



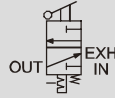
Shut-off valve standard white Series

V1000-W/V3000-W Series



One action exhaust operation. Prevent residual pressure accidents in pneumatic lines.

Port size: 1/8 to 1/2

JIS symbol

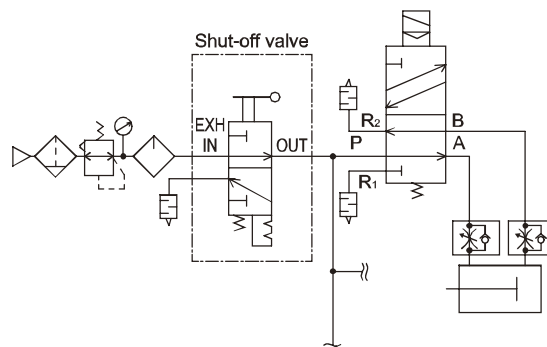


Specifications

Descriptions		V1000-W		V3000-W		
Appearance						
Descriptions		V1000-6-W	V1000-8-W	V3000-8-W	V3000-10-W	V3000-15-W
Working fluid		Compressed air				
Max. working pressure MPa		1.0				
Withstanding pressure MPa		1.5				
Fluid temperature °C		5 to 60				
Operation lever switchover angle		90°				
Operating force	Pushing force N	18		80		
	Torque N·m	0.5		2		
Valve section leakage cm ³ /min. (ANR)		10				
External leakage cm ³ /min. (ANR)		10				
Port size (Rc, NPT, G)	IN-OUT	1/8	1/4	1/4	3/8	1/2
	EXH	1/8		3/8		
Product weight kg		0.17		0.25		
Effective sectional area (mm ²)	IN/OUT	15	18	40	70	85
	OUT/EXH	5		40	50	50

Applications

Explanation: For safety, release compressed air in the pneumatic circuit from the lockout valve before repairing or adjusting the solenoid valve or air cylinder, etc.



How to order

● F.R.L1000 Series

V1000 - **6** - **W** - **A6W**
(White type)

● F.R.L3000, 4000 Series

V3000 - **8** - **W** - **A6W**
(White type)

A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Attachment
 Note 1

A Model no.	
V	V
1	3
0	0
0	0
0	0

Symbol	Descriptions		
B Port size			
6	Rc1/8	●	
8	Rc1/4	●	●
10	Rc3/8		●
15	Rc1/2		●
C Port thread type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●
D Option			
Blank	Standard flow (left → right)	●	●
X1	IN/OUT reverse flow (right → left)	●	●
E Display unit			
Blank	MPa display, Rc thread	●	●
J1	MPa display, NPT, G thread	●	●
F Attachment (attached)			
Blank	Without attachment	●	●
A6*W	1/8 piping adapter set	●	
A8*W	1/4 piping adapter set	●	●
A10*W	3/8 piping adapter set	●	●
A15*W	1/2 piping adapter set		●
A20*W	3/4 piping adapter set		●
BW	C type bracket	●	●
S	Silencer	●	●
* Adaptor screw type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●

⚠ Note on model no. selection

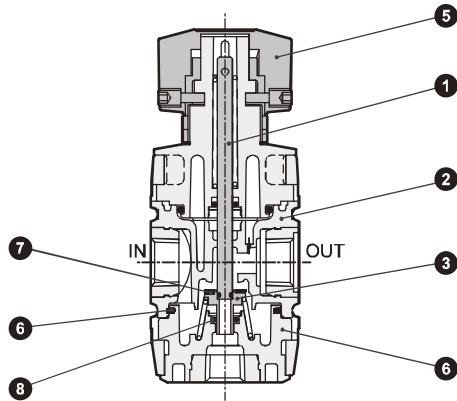
Note 1: Piping adapter set A*00-**-W is attached (refer to page 151).
 The piping adapter set and C bracket cannot be used together.

⚠ Select the reverse regulator (R*100-W) or reverse filter regulator (W*100-W) when installing the V*000-W onto the primary side of the regulator or filter regulator.

