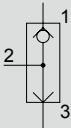


Shuttle valve

SHV2 Series

● Port size: Rc1/8 to Rc1

JIS symbol



Features

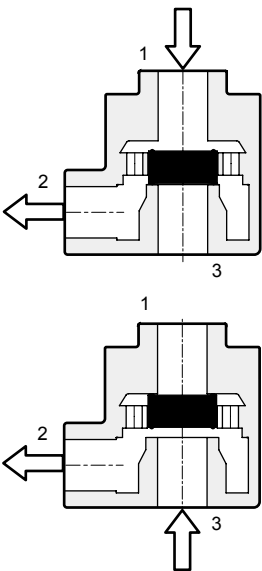
- **Variety of bore sizes available**
Series includes piping bore sizes Rc1/8 to Rc1.
- **Wide range of options**
 - Fluoro rubber specifications available as options
 - Mounting bracket available (small bore)
- **Eco-friendly product**
 - Eco-friendly design is free of lead and hexavalent chrome
 - Paint-free
 - Waste sorting is simplified

Specifications

Model No.		SHV2-6	SHV2-8	SHV2-10	SHV2-15	SHV2-20	SHV2-25
Item							
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	20	28	90	105	205	245
	3→2	22	32	95	115	210	250
mm ²							
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

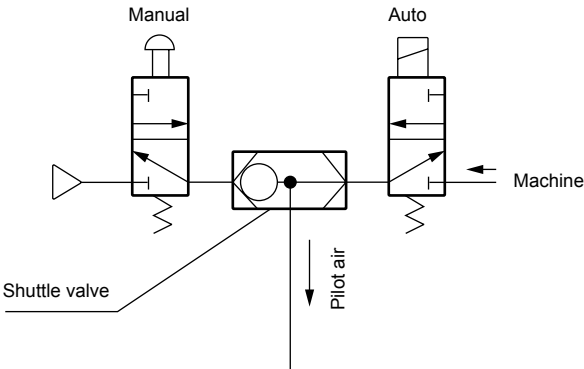


● 1→2
The valve closes port 3 with pressure from port 1. Air flows to port 2.

● 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.

A Port size

B Option

C Accessory

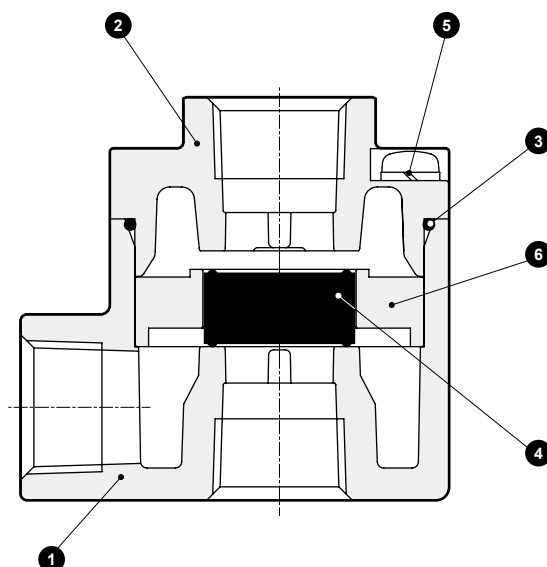
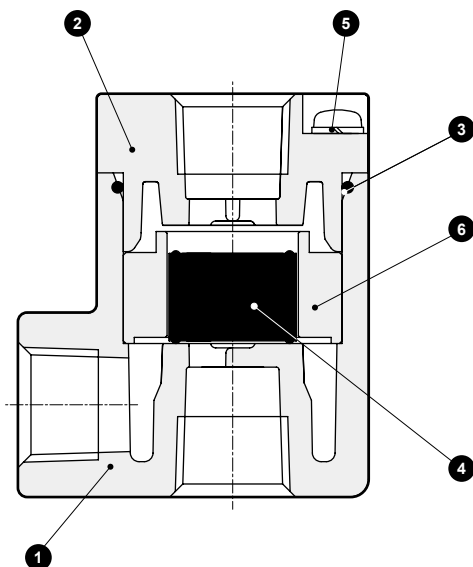
Code	Description
A Port size	
6	Rc 1/8
8	Rc 1/4
10	Rc 3/8
15	Rc 1/2
20	Rc 3/4
25	Rc 1
B Option	
Blank	No option
A	Fluoro rubber specifications
C Accessory	
Blank	None
P	Mounting bracket attached

*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).

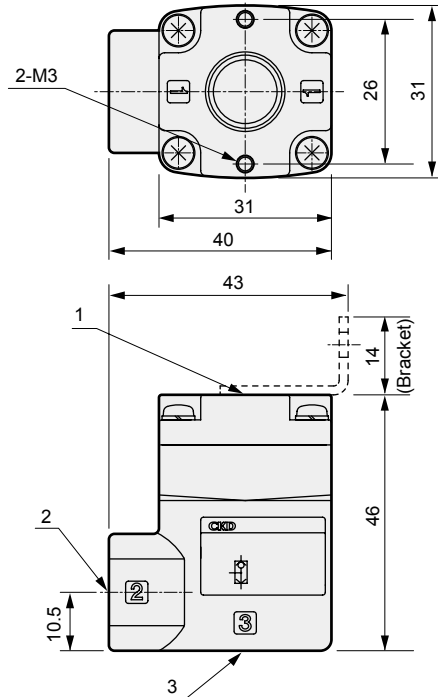
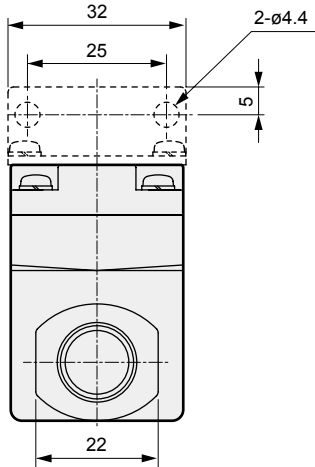
F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bac-
remove Filtr
Film
Resist FR
Oil-ProhR
Med
Press FR
No Cu/
PTFE FRL
Outdrs FRL
Adapter
Joiner
Press
Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/
other
Fit/Tube
Nozzle
Air Unit
PresCompn
Electro
Press SW
ContactSW
AirSens
PresSW
Cool
Air Flo
Sens/Ctrl
WaterRISens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg
etc
Ending

