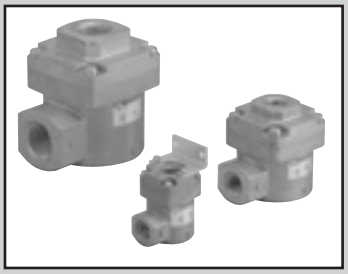
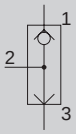


Shuttle valve

SHV2 Series

● Port size: Rc1/8 to Rc1

JIS symbol



RoHS CAD

Features

● Variety of bore sizes available

Series includes piping bore sizes Rc1/8 to Rc1.

● Wide range of options

· Fluoro rubber specifications available as options
· Mounting bracket available (small bore)

● Eco-friendly product

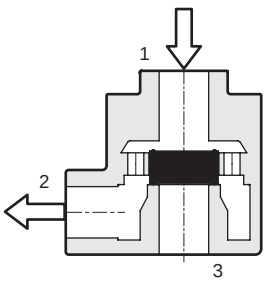
· Eco-friendly design is free of lead and hexavalent chrome
· Paint-free
· Waste sorting is simplified

Specifications

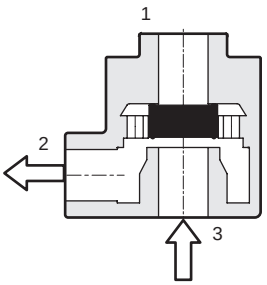
Model No. / Item		SHV2-6	SHV2-8	SHV2-10	SHV2-15	SHV2-20	SHV2-25
Working fluid		Compressed air					
Max. working pressure	MPa	1.0 (≈150 psi, 10 bar)					
Min. working pressure	MPa	0.05 (≈7.3 psi, 0.5 bar)					
Min. working differential pressure	MPa	0.05 (≈7.3 psi, 0.5 bar)					
Proof pressure	MPa	1.5 (≈220 psi, 15 bar)					
Fluid temperature	°C	5 (41°F) to 60 (140°F)					
Ambient temperature	°C	0 (32°F) to 60 (140°F) (no freezing)					
Port size	Rc	1/8	1/4	3/8	1/2	3/4	1
Weight	g	86	82	270	270	760	700
Mounting bracket weight	g	15		-			
Mounting orientation		Unrestricted					
Eff. X-sectional area	1→2 mm²	20	28	90	105	205	245
	3→2 mm²	22	32	95	115	210	250
Min. required flow rate *1	ℓ/min	20	30	100		150	

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

Operational explanation



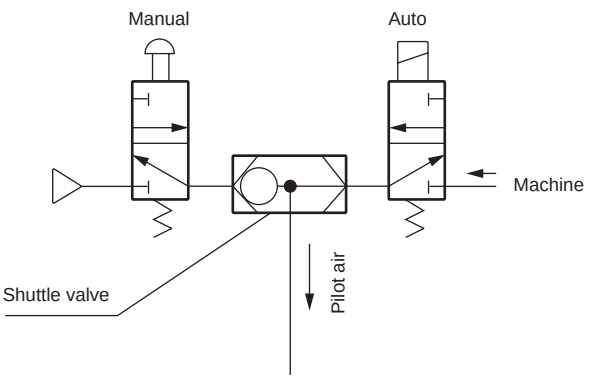
● 1→2
The valve closes port 3 with pressure from port 1. Air flows to port 2.