V*000-W Series

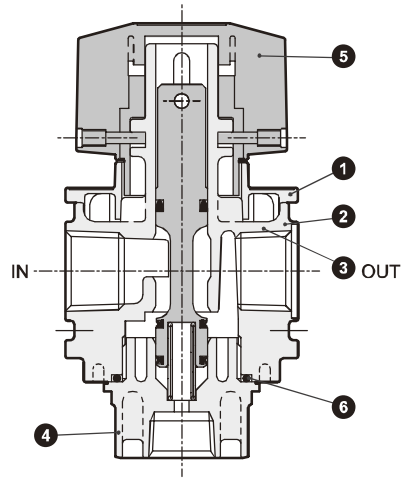
Internal structure and parts list

● V1000-W



No.	Part name	Material
1	Spool	Steel
2	Body assembly	Polyamide resin, steel
3	Valve element	Brass, nitrile rubber
4	Bottom plug	Polyamide resin, steel
5	Knob	Polyacetal resin
6	Packing seal	Nitrile rubber
7	O ring	Nitrile rubber
8	O ring	Nitrile rubber

● V3000-W



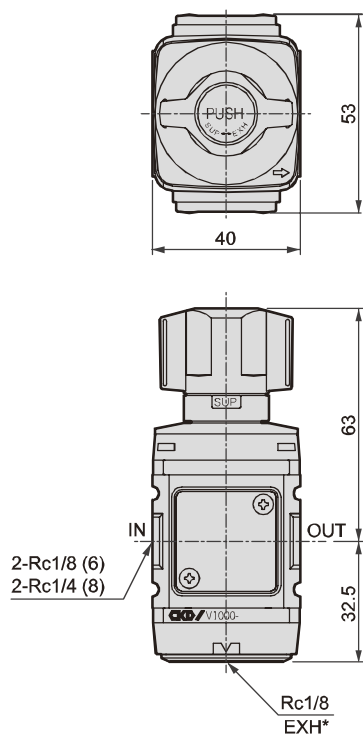
No.	Part name	Material
1	Plate cover	ABS resin
2	Body	Aluminum alloy die-casting
3	Spool assembly	Aluminum alloy urethane rubber resin
4	Bottom plug	PBT resin Note 1
5	Knob	Polyacetal resin
6	O ring	Nitrile rubber

Note 1: The metal bottom plug is used as a custom-order part.

Dimensions

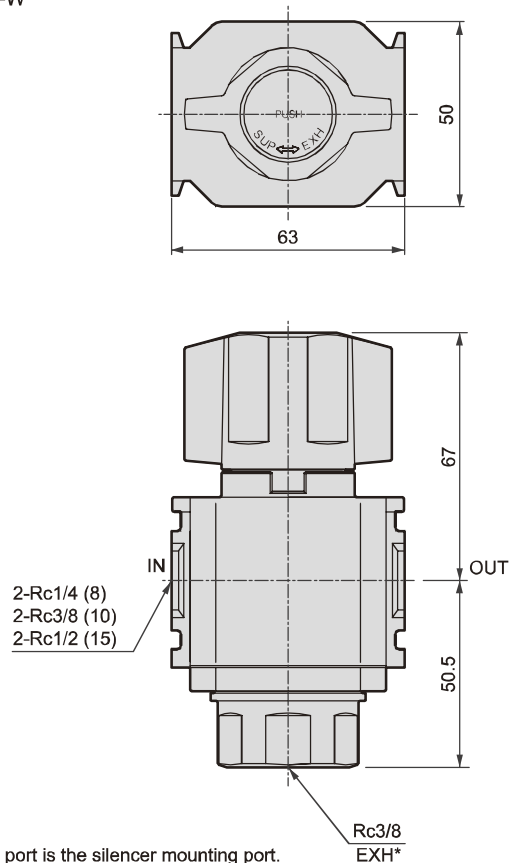


● V1000-W

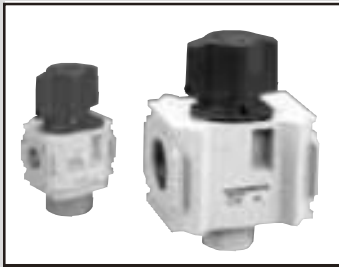


* The EXH port is the silencer mounting port.

