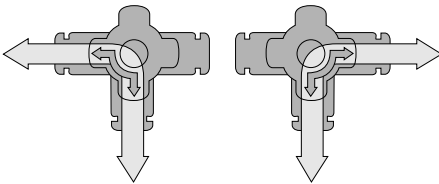




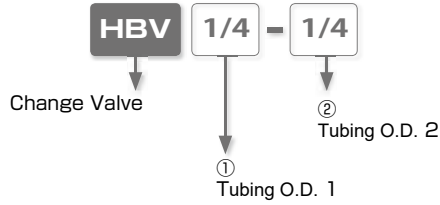
## Push-In Fitting Type Three-way Changeover Valve Change Valve



- *Changeover Air Direction by 90°*
- *Lightweight and Compact Design.*
- *Fine Operability and Easy Changeover.*

## Change Valve

### Model Designation (Example)



#### ① Tubing O.D. 1

Tube dia.	Inch size				mm size			
Code	1/4	5/16	3/8	1/2	6	8	10	12
Size(O.D.)	1/4"	5/16"	3/8"	1/2"	ø6	ø8	ø10	ø12

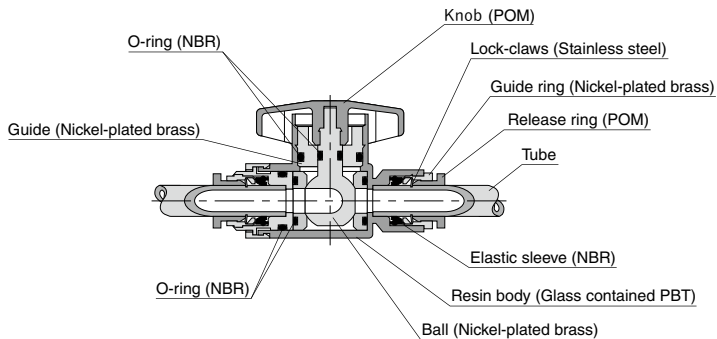
#### ② Tubing O.D. 2

Tube dia.	Inch size				mm size			
Code	1/4	5/16	3/8	1/2	6	8	10	12
Size(O.D.)	1/4"	5/16"	3/8"	1/2"	ø6	ø8	ø10	ø12

### Specifications

Fluid medium	Air
Operating pressure range	0~102psi (0~0.7MPa)
Max. vacuum	-29.5in. Hg (-100kPa)
Operating temp. range	32 ~ 140°F (0~ 60°C) (no freezing)

