

VXD Series



For Oil

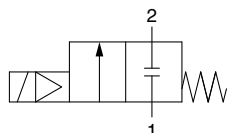
⚠ When the fluid is oil.

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.

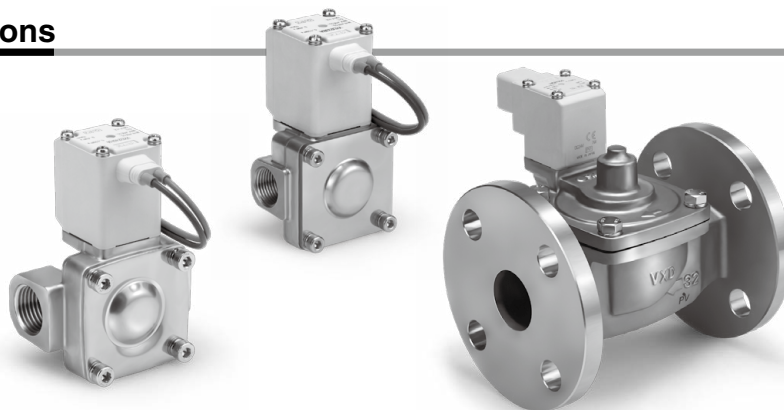
Model/Valve Specifications

N.C.

Symbol



Refer to "Glossary of Terms" on page 263 for symbol.



Normally Closed (N.C.)

Normally closed (NC)										
Body material	Port size	Orifice diameter (mm)	Model	Min. operating pressure differential ^{Note 1, 3)} (MPa)	Max. operating pressure differential ^{Note 3)}		Flow rate characteristics		Max. system pressure ^{Note 3)} (MPa)	Weight ^{Note 2)} (g)
					AC	DC	Kv	Conversion Cv		
Stainless steel, C37	1/4 (8A)	10	VXD233	0.02	0.5	0.4	1.6	1.9	1.5	480
	3/8 (10A)						2.0	2.4		480
	1/2 (15A)						2.0	2.4		480
	3/8 (10A)	15	VXD243		3.9	4.5	720			
	1/2 (15A)				4.6	5.5	720			
	3/4 (20A)				8.2	9.5	840			
	1 (25A)	25	VXD263		11.0	13	1360			
CAC408	32A Flange	35	VXD273	0.03			19.6	23		5400
	40A Flange	40	VXD283				26.4	31		6800
	50A Flange	50	VXD293				42.8	49		8400

Note 1) Be aware that even if the pressure differential is above the minimum operating pressure differential when the valve is closed, the pressure differential may fall below the minimum operating pressure differential when the valve opens, depending on the power of the supply source (pumps, compressors, etc.,) or the type of pipe restrictions.

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

Note 3) Refer to "Glossary of Terms" on page 263 for details on the minimum operating pressure differential, maximum operating pressure differential, maximum system pressure.

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)}	
	VXD23 to 26 (8A to 25A)	VXD27 to 29 (32A to 50A)
FKM	0.2 cm ³ /min or less	1 cm ³ /min or less

External Leakage

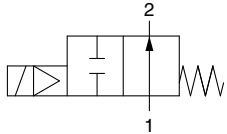
Seal material	Leakage rate (Oil) ^{Note)}	
	VXD23 to 26 (8A to 25A)	VXD27 to 29 (32A to 50A)
FKM	0.1 cm ³ /min or less	0.1 cm ³ /min or less

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

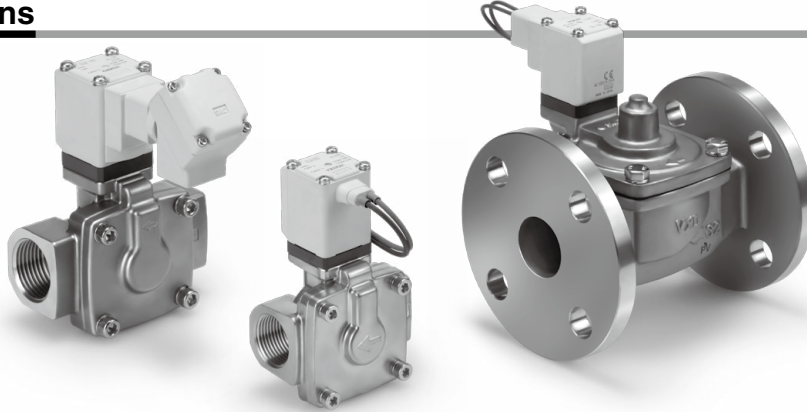
Model/Valve Specifications

N.O.

