

5 Port Solenoid Valve Body Ported Series VZ3000

How to Order

Body ported VZ3

Type of actuation 1 2 0 **Body option** 5 **Rated voltage** L **Electrical entry** **Light/Surge voltage suppressor** **Manual override** **4(A)/2(B) port size** M5 **Option**

Type of actuation

1 2 position single

2 2 position double

3 3 position closed center

4 3 position exhaust center

5 3 position pressure center

Body option

0: Individual exhaust for the pilot valve

3: Common exhaust type for main and pilot valve

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

Option

F: With foot bracket (2 position single type only)

U: With silencer

K: With foot bracket and silencer (2 position single only)

Note) The bracket and silencer are not assembled.

4(A), 2(B) port size

| | |
|----|--------------------------|
| M5 | M5 x 0.8 |
| C4 | One-touch fitting for ø4 |
| C6 | One-touch fitting for ø6 |

Note) 1(P), 5(R1), 3(R2) port: M5 x 0.8

Manual override

Nil: Non-locking push type

C: Locking type C (Manual)

B: Locking type B (Slotted)

Electrical entry

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

Light/Surge voltage suppressor

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

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

VK

VZ

VF

VFR

VP4

VZS

VFS

VS4

VQ7

EVS

VFN

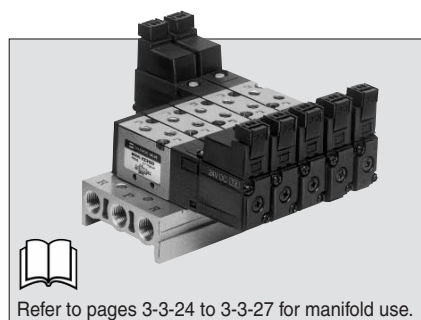
* Type "LN", "MN": With 2 sockets.

Series VZ3000

Applicable for cylinder actuation (up to $\phi 40$).

Compact size
(Width: 15 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 | 35 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 method | Individual pilot exhaust type, Common exhaust (pilot and main valve) type | |
| 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 8375-1981. (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

* Option

| | | | | |
|--|-------------|---------|---|--|
| 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) ^{Note)} [Current mA] | | | 1.8 (With indicator light 2.1) [24 VDC: 75 (With indicator light 87.5)] | |
| Apparent power ^{Note)} (VA) [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 | |
| Indicator light | | | DC: LED (Red), AC: Neon bulb | |



Note) At rated voltage

Option

| Description | Part no. | Note |
|-------------------|--------------|---|
| With foot bracket | DXT170-34-1B | For VZ312 ⁰ |
| Silencer | AN120-M5 | Noise reduction: 21dB or more ($\phi 8 \times 17$ mm) |