

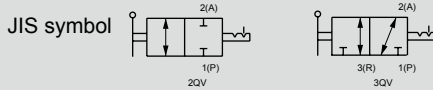
4GA/B  
M4GA/B  
MN4GA/B  
4GA/B (mastr)  
4GD/E  
M4GD/E  
MN4GD/E  
4GA4/B4  
MN3E  
MN4E  
W4GA/B2  
W4GB4  
4TB  
4L2-4/  
LMF0  
MN3S0  
MN4S0  
4SA/B0  
4KA/B  
4KA/B (mastr)  
4F  
4F (mastr)  
PV5G  
GMF  
PV5  
GMF  
PV5S-0  
3QR  
3QB  
MV3QR  
3MA/B0  
3PA/B  
P/M/B  
NP/NAP/  
NVP  
4F\*0EX  
4F\*0E  
HNV  
HSV  
2QV  
3QV  
SKH  
PCD  
Silencer  
TotAirSys  
(Total Air)  
TotAirSys  
(Gamma)  
Ending



Quick valve

# 2QV/3QV Series

● Port size: Push-in fitting  $\phi 4, \phi 6, \phi 8, \phi 10, \phi 12, R1/8$  to  $R1/2$



## Features

- Straight flow path and large effective sectional area.
- Flame-resistant resin has been adopted as a standard material. (UL94 Standards V-0 equivalent)
- Manifold enabled by optional bracket.
- 2- and 3-port valves are available.

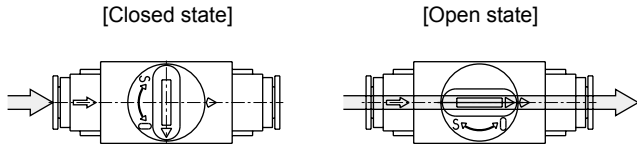
## Specifications

Descriptions	2QV/3QV
Working fluid	Air
Max. working pressure MPa	1.0 ( $\approx 150$ psi, 10 bar)
Min. working pressure kPa	-100 ( $\approx -15$ psi, -1 bar) (*1)
Proof pressure MPa	1.5 ( $\approx 220$ psi, 15 bar)
Fluid temperature $^{\circ}\text{C}$	0 ( $32^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ )
Ambient temperature $^{\circ}\text{C}$	0 ( $32^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ )
Switching angle $^{\circ}$	90
Tube used	Soft nylon tube (tube F-15**) Urethane tube (tube U-95**, NU-**)
Mounting orientation	Arbitrary

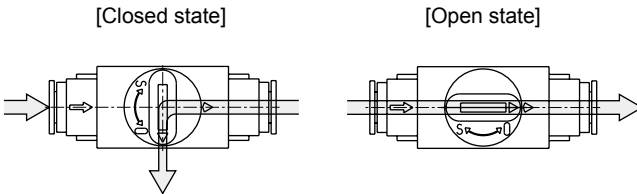
\*1: When using urethane tube (U-95\*\*, NU-\*\*) at vacuum, use an insert ring.  
\*2: Lubricant is used, so oil-prohibited specification is not available.

## Operational explanation

- 2-port valve (2QV Series)

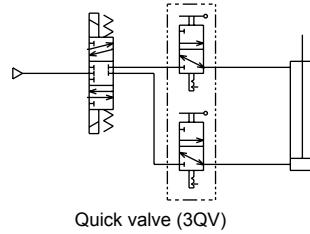


- 3-port valve (3QV Series)

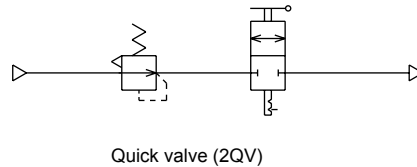


## Applications

- Shut-off valve in air cylinder circuit



- Stop valve in air blow circuit



## Clean-room specifications (Catalog No. CB-033SA)

- Anti-dust generation structure for use in cleanrooms

2QV- ..... **P70**

## Specifications for rechargeable battery (Catalog No. CC-1226A)

- Design compatible with rechargeable battery manufacturing process

2QV- ..... **P4**

## How to order

● Quick valve

**2** QV - **04-04**

Ⓐ Valve

Ⓑ Port size  
(P-port) - (A-port)