Symbol



Refer to "Glossary of Terms" on page 263 for symbol.



Normally Open (N.O.)

Body material	Port size	Orifice diameter (mm)	Model	Min. operating pressure differential ^{Note 1, 3)} (MPa)	Max. operating pressure differential ^{Note 3)}		Flow rate characteristics		Max. system pressure ^{Note 3)} (MPa)	Weight ^{Note 2)} (g)
					AC	DC	Kv	Conversion Cv		
Stainless steel, C37	1/4 (8A)	10	VXD2A3	0.02	0.4	0.3	1.6	1.9	1.5	500
	3/8 (10A)						2.0	2.4		500
	1/2 (15A)						2.0	2.4		500
	3/8 (10A)	15	VXD2B3		3.9	4.5	740			
	1/2 (15A)				4.6	5.5	740			
	3/4 (20A)				8.2	9.5	860			
	1 (25A)	25	VXD2D3		11.0	13	1390			
CAC408	32A Flange	35	VXD2E3	0.03			19.6	23	5430	
	40A Flange	40	VXD2F3				26.4	31	6840	
	50A Flange	50	VXD2G3				42.8	49	8440	

Note 1) Be aware that even if the pressure differential is above the minimum operating pressure differential when the valve is closed, the pressure differential may fall below the minimum operating pressure differential when the valve opens, depending on the power of the supply source (pumps, compressors, etc.) or the type of pipe restrictions.

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

Note 3) Refer to "Glossary of Terms" on page 263 for details on the minimum operating pressure differential, maximum operating pressure differential, maximum system pressure.

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)}	
	VXD2A to 2D (8A to 25A)	VXD2E to 2G (32A to 50A)
FKM	0.2 cm ³ /min or less	1 cm ³ /min or less

External Leakage

Seal material	Leakage rate (Oil) ^{Note)}	
	VXD2A to 2D (8A to 25A)	VXD2E to 2G (32A to 50A)
FKM	0.1 cm ³ /min or less	0.1 cm ³ /min or less

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



How to Order



VXD2 **3** **3** **A** **A**

Fluid

3 For Oil

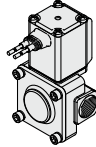
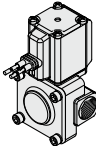
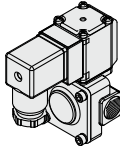
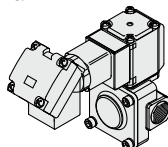
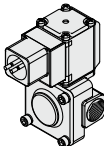
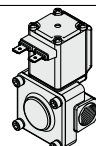
Size—Valve type

Symbol	Size	Valve type
3	8A	N.C.
A	10A 15A	N.O.
4	10A	N.C.
B	15A	N.O.
5	20A	N.C.
C		N.O.
6	25A	N.C.
D		N.O.
7	32A	N.C.
E		N.O.
8	40A	N.C.
F		N.O.
9	50A	N.C.
G		N.O.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
A	C37	1/4	10
B		3/8	
C		1/2	
D	Stainless steel	1/4	10
E		3/8	
F		1/2	
G	C37	3/8	15
H		1/2	
J	Stainless steel	3/8	15
K		1/2	
L	C37	3/4	20
M	Stainless steel		
N	C37	1	25
P	Stainless steel		
Q	CAC408	32A Flange	35
R	CAC408	40A Flange	40
S	CAC408	50A Flange	50

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	Flat terminal 
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	
Z	Other voltages and electrical option	

Common Specifications

Seal material	FKM
Coil insulation type	Class B
Thread type	Rc*

* For body size 32A or more, the ports will be the flange type.

For other special options, refer to page 240.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	