● 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

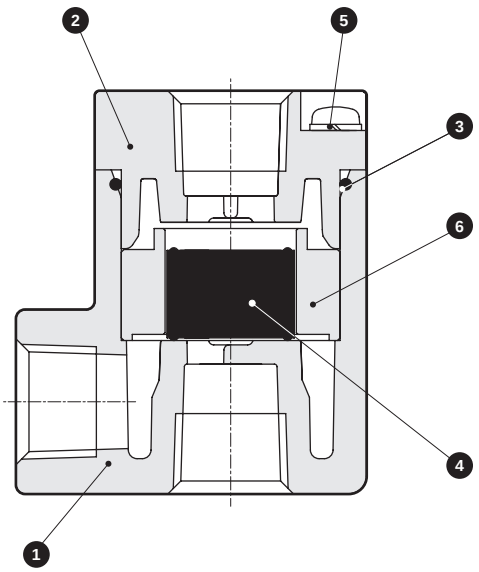
Ⓒ Accessory

Code	Description
Ⓐ 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

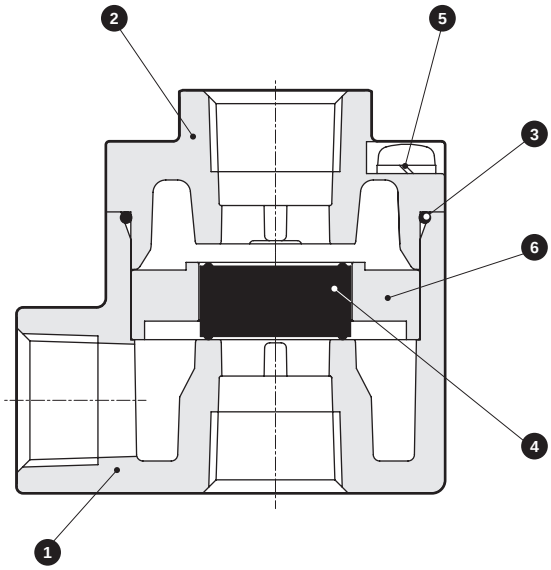
*1: Mounting bracket is available for SHV2-6 and SHV2-8 only.

Internal structure and parts list

● SHV2-6/8



● SHV2-10/15/20/25

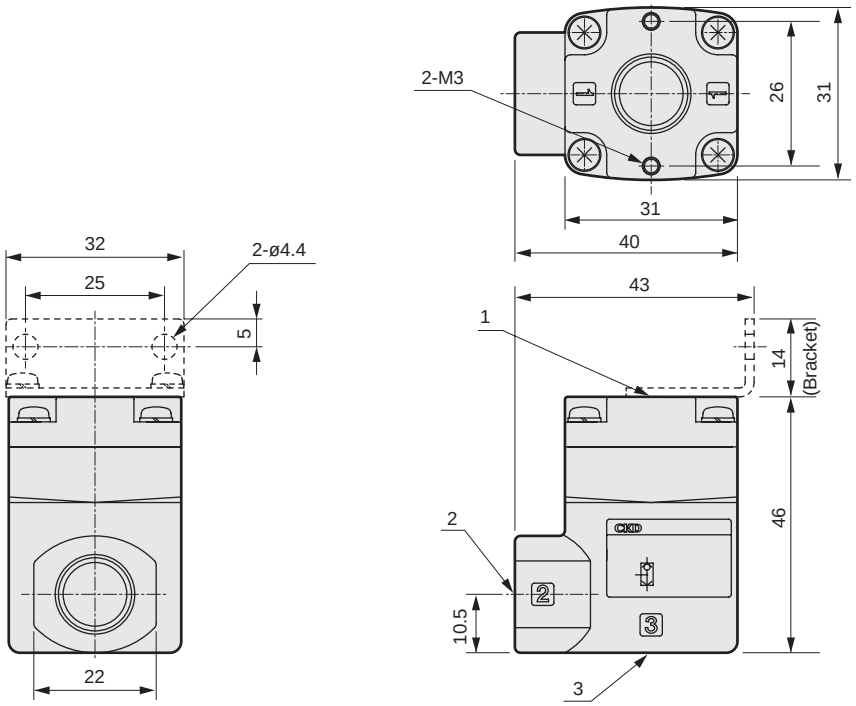


No.	Part name	Material
1	Body	Aluminum die-casting
2	Plug	Aluminum die-casting
3	O-ring	Nitrile rubber (fluoro rubber)
4	Valve	Nitrile rubber (fluoro rubber)
5	Cross-recessed pan head machine screw with switch	Stainless steel
6	Guide ring	Aluminum alloy

* Materials shown in ( ) are for option “A” (fluoro rubber specifications).