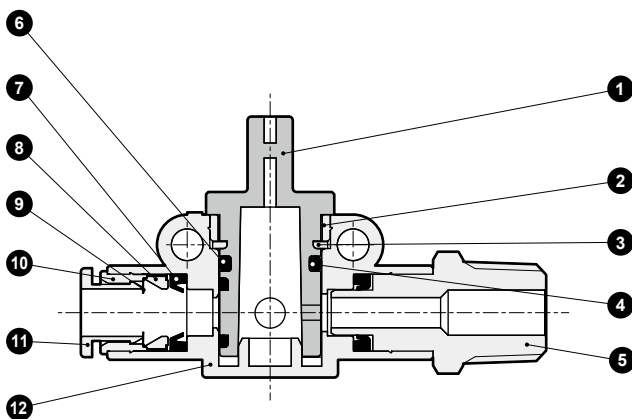
Code		Content		Bracket *
Ⓐ Valve				
	2	2-way valve		
	3	3-way valve		
Ⓑ Port size (P-port) - (A port)				Bracket *
		IN side	OUT side	
Standard	04-04	Push-in fitting φ 4 - Push-in fitting φ 4		2QV-P1
	06-06	Push-in fitting φ 6 - Push-in fitting φ 6		
	08S-08S	Push-in fitting φ 8 - Push-in fitting φ 8		
	08-08	Push-in fitting φ 8 - Push-in fitting φ 8		2QV-P2
	10-10	Push-in fitting φ10- Push-in fitting φ10		
	12-12	Push-in fitting φ12- Push-in fitting φ12		
Option	6A-04	R1/8	- Push-in fitting φ4	2QV-P1
	6A-06	R1/8	- Push-in fitting φ6	
	8A-06	R1/4	- Push-in fitting φ6	
	8A-08S	R1/4	- Push-in fitting φ8	
	10A-08	R3/8	- Push-in fitting φ8	2QV-P2
	10A-10	R3/8	- Push-in fitting φ10	
	15A-10	R1/2	- Push-in fitting φ10	
	15A-12	R1/2	- Push-in fitting φ12	
	04-6A	Push-in fitting φ 4 -	R1/8	2QV-P1
	06-6A	Push-in fitting φ 6 -	R1/8	
	06-8A	Push-in fitting φ 6 -	R1/4	
	08S-8A	Push-in fitting φ 8 -	R1/4	
	08-10A	Push-in fitting φ 8 -	R3/8	2QV-P2
	10-10A	Push-in fitting φ10-	R3/8	
	10-15A	Push-in fitting φ10-	R1/2	
12-15A	Push-in fitting φ12-	R1/2		
6A-6A	R1/8	-	R1/8	2QV-P1
8A-8A	R1/4	-	R1/4	
10A-10A	R3/8	-	R3/8	2QV-P2
15A-15A	R1/2	-	R1/2	

\* For 2- and 3-port valves, the bracket is common.

\* Note that this may differ according to the body size.

## Internal structure and parts list

⚠ Select the reverse regulator (R\*100) or reverse filter regulator (W\*100) when installing the 3QV onto the primary side of the regulator or filter regulator.



## Parts list

No.	Part name	Material
1	Rotary shaft	PBT (UL94V-0 or equivalent)
2	Stopper	Copper alloy (electroless nickeling treatment) *1
		Stainless steel *2
3	Ring	Steel
4	O-ring	Nitrile rubber
5	Nipple	Copper alloy (electroless nickeling treatment)
6	O-ring	Nitrile rubber
7	Packing	Nitrile rubber
8	Chuck holder	Polyetherimide
9	Chuck	Stainless steel
10	Outer ring	Copper alloy (electroless nickeling treatment)
11	Push ring	PBT (UL94V-0 or equivalent)
12	Body	PBT (UL94V-0 or equivalent)

\*1: The "A" dimensions in the outline drawing apply to the "18" model material.

\*2: The "A" dimensions in the outline drawing apply to the "22" model material.

