

Zero Differential Pressure Type Pilot Operated 2 Port Solenoid Valve

Series VXZ



For Water



RoHS

How to Order (Single Unit)

VXZ2 3 2 A A

Fluid

2 For Water

Size/Valve type

Symbol	Body size	Valve type
3	10A	N.C.
A		N.O.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
A	C37	1/4	10
B		3/8	
C	Stainless steel	1/4	10
D		3/8	

4	15A	N.C.
B		N.O.

F	C37	1/2	15
G	Stainless steel		

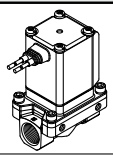
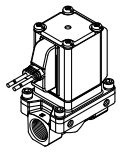
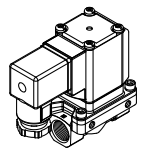
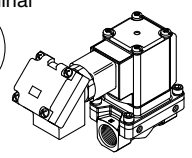
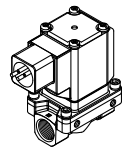
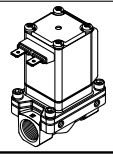
5	20A	N.C.
C		N.O.

H	C37	3/4	20
J	Stainless steel		

6	25A	N.C.
D		N.O.

K	C37	1	25
L	Stainless steel		

Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
B	100 VAC	Grommet (With surge voltage suppressor) 
C	110 VAC	
D	200 VAC	
E	230 VAC	
F	24 VDC	DIN terminal (With surge voltage suppressor) 
G	24 VDC	
H	100 VAC	
J	110 VAC	
K	200 VAC	Conduit terminal (With surge voltage suppressor) 
L	230 VAC	
M	24 VDC	
N	100 VAC	
P	110 VAC	Conduit (With surge voltage suppressor) 
Q	200 VAC	
R	230 VAC	
S	24 VDC	
T	100 VAC	Faston terminal 
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	Faston terminal
Z	Other voltages	

Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

Specifications

For Air

For Water

For Oil

For Heated Water

For High Temperature Oil

Options

Construction

Dimensions

For other special options,
refer to pages 20 and 21.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Applicable to deionized water (Seal material: FKM)	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

Dimensions → Page 26 and after

Series VXZ



For Oil

* Can be used with air and water.

Note that the maximum operating pressure differential and flow-rate characteristics should be within the specifications of the fluid used.

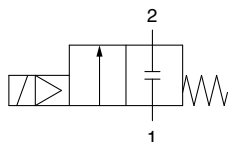
⚠ When the fluid is oil.

The kinematic viscosity must not exceed 50 mm²/s. The special construction of the armature adopted in the built-in full-wave rectifier type gives an improvement in OFF response by providing clearance on the absorbed surface when it is switched ON.

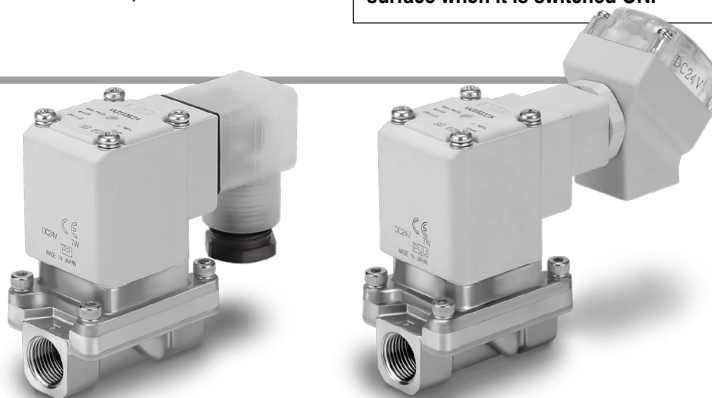
Flow-rate Characteristics

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.



Normally Closed (N.C.)

Body material	Port size (Nominal diameter)	Orifice diameter (mmø)	Model	Min. operating pressure differential (Note 1) (MPa)	Max. operating pressure differential (MPa)		Flow-rate characteristics		Max. system pressure (MPa)	Weight (Note 2) (g)
					AC	DC	Av x 10 ⁻⁶ m ²	Cv		
C37, Stainless steel	1/4 (8A)	10	VXZ233	0	0.7		46	1.9	1.5	600
	3/8 (10A)						58	2.4		720
	1/2 (15A)	15	VXZ243				130	5.3		1100
	3/4 (20A)	20	VXZ253				220	9.2		1300
	1 (25A)	25	VXZ263				245	10.2		

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 23.)

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

• Refer to "Glossary of Terms" on page 30 for details on the max. operating pressure differential.

Fluid and Ambient Temperature

Fluid temperature (°C)	Ambient temperature (°C)
-5 (Note) to 60	-20 to 60

Note) Kinematic viscosity: 50 mm²/s or less

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate (Oil) (Note)
FKM	0.1 cm ³ /min or less

External Leakage

Seal material	Leakage rate (Oil) (Note)
FKM	0.1 cm ³ /min or less

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