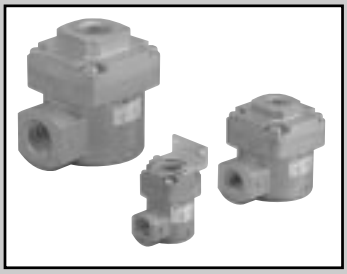
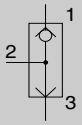


Shuttle valve

SHV2 Series

● Port size: Rc1/8 to Rc1

JIS symbol



RoHS CAD

Features

● Variety of bore sizes available

Series are available for piping bore sizes Rc1/8 to Rc1.

● Wide range of options

- Fluorine rubber specifications available as options
- Mounting bracket available (small bore)

● Eco-friendly product

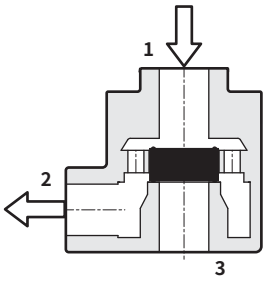
- Eco-friendly design is free of lead and hexavalent chrome.
- Paint-free
- Sorting is simplified.

Specifications

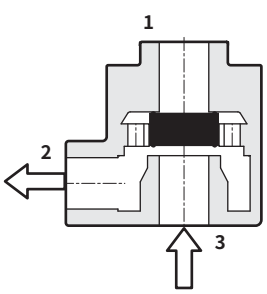
Model no. / Descriptions		SHV2-6	SHV2-8	SHV2-10	SHV2-15	SHV2-20	SHV2-25
Working fluid	MPa	Compressed air					
Max. working pressure	MPa	1.0					
Min. working pressure	MPa	0.05					
Min. operating differential pressure	MPa	0.05					
Withstanding pressure	˚C	1.5					
Fluid temperature range	˚C	5 to 60					
Ambient temperature range		0 to 60 (no freezing)					
Port size	Rc	1/8	1/4	3/8	1/2	3/4	1
Product weight	g	86	82	270	270	760	700
Mounting attitude		Free					
Effective sectional area	mm² 1 → 2	20	28	90	105	205	245
	mm² 3 → 2	22	32	95	115	210	250
Min. required flow *1	ℓ/min.	20	30	100		150	

*1: The valve may not change completely if the flow rate is less than this value.

Operational explanation



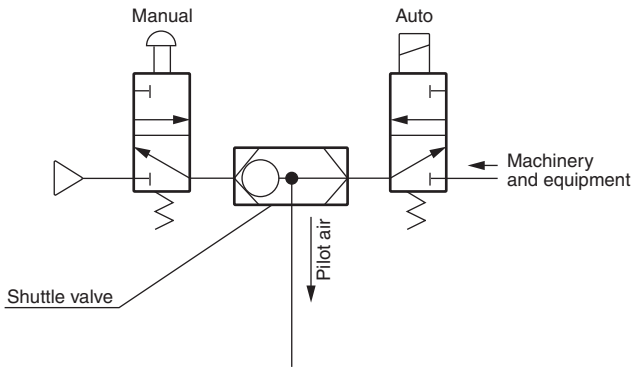
● 1 → 2
The valve closes port 3 with pressure from port 1. Air flows to port 2.



● 3 → 2
The valve closes port 1 with pressure from port 3. Air flows to port 2.

Applications

(1) Switching manual/auto



How to order

● Shuttle valve

SHV2 - 6 - A P

Model no.

Ⓐ Port size

Ⓑ Option

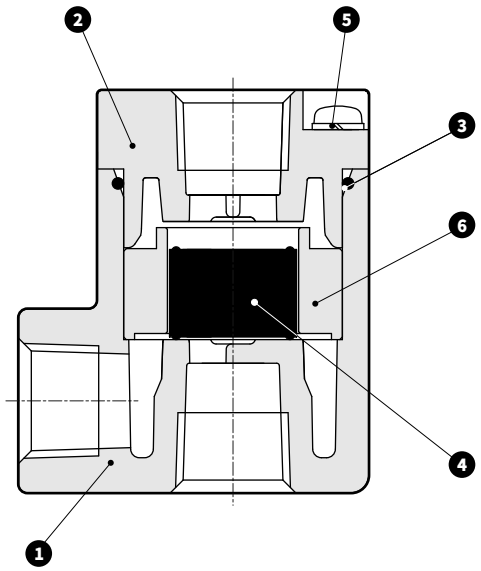
Ⓒ Accessory

Symbol	Descriptions
Ⓐ Port size	
6	Rc 1/8
8	Rc 1/4
10	Rc 3/8
15	Rc 1/2
20	Rc 3/4
25	Rc 1
Ⓑ Option	
Blank	No option
A	Fluoro rubber specifications
Ⓒ Accessory	
Blank	None
P	Mounting bracket attached

