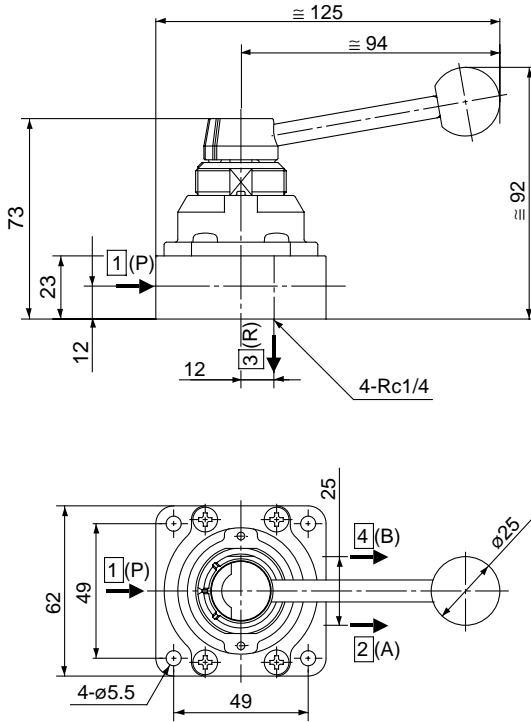


*(): Exhaust center

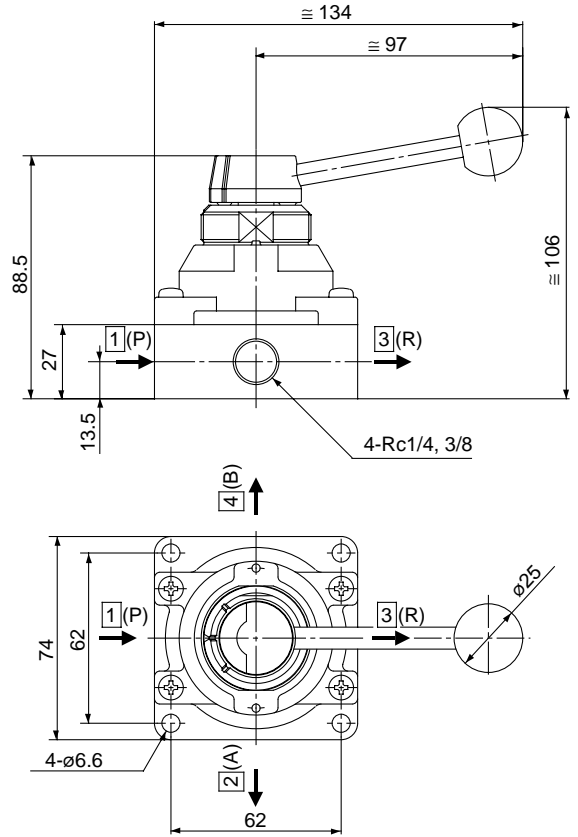
Series VH

Body Mounted/Dimensions

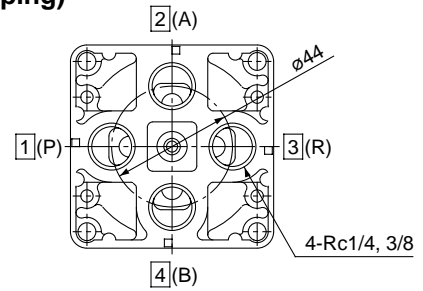
VH20□-02



VH30□-02 to 03

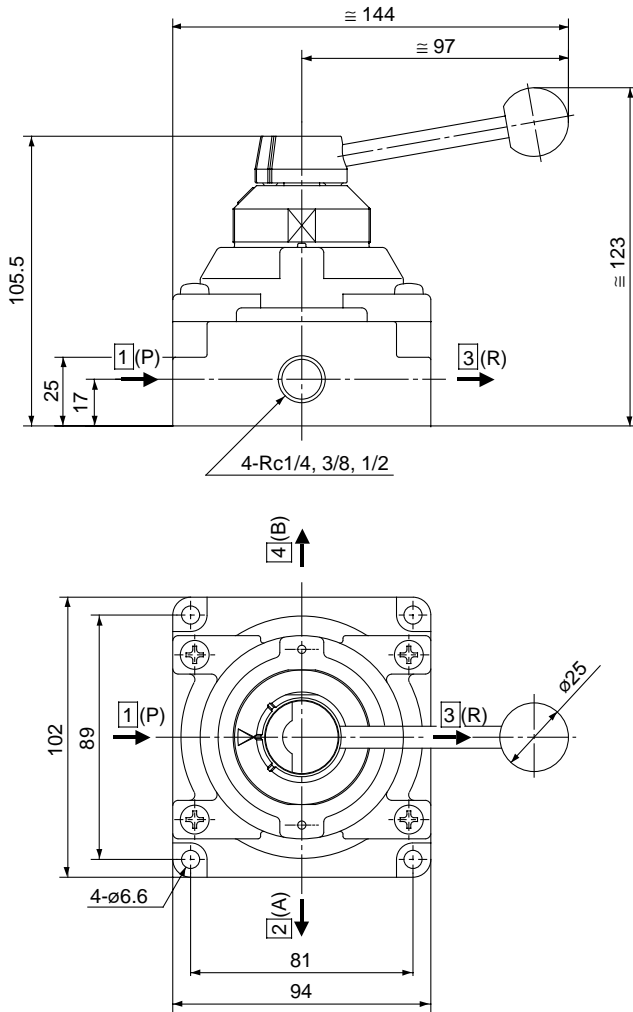


