

4/5 Port Air Operated Valve

Series VSA4□20

Model

Valve model	Body size	Function	Port size Rc	Flow characteristics						Pilot port size	Note) Mass (kg)
				P→A/B			A/B→EA/EB				
				C [dm ³ (s·bar)]	b	Cv	C [dm ³ (s·bar)]	b	Cv		
VSA4120-01	1/4	2 position single	1/8	4.1	0.30	0.95	4.2	0.34	1.0	Rc 1/8	0.60
VSA4120-02			1/4	5.9	0.30	1.3	5.1	0.47	1.2	Rc 1/8	
VSA4120-03			3/8	6.5	0.33	1.5	5.6	0.51	1.4	Rc 1/8	
VSA4220-01	1/4	2 position double	1/8	4.1	0.30	0.95	4.2	0.34	1.0	Rc 1/8	0.70
VSA4220-02			1/4	5.9	0.30	1.3	5.1	0.47	1.2	Rc 1/8	
VSA4220-03			3/8	6.5	0.33	1.5	5.6	0.51	1.4	Rc 1/8	
VSA4320-01	1/4	3 position closed center	1/8	4.0	0.31	0.95	4.1	0.34	1.0	Rc 1/8	0.86
VSA4320-02			1/4	6.0	0.28	1.4	5.0	0.44	1.2	Rc 1/8	
VSA4320-03			3/8	6.6	0.31	1.5	5.4	0.48	1.3	Rc 1/8	
VSA4420-01	1/4	3 position exhaust center	1/8	4.0	0.31	0.96	4.3	0.33	1.1	Rc 1/8	0.86
VSA4420-02			1/4	5.8	0.30	1.3	4.7	0.48	1.2	Rc 1/8	
VSA4420-03			3/8	6.4	0.33	1.5	5.1	0.53	1.3	Rc 1/8	

Note) The table shows the valve without sub-plate. With sub-plate: Add 0.24 kg



Specifications

Max. operating pressure	1.0 MPa
Pilot air pressure	0.1 to 1.0 MPa
Ambient temperature and operating fluid temperature	-10 to 60°C (1)
Lubrication	Not required (2)
Impact/Vibration resistance (m/s ²) (3)	150/50
Enclosure	Dustproof (Enclosure class 0) (4)



Note 1) Use dry air to prevent condensation when operating at low temperature.

Note 2) Use turbine oil Class 1 (ISO VG32), if lubricated.

Note 3) 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. (Value in the initial stage)

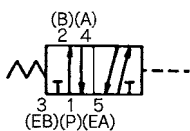
Vibration resistance: No malfunction from test with 45 to 2000 Hz one sweep, to axis and right angle direction of main valve, each one time when pilot signal ON and OFF. (Value in the initial stage)

Note 4) As per JIS C0920

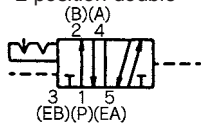
- Manifold possible.
- When requiring bottom piping, please specify it.

JIS Symbol

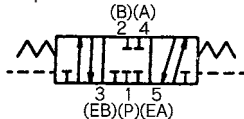
2 position single



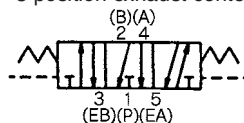
2 position double



3 position closed center



3 position exhaust center



Sub-plate Assembly Part No.: VS4020-S-⁰¹₀₂⁰³

* Mounting bolt and gasket are not included.

Mounting Bolts, Gasket Part No.: BG-VS4020

How to Order

VSA 4 1 2 0 - 02 [] [] []

Air operated valve
 4/5 port valve
 Function
 Body size
 Piping
 Port size
 Option
 Thread type
 Pilot
 Option

1	2 position single
2	2 position double
3	3 position closed center
4	3 position exhaust center

2	1/4 standard
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0	Sub-plate side ported
1*	Sub-plate bottom ported
4	Without sub-plate (For manifold)

* Option

00	Without sub-plate
01	Rc 1/8
02	Rc 1/4
03	Rc 3/8

* Bottom ported: Rc 1/8 and 1/4 only

Nil	Rc
N*	NPT
T*	NPTF
F*	PF

* Option

Nil	Body side
1*	Base side (Without sub-plate)

* Option

Nil	None
PA	Non-locking manual override

⚠ Caution

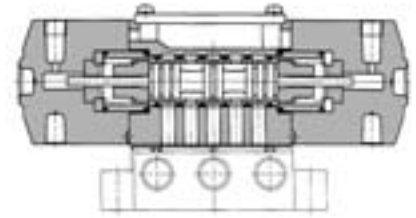
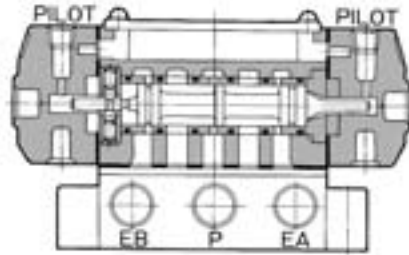
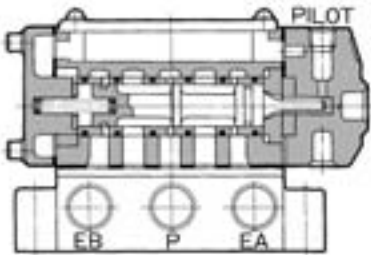
Be sure to read this before handling. Refer to front matters 58 and 59 for Safety Instructions and pages 3 to 7 for 3/4/5 Port Solenoid Valve Precautions.

Construction

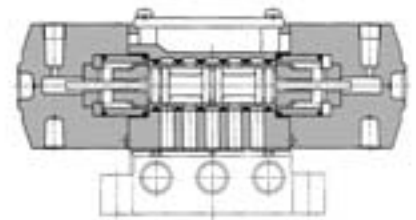
2 position single: VSA4120

2 position double: VSA4220

3 position closed center: VSA4320



3 position exhaust center: VSA4420



Dimensions

2 position single: VSA4120

2 position double: VSA4220

3 position closed center: VSA4320
3 position exhaust center: VSA4420