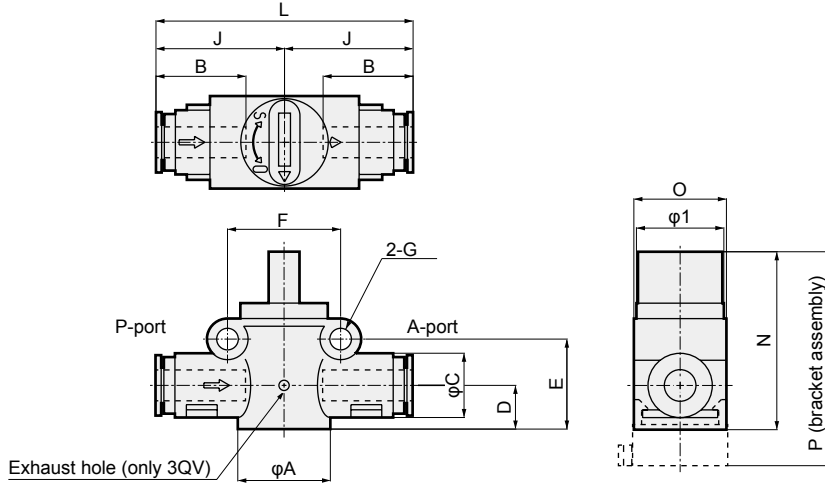
4GA/B  
M4GA/B  
MN4GA/B  
4GA/B (mastr)  
4GD/E  
M4GD/E  
MN4GD/E  
4GA4/B4  
MN3E  
MN4E  
W4GA/B2  
W4GB4  
4TB  
4L2-4/  
LMF0  
MN3S0  
MN4S0  
4SA/B0  
4KA/B  
4KA/B (mastr)  
4F  
4F (mastr)  
PV5G  
GMF  
PV5  
GMF  
PV5S-0  
3QR  
3QB  
MV3QR  
3MA/B0  
3PA/B  
P/M/B  
NP/NAP/  
NVP  
4F\*0EX  
4F\*0E  
HMV  
HSV  
2QV  
3QV  
SKH  
PCD  
Silencer  
TotAirSys  
(Total Air)  
TotAirSys  
(Gamma)  
Ending

# 2QV/3QV Series

## Dimensions



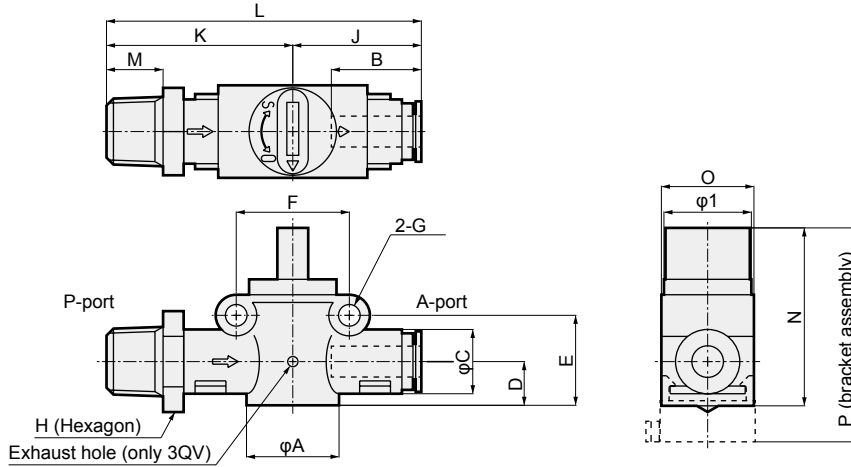
- Port size
- P-port (push-in fitting)/A-port (push-in fitting)



Compatible tube O.D. (mm)	Model No.	A	B	C	D	E	F	G	I	J	L	N	O	P	Weight (g)	Eff. X-sectional area (mm <sup>2</sup> )	
																P→A	A→R
4SA/B0	2/3 QV-04-04	18	16	12.5	8.5	17.5	22	4.2	17	25	50	34.5	18	41.5	20	4.2	1.8
4KA/B	2/3 QV-06-06		17.5													21	
4KA/B (mastr)	2/3 QV-08S-08S	22	19	14.5	10.7	22.8	26.5	4.2	17	26.5	53	39.8	22	46.8	23	10.2	4.0
4F	2/3 QV-08-08		19													34	
4F (mastr)	2/3 QV-10-10	22	21.5	17.5	10.7	22.8	26.5	4.2	17	31.5	63	39.8	22	46.8	35	22.5	4.0
PV5G GMF	2/3 QV-12-12		23													38	

\* Tolerance of effective cross-sectional area is ±10%.

