Zero Differential Pressure Type Pilot Operated 2 Port Solenoid Valve VXZ Series



* Can be used with air (Up to 133 Pa.abs for vacuum). Note that the maximum operating pressure differential and flow rate characteristics should be within the specifications for air.

Flow Rate Characteristics

N.C.

Symbol



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid and it will flow from port 2 to port 1.



VXZ

VX2 VXK

VXD

VXS

VXE

VXP

VXR

VXH

VXF VX3

VXA

Normally Closed (N.C.)

| Body | Port size | Orifice diameter (mmø) | Model | Min. operating pressure differential Note 1) (MPa) | Max. operating pressure differential (MPa) Note 3) | | Flow rate characteristics | | Max. system | Weight Note 2) |
|--|-------------------|------------------------|--------|---|--|-----|---------------------------|------|------------------------|----------------|
| material | Nominal diameter) | | | | AC | DC | Kv | Cv | pressure Note 3) (MPa) | (g) |
| C37, Stainless steel | 1/4 (8A) | 10 | VXZ232 | 0 | 1.0 | 0.7 | 1.6 | 1.9 | 1.5 | 600 |
| | 3/8 (10A) | | | | | | 2.0 | 2.4 | | |
| | 1/2 (15A) | 15 | VXZ242 | | | | 4.6 | 5.3 | | 720 |
| | 3/4 (20A) | 20 | VXZ252 | | | 1.0 | 7.8 | 9.2 | | 1100 |
| | 1 (25A) | 25 | VXZ262 | | | | 8.7 | 10.2 | | 1300 |
| Note 1) The appealing of the value was he wastelle due to the appealing of | | | | | | | | | | |

Note 1) The operation of the valve may be unstable due to the capacity of the pressure supply source such as pumps and compressors or the pressure loss by the orifice of piping. Please contact SMC to check if the required valve size can be used in the application. Please contact SMC for the compatibility of the circuit flow and valve size. (Refer to page 195.)

Note 2) Weight of grommet type. Add 10 g for conduit, 30 g for DIN terminal, and 60 g for conduit terminal type respectively.

Note 3) Refer to "Glossary of Terms" on page 202 for details on the maximum operating pressure differential and the maximum system pressure.

Fluid and Ambient Temperature

| _ | | |
|---|------------------------|--------------------------|
| | Fluid temperature (°C) | Ambient temperature (°C) |
| | 1 to 60 | -20 to 60 |

Note) With no freezing

Valve Leakage Rate

Internal Leakage

| Seal material | Leakage rate (Water) Note 1) 2) |
|-------------------|----------------------------------|
| NBR (FKM) Note 3) | 0.1 cm ³ /min or less |

External Leakage

| Seal material | Leakage rate (Water) Note 1) | | |
|-------------------|----------------------------------|--|--|
| NBR (FKM) Note 3) | 0.1 cm ³ /min or less | | |

Note 1) Leakage is the value at ambient temperature 20°C.

Note 2) Leakage is the value when the pressure differential ranges from 0.01 MPa to the maximum operating pressure differential.

Note 3) For seal material/FKM, refer to "Other options" on page 192 for the selection.