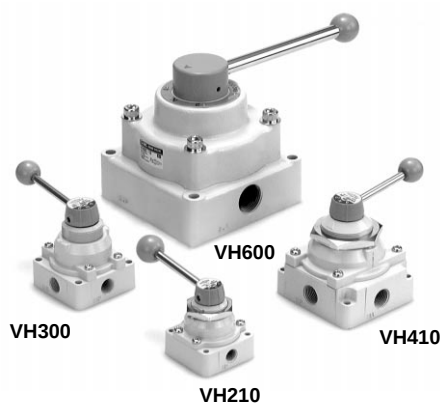


Hand Valve Series *VH*



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

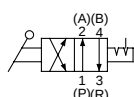


* Note that 1(P) port of VH600 is located on handle side as standard.

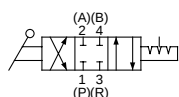
Models

Symbol

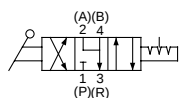
2 Position



Closed center



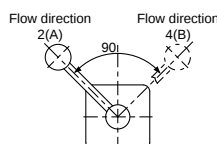
Exhaust center



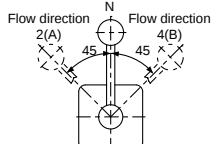
Handle operation angle and air flow direction

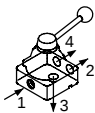
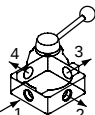
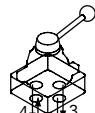
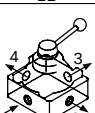
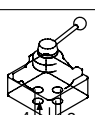
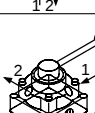
(Refer to figures of porting direction in the right.)

2 position



3 position



Series	Port Size	Number of positions	Piping direction	Model		Effective area (mm ²) (Cv factor)	Weight (kg)
				Body mounted	Panel mounted		
VH2	1/4	3 (Closed center)		VH200-02	VH210-02	7.5(0.4)	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	Rc1/4: 17(0.9)	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	Rc3/8: 20(1.1)	
		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	Rc1/4: 45(2.5)	1.28
		3 (Exhaust center)		VH401-02 to 06	VH411-02 to 06	Rc3/8: 49(2.7)	
		2 (Position)		VH402-02 to 06	VH412-02 to 06	Rc1/2: 55(3.1)	
		3 (Closed center)		VH420-02 to 06	VH430-02 to 06	Rc1/2: 55(3.1)	
		3 (Exhaust center)		VH421-02 to 06	VH431-02 to 06	Rc3/4: 58(3.2)	
		2 (Position)		VH422-02 to 06	VH432-02 to 06		
VH6	3/4, 1	3 (Closed center)		VH600-06, 10	—	Rc3/4: 185(10.2) Rc1: 194(10.5)	9.7

How to Order

VH

2

0

1

02

Hand valve

Body size (Base size)

Piping/Mounting

Port size (nominal size)

Port thread

1(P) port location

Number of positions/Configuration

2	1/4 base
3	3/8 base
4	1/2 base
6	1 base

Symbol	Piping ⁽¹⁾	Mounting method
0	Side	Body mounted
1	Side	Panel mounted
2	Bottom	Body mounted
3	Bottom	Panel mounted

Note 1) Only side piping is available for VH200 and VH600 and R port is located on the bottom

