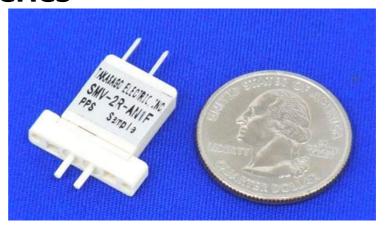


# **SMV Series**



#### **Features**

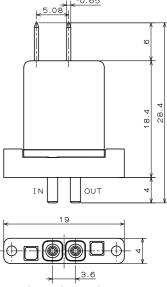
This valve is driven by a piece of shape memory alloy, giving it the following features:

- Compact and light weight: 19 x 18.4 x t4 mm and 1.5 g (approx.).
- Silent operation
- Low power consumption 0.3 W or less.
- Low cost and disposable.

## **Specifications**

Туре			2-Way N.C.		
Model		Standard	High pressure		
Orifice Diameter (mm)		0.4, 0.8	0.4	0.8	
Port Connection			Hose pipe, O-ring (Manifold mount)		
Opera	Range	IN	0 ~ 100	0 ~ 250	0 ~ 200
Pressure (kP		OUT	0 ~ 50	0 ~ 100	
Operating Temp. Range			5 ~ 40 °C		
Electrical Supply			Current 250 mA *1		
Response Time(Typ.) *2			ON: 600 ms, OFF: 600 ms		
Wetted Materials	Body		PPS *3		
	Diaphragm		FPM or EPDM *3		

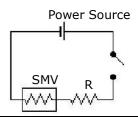
#### Dimensions



- \*1: Please see "Cautions concerning Power Supply" below.
- \*2: 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.
- \*3: PEEK & Perfluoroelastomer are optionally available.

## Cautions concerning Power Supply

- 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.



Power Source	Resistor	
12 VDC Power Supply	45 Ω	5 W
AA battery x 2	10 Ω	1 W

Note: Details including specifications may change without notification.

