

TAKASAGO

SMV Series Low Cost Miniature Isolation Valve

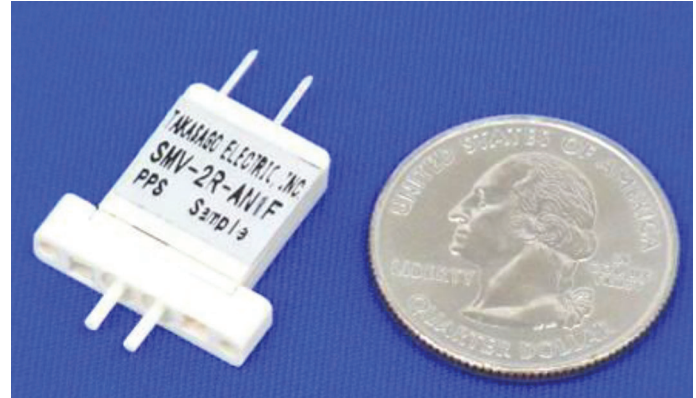
Inert Valves, 2-way Normally Closed, 0.4 or 0.8 mm Orifice

DESCRIPTION

Model series SMV miniature diaphragm isolation valves utilizes a specialty shape memory alloy for actuation. They are suitable for a wide range of clinical, analytical and laboratory instruments.

The small rectangular footprint, silent operation, low power consumption (0.3 W or less) and reduced internal passage volume are main product advantages. O-ring manifold mounting options are available (consult us).

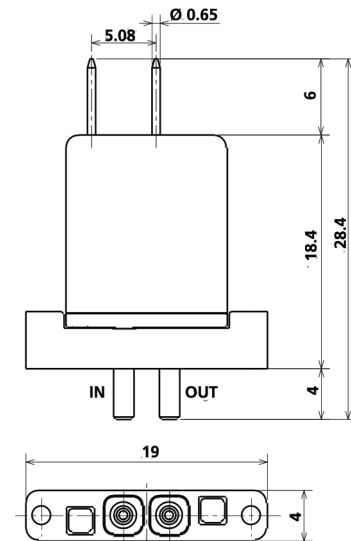
Standard materials in contact with the process fluid are PPS valve body and FPM or EPDM Diaphragm.



SPECIFICATIONS

Type	2-way N.C.		
Model	Standard	High Pressure	
Orifice Diameter (mm)	0.5, 0.8	0.4	0.8
Port Connection	Hose Pipe, O-ring (Manifold Mount)		
Operating Pressure (kPa) In	0-100	0-250	0-200
Operating Pressure (kPa) Out	0-50	0-100	
Operating Temp. Range	5 to 40°C (41-113°F)		
Ambient Temp. Range	5 to 45°C (41-113°F); 0-55°C (131°F) for FPM & EPDM models		
Electrical Supply	250 mA current (See below "Power Supply Notes")		
Typical Response Time ¹	ON: 600 ms, OFF: 600 ms		
Wetted Body Material	PPS or PEEK		
Wetted Diaphragm Material	FPM, EPDM, FFKM		
¹ Response times vary depending on the ambient temperature. The values above are measured at 30°C. Can be improved by controlling the applied current (e.x. PWM, a spike & hold circuit, etc.). Please contact us for details			

DIMENSIONS (MM)

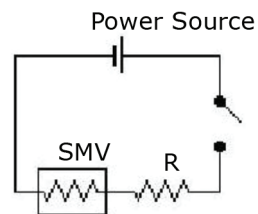


Power Supply Notes

1. Power supply by a constant current circuit is recommended.
2. Operation by 12 VDC power supply or batteries is also possible, but a resistor must be inserted between the valve and the power source. See diagram on right.
3. If you operate the valve by any other method, the shape memory alloy may burn out, resulting in the valve malfunctioning.

ORDERING INFORMATION

Please contact us to discuss your application and to arrive at an ordering number



Power Source	Resistor
12 VDC	45 Ohms, 5W
2 AA Batteries	10 Ohms, 2 W