

Finger Valve

Series VHK

Large effective area: 2.0 to 17.5 mm²

Small knob operating force: 0.04 to 0.14 N·m

Poppet valve construction seldom suffers seal defection.

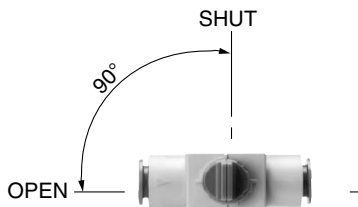
The series begins with the min. tubing O.D. of ø4.

Selection from four types in accordance with the piping specifications

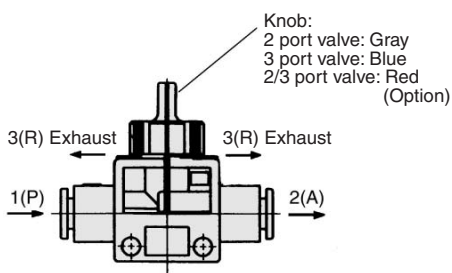
The 3 port valve discharges residual pressure from 2(A) with the handle set at SHUT.
(There is no exhaust port.)



The valve direction clearly indicates whether the valve is open or closed. (SHUT-OPEN: Counterclockwise)



2 port valves and 3 port valves can be distinguished by the color of their knobs.

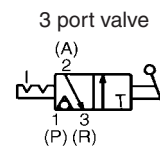
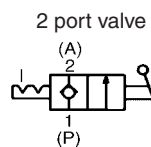


Specifications

Valve	2/3 port valves
Fluid	Air
Proof pressure	1.5 MPa
Max. operating pressure	1.0 MPa
Operating vacuum pressure *□	-100 kPa
Ambient temperature and operating fluid temperature	0 to 60°C
Applicable tubing material ^{Note)}	Nylon, Soft nylon, Polyurethane
Accessory (Option)	Bracket

Note) Use caution about the maximum operating pressure when soft nylon or polyurethane tubing is used. (Refer to "Best Pneumatics Vol. 15".)
* Use VHK2 (2 port valve) for vacuum application.

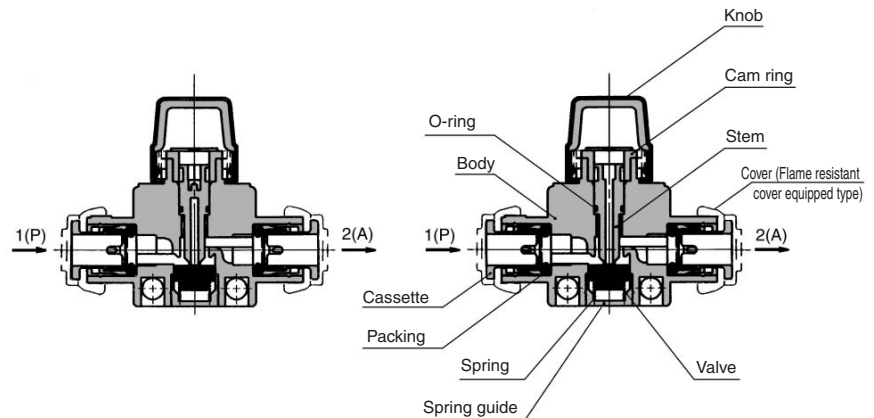
JIS Symbol



Construction

2 port valve: Series VHK2

3 port valve: Series VHK3



Component Parts

Body	Standard type	PBT
	Flame resistant type	Flame resistant PBT (UL standard V-0)
Knob	Standard type	PBT
	Flame resistant type	Flame resistant PBT (UL standard V-0)
Cover	Flame resistant CR	
Cam ring	POM	
Stem	POM	
Spring guide	Flame resistant CR (UL standard V-0) For flame resistant type with cover only	
Spring	Stainless steel	
Packing, O-ring, Valve	NBR	

How to Order

Flame resistant type VHK **2** — **02S** — **02S** **R** **L**

Flame resistant type VHK **2** **R** — **04F** — **04F** **R** **L** **C**

Valve model

2	2 port valve
3	3 port valve

Flame resistant type

04F	ø4
06F	ø6
08F	ø8
10F	ø10
12F	ø12
M5	M5 x 0.8
01S	R 1/8
02S	R 1/4
03S	R 3/8
04S	R 1/2

1(P) port size

04F	ø4
06F	ø6
08F	ø8
10F	ø10
12F	ø12
M5	M5 x 0.8
01S	R 1/8
02S	R 1/4
03S	R 3/8
04S	R 1/2

2(A) port size

04F	ø4
06F	ø6
08F	ø8
10F	ø10
12F	ø12
M5	M5 x 0.8
01S	R 1/8
02S	R 1/4
03S	R 3/8
04S	R 1/2

Bracket

Nil	None
L	With L-bracket

* Bracket and screws are attached.