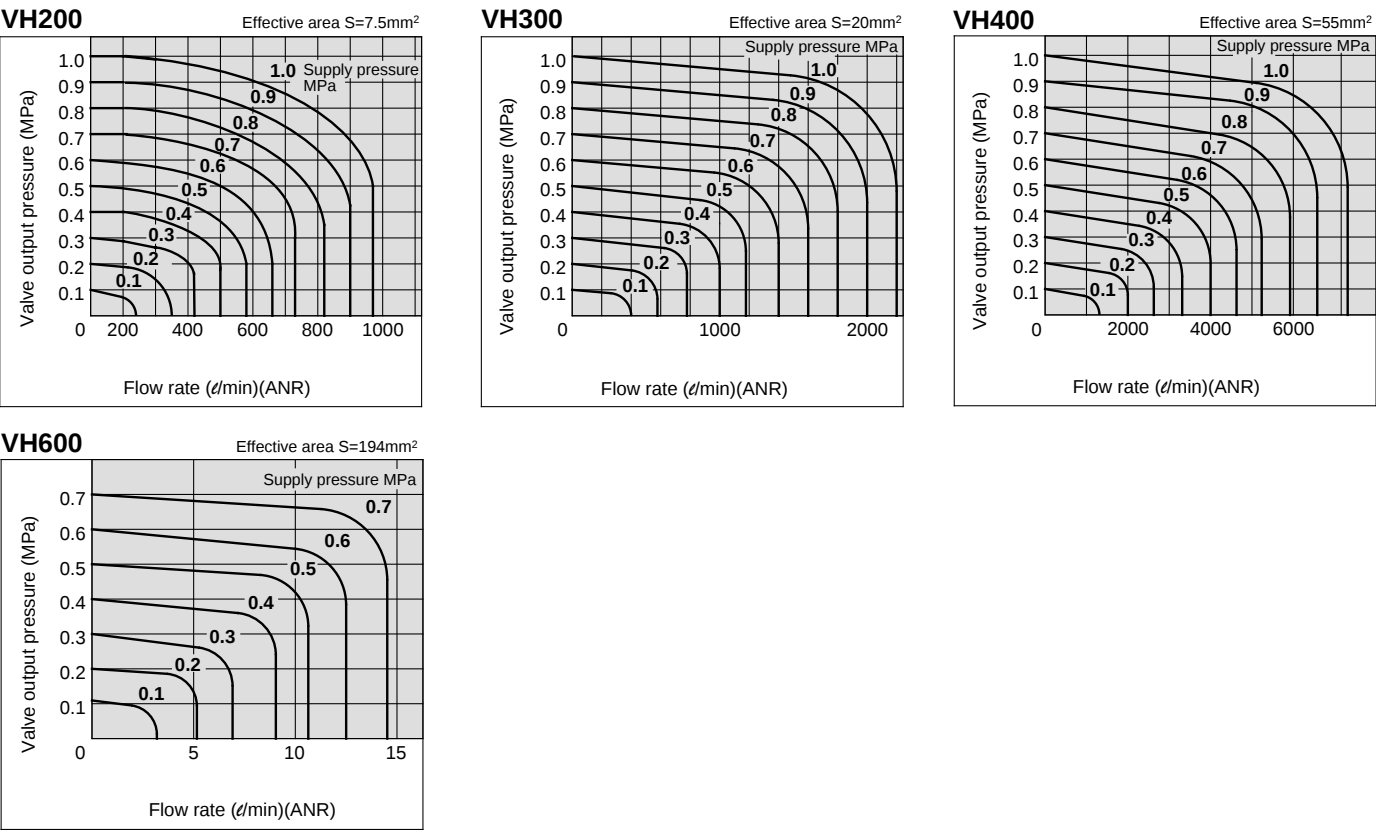
0	3 position Closed center
1	3 position Exhaust center
2	2 position

02	1/4
03	3/8
04	1/2
06	3/4
10	1

	Rc
N	NPT
F	G

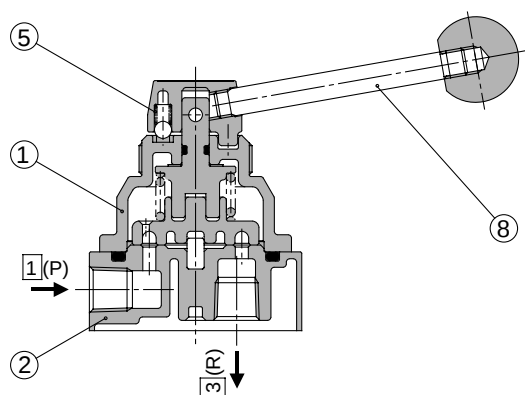
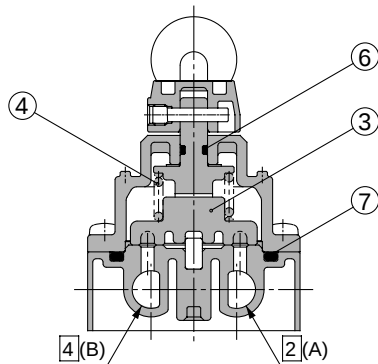
	Standard (Opposite to handle side)
R	Handle side