● V3000-W



* The EXH port is the silencer mounting port.

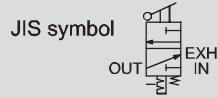


Lockout valve (OSHA compliant) standard white Series

V3010-W/V6010-W Series

Prevent residual pressure accidents in pneumatic lines.

Port size: 1/4 to 1



Specifications

Descriptions		V3010-8-W	V3010-10-W	V3010-15-W	V6010-20-W	V6010-25-W
Working fluid		Compressed air				
Max. working pressure	MPa	1.0				
Withstanding pressure	MPa	1.5				
Fluid temperature	°C	5 to 60				
Operation lever switchover angle		90°				
Operating force	Pushing force N	80 or less				
	Torque N·m	2.5 or less				
Valve seat leakage	cm ³ /min. (ANR)	10 or less				
External leakage	cm ³ /min. (ANR)	10 or less				
Port size	IN-OUT	1/4	3/8	1/2	Rc 3/4	Rc1
	(Rc, NPT, G) EXH	3/8			Rc1/2	
Product weight	kg	0.3			0.8	
Effective sectional area (mm ²)	IN → OUT	40	70	85	145	150
	OUT → EXH	40	50	50	105	110

OSHA: Occupational Safety and Health Administration

US Safety Standards related to worker safety are set.

<Lockout/Tagout Regulations>

When servicing or maintaining machinery, the air source shall be closed with a shut-off valve (lockout valve), and residual pressure shall be discharged. If a third party inadvertently operates the valve during such operation and compressed air is applied, the cylinder, etc., could move suddenly and injure personnel. This standard states that, "All valves used for such purposes shall have a key or a structure which can be locked with a key."

How to order

● F.R.L. 2000, 3000, 4000 Series



● F.R.L. 6000, 8000 Series



A Model no.

B Port size

C Port thread type

D Option

E Display unit

F Attachment
Note 1

⚠ Note on model no. selection

Note 1: The piping adapter set and C type bracket cannot be used together.

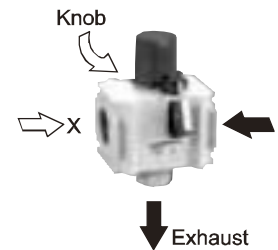
⚠ Select the reverse regulator (R*100-W) or reverse filter regulator (W*100-W) when installing the V*010-W onto the primary side of the regulator or filter regulator.

How to use

● Regular use



● During maintenance work, a lock is set where residual pressure is released.



A Model no.

V	V
3	6
0	0
1	1
0	0

Symbol	Descriptions		
B Port size			
8	1/4	●	
10	3/8	●	
15	1/2	●	
20	3/4		●
25	1		●

C Port thread type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●

D Option			
Blank	None	●	●
X1	IN/OUT reverse flow (right → left)	●	●

E Display unit			
Blank	MPa display, Rc thread	●	●
J1	MPa display, NPT, G thread	●	●

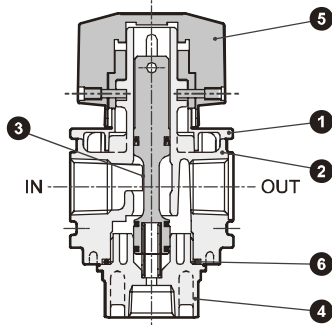
F Attachment (attached)			
Blank	Without attachment	●	●
A8W	1/4 piping adapter set	●	
A10W	3/8 piping adapter set	●	
A15W	1/2 piping adapter set	●	
A20W	3/4 piping adapter set	●	●
A25W	1 piping adapter set	●	●
A32W	1 1/4 piping adapter set		●
BW	C type bracket	●	●
S	Silencer	●	●

