

# Check valve CHV2 Series



### Features

- Wide variation  
Port size; Rc1/8 to Rc1 1/2 are available.
- Compact and lightweight  
34% reduced in volume and 25% reduced in weight (CKD comparison).
- Various options  
Fluoro rubber and oil-prohibition are joined in option. Mounting bracket is available for small bore size type.
- Stylish shape
- Ecological  
Easy sorting materials for recycling. **RoHS**

### Specifications

Model no.	CHV2-6	CHV2-8-J	CHV2-8	CHV2-10-J	CHV2-10	CHV2-15	CHV2-20	CHV2-25	CHV2-32	CHV2-40
Working fluid	Compressed air									
Max. working pressure MPa	1									
Min. working pressure MPa	0.03									
Withstanding pressure MPa	1.5									
Cracking pressure MPa	0.02									
Fluid temperature °C	5 to 60									
Ambient temperature °C	0 to 60 (no freezing)									
Port size Rc	1/8	1/4		3/8		1/2	3/4	1	1 1/4	1 1/2
Product weight g	47		81		140		265		875	
Effective sectional area mm <sup>2</sup>	28		55	60	94	110	220	250	700	730

### How to order

**CHV2** - **8** - **J** - **A** **P**

Model no.

**A** Port size

Small flow compact type  
Note 1

Symbol	Descriptions
<b>A Port size</b>	
6	Rc1/8
8	Rc1/4
10	Rc3/8
15	Rc1/2
20	Rc3/4
25	Rc1
32	Rc1 1/4
40	Rc1 1/2

**B** Option  
Note 2

<b>B Option</b>	
Blank	No option
A	Fluoro rubber specifications
P8	Oil-prohibited specifications

**C** Accessory  
Note 3

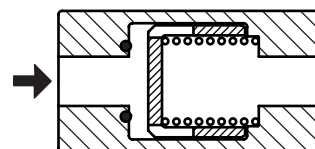
<b>C Accessory</b>	
Blank	None
P	Mounting plate attached

Note 1: The small flow compact type (J) is available only for port size Rc1/4 (8) or Rc3/8 (10).

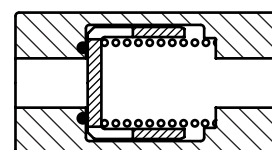
Note 2: Options are indicated in alphabetic order. (AP8)

Note 3: Mounting plate comes with CHV2-6, CHV2-8-J, CHV2-8 and CHV2-10-J.

### Operational principle



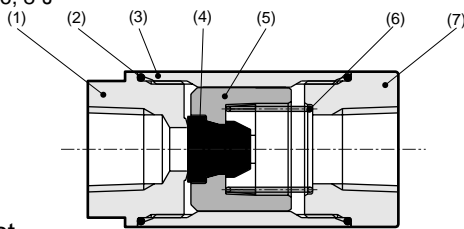
The valve will be fully opened if the pressure is applied in the arrow (→) direction indicated on the side of body, then the air flows as free flow.



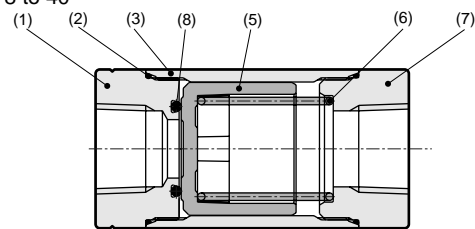
The valve will be closed if the pressure is applied in counter direction to arrow (←) indicated on the side of body, then the air will be shut off.