VH32□-02 to 03 (Bottom piping)

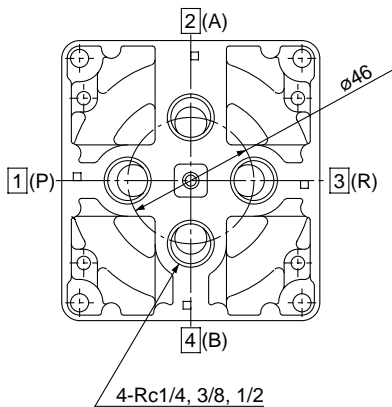


Body Mounted/Dimensions

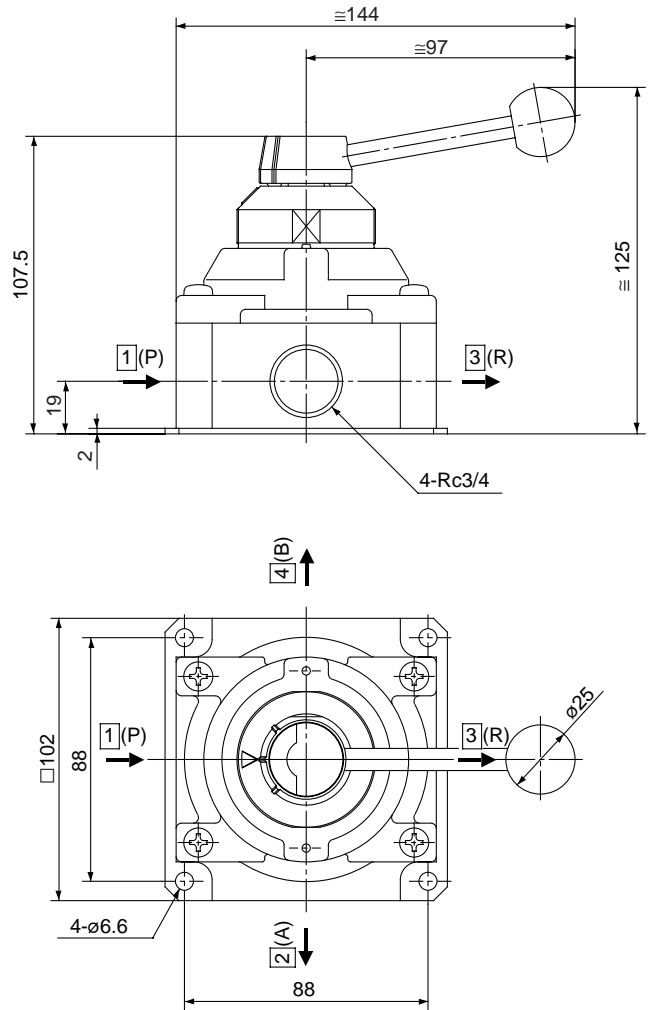
VH40□-02 to 04



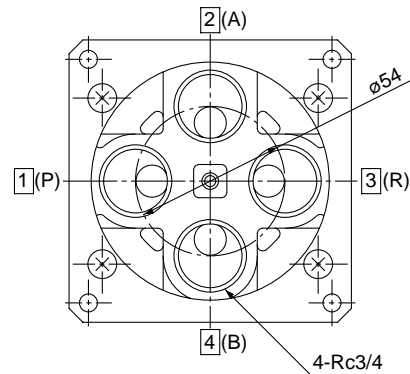
VH42□-02 to 04 (Bottom piping)