* Adaptor screw type			
Blank	Rc thread	●	●
N	NPT thread	●	●
G	G thread	●	●

V*010-W Series

Internal structure and parts list

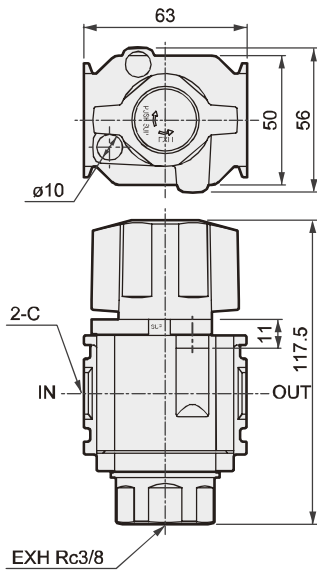
● V3010-W



No.	Part name	Material
1	Plate cover	ABS resin (Note 2)
2	Body	Aluminum alloy die-casting
3	Spool assembly	Aluminum alloy urethane rubber resin
4	Bottom plug	PBT resin (Note 1) (Note 2)
5	Knob	Aluminum alloy die-casting
6	O ring	Nitrile rubber

Note 1: The metal bottom plug is used as a custom-order part.
 Note 2: Flame resistance resin UL94 standards V-O or equivalent

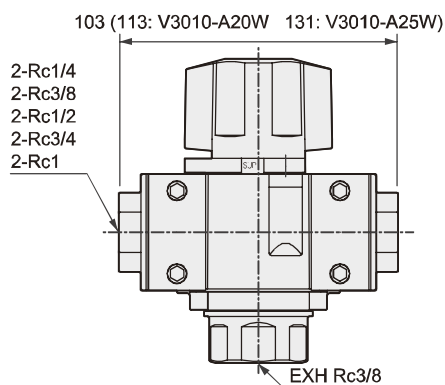
Dimensions (V3010-W)



* The EXH port is the silencer mounting port.

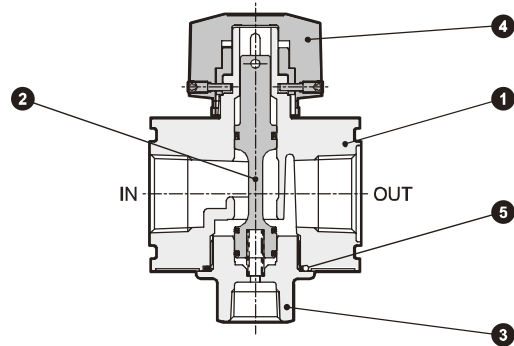
Descriptions	C
V3010-8-W	Rc1/4
V3010-10-W	Rc3/8
V3010-15-W	Rc1/2

● Adaptor attachment



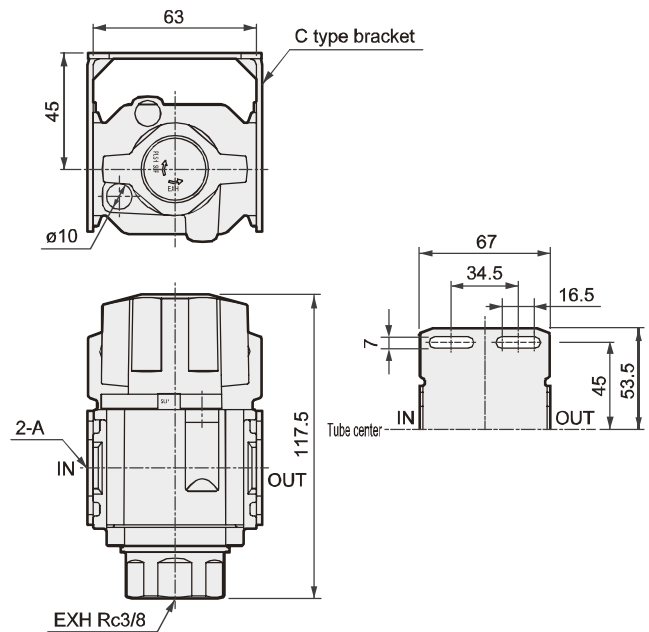
Piping adapter set is attached at shipment.

