

Compact Proportional Solenoid Valve

PVQ10 Series



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 With lead wire (Length 300 mm)	
LO	L plug connector Without connector	
M	M plug connector With lead wire (Length 300 mm)	
MO	M plug connector Without connector	

* Refer to page 981 for the different lead wire lengths of L and M plug connectors.

Body/Seal material

Symbol	Body	Seal
A	C36	FKM

Port size

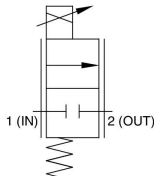
Nil	Without sub-plate (with mounting screw M1.7 x 17L, 2 pcs.)	
M5	With sub-plate M5 x 0.8	

Orifice size

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



Symbol



Specifications

Standard specifications	Valve construction	Direct operated poppet	
	Fluid	Air	
	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
Coil current		0 to 85 mA	0 to 170 mA
Power consumption		0 to 2 W	
Coil insulation		Class B	

Note 1) Indicates the ambient temperature when the valve is not energized.

Note 2) When the valve is continuously energized (when applying maximum current) and the ambient temperature is kept at 50°C due to the convection of the air around the valve, the coil outer surface reaches approximately 90°C, and the coil proximal section (1 mm) reaches approximately 60°C. Use the product at a temperature of not more than 50°C.

* Refer to the Specific Product Precautions "Continuous Energization."

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.

Characteristic specifications	Orifice diameter (mm \varnothing)	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	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			