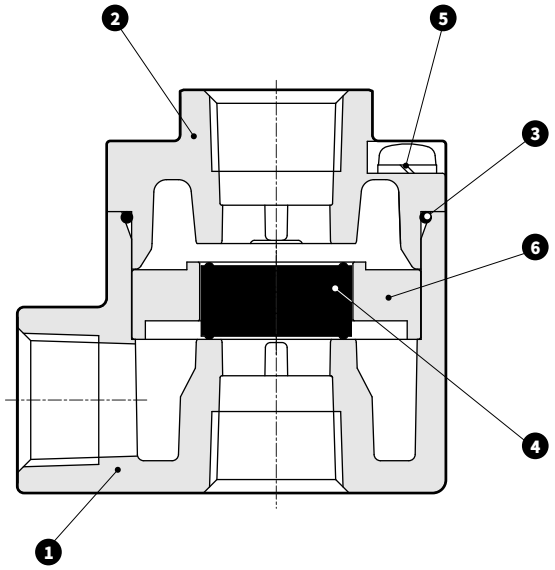
Note 1: The installation bracket is enclosed only with SHV2-6 and SHV2-8.

Internal structure and part list

● SHV2-6/8



● SHV2-10/15/20/25

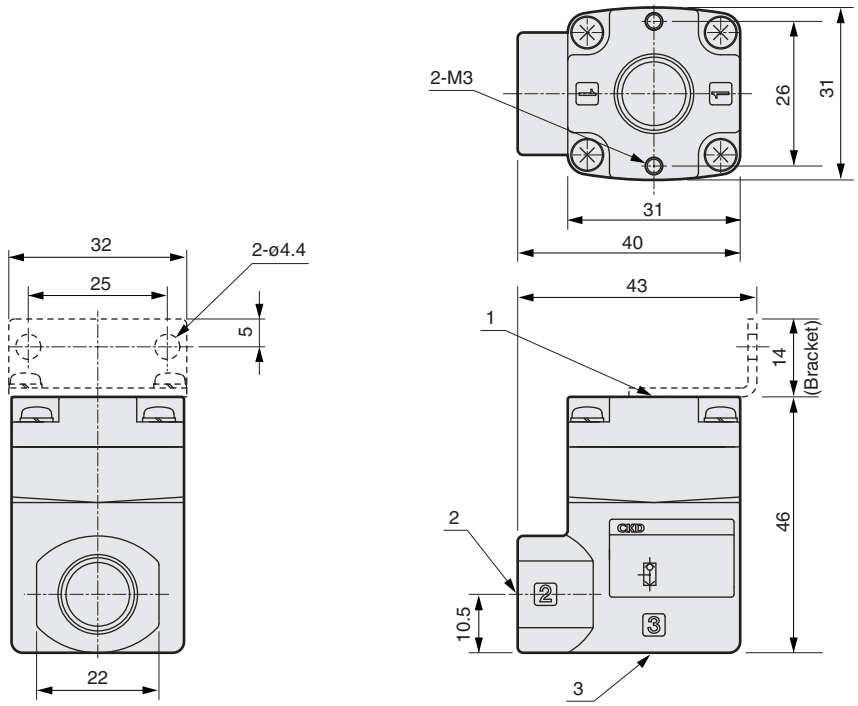


No.	Parts name	Material
1	Body	Aluminum alloy die-casting
2	Plug	Aluminum alloy die-casting
3	O ring	Nitrile rubber (fluoro rubber)
4	Valve	Nitrile rubber (fluoro rubber)
5	Cross headed pan head machine screw with SW	Stainless steel
6	Guide ring	Aluminum alloy

* The material in ( ) is for option "A" (fluorin rubber specification) .

