

Compact Proportional Solenoid Valve Series *PVQ10*

How to Order

Base mounted

PVQ 13 - 5 L - 03 - M5 - A



Valve type
13 N.C.

Voltage
5 24 VDC
6 12 VDC

Electrical entry

L	L plug connector	
M	M plug connector	

With / Without lead wire

Nil	With lead wire
O	Without lead wire

Body / Seal material

Symbol	Body	Seal
A	C36	FKM

Port size

Nil	Without sub-plate (with mounting screw M1.7 x 17L, 2 pcs.)	
M5	With sub-plate M5 x 0.8	

Orifice size

Symbol	Orifice dia.	Max. operating pressure
03	0.3 mmø	0.7 MPa
04	0.4 mmø	0.45 MPa
06	0.6 mmø	0.2 MPa
08	0.8 mmø	0.1 MPa

Specifications

Standard specifications	Valve construction	Direct operated poppet	
	Fluid	Air, Inert gas	
	Seal material	FKM	
	Body material	C36	
	Fluid temperature	0 to +50°C	
	Ambient temperature ^{Note 1)}	0 to +50°C	
	Action	N.C. (Normally closed)	
Mounting orientation	Unrestricted		
Port size	M5		
Coil specifications	Power supply	24 VDC	12 VDC
	Coil current	0 to 85 mA	0 to 170 mA
	Power consumption	0 to 2 W	
	Coil insulation	Class B	

Characteristic specifications	Orifice diameter (mmø)	0.3	0.4	0.6	0.8
	Max. operating pressure differential (MPa) ^{Note 2)}	0.7	0.45	0.2	0.1
	Max. operating pressure (MPa)	1 MPa			
	Min. operating pressure (MPa) (Vacuum) ^{Note 3)}	0 (0.1 Pa.abs)			
	Flow rate (l/min) (at max. operating pressure differential)	0 to 5	0 to 6	0 to 5	
	Hysteresis (at max. operating pressure differential)	10% or less			
	Repeatability (at max. operating pressure differential)	3% or less			
	Start-up current (at max. operating pressure differential)	50% or less			

Note 1) Ambient temperature is for the valve proximal section (approx. 1 mm).

When the valve is continuously energized at an ambient temperature of 50°C (when applying maximum current), the coil outer surface reaches 90°C. The temperature changes depending on the operating conditions, and the coil outer surface temperature must be kept at 90°C or lower.

Note 2) Maximum operating pressure differential indicates pressure differential (difference between inlet and outlet pressure) which can be allowed for operation with the valve closed or open. If the pressure differential exceeds the max. operating pressure differential of orifice, the valve may leak.

Note 3) For vacuum application, max. operating pressure range is 0.1 Pa-abs to max. operating pressure differential. A(2) port is applicable for vacuum pressure.