

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB
With sensor
4GD/E
M4GD/E
MN4GD/E
4GA/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HNV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending



Quick valve

2QV/3QV Series

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

JIS symbol



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

Item	2QV/3QV
Working fluid	Air
Max. working pressure MPa	1.0 (≈ 150 psi, 10 bar)
Min. working pressure kPa	-100 (≈ -15 psi, -1 bar) (*1)
Proof pressure MPa	1.5 (≈ 220 psi, 15 bar)
Fluid temperature $^{\circ}\text{C}$	0 (32°F) to 60 (140°F)
Ambient temperature $^{\circ}\text{C}$	0 (32°F) to 60 (140°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.

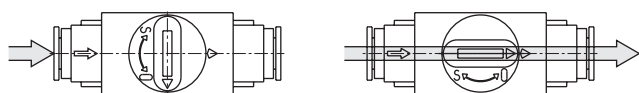
*2: Lubricant is used, so oil-prohibited specification is not available.

Operational explanation

- 2-port valve (2QV Series)

[Closed state]

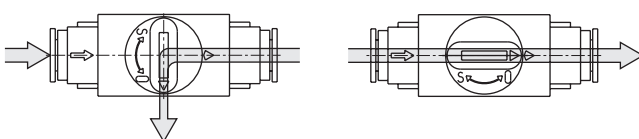
[Open state]



- 3-port valve (3QV Series)

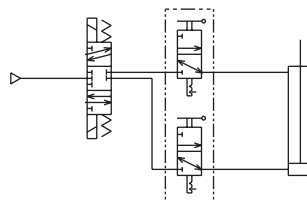
[Exhaust status]

[Air supply status]



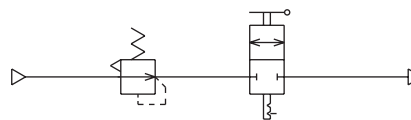
Applications

- Residual pressure exhaust valve in the air cylinder circuit



Quick valve (3QV)

- Stop valve in air blow circuit



Quick valve (2QV)

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

A Valve

B Port size
(P-port) - (A-port)

Code		Description	Bracket *
A Valve			
2	2-way valve		
3	3-way valve		
B Port size (P-port) - (A port)			Bracket *
	IN side - OUT side		
Standard	04-04	Push-in fitting ø 4 - Push-in fitting ø4	2QV-P1
	06-06	Push-in fitting ø 6 - Push-in fitting ø6	
	08S-08S	Push-in fitting ø 8 - Push-in fitting ø8	
	08-08	Push-in fitting ø 8 - Push-in fitting ø8	2QV-P2
	10-10	Push-in fitting ø10- Push-in fitting ø10	
	12-12	Push-in fitting ø12- Push-in fitting ø12	
Option	6A-04	R1/8 - Push-in fitting ø4	2QV-P1
	6A-06	R1/8 - Push-in fitting ø6	
	8A-06	R1/4 - Push-in fitting ø6	
	8A-08S	R1/4 - Push-in fitting ø8	
	10A-08	R3/8 - Push-in fitting ø8	2QV-P2
	10A-10	R3/8 - Push-in fitting ø10	
	15A-10	R1/2 - Push-in fitting ø10	
	15A-12	R1/2 - Push-in fitting ø12	
	04-6A	Push-in fitting ø 4 - R1/8	2QV-P1
	06-6A	Push-in fitting ø 6 - R1/8	
	06-8A	Push-in fitting ø 6 - R1/4	
	08S-8A	Push-in fitting ø 8 - R1/4	
	08-10A	Push-in fitting ø 8 - R3/8	2QV-P2
	10-10A	Push-in fitting ø10- R3/8	
	10-15A	Push-in fitting ø10- R1/2	
	12-15A	Push-in fitting ø12- R1/2	
	6A-6A	R1/8 - R1/8	2QV-P1
	8A-8A	R1/4 - R1/4	
	10A-10A	R3/8 - R3/8	
	15A-15A	R1/2 - R1/2	2QV-P2

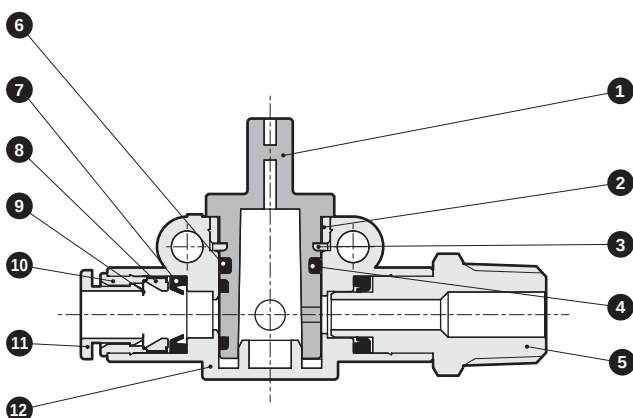
* For 2- and 3-port valves, the bracket is common.

