



Base mounted

Body ported

## Specifications

<b>Fluid</b>		Air
<b>Operating pressure range (MPa)</b>	2 position single	0.15 to 0.9
	2 position double	0.1 to 0.9
	3 position	0.15 to 0.9
<b>Pilot pressure range (MPa)</b>	2 position single	(0.4 x P + 0.1) to 0.9, P: Operating pressure
	2 position double	0.1 to 0.9
	3 position	0.15 to 0.9
<b>Ambient and fluid temperature (°C)</b>		-10 to 60 (No freezing. Refer to page 5.)
<b>Lubrication</b>		Not required
<b>Mounting orientation</b>		Free
<b>Impact/Vibration resistance (m/s<sup>2</sup>)<sup>Note</sup></b>		300/50

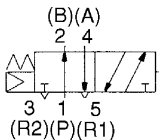


Note) Impact resistance: No malfunction from test using drop impact tester, to axis and right angle directions of main valve, each one time when pilot signal is ON and OFF. (Valve in the initial stage)

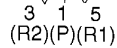
Vibration resistance: No malfunction from test with 45 to 2000 Hz one sweep, to axis and right angle direction of main valve, each one time when pilot signal ON and OFF. (Value in the initial stage)

### JIS symbol

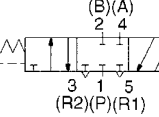
2 position single



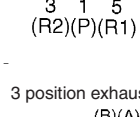
2 position double



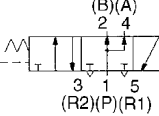
3 position closed center



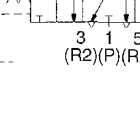
3 position exhaust center



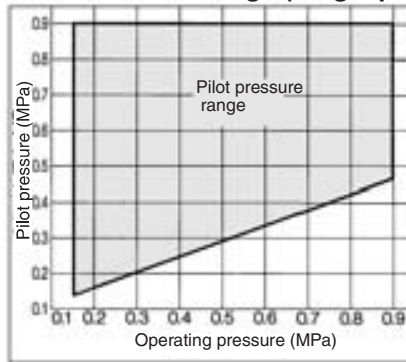
3 position pressure center



3 position pressure center



### Pilot Pressure Range (Single pilot)



### ⚠ Cautions

Be sure to read this before handling. Refer to front matters 58 and 59 for Safety Instructions and pages 3 to 7 for 3/4/5 Port Solenoid Valve Precautions.