Dimensions CAD

● SHV2-6/8

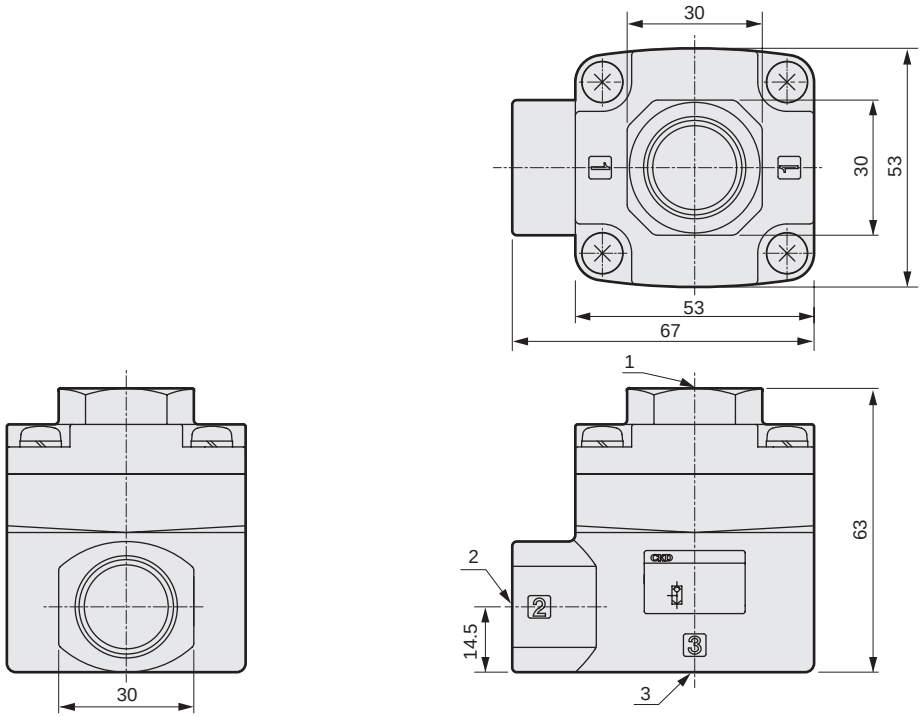


Model No.	Port position		
	1	2	3
SHV2-6	Rc 1/8		
SHV2-8	Rc 1/4		

[Piping port indication]

Port code	Description
1	A (Input)
2	OUT (Output)
3	B (Input)

● SHV2-10/15



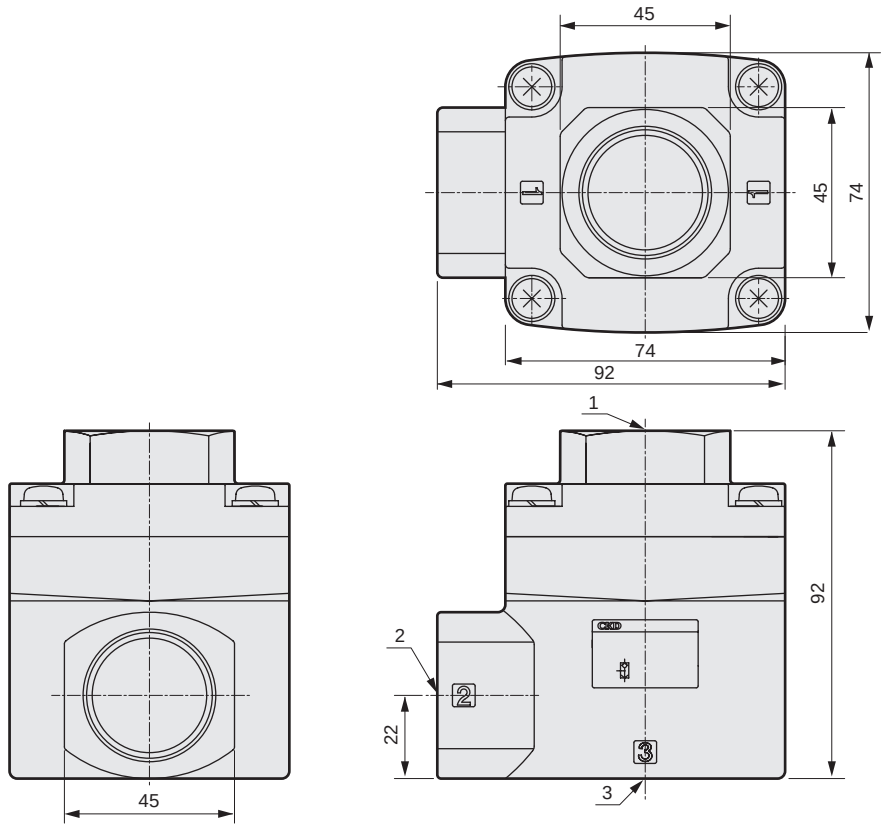
Model No.	Port position		
	1	2	3
SHV2-10	Rc 3/8		
SHV2-15	Rc 1/2		

[Piping port indication]

Port code	Description
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 code	Description
1	A (Input)
2	OUT (Output)
3	B (Input)

⚠Safety precautions

■ Design/selection

- This valve cannot be used as a stop valve that requires no leakage. Slight leakage is allowed for in this product's specifications.
- While there is no orientation to the installation, if used in a range with little differential pressure (0.05 MPa or less), the movement could become sluggish.

■ Mounting, installation and adjustment

- Apply recommended tightening torque when connecting pipes.
  - · The purpose is to prevent air leakage and damage to bolts.
  - · First tighten the bolts by hand to ensure that the threads are not damaged, then use a tool.
  - · Do not tighten while pressure is applied.
- Install a pneumatic 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

■ Use/maintenance

- Stop air flow and confirm that there is no residual pressure before replacing the tube.