Flow Characterisitics



Construction

VH200



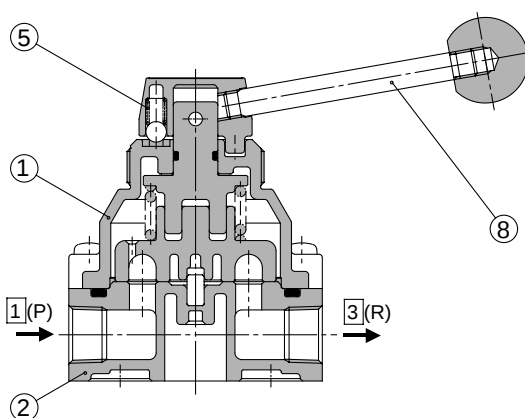
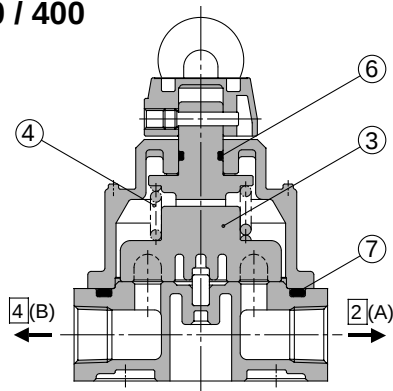
S□A

V□A

S□A

V□A

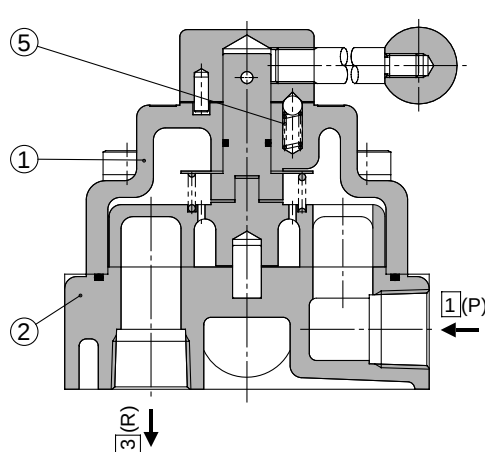
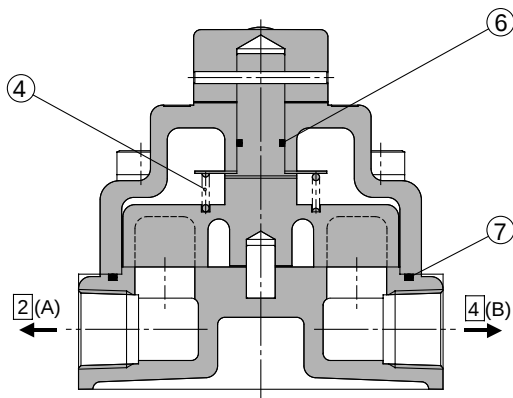
VH300 / 400