● V6010-W



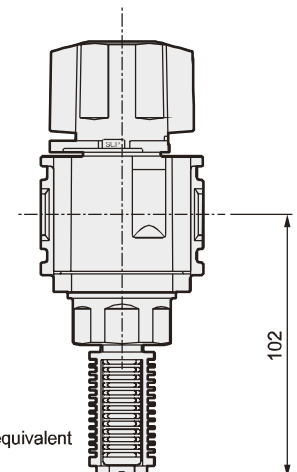
No.	Part name	Material
1	Body	Aluminum alloy die-casting
2	Spool assembly	Aluminum alloy, hydrogen nitrile rubber
3	Bottom plug	Aluminum alloy die-casting
4	Knob	Aluminum alloy die-casting
5	O ring	Nitrile rubber

● C type bracket (-BW) Part model no.: B320



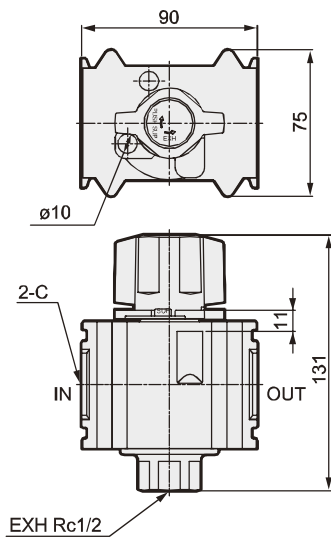
The C type bracket is attached at shipment.
 C type bracket and piping adapter set can not be used together.

● Silencer (-S) Part model no.: SLW-10A



The silencer is attached at shipment.
 The silencer is made of flame-resistant resin equivalent to UL94 Standard V-O, but the element is not.

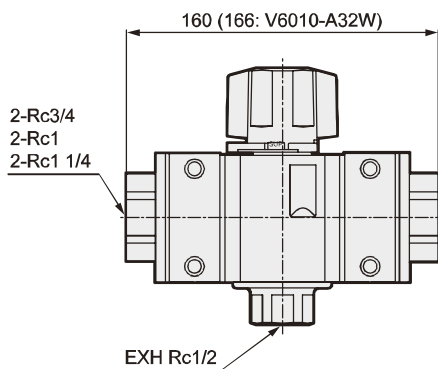
Dimensions (V6010-W)



* The EXH port is the silencer mounting port.

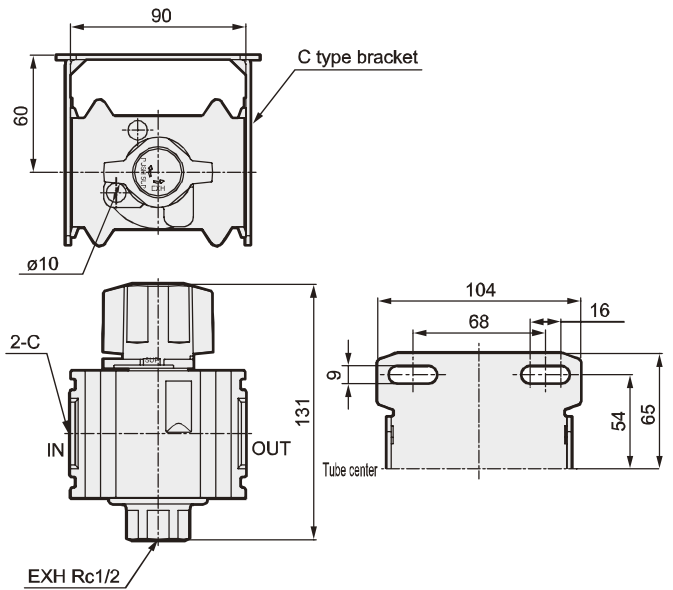
Descriptions	C
V6010-20-W	Rc3/4
V6010-25-W	Rc1

● Adaptor attachment



Piping adapter set is attached at shipment.

● C type bracket (-BW) Part model no.: B620

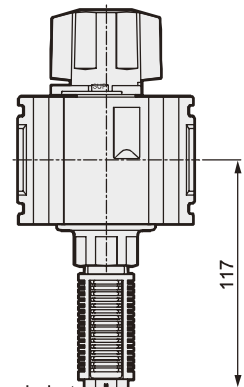


The C type bracket is attached at shipment.

C type bracket and piping adapter set can not be used together.