VH40□-06



VH42□-06 (Bottom piping)



S□A

V□A

S□A

V□A

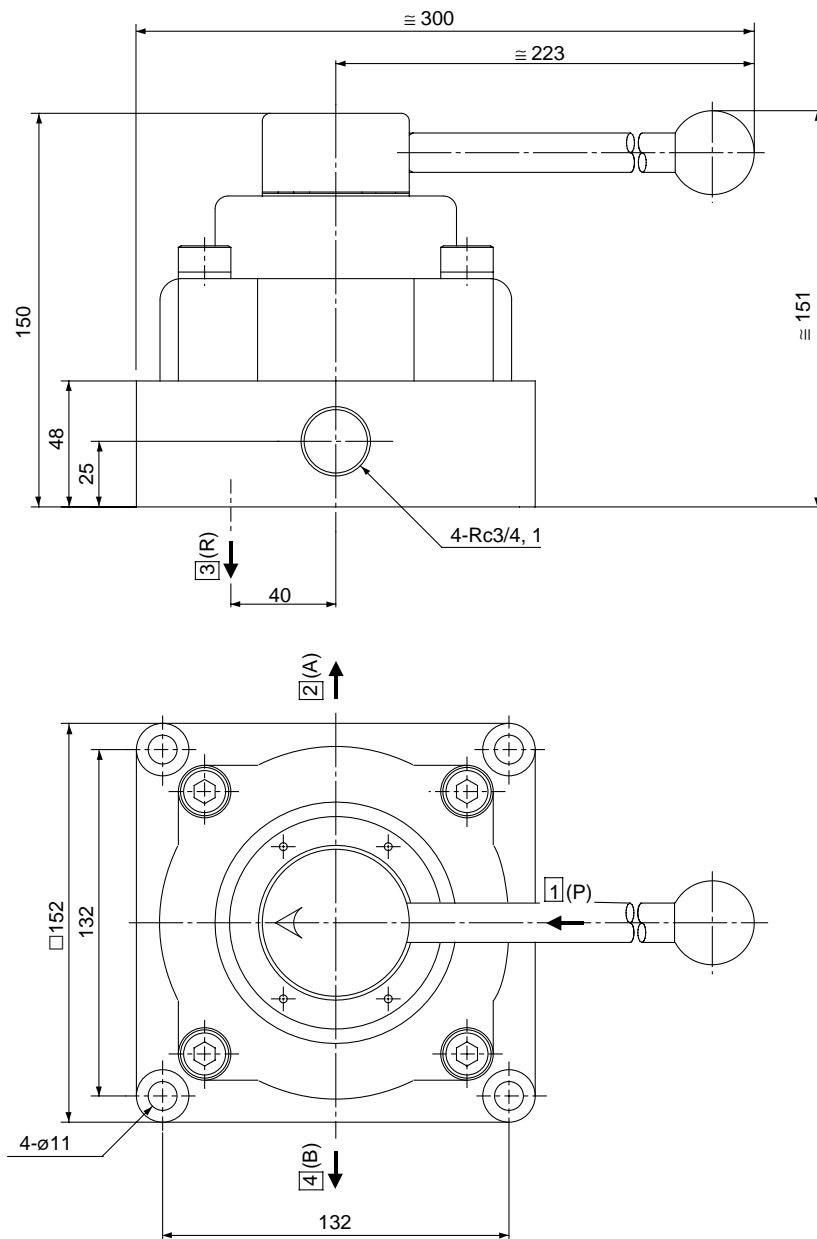
VM/VR

VH

Series VH

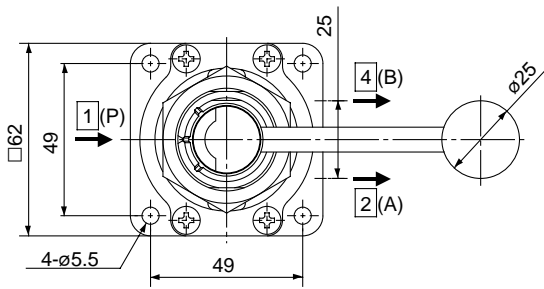
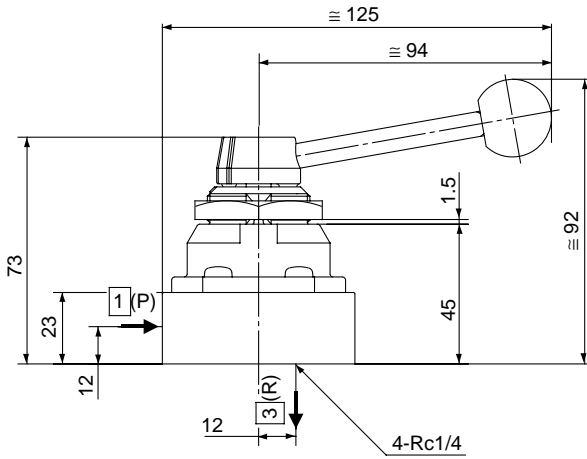
Body Mounted/Dimensions

VH600-06/10

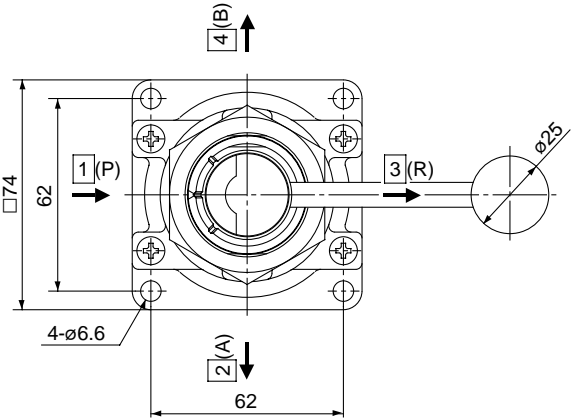