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	—

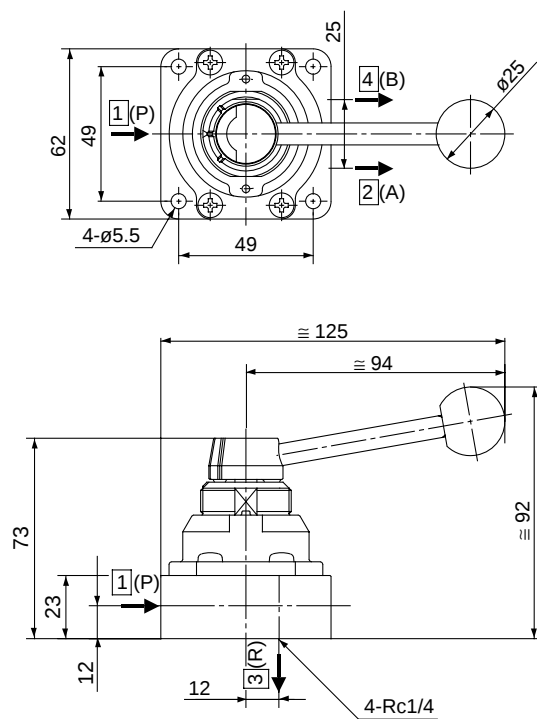
Part No. of lock nut for panel mount

Series	Part No.
VH200	244010
VH300	24418
VH400	240258

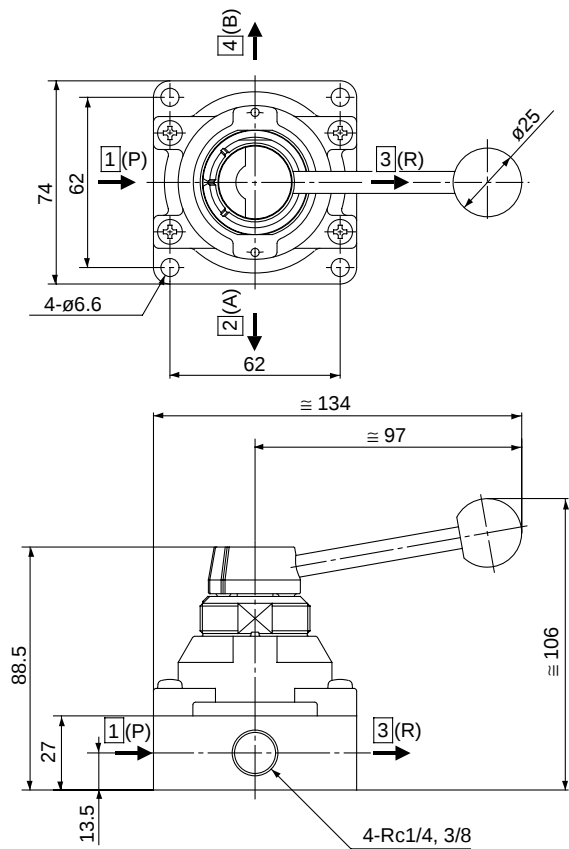
*() : Exhaust center

Body Mounted/Dimensions

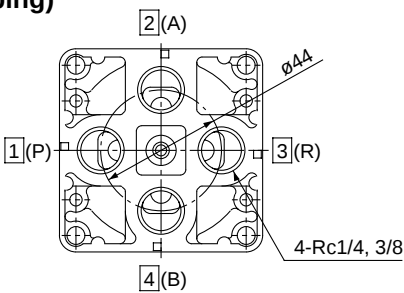
VH20□-02



VH30□-02 to 03

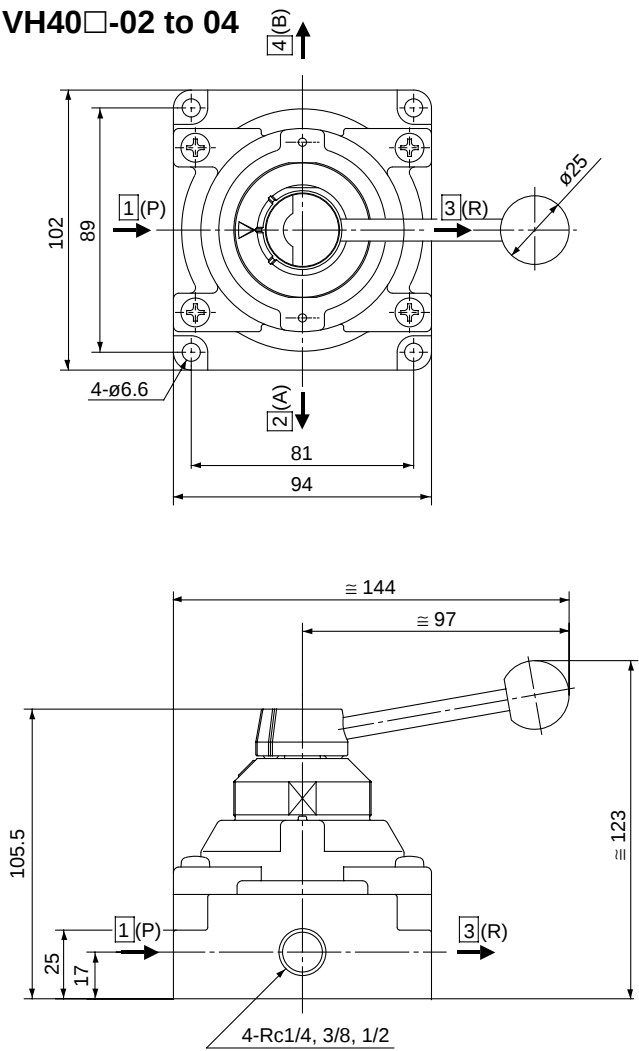


VH32□-02 to 03
(Bottom piping)