### Flow Characteristics/Mass

Valve model	Function	Port size	Flow characteristics						Pilot port size	Mass (kg)
			1→4/2(P→A/B)			4/2→5/3(A/B→EA/EB)				
			C [dm <sup>3</sup> /(s·bar)]	b	Cv	C [dm <sup>3</sup> /(s·bar)]	b	Cv		
Body ported	VFA5 <sub>2</sub> <sup>1</sup> 20-02	2 position single	7.1	0.46	1.9	7.7	0.51	2.2	1/8	0.33
		2 position double	7.1	0.46	1.9	7.7	0.51	2.2		0.34
	VFA5 <sub>5</sub> <sup>3</sup> 420-02-X1	3 position closed center	6.7	0.46	1.8	6.6	0.41	1.8		0.43
		3 position exhaust center	7.1	0.42	1.9	8.0{7.4}	0.45{0.47}	2.2{2.1}		0.43
		3 position pressure center	6.8{2.7}	0.51{0.50}	2.0{0.78}	5.7	0.37	1.4		0.43
	VFA5 <sub>5</sub> <sup>3</sup> 420-03-X1	2 position single	8.8	0.44	2.4	10	0.49	2.9		0.33
		2 position double	8.8	0.44	2.4	10	0.49	2.9		0.34
		3 position closed center	7.5	0.43	2.0	7.5	0.38	1.9		0.43
	VFA5 <sub>5</sub> <sup>3</sup> 420-03-X1	3 position exhaust center	8.3	0.40	2.2	10{8.7}	0.48{0.46}	3.0{2.4}		0.43
3 position pressure center		9.2{3.0}	0.50{0.49}	2.6{0.85}	6.1	0.35	1.6	0.43		
Base mounted <sup>(1)</sup>		VFA5 <sub>2</sub> <sup>1</sup> 44-02	2 position single	7.3	0.49	2.1	7.3	0.50	2.0	0.51
	2 position double		7.3	0.49	2.1	7.3	0.50	2.0	0.52	
	VFA5 <sub>5</sub> <sup>3</sup> 444-02-X1	3 position closed center	6.6	0.35	1.7	6.3	0.31	1.6	0.66	
		3 position exhaust center	7.4	0.33	1.9	8.1{7.4}	0.35{0.34}	2.1{1.9}	0.66	
		3 position pressure center	8.0{2.9}	0.35{0.48}	2.1{0.85}	5.6	0.31	1.5	0.66	
	VFA5 <sub>5</sub> <sup>3</sup> 444-03-X1	2 position single	8.4	0.34	2.2	8.9	0.29	2.3	0.51	
2 position double		8.4	0.34	2.2	8.9	0.29	2.3	0.52		
3 position closed center		7.3	0.34	2.0	7.1	0.28	1.8	0.66		
VFA5 <sub>5</sub> <sup>3</sup> 444-04-X1	3 position exhaust center	8.1	0.27	2.0	14{8.3}	0.26{0.31}	3.4{2.2}	0.66		
	3 position pressure center	8.1{2.5}	0.33{0.48}	2.0{0.74}	5.7	0.31	1.4	0.66		
	2 position single	9.4	0.43	2.7	12	0.32	3.0	0.56		
VFA5 <sub>5</sub> <sup>3</sup> 444-04-X1	2 position double	9.4	0.43	2.7	12	0.32	3.0	0.57		
	3 position closed center	7.1	0.41	2.1	7.4	0.32	2.0	0.71		
	3 position exhaust center	8.6	0.39	2.4	13{8.9}	0.21{0.40}	3.1{2.5}	0.71		
	3 position pressure center	11{2.6}	0.18{0.47}	2.6{0.78}	6.1	0.35	1.6	0.71		