● Silencer (-S)

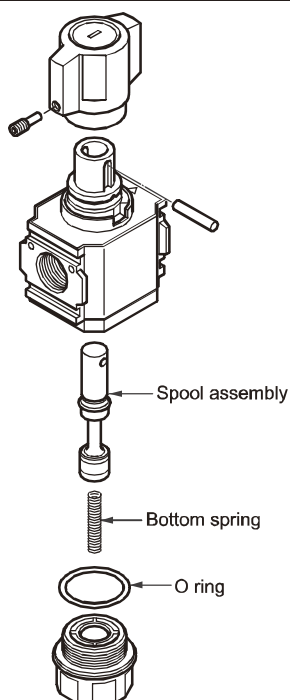
Part model no.: SLW-15A



The silencer is attached at shipment.

The silencer is made of flame-resistant resin equivalent to UL94 Standard V-O, but the element is not.

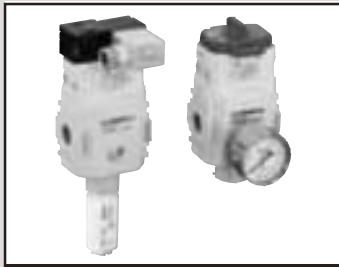
Shut-off valve (V3000-W, V3010-W) optional parts drawing



Spool assembly

(Sets of spool assembly and bottom spring)

Model	Spool assembly model no.
V3000, V3010	V3000-SPOOL



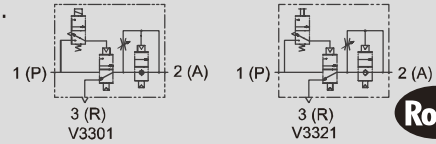
Slow start valve standard white Series

V3301-W/V3321-W Series

To maintain safety at starting and stopping.

● Port size: Rc1/4 to Rc1/2

JIS symbol



Specifications

Descriptions		V3301-W/V3321-W		
Operating method		Pilot operated soft spool valve		
Working fluid		Compressed air (excluding ultra dry compressed air) Note 1		
Working pressure range MPa		0.2 to 1.0		
Withstanding pressure MPa		1.5		
Ambient temperature range °C		5 to 60		
Port size	1 (P) / 2 (A) port	Rc1/4	Rc3/8	Rc1/2
	3 (R) port	Rc3/8		
	Gauge port	Rc1/4		
Effective sectional area mm ²	Low speed air supply	6		
	High speed air supply	40	64	76
	High speed exhaust	50	74	78
Response time		0.2sec. or less		
Lubrication		Oil-free Note 2		
Weight g		V3301-W: 635 V3321-W: 515		
Solenoid valve specifications		V3301-W		
Rated voltage V		100 AC (50/60Hz)	200 AC (50/60Hz)	24 DC
Starting current A		0.076/0.058	0.038/0.030	0.092
Holding current A		0.038/0.029	0.019/0.015	
Power consumption W		2.2/1.7	2.2/1.7	2.2
Temperature rises K		40 or less		
Voltage fluctuation range		±10%		
Insulation class		Class B		
Electric connection		Grommet lead wire, terminal box		

Note 1: Contact CKD when using ultra dry compressed air.

Note 2: Use the turbine oil Class 1 ISO VG32 if lubricated.

How to order

● Solenoid valve type **V3301** - **08** - **W** - **1** - **BW**
(White type)