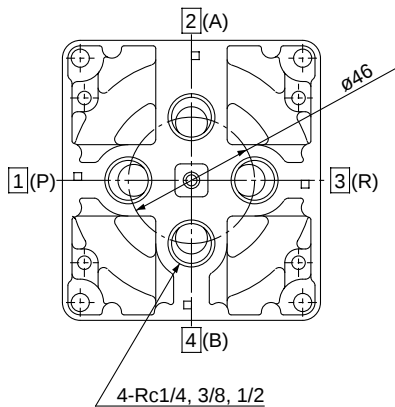


Body Mounted/Dimensions

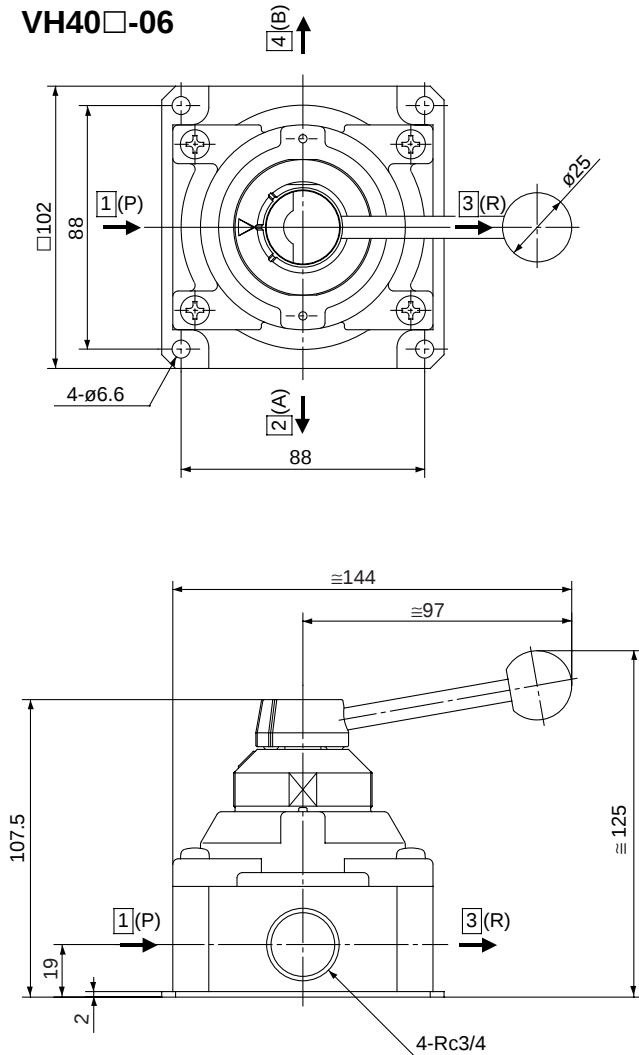
VH40□-02 to 04



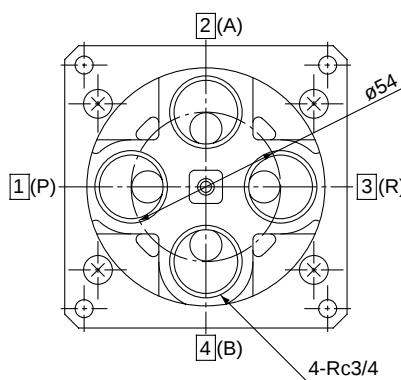
**VH42□-02 to 04
(Bottom piping)**



VH40□-06



**VH42□-06
(Bottom piping)**



S□A

V□A

S□A

V□A

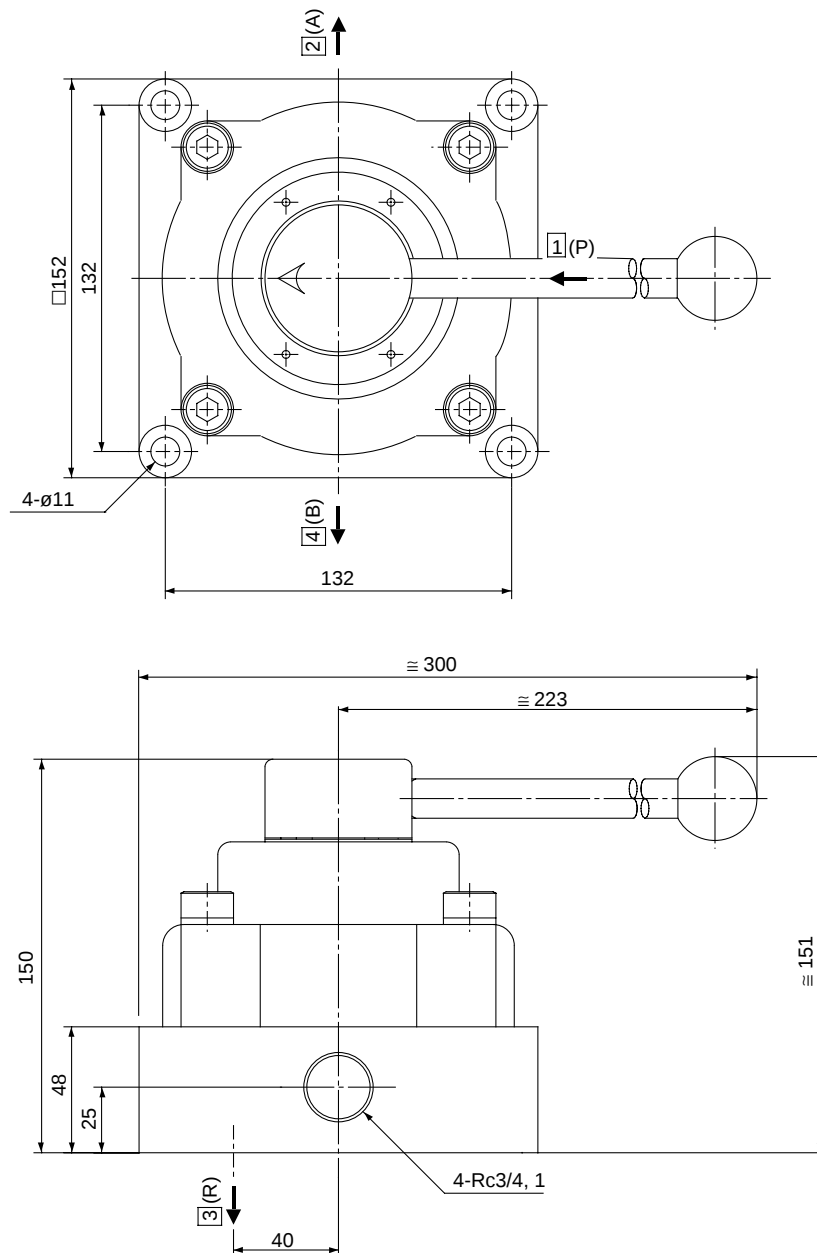
