

5 Port Solenoid Valve Base Mounted Series VZ5000

How to Order

Plug-in VZ5 1 4 3 — 5 F Z

Non plug-in VZ5 1 4 0 — 5 L

Type of actuation

1 2 position single solenoid

 (B) (A)
 2 4
 3 1 5
 (R₂) (P) (R₁)

2 2 position double solenoid

 (B) (A)
 2 4
 3 1 5
 (R₂) (P) (R₁)

3 3 position closed center

 (B) (A)
 2 4
 3 1 5
 (R₂) (P) (R₁)

4 3 position exhaust center

 (B) (A)
 2 4
 3 1 5
 (R₂) (P) (R₁)

5 3 position pressure center

 (B) (A)
 2 4
 3 1 5
 (R₂) (P) (R₁)

Body option

0: Individual exhaust for the pilot valve

 3(R) port PE port

3: Common exhaust type for main and pilot valve

 3(R) port PE port

Rated voltage

1	100 VAC, 50/60 Hz
2	200 VAC, 50/60 Hz
3*	110 VAC, 50/60 Hz
4*	220 VAC, 50/60 Hz
5*	24 VDC
6	12 VDC
9*	Other

* Option

Electrical entry

Grommet	L plug connector	M plug connector	MN: Without lead wire	DIN terminal
G: Lead wire length 300 mm 	L: With lead wire (Length 300 mm) 	M: With lead wire (Length 300 mm) 	MN: Without lead wire 	D: With connector
H: Lead wire length 600 mm 	LN: Without lead wire 	LO: Without connector 	MO: Without connector 	DO: Without connector

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

Port size

Nil: Without sub-plate
 01: Rc 1/8 With sub-plate *Note*
 02: Rc 1/4 With sub-plate

Note 5(R1), 3(R2) port: Rc 1/4

Manual override/Plug-in type

Nil: Non-locking push type
 B: Locking type B (Slotted)
 C: Locking type C (Manual)

Manual override/Non plug-in type

Nil: Non-locking push type
 B: Locking type B (Slotted)
 C: Locking type C (Manual)

Light/Surge voltage suppressor

Nil	None
Z*	With light/surge voltage suppressor
S	With surge voltage suppressor

Note Please contact SMC in the case of without indicator light.

* Type "LN", "MN": With 2 sockets.

* Not available for "GZ", "HZ" and "DOZ"

VK

VZ

VF

VFR

VP4

VZS

VFS

VS4

VQ7

EVS

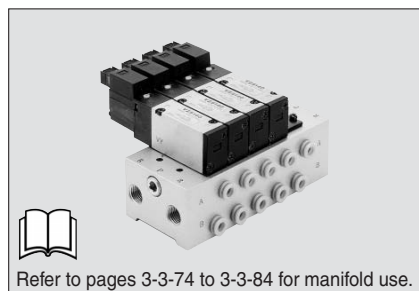
VFN

Series VZ5000

Applicable for cylinder actuation (up to $\phi 50$).

Compact size
(Width: 18 mm)

Low power consumption:
1.8 W DC



Made to Order Specifications
(For details, refer to page 3-3-85.)

Specifications

Fluid		Air
Operating pressure range (MPa)	2 position single	0.15 to 0.7
	2 position double	0.1 to 0.7
	3 position	0.15 to 0.7
Ambient and fluid temperature (°C)		-10 to 50°C (No freezing. Refer to page 3-13-4.)
Response time (ms) ⁽¹⁾ (at the pressure of 0.5 MPa)	2 position single, double	20 or less
	3 position	50 or less
Max. operating frequency (Hz)	2 position single, double	10
	3 position	3
Effective area		Refer to the table below.
Manual override ⁽²⁾		Non-locking push type, Locking slotted type, Locking lever type
Pilot exhaust		Individual pilot exhaust, Common exhaust (pilot and main valve) Common exhaust port for the pilot and main valve
Lubrication		Not required
Mounting orientation		Unrestricted
Impact /Vibration resistance (m/s ²) ⁽³⁾		300/50
Enclosure		Dustproof



Note 1) Based on dynamic performance test, JIS B 8374-1981. (Coil temperature: 20°C, at rated voltage, without surge suppressor)

Note 2) When operating the locking type manually, apply torque of 0.2 N·m or less.

Note 3) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

Solenoid Specifications

Electrical entry		Grommet (G)/(H), L plug connector (L), M plug connector (M), DIN terminal (D)
Coil rated voltage (V)	AC 50/60 Hz	100, 200, 24*, 48*, 110*, 220*
	DC	24, 6*, 12*, 48*
Allowable voltage fluctuation (%)		-15 to +10% of rated voltage
Power consumption (W) ⁽¹⁾ [Current mA]	DC	1.8 (With indicator light 2.1) [24 VDC: 75 (With indicator light 87.5)]
Apparent power (VA) ⁽¹⁾ [Current mA]	AC	Inrush 4.5/50 Hz, 4.2/60 Hz [100 VAC: 45/50 Hz, 42/60 Hz 200 VAC: 22.5/50 Hz, 21/60 Hz]
		Holding 3.5/50 Hz, 3/60 Hz [100 VAC: 35/50 Hz, 30/60 Hz 200 VAC: 17.5/50 Hz, 15/60 Hz]
Surge voltage suppressor		DC: Diode, AC: ZNR ⁽²⁾
Indicator light		DC: LED (Red), AC: Neon bulb



Note 1) At rated voltage

Note 2) Plug-in should be ZNR