SHV2 Series



Dimensions

● SHV2-6/8

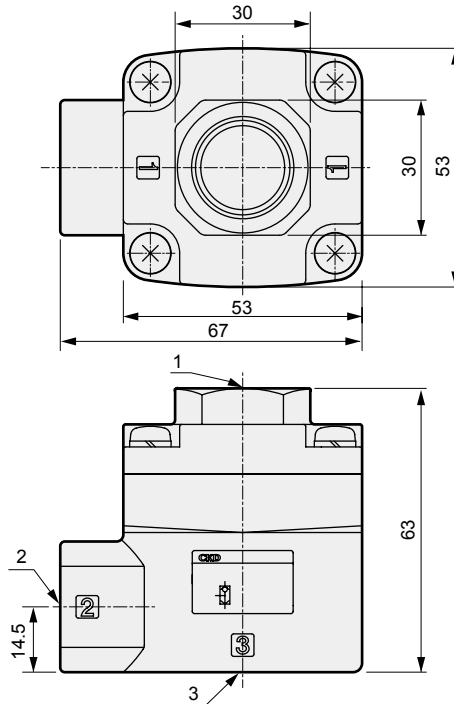
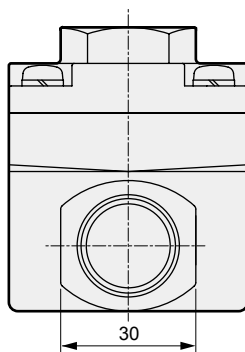


[Piping port indication]

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

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

● SHV2-10/15



[Piping port indication]

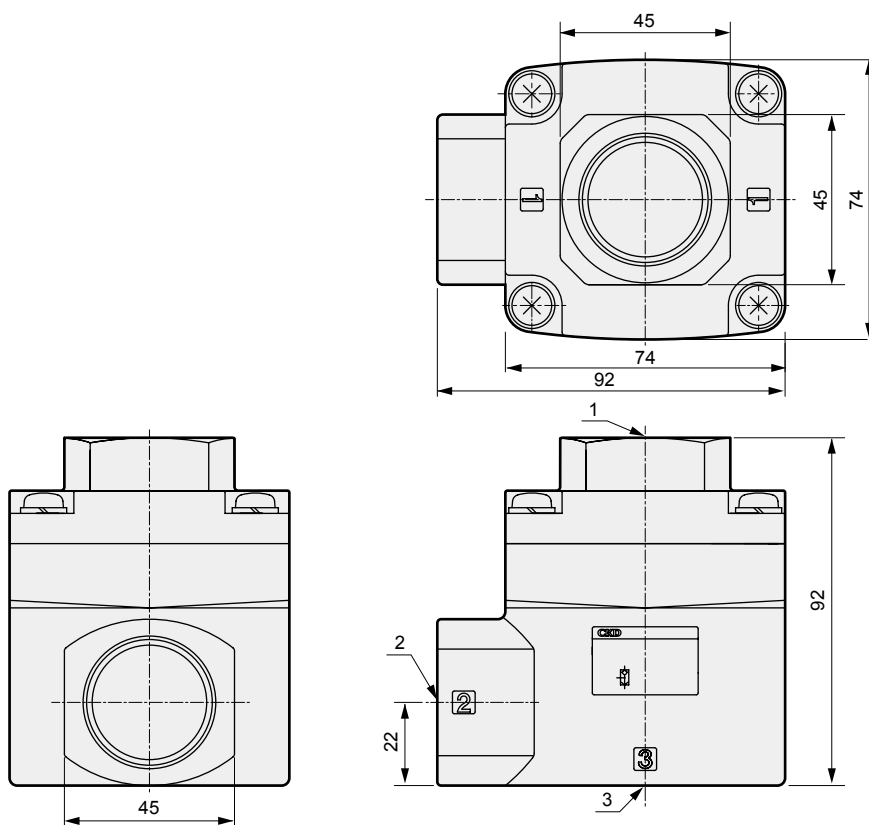
Model No.	Port position		
	1	2	3
SHV2-10	Rc 3/8		
SHV2-15	Rc 1/2		

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.

Use/maintenance

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

[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

F.R.L.
F.R.
F (Filtr)
R (Reg)
L (Lub)
Drain Separ
Mech Press SW
Res press exh valve
SlowStart
Anti-bac/Bac-remove Filtr
Film Resist FR
Oil-ProhR
Med Press FR
No Cu/ PTFE FRL
Outdrs FRL
Adapter Joiner Press Gauge
CompFRL
LgFRL
PrecsR
VacF/R
Clean FR
ElecPneuR
AirBoost
Speed Ctrl
Silncr
CheckV/ other
Fit/Tube
Nozzle
Air Unit
PrecsCompn
Electro Press SW
ContactSW
AirSens
PresSW Cool
Air Flo Sens/Ctrl
WaterRISens
TotAirSys (Total Air)
TotAirSys (Gamma)
Gas generator
RefrDry
DesicDry
HiPolymDry
MainFiltr
Dischrg etc
Ending