## Internal structure and parts list

### ●CHV2-6, 8-J



### ●CHV2-8 to 40

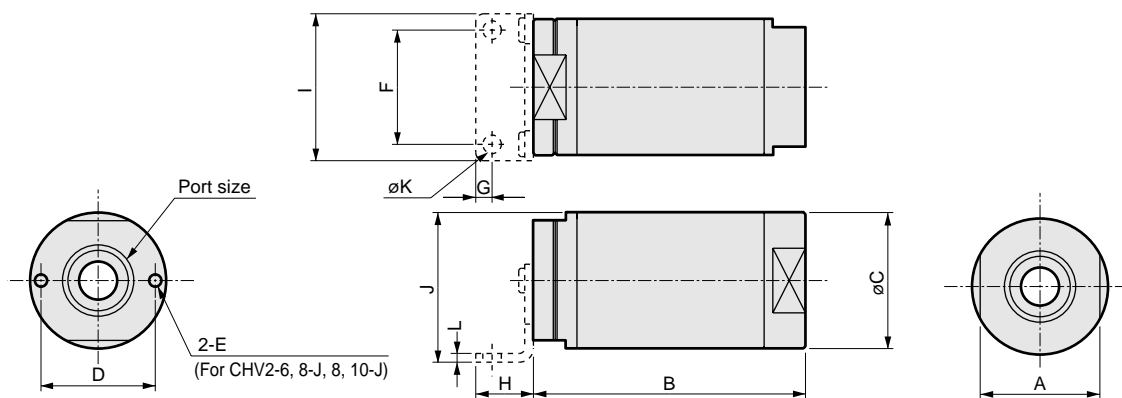


### Parts list

No.	Parts name	Material	No.	Parts name	Material
1	Guard A	Aluminum alloy	5	Valve guide	Polyacetal
2	O ring	Nitrile rubber (fluoro rubber)	6	Coil spring	Stainless steel
3	Tube	Aluminum alloy	7	Guard B	Aluminum alloy
4	Valve element	Nitrile rubber (fluoro rubber)	8	O ring	Nitrile rubber (fluoro rubber)

\* The value in ( ) is for option "A" (fluoro rubber specifications).

## Dimensions



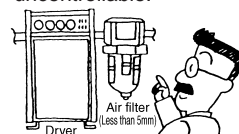
### Dimensions table

Model no.	Port size	A	B	øC	D	E	F	G	H	I	J	øK	L
CHV2-6	Rc1/8	22	50	25	21	M2.5	21	3	10.5	27	27.5	3.4	1.6
CHV2-8-J	Rc1/4												
CHV2-8	Rc3/8	27	60	31	26	M3	25	5	14	32	34	4.4	
CHV2-10-J													
CHV2-10													
CHV2-15	Rc1/2	32	75	38	-	-	-	-	-	-	-	-	
CHV2-20	Rc3/4	42	95	47	-	-	-	-	-	-	-	-	-
CHV2-25	Rc1												
CHV2-32	Rc1 1/4												
CHV2-40	Rc1 1/2	63	140	72	-	-	-	-	-	-	-	-	-

**! safety precautions** Refer to 'Safety precautions' in [Pneumatic, vacuum and auxiliary components (No. CB-24SA)] as well.

### ■ Installation & Adjustment

- Apply with recommended tightening torque when connecting pipes to prevent air leakage and damage of screw.
  - Tighten by hand first, then use a tool to prevent damage on screw thread.
  - Do not tighten the setscrew as applying pressure.
- Pipe so as not to be dislocated due to device movement, vibration, or tension.
  - Pipe dislocation on exhaust side in air pressure circuit will cause actuator to be uncontrollable.
  - With chuck holding mechanism, chuck will open, so this could cause dangerous situations.
- Install an air filter just before the pneumatic component in the circuit.



(Recommended tightening torque)

Port thread	Tightening torque N·m
M5	1.0 to 1.5
Rc1/8	3 to 5
Rc1/4	6 to 8
Rc3/8	13 to 15
Rc1/2	16 to 18
Rc3/4	19 to 40
Rc1	41 to 70
Rc1 1/4	43 to 75
Rc1 1/2	45 to 80

### ■ During use & Maintenance

- Stop supplying air and make sure of no residual pressure when replacing tube.
- Use width across flats on same piping side when removing this product from pipe.

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