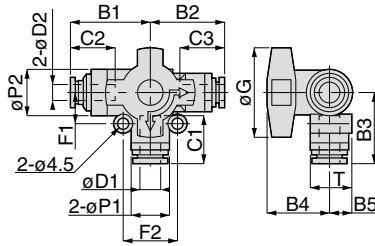
### Construction



# Change Valve

**HBV Union**

RoHS compliant



Unit : mm

Model code	Tube O.D. øD1	Tube O.D. øD2	Tube end C1	Tube end C2	Tube end C3	B1	B2	B3	B4	B5	T	F1	F2	øP1	øP2	øG	Effective area (mm <sup>2</sup> )	Weight (g)	CAD file name
HBV1/4-1/4	1/4"	1/4"	17	17	17	26.9	28.8	27	23.8	8.9	16.2	12	20	14.5	17.8	34.5	9	50	HBV1_4-1_4
HBV5/16-1/4	1/4"	1/4"	17	17	17	26.9	28.8	27	23.8	8.9	16.2	12	20	14.5	17.8	34.5	11	51	HBV5_16-1_4
HBV5/16-5/16	5/16"	5/16"	18.4	18.2	18.4	28.5	28.7	26.9	23.8	8.9	16.2	12	20	14.5	17.8	34.5	17	50	HBV5_16-5_16
HBV3/8-3/8	3/8"	3/8"	21.2	20.7	21.2	36.1	36.5	34.8	28.5	11.9	22.4	15	25	21	23.8	44	24	122	HBV3_8-3_8
HBV1/2-3/8	1/2"	3/8"	23.7	20.7	21.2	36.1	36.5	35.3	28.5	11.9	22.4	15	25	21	23.8	44	24.5	122	HBV1_2-3_8
HBV1/2-1/2	1/2"	1/2"	23.1	23.7	23.7	36.4	37	35.3	28.5	11.9	22.4	15	25	21	23.8	44	34.5	115	HBV1_2-1_2
HBV6-6	6	6	16.9	17	16.9	26.9	28.8	27	23.8	8.9	16.2	12	20	14.5	17.8	34.5	9	50	HBV6-6
HBV8-6	6	6	17	16.9	16.9	26.9	28.8	27	23.8	8.9	16.2	12	20	14.5	17.8	34.5	11	53	HBV8-6
HBV8-8	8	8	18.4	18.2	18.4	28.5	28.7	26.9	23.8	8.9	16.2	12	20	14.5	17.8	34.5	17	50	HBV8-8
HBV10-10	10	10	21.2	20.7	21.2	36.1	36.5	34.8	28.5	11.9	22.4	15	25	21	23.8	44	24	122	HBV10-10
HBV12-10	12	10	23.4	20.7	21.2	36.1	36.5	35	28.5	11.9	22.4	15	25	21	23.8	44	24.5	125	HBV12-10
HBV12-12	12	12	23.3	23.4	23.4	36.6	36.7	35	28.5	11.9	22.4	15	25	21	23.8	44	34.5	117	HBV12-12

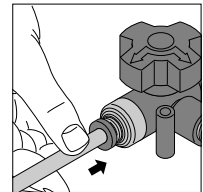
## How to insert and disconnect

### 1. How to insert and disconnect tubes

#### ① Tube insertion

Insert a tube into Push-In Fitting up to the tube end. Lock-claws bite the tube and fix it automatically, then the elastic sleeve seals around the tube.

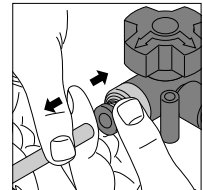
Refer to "2. Instructions for Tube Insertion" under "Common Safety Instructions for Fittings" .



#### ② Tube disconnection

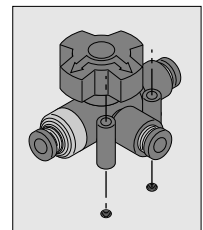
The tube is disconnected by pushing release-ring to release Lock-claws.

Make sure to stop air supply before the tube disconnection.



### 2. Installation of valve

- ① In order to fix a valve, use the fixing holes on the body to tighten with M4 screw. Refer to the dimensional drawings for the hole pitch.



## Detailed Safety Instructions

Before using PISCO products, be sure to read "Safety Instructions" and "Safety Instruction Manual" and "Common Safety Instructions for Valves".

### Caution

1. Make sure to turn the handle 90 degrees. Inadequate turning can cause a poor path connection or a lack of flow amount. Excessive turning can cause damage to Change Valve.
2. Make sure the directional arrow marked on the handle before air supply.
3. When Change Valves are used under negative pressure, place a vacuum filter on the intake side. Vacuumed dusts can cause malfunction of pneumatic systems.

## Common Safety Instructions for Valves

Before selecting or using PISCO products, read the following instructions. Read the detailed instructions for individual series as well as the instructions below.

### Warning

1. Some products have an air direction to control. Make sure to distinguish the direction by the catalog or marking on the products. Installing the product with the wrong direction may cause personal injury or property damage.
2. Do not operate manual valves by machine. It may cause damage to the products.
3. Use clean air to supply and remove drainage and dusts. Place an air filter on the upstream side of valves. Impurities in the compressed air can cause malfunction of valves.
4. Avoid any load on PISCO products such as a tensile strength, twisting, bending, dropping and excessive impacts. These may cause damage to the products.