● Manual **V3321** - **08** - **W** - **BW**

A Port size

B Manual override

C Electric connection

D Voltage

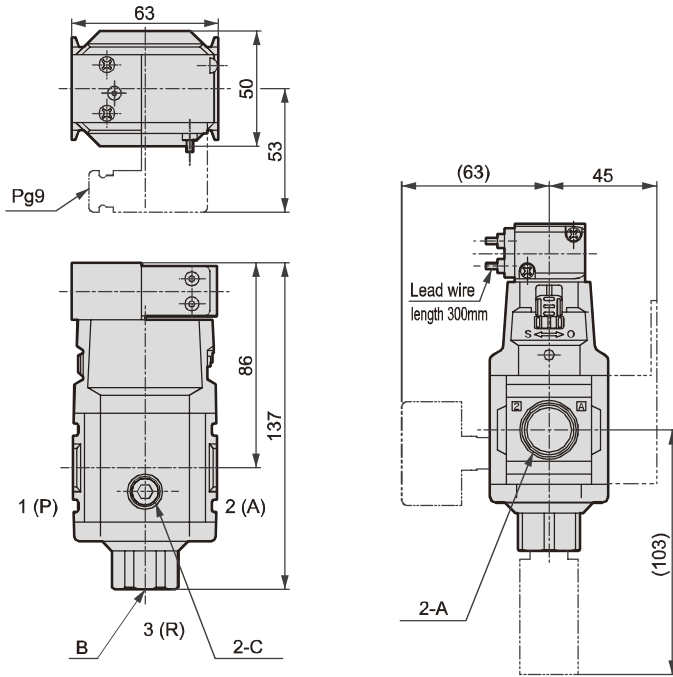
E Attachment (attached)

Symbol	Descriptions	
A Port size		
1 (P) / 2 (A) port		
08	Rc1/4	
10	Rc3/8	
15	Rc1/2	
B Manual override		
Blank	Non-locking	
M1	Locking	
C Electric connection		
Blank	Grommet lead wire	
S	Grommet lead wire with surge suppressor	
B	Terminal box	
LS	Terminal box with surge suppressor and indicator light	
D Voltage		
1	100 VAC 50/60Hz	Standard
2	200 VAC 50/60Hz	
3	24 VDC	Option
4	12 VDC	
5	110 VAC 50/60Hz	
6	220 VAC 50/60Hz	
E Attachment (attached)		
Blank	Without attachment	
BW	C type bracket	
G49P	Pressure gauge: G49D-8-P10	
S	Silencer	

⚠ Select the reverse regulator (R*100-W) or reverse filter regulator (W*100-W) when installing the V3301-W or V3321-W onto the primary side of the regulator or filter regulator.