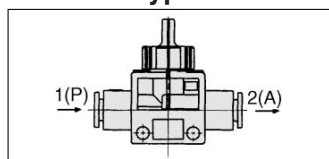
Flame resistant cover

Nil	No
C	With cover (For One-touch fitting only)

1(P) nob color

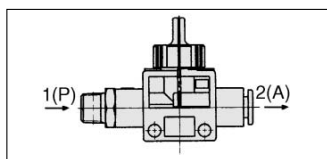
Nil (Standard)	2 port valve	Gray
	3 port valve	Blue
R (Option)	2 port valve	Red
	3 port valve	Red

Standard Type



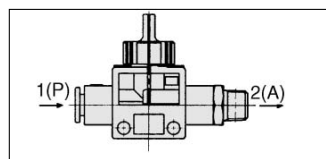
1(P): One-touch fitting
2(A): One-touch fitting

1(P)	2(A)				
	Applicable tubing O.D. (mm)				
ø4	●				
ø6	●	●			
ø8		●	●		
ø10			●	●	
ø12				●	●



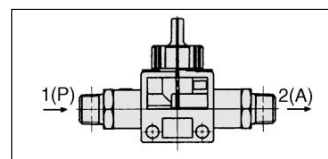
1(P): Male thread
2(A): One-touch fitting

1(P)	2(A)				
	Applicable tubing O.D. (mm)				
M5	●	●			
1/8	●	●	●		
1/4		●	●	●	●
3/8		●	●	●	●
1/2				●	●



1(P): One-touch fitting
2(A): Male thread

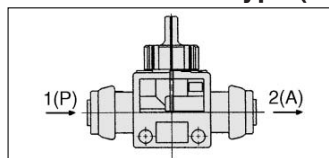
1(P)	2(A)				
	Port size R				
ø4	●	●			
ø6	●	●	●	●	
ø8		●	●	●	
ø10			●	●	●
ø12			●	●	●



1(P): Male thread
2(A): Male thread

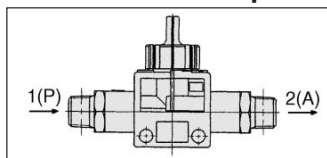
1(P)	2(A)				
	Port size R				
M5	●				
1/8	●	●			
1/4		●	●		
3/8			●	●	
1/2				●	●

Flame Resistant Type (UL-94 Standard V-0 equivalent)



1(P): One-touch fitting
2(A): One-touch fitting

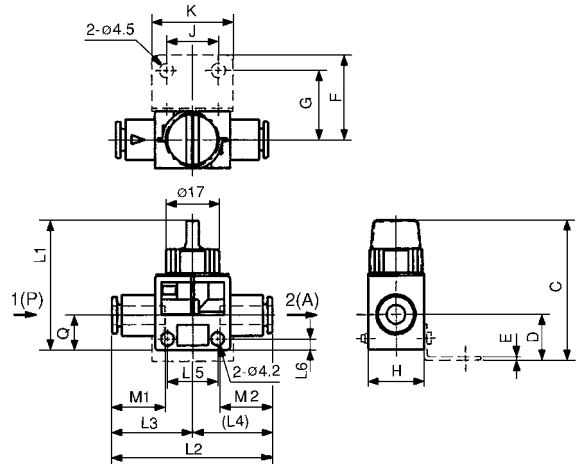
1(P)	2(A)				
	Applicable tubing O.D. (mm)				
ø4	●				
ø6		●			
ø8			●		
ø10				●	
ø12					●



1(P): Male thread
2(A): Male thread

1(P)	2(A)			
	Port size R			
1/8	●			
1/4		●		
3/8			●	
1/2				●

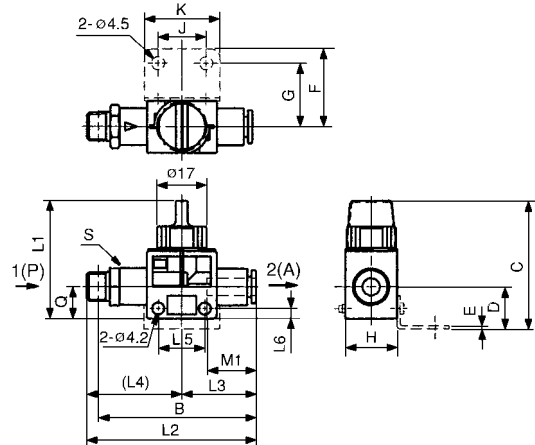
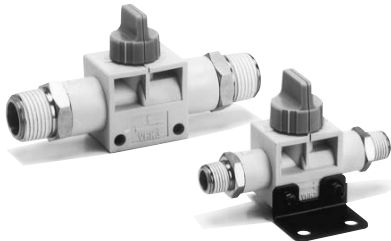
1(P)/2(A): One-touch Fitting



