# **VDW** Series



## Model/Valve Specifications

N.C.

#### Symbol



Note) The 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.) Aluminum Body Type

\* Flow rate characteristics show those when the port size is 1/8 (size 2).

Size	Port size	Orifice diameter Model (mmø)	Flow rate characteristics Note 1)			Maximum operating Note 2) pressure differential (MPa)	Weight	
				C [dm <sup>3</sup> /(s-bar)]	b	Cv	Pressurized port 1	(g)
	M5, 1/8	1.6	VDW20	0.30	0.45	0.07	0.7	80
2		2.3		0.58	0.45	0.18	0.4	
		3.2		1.10	0.38	0.30	0.2	

Resin Body Type (Built-in One-touch Fittings) \*Flow rate characteristics show those when the One-touch fitting with a port size of ø4 (size 1 or 2) is used.

Size	Port size	Orifice diameter (mmø) Model	Flow rate characteristics Note 1)			Maximum operating Note 2) pressure differential (MPa)	Weight	
				C [dm <sup>3</sup> /(s-bar)]	b	Cv	Pressurized port 1	(g)
1	M5 ø3.2 One-touch fitting ø4 One-touch fitting	1.0	VDW10	0.14	0.40	0.04	0.9	45
		1.6	VDW10	0.30	0.25	0.07	0.4	45
	M5 ø4 One-touch fitting ø6 One-touch fitting	1.6	VDW20	0.30	0.45	0.07	0.7	80
2		2.3		0.42	0.45	0.12	0.4	
		3.2		0.56	0.40	0.16	0.2	

Note 1) The flow rate characteristics of this product have variations.

When the highly precise flow control is required according to the system to be used, select an orifice diameter 1.3 times larger than that shown above and install a restrictor on the downstream side of the solenoid valve to make the adjustment.

Note 2) Refer to "Glossary of Terms" on page 466 for details on the maximum operating pressure differential.

### Fluid and Ambient Temperature

Fluid temperature (°C)	Ambient temperature (°C)		
-10 Note) to 50	-10 to 50		

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

#### Valve Leakage

Internal Leakage

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Seal material	Leakage rate (Air) Note)				
NBB	1 cm <sup>3</sup> /min or less (Aluminum body type)				
NDA	15 cm <sup>3</sup> /min or less (Resin body type)				

External Leakage

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Seal material		Leakage rate (Air) Note)			
	NBB	1 cm <sup>3</sup> /min or less (Aluminum body type)			
	NDH	15 cm <sup>3</sup> /min or less (Resin body type)			

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