- Port size
- P-port (male thread)/A-port (push-in fitting)



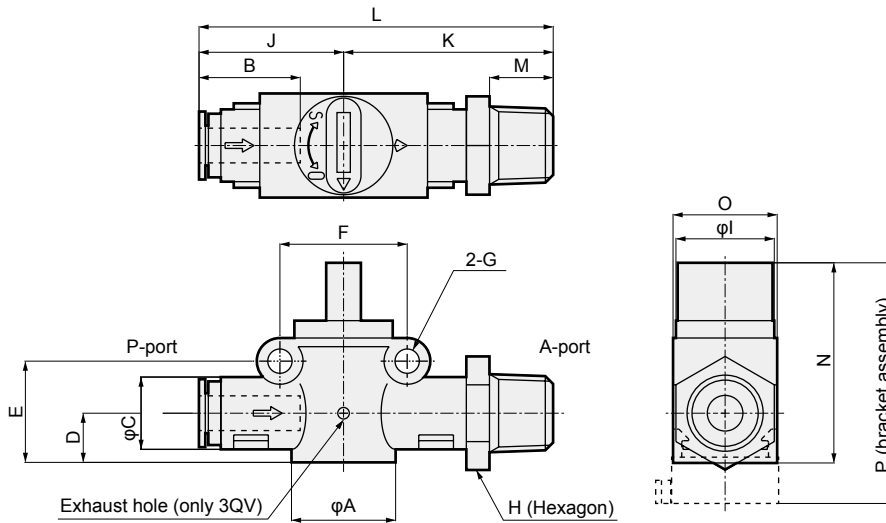
Port thread R	Compatible tube O.D. (mm)	Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight (g)	Eff. X-sectional area (mm <sup>2</sup> )	
																				P→A	A→R
2QV	φ4	2/3 QV-6A-04	18	16	12.5	8.5	17.5	22	4.2	14	17	25	33.5	58.5	8	34.5	18	41.5	26	4.2	1.8
3QV	φ6	2/3 QV-6A-06		17.5																32	
SKH	φ6	2/3 QV-8A-06	22	19	14.5	10.7	22.8	26.5	4.2	17	17	26.5	38	64.5	11	39.8	22	46.8	35	9.3	4.0
PCD	φ8	2/3 QV-8A-08S		19																40	
Silencer	φ8	2/3 QV-10A-08	22	19	17.5	10.7	22.8	26.5	4.2	17	17	31.5	44.5	76	12	39.8	22	46.8	57	16.3	4.0
TotAirSys (Total Air)	φ10	2/3 QV-10A-10		21.5																63	
TotAirSys (Gamma)	φ10	2/3 QV-15A-10	22	23	20.0	10.7	22.8	26.5	4.2	22	17	33	47.5	79	15	39.8	22	46.8	76	21.4	4.0
Ending	φ12	2/3 QV-15A-12		23																85	

\* Tolerance of effective cross-sectional area is ±10%.

### Dimensions



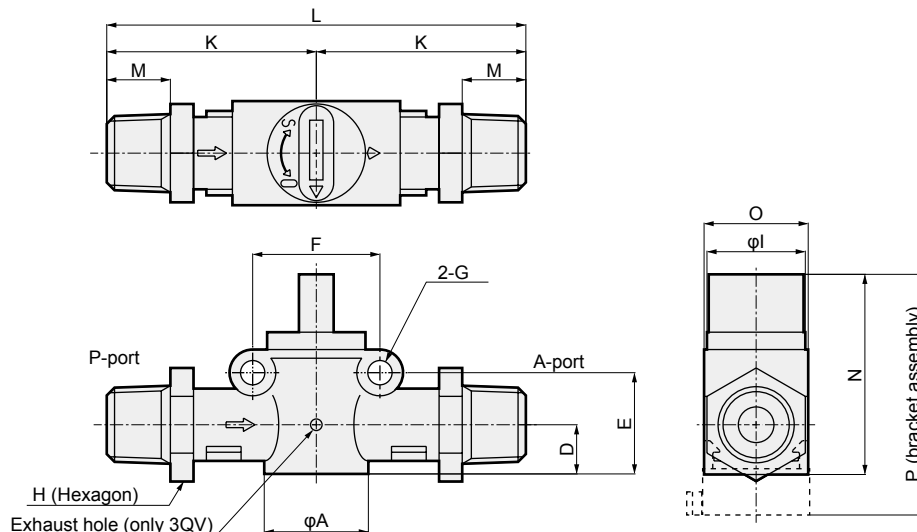
- Port size
  - P-port (push-in fitting)/A-port (male thread)



