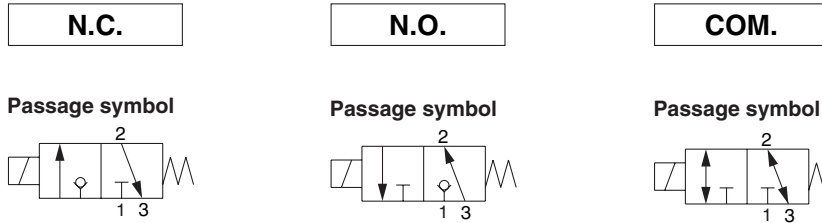


For Air/Single Unit

(Inert gas, Non-leak, Medium vacuum)

Model / Valve Specifications



Port size	Orifice diameter (mmø)	Model	Max. operating pressure differential (MPa)			Flow characteristics			Max. system pressure (MPa)	Weight ^(Note) (g)
			N.C.	N.O.	COM.	C[dm³/(s·bar)]	b	Cv		
1/8 (6A)	1.5	VX311□-01	1	1	0.7	0.29	0.32	0.08	2.0	380
	2.2	VX312□-01	0.7	0.5	0.4	0.60	0.25	0.15		
	3	VX313□-01	0.3	0.3	0.2	0.82	0.20	0.20		
1/4 (8A)	1.5	VX311□-02	1	1	0.7	0.29	0.32	0.08		530
	2.2	VX312□-02	0.7	0.5	0.4	0.60	0.25	0.15		
		VX322□-02	1.2	1	0.7	0.64	0.40	0.17		
		VX332□-02	1.6	1.6	1					
	3	VX313□-02	0.3	0.3	0.2	0.82	0.20	0.20		
		VX323□-02	0.6	0.5	0.3	1.1	0.25	0.27		
		VX333□-02	1	0.9	0.6					
	4	VX324□-02	0.3	0.25	0.2	1.6	0.20	0.38		
		VX334□-02	0.5	0.4	0.3					
3/8 (10A)	2.2	VX322□-03	1.2	1	0.7	0.64	0.40	0.17		530
		VX332□-03	1.6	1.6	1					
	3	VX323□-03	0.6	0.5	0.3	1.1	0.25	0.27		
		VX333□-03	1	0.9	0.6					
	4	VX324□-03	0.3	0.25	0.2	1.6	0.20	0.38		
		VX334□-03	0.5	0.4	0.3					

Note) Weight of grommet type. Add 10 g for conduit, 30 g for DIN terminal, and 60 g for conduit terminal type respectively.
Also, add 60 g for VX31□□, 80 g for VX32□□ and VX33□□ respectively for bracket option.

• Refer to "Glossary" on page 31, for details on the max. operating pressure differential and the max. system pressure.

Fluid and Ambient Temperature

Power source	Fluid temperature (°C)		Ambient temperature (°C)
	Solenoid valve option (symbol)		
	Nil, G	V, M	
AC	−10 ^{Note)} to 60	−10 ^{Note)} to 40	−20 to 60
DC	−10 ^{Note)} to 60	−10 ^{Note)} to 40	−20 to 40

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

Valve Leakage

Internal Leakage / External Leakage

Seal material	Max. operating pressure differential	Leakage rate	
		Air	Non-leak, Medium vacuum ^{Note)}
NBR, FKM	From 0 to less than 1 MPa	1 cm ³ /min or less	10 ⁻⁶ Pa·m ³ /sec or less
	1 MPa or more	2 cm ³ /min or less	

Note) The leakage amount (10⁻⁶ Pa·m³/sec) for the "V" and "M" option are values when the differential pressure is 0.1 MPa.

Direct Operated 3 Port Solenoid Valve *Series* **VX31/32/33**

For Air / Single Unit

How to Order (Single Unit)

DC

AC/Class B coil (Built-in full-wave rectifier type)

Model • Refer to Table (1) shown below for availability.

Valve / Body type •

0	N.C. / Single unit
2	N.O. / Single unit
4	COM. / Single unit

Suffix •

Nil	—
Z	Oil-free spec.

Thread type • Refer to Table (1) shown below for availability.

Nil	Rc
T	NPTF
F	G
N	NPT

Rated voltage •

1	100 VAC 50/60 Hz	6	12 VDC
2	200 VAC 50/60 Hz	7	240 VAC 50/60 Hz
3	110 VAC 50/60 Hz	8	48 VAC 50/60 Hz
4	220 VAC 50/60 Hz	J	230 VAC 50/60 Hz
5	24 VDC		

* Refer to Table (3) shown below for availability.

Refer to page 23 for ordering coil only.

Orifice diameter • Refer to Table (1) shown below for availability.

Solenoid valve option • Refer to Table (2) shown below for availability.

Port size • Refer to Table (1) shown below for availability.

Electrical entry (AC/DC)

G -Grommet GS -With grommet surge voltage suppressor	C -Conduit
T -With conduit terminal TS -With conduit terminal and surge voltage suppressor TL -With conduit terminal and light TZ -With conduit terminal, surge voltage suppressor and light	D -DIN terminal DS -DIN terminal with surge voltage suppressor DL -DIN terminal with light DZ -DIN terminal with surge voltage suppressor and light DO -For DIN terminal (without connector, gasket is included.) * DIN type is available with class B only.

* Refer to Table (3) for available combinations between each electrical option (S, L, Z) and rated voltage.
 * Surge voltage suppressor is integrated into the AC/Class B coil, as a standard.

Bracket •

Nil	None
B	With bracket

* Bracket is neither mountable nor removable.

Built-in full-wave rectifier type

Table (1) Model – Orifice Diameter – Port Size

Solenoid valve model				Orifice symbol (diameter)			
Model	VX31	VX32	VX33	1 (1.5 mmø)	2 (2.2 mmø)	3 (3 mmø)	4 (4 mmø)
Port symbol (Port size)	01 (1/8)	—	—	●	●	●	—
	02 (1/4)	—	—	●	●	●	—
	—	02 (1/4)	02 (1/4)	—	●	●	●
	—	03 (3/8)	03 (3/8)	—	●	●	●

Table (2) Solenoid Valve Option

Option symbol	Seal material		Body material/ Shading coil material	Guide pin material	Coil insulation type	Note ^{Note)}
	Main valve poppet	Fixed sealant				
Nil			C37			
G	NBR	NBR	Stainless steel			
M	FKM	FKM	Stainless steel	PPS	B	Non-leak (10 ⁻⁶ Pa·m ³ /sec), Medium vacuum (0.1 Pa.abs), Oil-free
V			C37			

Note) The leakage amount (10⁻⁶ Pa·m³/sec) for the “V” and “M” option are values when the differential pressure is 0.1 MPa.

Table (3) Rated Voltage – Electrical Option

Rated voltage			Class B		
AC/DC	Voltage symbol	Voltage	S With surge voltage suppressor	L With light	Z With light and surge voltage suppressor
AC	1	100 V		●	
	2	200 V		●	
	3	110 V		●	
	4	220 V	— Note)	●	— Note)
	7	240 V		—	
	8	48 V		—	
DC	J	230 V		—	
	5	24 V	●	●	●
	6	12 V	●	—	—

Note 1) Option S, Z are not available as surge voltage suppressor is integrated into the AC/Class B coil, as a standard.

* Class H coil is not available.