How to Order (Single Unit)

VDW 1 4 A A

Fluid

4	For medium vacuum

Common Specifications

Valve type	N.C.
Seal material	FKM
Coil insulation type	Class B
Thread type	Rc
Oil-free	

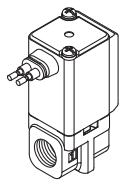
Size/Valve type

Symbol	Size	Valve type
1	Size 1	Single unit N.C.
2	Size 2	Single unit N.C.

Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
G	C37	M5	1.0
H			1.6
J	Stainless steel	M5	1.0
K			1.6
K	C37	M5	1.6
L			2.3
M			3.2
N		1/8	1.6
P			2.3
Q			3.2
R	Stainless steel	M5	1.6
S			2.3
T			3.2
U		1/8	1.6
V			2.3
W			3.2

Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
B	100 VAC	
C	110 VAC	
D	200 VAC	
E	230 VAC	
Z	Other voltages	

For other special options, refer to page 8.

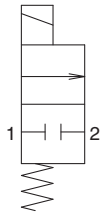
Special voltage	48 VAC
	220 VAC
	240 VAC
	12 VDC
G thread	
NPT thread	
Bracket interchangeable with old type	

Dimensions→Page 9 (Single unit)

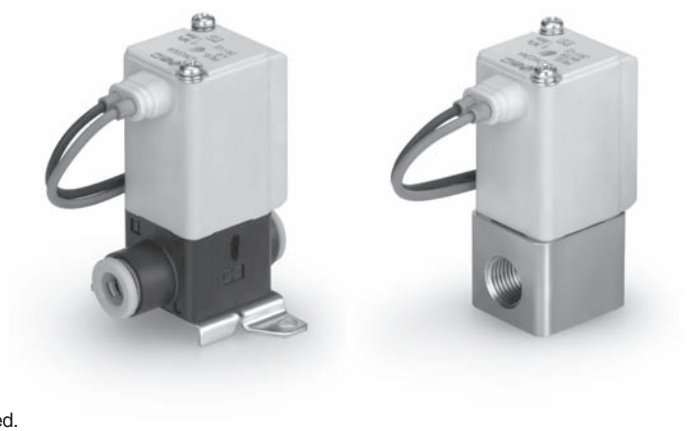
Model/Valve Specifications

N.C.

Configuration symbol



Note) The configuration symbol shows ports 1 and 2 as blocked, but there is actually a limit to the blocking capability when the pressure of port 2 is greater than the pressure of port 1. Please contact SMC when low leakage performance is required.



Normally Closed (N.C.)
C37, Stainless Steel Body Type

Size	Port size	Orifice diameter (mmø)	Model	Flow-rate characteristics		Maximum operating pressure differential psi (MPa)	Weight
				AV (x10^{-6}m^2)	Conversion Cv	Pressurized port 1	
1	M5	1.0	**VDW12**	0.96	0.04	131 (0.9)	C37: 65 Stainless steel: 2.1oz (60g)
		1.6		1.70	0.07	58 (0.4)	
2	M5, 1/8	1.6	**VDW22**	1.70	0.07	102 (0.7)	C37: 115 Stainless steel: 3.5oz (100g)
		2.3		4.30	0.18	58 (0.4)	
		3.2		7.20	0.30	29 (0.2)	

Resin Body Type

Size	Port size	Orifice diameter (mmø)	Model	Flow-rate characteristics		Maximum operating pressure differential psi (MPa)	Weight
				AV	Conversion Cv	Pressurized port 1	
1	M5 ø3.2 One-touch fitting ø4 One-touch fitting	1.0	**VDW12**	0.96	0.04	131 (0.9)	1.6 oz (45g)
		1.6		1.70	0.07	58 (0.4)	
2	M5 ø4 One-touch fitting ø6 One-touch fitting	1.6	**VDW22**	1.70	0.07	102 (0.7)	2.8 oz (80g)
		2.3		4.30	0.18	58 (0.4)	
		3.2		7.20	0.30	29 (0.2)	

Refer to “Glossary of Terms” on page 12 for details on the maximum operating pressure differential.

Fluid and Ambient Temperature

Fluid temperature F° (°C)	Ambient temperature F° (°C)
33.8 to 122° (1 to 50)	14 122 (–10 to 50)

Note) With no freezing

Valve Leakage

Internal Leakage Note 1)Internal leakage when pressure is supplied to Port 1 (IN).

Seal material	Leakage rate (Water) Note 2)
NBR	0.1 cm^3/min or less (C37, Stainless steel body type)
	1 cm^3/min or less (Resin body type)

External Leakage

Seal material	Leakage rate (Water) Note 2)
NBR	0.1 cm^3/min or less (C37, Stainless steel body type)
	1 cm^3/min or less (Resin body type)

Note 2) Leakage is the value at ambient temperature 68°F (20°C).