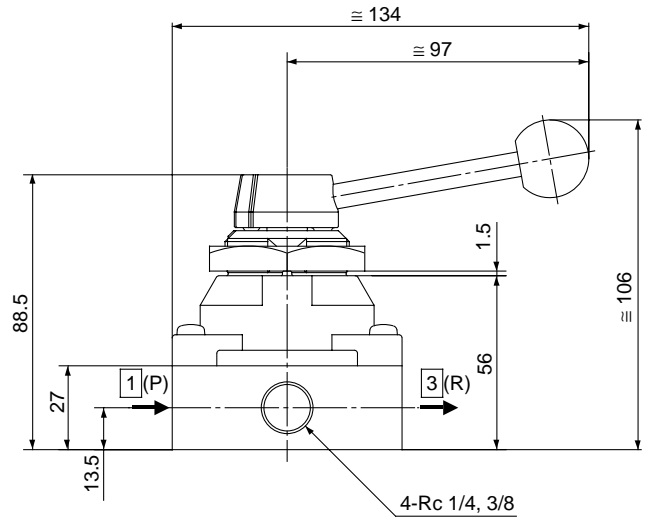


Panel Mounted/Dimensions

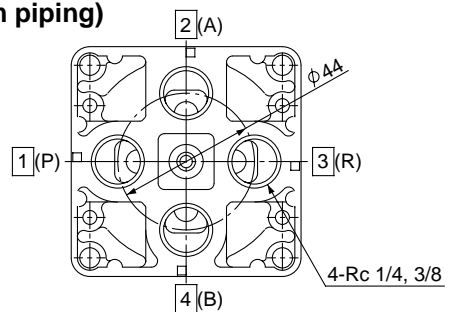
VH21□-02



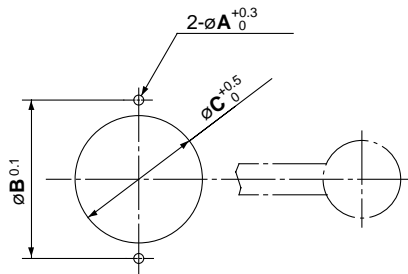
VH31□-02 to 03



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

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