VM/VR

VH

Series VH

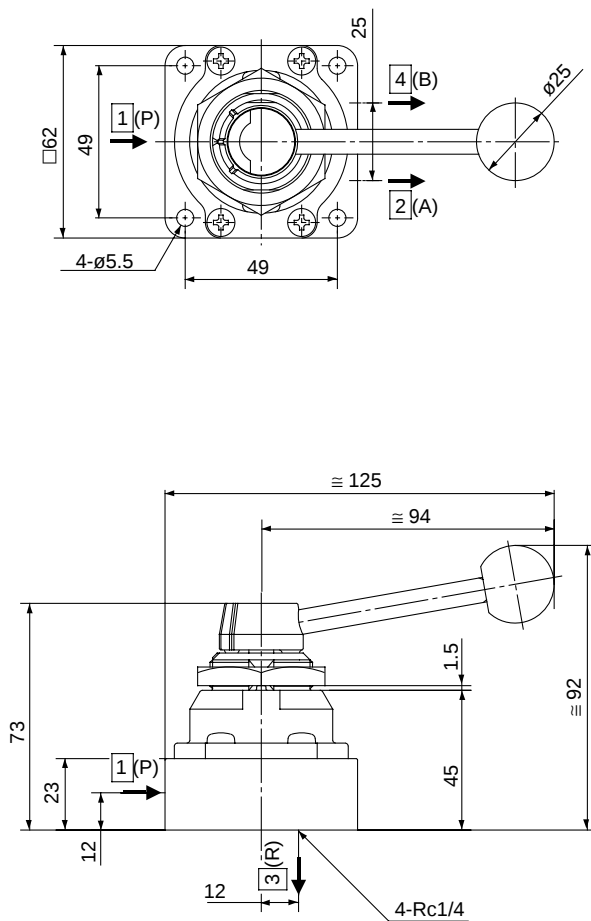
Body Mounted/Dimensions

VH600-06/10

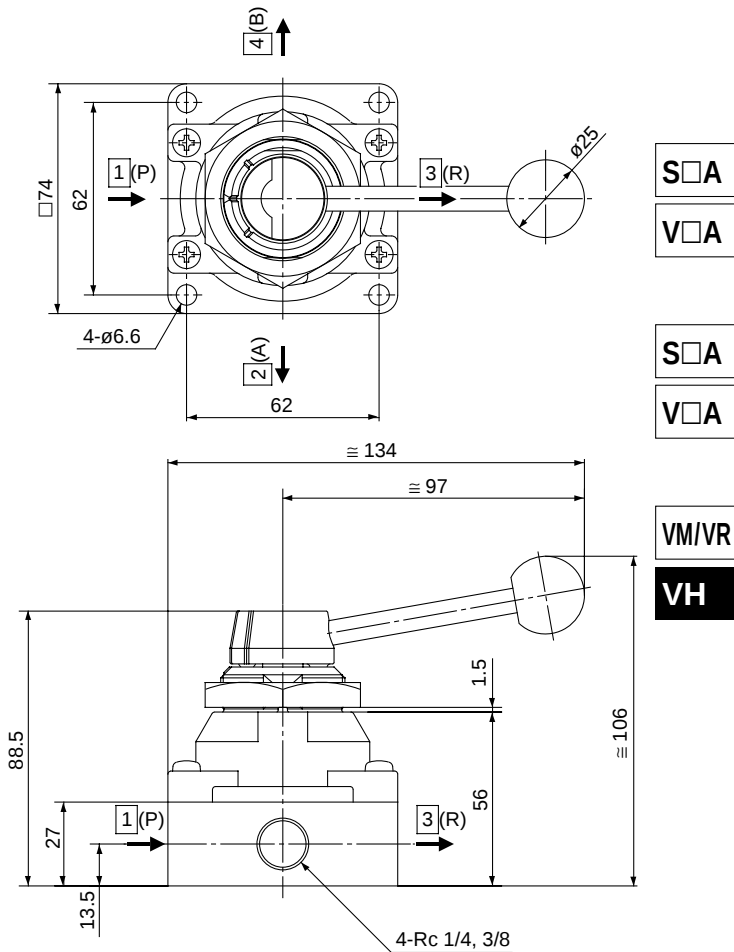


Panel Mounted/Dimensions

VH21□-02



VH31□-02 to 03



S□A

V□A

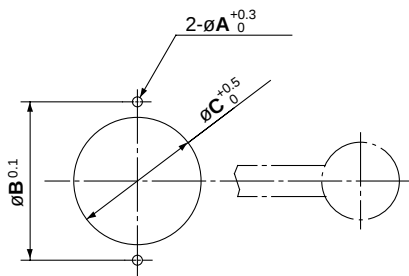
S□A

V□A

VM/VR

VH