Dimensions CAD

● SHV2-6/8

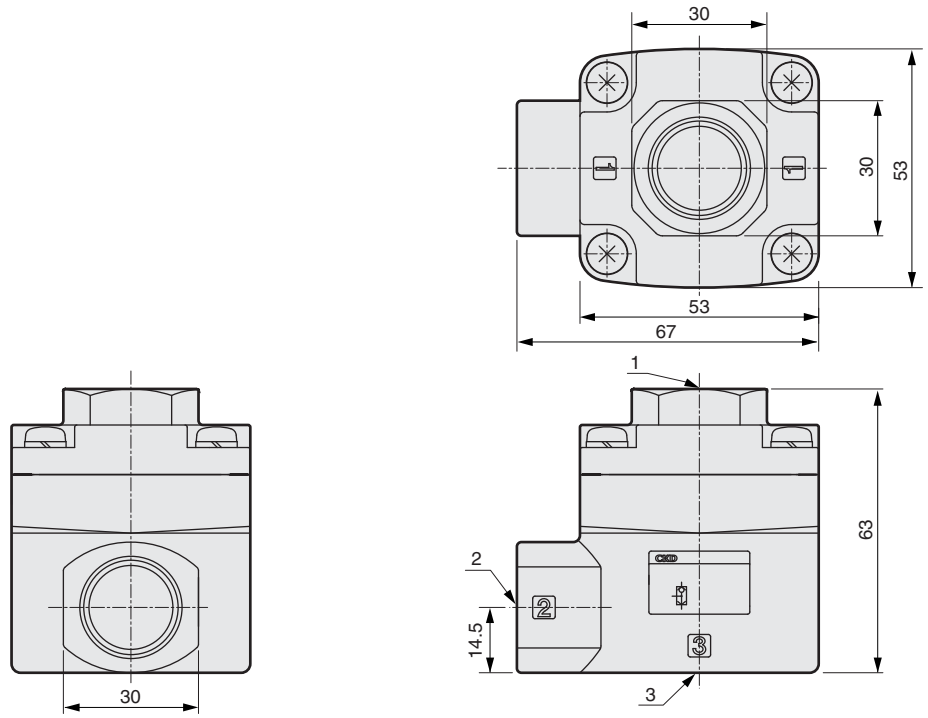


Model no.	Port position		
	1	2	3
SHV2-6	Rc 1/8		
SHV2-8	Rc 1/4		

(Piping port indication)

Port symbol	Descriptions
1	A (input)
2	OUT (output)
3	B (input)

● SHV2-10/15



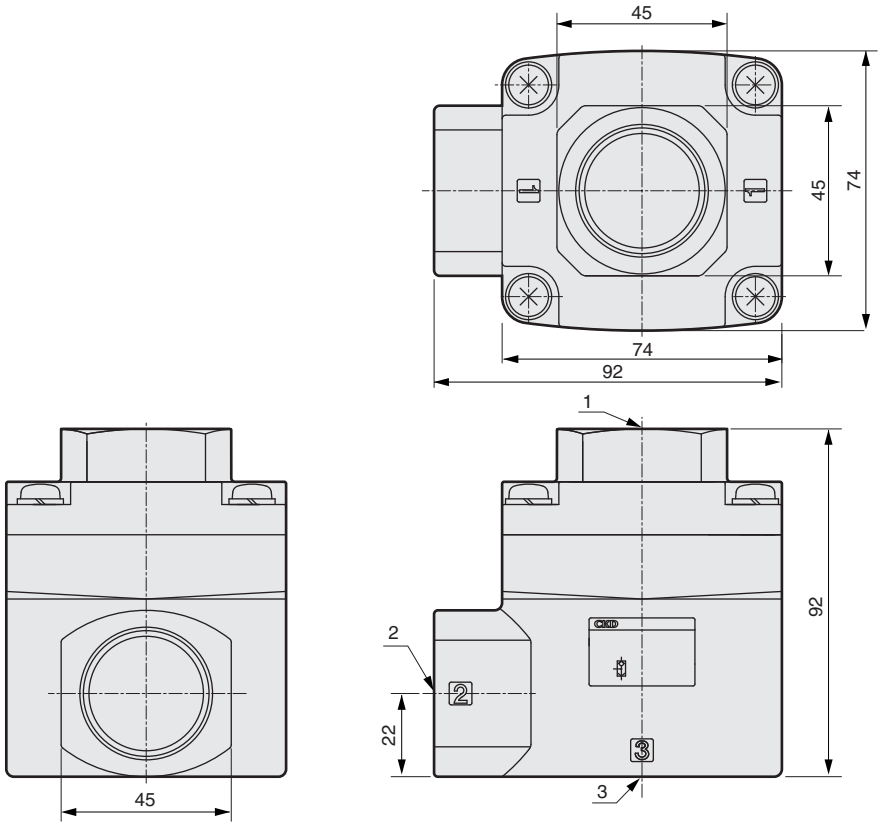
Model no.	Port position		
	1	2	3
SHV2-10	Rc 3/8		
SHV2-15	Rc 1/2		

(Piping port indication)

Port symbol	Descriptions
1	A (input)
2	OUT (output)
3	B (input)

Dimensions

● SHV2-20/25



Model no.	Port position		
	1	2	3
SHV2-20	Rc 3/4		
SHV2-25	Rc 1		

(Piping port indication)

Port symbol	Descriptions
1	A (input)
2	OUT (output)
3	B (input)

Safety Precautions

■ Design & Selection

- This valve can not be used as a stop valve that has no leakage. Slight leakage is allowed in product specifications.
- While there is no direction to the installation, use in a range with little differential pressure (0.05MPa or less), the movement could become dull.

■ Installation & Adjustment

- Apply recommended tightening torque when connecting pipes.
  - To prevent air leakage or damage of screw.
  - First tighten the screw by hand to prevent threads are not damaged, then use a tool.
  - Do not tighten while pressure is applied.
- Install an air filter just before the pneumatic component in the circuit.

(Recommended tightening torque)

	Tightening torque N·m
Rc 1/8	3 to 5
Rc 1/4	6 to 8
Rc 3/8	13 to 15
Rc 1/2	16 to 18
Rc 3/4	19 to 40
Rc 1	41 to 70

■ During Use & Maintenance

- Before replacing tubing, stop the air flow and confirm that no pressure remains.