

Series VXZ



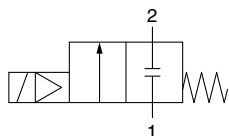
For Air

* Can be used with low vacuum (up to 133 Pa.abs).

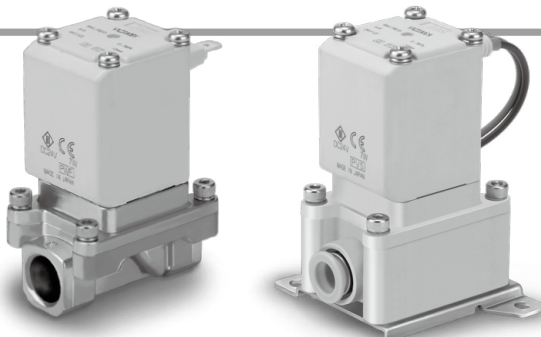
Flow-rate Characteristics

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)	Note 2) Weight (g)			
					AC	DC	C [dm³/(s·bar)]	b	Cv	Effective area (mm²)					
Resin	ø10	10	VXZ230	0	1.0	0.7	6.2	0.38	1.7	—	1.5	400			
	ø3/8"						5.3		1.2						
	ø12						8.0		2.0						
Aluminum	1/4 (8A)	15	VXZ240				8.5	0.44	2.4						
	3/8 (10A)						9.3	0.43	2.6						
C37, Stainless steel	1/2 (15A)	20	VXZ250			1.0	23.0	0.34	6.0			720			
	3/4 (20A)	25	VXZ260				36.0	0.26	9.4			1100			
	1 (25A)	25	VXZ260				—		185	1300					

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)
-10 Note) to 60	-20 to 60

Note) Dew point temperature: -10°C or less

Valve Leakage Rate

Internal Leakage

Seal material	Leakage rate (Air) Note 1)
NBR (FKM) Note 2)	15 cm ³ /min or less (Aluminum body type)
	15 cm ³ /min or less (Resin body type)
	1 cm ³ /min or less (Metal body type)

External Leakage

Seal material	Leakage rate (Air) Note 1)
NBR (FKM) Note 2)	15 cm ³ /min or less (Aluminum body type)
	15 cm ³ /min or less (Resin body type)
	1 cm ³ /min or less (Metal body type)

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

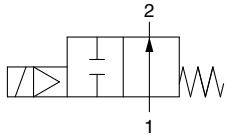
Note 2) For seal material/FKM, refer to "Other options" on page 20 for the selection.

Note 3) When the product is used with low vacuum (to 133 Pa.abs), give caution to the external leakage outlined above.

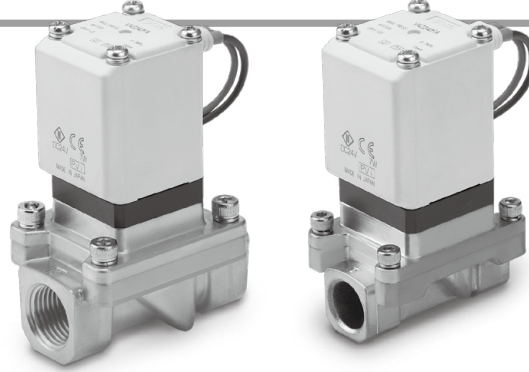
Flow-rate Characteristics

N.O.

Symbol



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Normally Open (N.O.)

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)	^{Note 2)} Weight (g)			
					AC	DC	C [dm³/(s·bar)]	b	Cv	Effective area (mm²)					
Resin	ø10	10	VXZ2A0	0	0.7	0.6	6.2	0.38	1.7	—	1.5	430			
	ø3/8"						5.3		1.2						
	ø12						8.0		2.0						
Aluminum	1/4 (8A)	15	VXZ2B0				8.5	0.44	2.4			630			
	3/8 (10A)						9.3	0.43	2.6						
C37, Stainless steel	1/2 (15A)	15	VXZ2B0				23.0	0.34	6.0			750			
	3/4 (20A)	20	VXZ2C0				36.0	0.26	9.4			1150			
	1 (25A)	25	VXZ2D0				—			185		1350			

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.

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Seal material	Leakage rate (Air) Note 1)
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	1 cm ³ /min or less (Metal body type)

External Leakage

Seal material	Leakage rate (Air) Note 1)
NBR (FKM) Note 2)	15 cm ³ /min or less (Aluminum body type)
	15 cm ³ /min or less (Resin body type)
	1 cm ³ /min or less (Metal body type)

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

Note 2) For seal material/FKM, refer to "Other options" on page 20 for the selection.