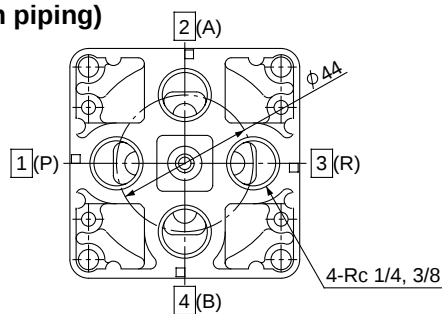
Panel cut dimension



Max. panel thickness D

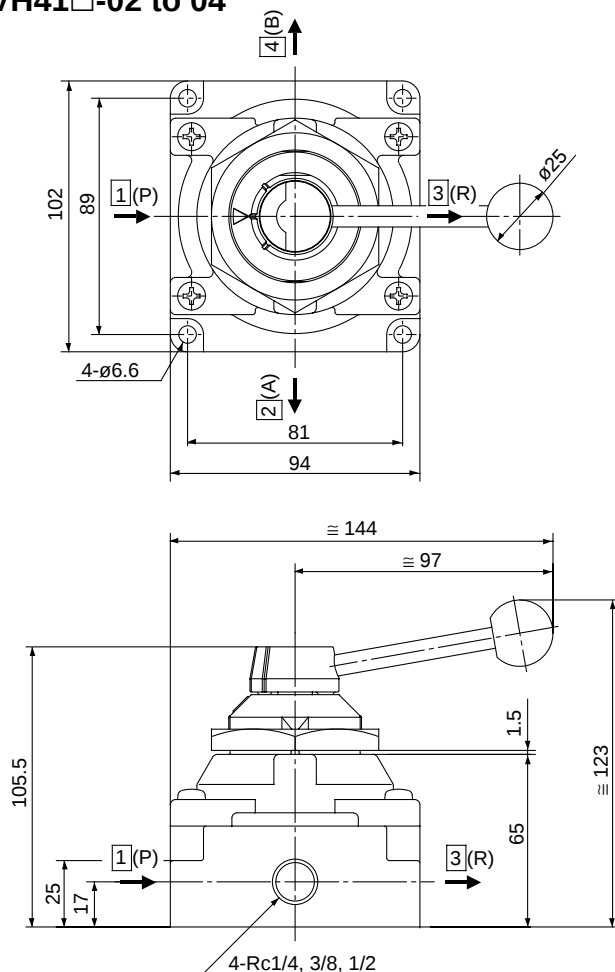
Model	A	B	C	D
VH200	3.2	40	35	3.5
VH300	3.2	51	41	6
VH400	3.2	64	51	8

VH33□-02 to 03
(Bottom piping)

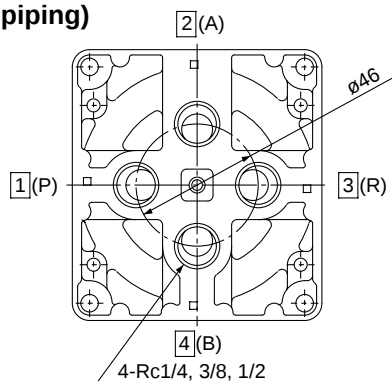


Panel Mounted/Dimensions

