

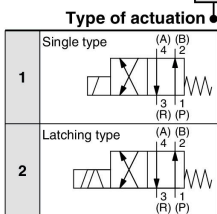
4 Port Solenoid Valve Direct Operated Poppet Type

VQD1000 Series



How to Order Valves

VQD1 1 5 1 [] - 5 L - [] - [] - []



Body type

2	Body ported (Single unit)
3	Body ported (Manifold)
5	Base mounted

Note) Latching type: Base mounted type only.

Valve option

NII	Standard
V	Vacuum
U	For large flow ⁽¹⁾
W	For large flow, vacuum ⁽¹⁾

Note 1) Latching type: U and W only
Note 2) Latching type (-COM): NU and NW

Rated voltage

5	24 VDC
6	12 VDC

Note) Latching type: 24 VDC only

CE-compliant

NII	—
Q	CE-compliant

Made to Order

X16 Fluid-contact part: Oil-free

Port size

Body ported	M5	M5 thread (Single unit, Manifold)
Base mounted	NII	Without sub-plate (Manifold)
	M5	M5 thread (Single unit)

* Fittings with a 10 mm or more width across flats may cause interference.

Electrical entry

L: Plug lead type L plug connector, With lead wire With light/surge voltage suppressor	
LO: Plug lead type L plug connector, Without connector With light/surge voltage suppressor	
M: Plug lead type M plug connector, With lead wire With light/ surge voltage suppressor	
MO: Plug lead type M plug connector, Without connector With light/surge voltage suppressor	

Note) When you expect to energize the unit for extended periods of time, refer to page 3 for details.

Standard Specifications

Item	Type	Standard single type	Large-flow single type	Large-flow latching type	
Valve specifications	Valve construction	4 port direct operated poppet valve			
	Fluid	Air			
	Maximum operating pressure	0.7 MPa			
	Minimum operating pressure/Vacuum	0 MPa / -101.2 kPa			
	Response time⁽¹⁾	ON: 4ms±1	OFF: 2ms±1	10ms or less	
	Ambient and fluid temperature	-10 to 50°C ⁽²⁾			
	Lubrication	Not required			
	Manual override	Non-locking push type	Locking type		
	Impact/Vibration resistance⁽³⁾	150/30 m/s ²			
	Mounting position	Unrestricted			
	Enclosure	Dust tight			
	Electricity specifications	Weight	34 g	37 g	37 g
Coil rated voltage		DC	24 V, 12 V	24 DC	
Allowable voltage fluctuation		±10% of rated voltage			
Coil insulation type		Class B or equivalent			
Power consumption		DC	2 W	3.2 W (Energy saving type) (Inrush: 3.2 W, Holding: 1.0 W) ⁽⁴⁾	2 W
Electrical entry		L plug connector, M plug connector (With indicator light and surge voltage suppressor)			

Note 1) Based on response time measurement, JIS B8419: 2010. (Coil temperature: 20°C, pressure: 0.5 MPa, at rated voltage, with light and surge suppressor, value at operation excluding restart period) The period immediately after a restart may be delayed for about 1 msec depending on operating conditions.

Note 2) Operation of the valve at low temperatures may cause condensate to form, therefore dry air must be used.

Note 3) Impact resistance: No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

Vibration resistance: No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

Note 4) For the start-up time, refer to the energy saving type's electrical power waveform on page 1399 "Wiring Specifications".