Compatible tube O.D. (mm)	Port thread R		Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight (g)	Eff. X-sectional area (mm <sup>2</sup> )				
	P-port	A-port		P→A	A→R																				
φ4	1/8	$\frac{2}{3}$	QV-04-6A	18	16	12.5	8.5	17.5	22	4.2	14	17	25	33.5	58.5	8	34.5	18	41.5	26	3.5	1.8			
φ6	1/8	$\frac{2}{3}$	QV-06-6A		17.5																		19	14.5	17
φ6	1/4	$\frac{2}{3}$	QV-06-8A		19	17	19	17	19	17	17	17	17	17	17	17	17	17	17				17	35	9.3
φ8	1/4	$\frac{2}{3}$	QV-08S-8A	22	19	17.5	10.7	22.8	26.5	4.2	17	17	17	31.5	44.5	76	12	39.8	22	46.8	40	10.2	4.0		
φ8	3/8	$\frac{2}{3}$	QV-08-10A		21.5																			19	19
φ10	3/8	$\frac{2}{3}$	QV-10-10A		21.5	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19				19	63
φ10	1/2	$\frac{2}{3}$	QV-10-15A	23	20.0	20.0	20.0	20.0	20.0	20.0	22	22	33	49	82	15	15	15	15	15	85	21.4	21.4		
φ12	1/2	$\frac{2}{3}$	QV-12-15A																					23	23

\* Tolerance of effective cross-sectional area is ±10%.

- Port size
  - P-port (male thread)/A-port (male thread)



Port thread R		Model No.	A	D	E	F	G	H	I	K	L	M	N	O	P	Weight (g)	Eff. X-sectional area (mm <sup>2</sup> )				
P-port	A-port		P→A	A→R																	
1/8	1/8	$\frac{2}{3}$	QV-6A-6A	18	8.5	17.5	22	4.2	14	17	33.5	67	8	34.5	18	41.5	42	9.5	1.8		
1/4	1/4	$\frac{2}{3}$	QV-8A-8A																	17	17
3/8	3/8	$\frac{2}{3}$	QV-10A-10A	22	10.7	22.8	26.5	4.2	19	17	44.5	89	12	39.8	22	46.8	90	21.4	4.0		
1/2	1/2	$\frac{2}{3}$	QV-15A-15A																	22	22

\* Tolerance of effective cross-sectional area is ±10%.

- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (mastr)
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (mastr)
- 4F
- 4F (mastr)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3QR
- 3QB
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/NVP
- 4F\*0EX
- 4F\*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- TotAirSys (Total Air)
- TotAirSys (Gamma)
- Ending

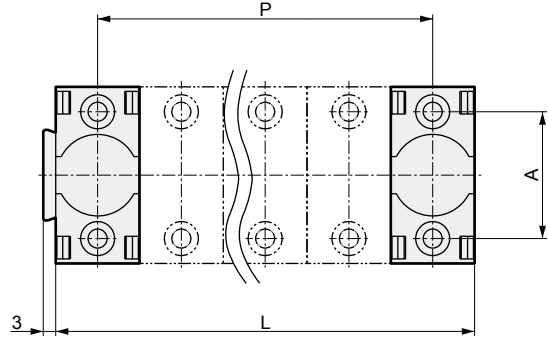
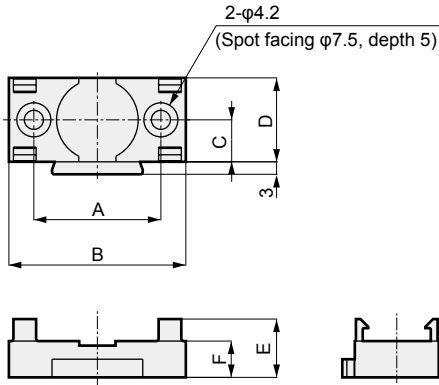
# 2QV/3QV Series