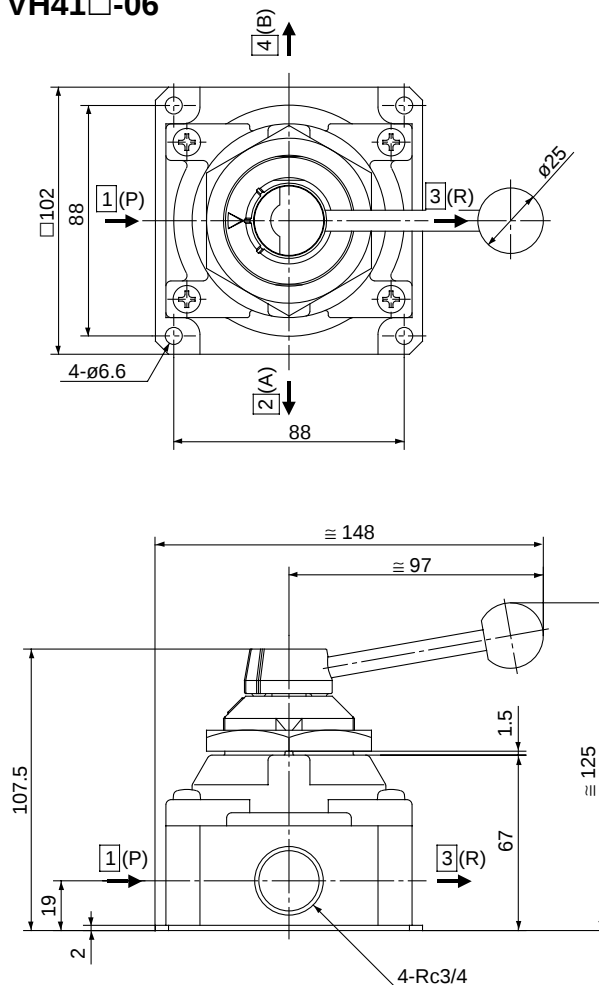
VH41□-02 to 04



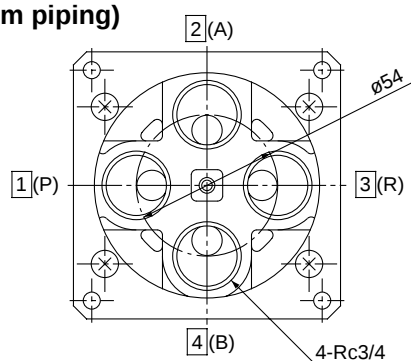
VH43□-02 to 04
(Bottom piping)



VH41□-06



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.**

S□A

V□A

S□A

V□A

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.

VM/VR

VH