* 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 nickel plating treatment) *1
		Stainless steel *2
3	Ring	Steel
4	O-ring	Nitrile rubber
5	Nipple	Copper alloy (electroless nickel plating treatment)
6	O-ring	Nitrile rubber
7	Packing	Nitrile rubber
8	Chuck holder	Polyetherimide
9	Chuck	Stainless steel
10	Outer ring	Copper alloy (electroless nickel plating 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.

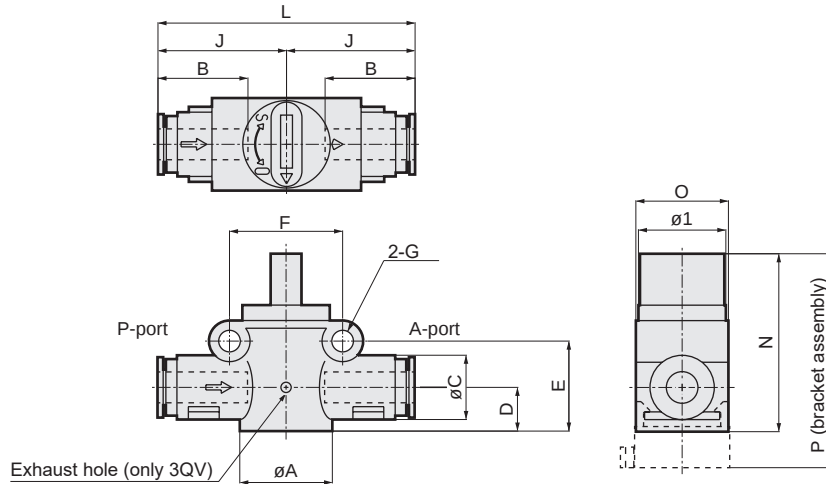
*2: The "A" dimensions in the outline drawing apply to the "22" model material.

2QV/3QV Series

Dimensions



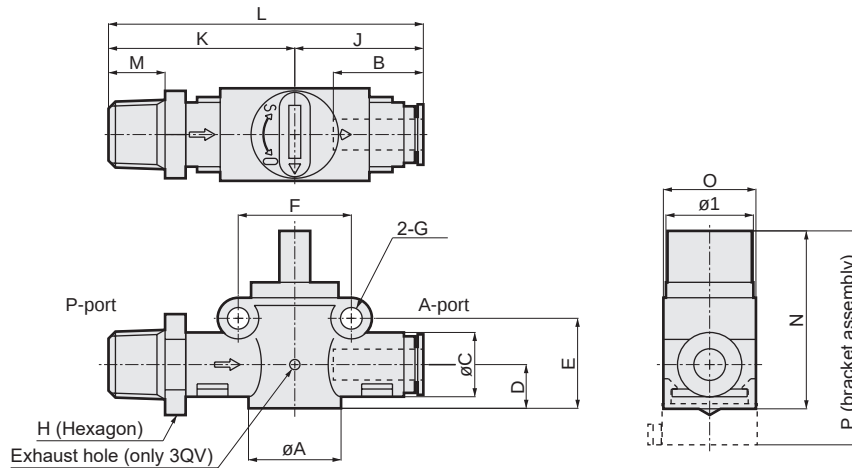
- Port size
- P-port (push-in fitting)/A-port (push-in fitting)



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 ²)	
P-port	A-port																P→A	A→R
ø4	ø4	$\frac{2}{3}$ 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
ø6	ø6	$\frac{2}{3}$ QV-06-06		17.5												21	9.3	
ø8	ø8	$\frac{2}{3}$ QV-08S-08S		19	14.5											23	10.2	
ø8	ø8	$\frac{2}{3}$ QV-08-08	22	19	17.5	10.7	22.8	26.5	4.2	17	31.5	63	39.8	22	46.8	34	17.5	4.0
ø10	ø10	$\frac{2}{3}$ QV-10-10		21.5												35	22.5	
ø12	ø12	$\frac{2}{3}$ QV-12-12		23	20											38	22.5	