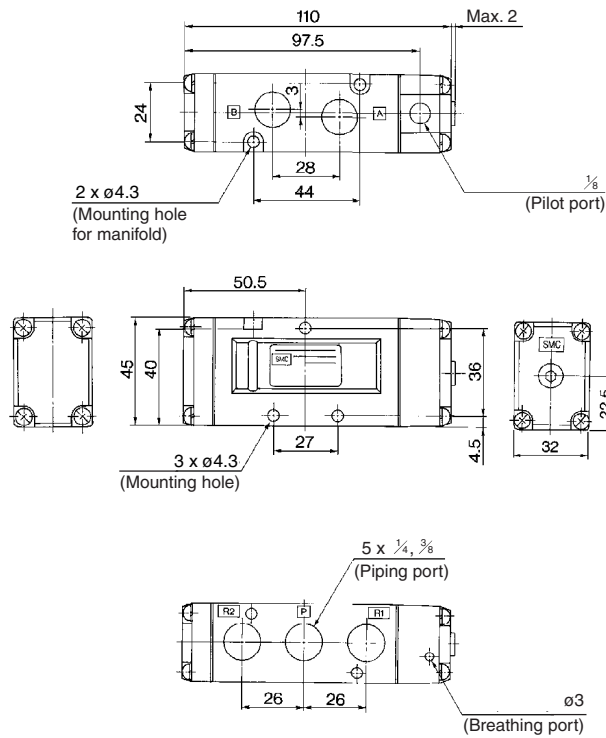


Note 1) With sub-plate  
Note 2) { } : Normal position

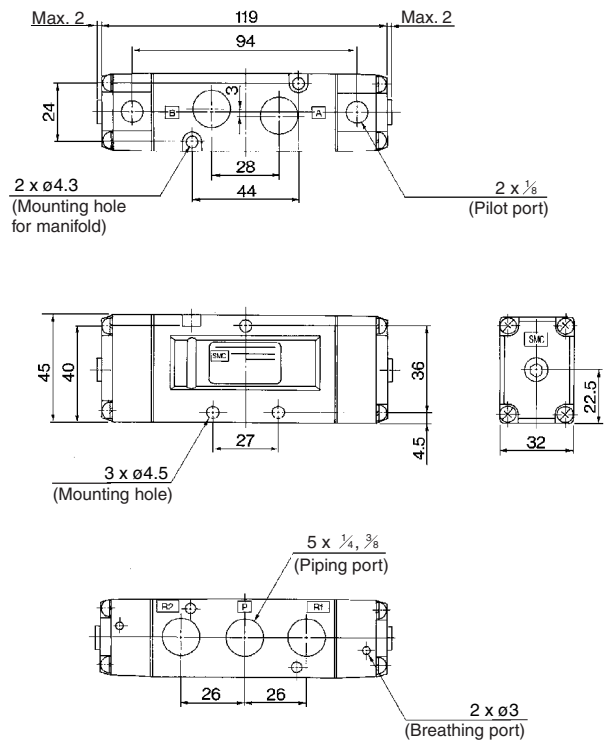
# 5 Port Air Operated Valve *Series VFA5000*

## Dimensions: Body Ported

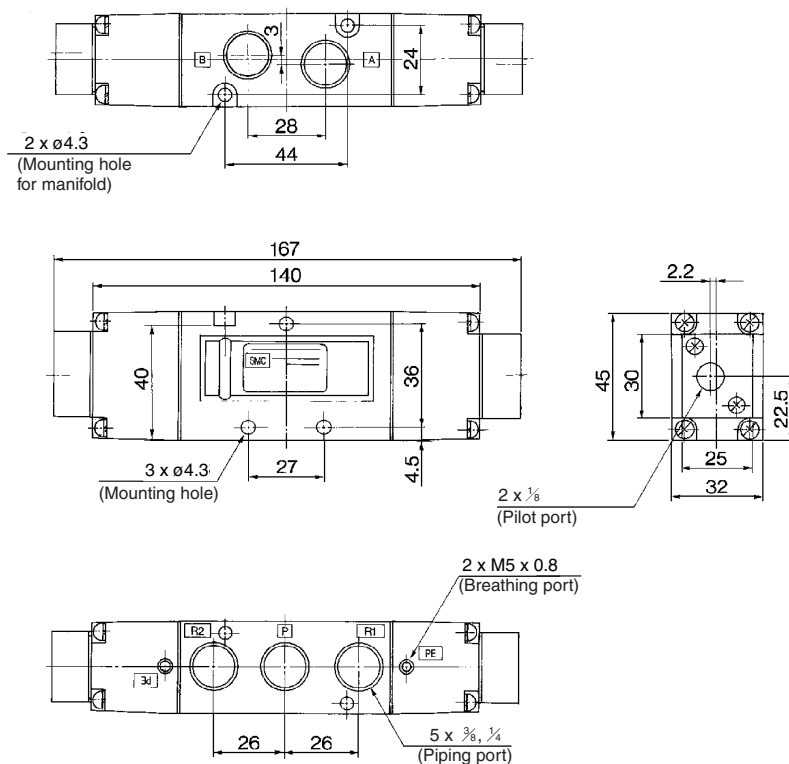
### 2 position single: VFA5120-<sup>02</sup>/<sub>03</sub>



### 2 position double: VFA5220-<sup>02</sup>/<sub>03</sub>



### 3 position closed center/exhaust center/pressure center: VFA5<sup>3</sup>/<sub>4</sub>20-<sup>02</sup>/<sub>03</sub>-X1



SYA

SYJA

VZA

VFA

VFRA

V□A