Applicable tubing O. D. (mm)		Model	H	L1	L2	L3	L4	L5	L6	M1	M2	Q	Effective area (mm ²)		Weight (g)	Bracket mounting dimensions							
1(P)	2(A)												1(P) R 2(A)	2(A) R 3(R)		Bracket assembly no.	C	D	E	F	G	J	K
4	4	VHK□-04F-04F	18	41	47.6	23.8	23.8	16.5	3.5	15.8	15.8	11	3.4	1.2	15	VHK-B1A	44.5	14.5	1	27	22	16.5	26
6	4	VHK□-06F-04F	18	41	48	24.3	23.7	16.5	3.5	16.8	15.8	11	5.1	1.2	15	VHK-B1A	44.5	14.5	1	27	22	16.5	26
	6	VHK□-06F-06F			48.6		24.3				16.8		7.2		16								
8	6	VHK□-08F-06F	18	41	50.5	26.2	24.3	16.5	3.5	18.7	16.8	11	9	1.2	16	VHK-B1A	44.5	14.5	1	27	22	16.5	26
	8	VHK□-08F-08F			52.4		26.2				18.7		9.7		17								
10	8	VHK□-10F-08F	22	46	58.5	30.5	28	21.5	4	20.8	18.7	14	13.7	3.2	28	VHK-B2A	49	17	1	30	25	21.5	31
	10	VHK□-10F-10F			61		30.5				20.8		16.1		29								
12	10	VHK□-12F-10F	22	46	62	31.5	30.5	21.5	4	21.8	20.8	14	17	3.2	31	VHK-B2A	49	17	1	30	25	21.5	31
	12	VHK□-12F-12F			63		31.5				21.8		17.5		32								

* 3 port valve

1(P): Male Thread, 2 (A): One-touch Fitting



Connection thread R	Applicable tubing O. D. (mm)	Model	H	L1	L2	L3	L4	L5	L6	M1	Q	Effective area (mm ²)		Weight (g)	B**	S (Width across flats)	Bracket mounting dimensions								
												1(P) R 2(A)	2(A) R 3(R)†				Bracket assembly no.	C	D	E	F	G	J	K	
1(P)	2(A)																								
M5	4	VHK□-M5-04F	18	41	52.9	23.8	29.1			15.8		2.0	1.2	19	49	11	VHK-B1A	44.5	14.5	1	27	22	16.5	26	
	6	VHK□-M5-06F			53.9	24.3	29.6	16.5	3.5	16.8	11			21	50	13									
1/8	4	VHK□-01S-04F			55.4	23.8	31.6			15.8		3.4		21	51	11	VHK-B1A	44.5	14.5	1	27	22	16.5	26	
	6	VHK□-01S-06F	18	41	56.9	24.3	32.6	16.5	3.5	16.8	11	7.2	1.2	23	53	13									
	8	VHK□-01S-08F			62.2	26.2	36			18.7		9.7		31	58	17									
1/4	6	VHK□-02S-06F			60.4	24.3	36.1			16.8		7.2		31	54	14	VHK-B1A	44.5	14.5	1	27	22	16.5	26	
	8	VHK□-02S-08F	18	41	65.2	26.2	39	16.5	3.5	18.7	11	9.7	1.2	32	59	17									
	10	VHK□-02S-10F			73.8	30.5	43.3			20.8		16.1		49	68	19	VHK-B2A	49	17		30	25	21.5	31	
	12	VHK□-02S-12F	22	46	76.3	31.5	44.8	21.5	4	21.8	14	17.5	3.2	63	70	22									
3/8	6	VHK□-03S-06F	18	41	62.4	24.3	38.1			16.8		7.2	1.2	41	56		VHK-B1A	44.5	11.5	1	27	22	16.5	26	
	8	VHK□-03S-08F			66.2	26.2	40	16.5	3.5	18.7	11	9.7		40	60	17									
	10	VHK□-03S-10F			74.8	30.5	44.3			20.8		16.1		51	68	19	VHK-B2A	49	17		30	25	21.5	31	
	12	VHK□-03S-12F	22	46	77.3	31.5	45.8	21.5	4	21.8	14	17.5	3.2	64	71	22									
1/2	10	VHK□-04S-10F			78.2	30.5	47.7			20.8		16.1		72	70		VHK-B2A	49	17	1	30	25	21.5	31	
	12	VHK□-04S-12F	22	46	80.2	31.5	48.7	21.5	4	21.8	14	17.5	3.2	70	72	22									

* 3 port valve

** Reference dimensions after insertion of R thread.