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

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



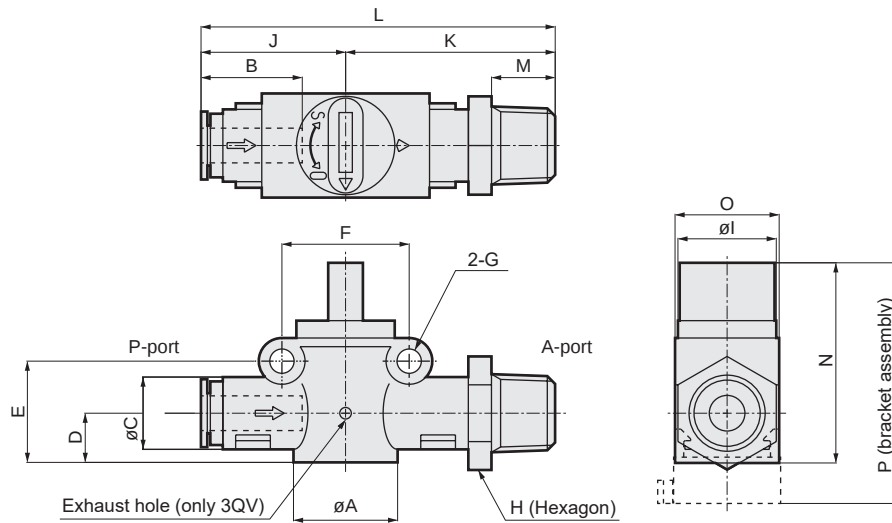
Port thread R	Compatible tube O.D. (mm)		Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight (g)	Eff. X-sectional area (mm ²)	
P-port	A-port	P→A																			A→R	
1/8	ø4	$\frac{2}{3}$ QV-6A-04	18	16	12.5	8.5	17.5	22	4.2	14	17	25	33.5	58.5	8	34.5	18	41.5	26	4.2	1.8	
1/8	ø6	$\frac{2}{3}$ QV-6A-06		17.5										32	9.3							
1/4	ø6	$\frac{2}{3}$ QV-8A-06								35		9.3										
1/4	ø8	$\frac{2}{3}$ QV-8A-08S		19	14.5					40		10.2										
3/8	ø8	$\frac{2}{3}$ 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	
3/8	ø10	$\frac{2}{3}$ QV-10A-10		19									63	21.4								
1/2	ø10	$\frac{2}{3}$ QV-15A-10		21.5						76		21.4										
1/2	ø12	$\frac{2}{3}$ QV-15A-12		23	20.0					85		21.4										

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

Dimensions



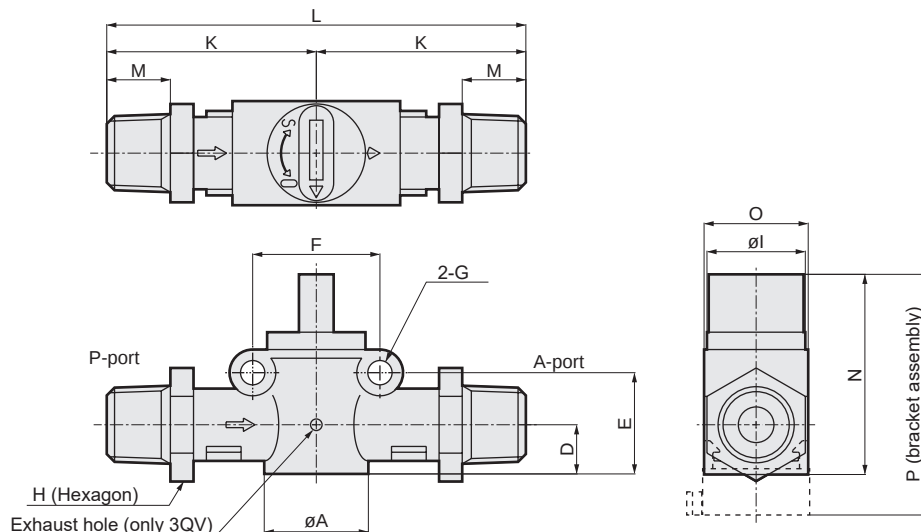
- Port size
 - P-port (push-in fitting)/A-port (male thread)



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 (mm²)	
P-port	A-port																			P→A	A→R
ø4	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
ø6	1/8	$\frac{2}{3}$ QV-06-6A		17.5									32	9.3							
ø6	1/4	$\frac{2}{3}$ QV-06-8A		19									14.5	35	9.3						
ø8	1/4	$\frac{2}{3}$ QV-08S-8A												40	10.2						
ø8	3/8	$\frac{2}{3}$ QV-08-10A	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	15.8	4.0
ø10	3/8	$\frac{2}{3}$ QV-10-10A		19						63			21.4								
ø10	1/2	$\frac{2}{3}$ QV-10-15A		21.5						76			21.4								
ø12	1/2	$\frac{2}{3}$ QV-12-15A		23						20.0			85	21.4							