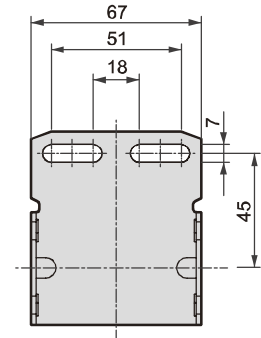
Dimensions

● V3301-W

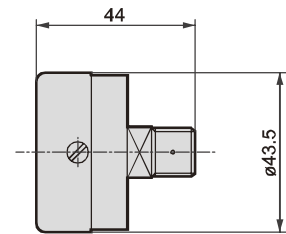


	A	B	C
V3301-08-W	Rc1/4	Rc3/8	Rc1/4
V3301-10-W	Rc3/8		
V3301-15-W	Rc1/2		

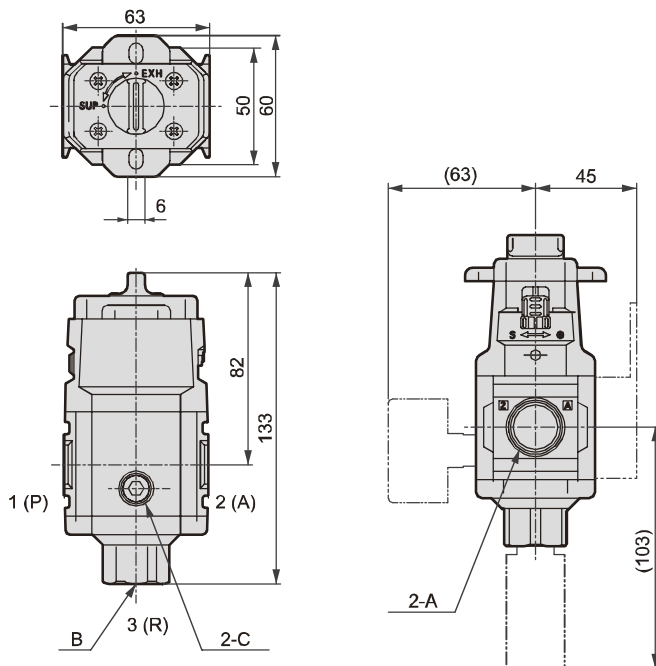
● Bracket: B320



● Pressure gauge: G49D-8-P10

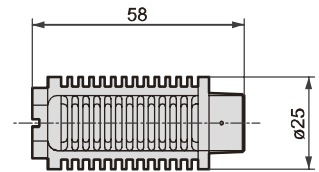


● V3321-W



	A	B	C
V3321-08-W	Rc1/4	Rc3/8	Rc1/4
V3321-10-W	Rc3/8		
V3321-15-W	Rc1/2		

● Silencer: SLW-10A

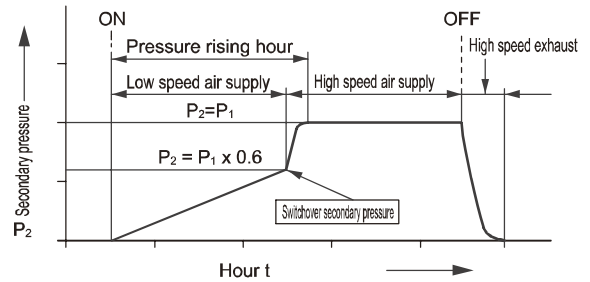


Operational explanation (refer to the operation characteristics)

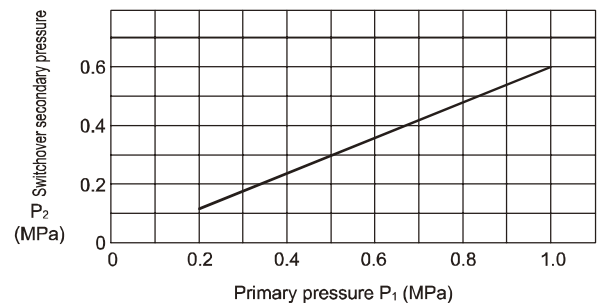
The slow start valve turns on when the solenoid valve is energized or the manual section is set to SUP. The valve turns off when the solenoid valve is deenergized or the manual section is set to EXH.

- (1) First, when the main unit is turned on, the low-speed supply path opens, and the compressed air starts to flow to the secondary side. The secondary pressure gradually starts to rise. The operable cylinders in the unit will start moving at a low speed and thus will not pop out.
- (2) Next, when the secondary pressure exceeds 60% of the primary pressure, the high-speed supply path opens. The secondary pressure suddenly rises to the same pressure as the primary pressure. (Fully open state)
- (3) When the main unit is turned off, high-speed exhaust will start, and the residual pressure in the device will be exhausted.

● Operation characteristics



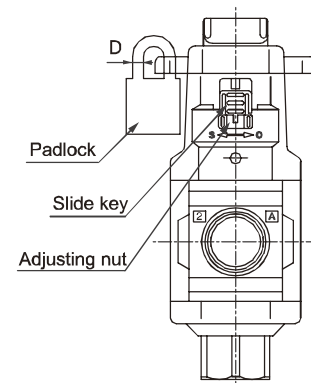
● Switchover secondary pressure



Adjustment method of slow start (refer to the side view)

- (1) Press the slide key up and release the adjustment nut lock.
- (2) Turn the main unit on, and confirm the cylinder operation speed and secondary pressure rise time. Then turn the main unit off.
- (3) Turn the adjustment nut as explained below, and adjust the state.
 - Cylinder pops out → Turn to the S side
 - Low speed operation time is too long → Turn to the O side
 Repeat steps (2) and (3) as necessary, and adjust to the optimum state.
- (4) Align the adjustment nut keyway to the projection on the slide key.
- (5) Press down the slide key and lock the adjustment nut.
- (6) Confirm that the main unit is off.

● Side view



⚠ Safety precautions

- Note 1: This valve is dedicated for starting and stopping (including emergency stop) the device. As a rule, this valve should not be used for repeated cylinder operation or as a normal 3-way valve.
- Note 2: If the minimum operating pressure of the cylinder, which is to be kept from popping out, is less than 50% of the working pressure, popping out will not be prevented.
- Note 3: The manual override is locked with the manual valve type. Select a padlock with a D dimension of 3.8 to 5.8 mm.
- Note 4: Connect a silencer or exhaust filter, etc., to the exhaust port for safety and sound absorption.