## Dimensions

● Dedicated bracket

● Mounting pitch dimension for manifold



Model No.	A	B	C	D	E	F	P	L	Subject A dimension	Weight g
2QV-P1	28	39	9.25	18.5	13	8	D × (n-1)	D × n	18	5.4
2QV-P2	32	44	11.25	22.5	12.5	8			22	7.2

n = Station No.

## Introduction of custom order product

A quick valve with air lamp is available as a customized order part. Contact CKD for details. Note: Note that the φ12 diameter is not available.

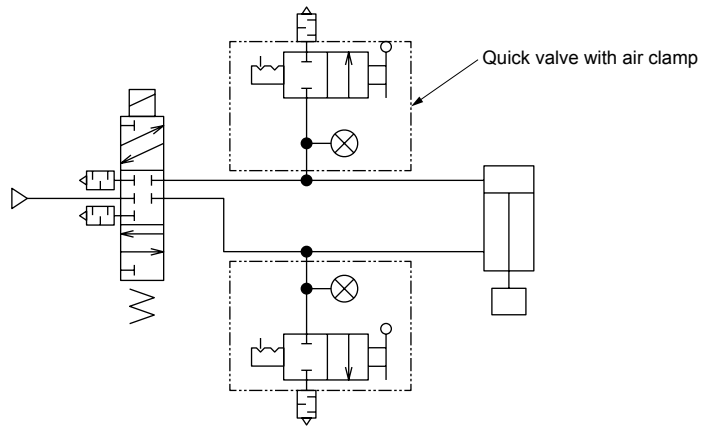
## Specifications

1 MPa = 10 bar

Descriptions	Air lamp
Working fluid	Air
Working pressure MPa	0.05 (≈7.3 psi) to 0.8 (≈120 psi)
Fluid temperature °C	0 (32°F) to 60 (140°F)
Ambient temperature °C	0 (32°F) to 60 (140°F)
Display color	Red, green

## Applications

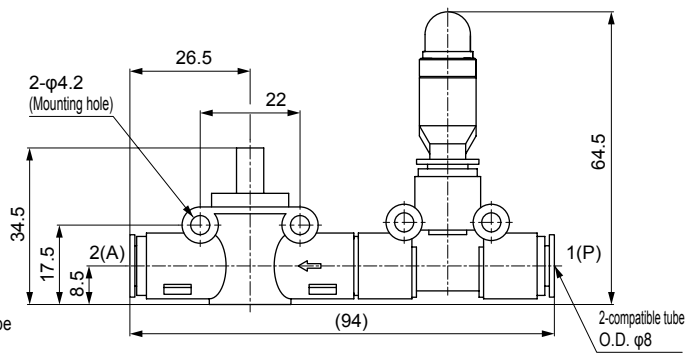
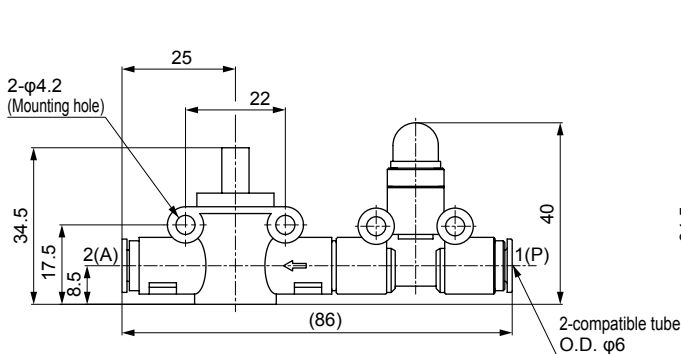
● Cylinder residual pressure exhaust



## Example of assembly

● When using 2QV-06-06 with air lamp

● When using 2QV-08S-08S with air lamp



● Types 3QV-06 to 10 with air lamp are also available. Contact CKD for details.