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

- 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 (mm²)	
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		38	76	11				48	9.5	
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		47.5	95	15				116	21.4	

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

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB
With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HNV
HSV
2QV
3QV
SKH
Silencer
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Ending

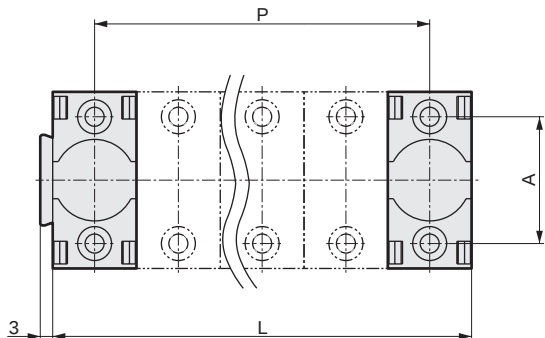
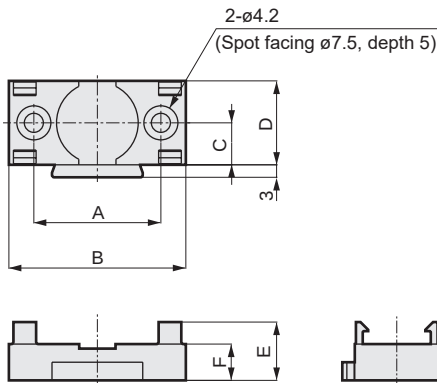
2QV/3QV Series



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	Dx(n-1)	D x 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. Contact CKD for details.
Note: Note that the ø12 diameter is not available.

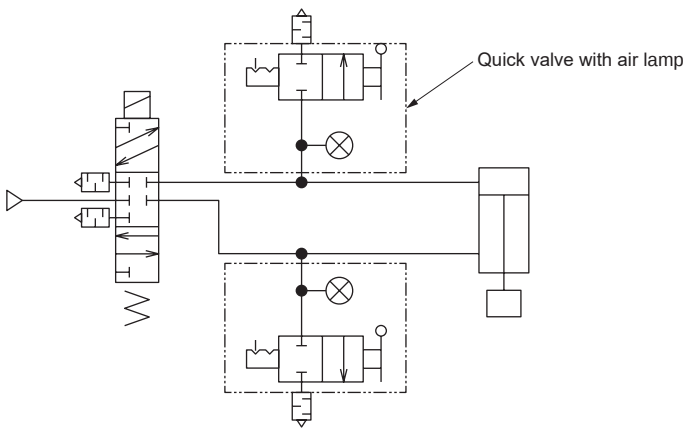
Specifications

1 MPa = 10 bar

Item	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

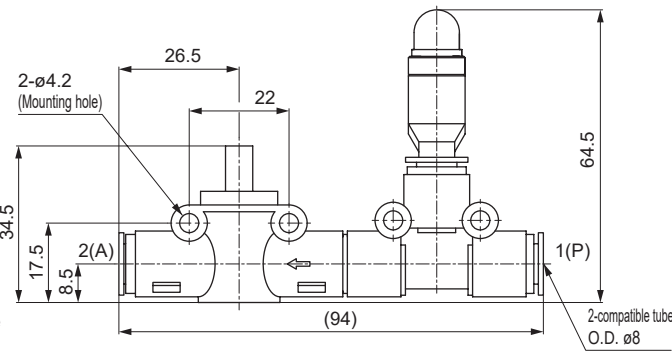
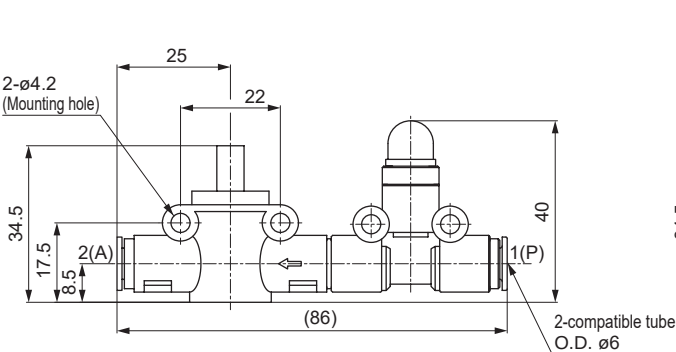
·Cylinder residual pressure exhaust



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.