

Compact Proportional Solenoid Valve

PVQ30 Series



How to Order

Body ported

Valve type: 31 N.C.
 Port size: 01 1/8 (6A)

PVQ 31 - 5 G - 16 - 01

Option	
Nil	None
F	Foot bracket

* Bracket is not mounted but is provided at the time of shipment.

Base mounted

Valve type: 33 N.C.
 Voltage: 5 24 VDC, 6 12 VDC

PVQ 33 - 5 G - 16 - 01

Valve type: 33 N.C.

Voltage	
5	24 VDC
6	12 VDC

Electrical entry: Grommet

Body/(Sub-plate) Seal material

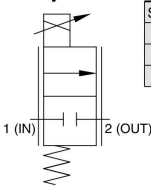
Symbol	Body	Seal
Nil	C37	FKM
H	Stainless steel	

Thread type (with sub-plate)

Nil	Rc
F	G
N	NPT
T	NPTF



Symbol



Orifice size

Symbol	Orifice dia.	Max. operating pressure differential
16	1.6 mmø	0.7 MPa
23	2.3 mmø	0.35 MPa
40	4 mmø	0.12 MPa

Port size

Nil	Without sub-plate (with mounting screw M3 x 8L, 2 pcs.)	
	With sub-plate 1/8 (6A)	

Specifications

Standard specifications	Valve construction	Direct operated poppet	
	Fluid	Air	
	Seal material	FKM	
	Body material	C37 (Standard), Stainless steel	
	Fluid temperature	0 to +50°C	
	Ambient temperature ^{Note 1)}	0 to +50°C	
	Action	N.C. (Normally closed)	
	Mounting orientation	Unrestricted	
	Enclosure	IP40	
	Port size	Rc 1/8	
Coil specifications	Power supply	24 VDC	12 VDC
	Coil current	0 to 165 mA	0 to 330 mA
	Power consumption	0 to 4 W	
	Coil insulation	Class B	

Note 1) Indicates the ambient temperature when the valve is not energized. 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 100°C, and the coil proximal section (1 mm) reaches approximately 70°C. Use the product at a temperature of not more than 50°C.

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

Characteristic specifications	Orifice diameter (mmø)	1.6	2.3	4.0
	Max. operating pressure differential (MPa) ^{Note 2)}	0.7	0.35	0.12
	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 100	0 to 75	
	Hysteresis (at max. operating pressure differential)	10% or less	13% or less	
	Repeatability (at max. operating pressure differential)	3% or less		
	Start-up current (at max. operating pressure differential)	50% or less	65% or less	

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.

ARJ
AR425 to 935
ARX
AMR
ARM
ARP
IR□-A
IR
IRV
VEV
SRH
SRP
SRF
ITV
IC
ITVH
ITVX
PVQ
VY1
VBA
VBAT
AP100