

TAKASAGO

FV Series Inert Isolation Type Miniature Solenoid Valves

2-way N.C , 0.4 mm Orifice, Hose Barb Connection or Manifold Mount

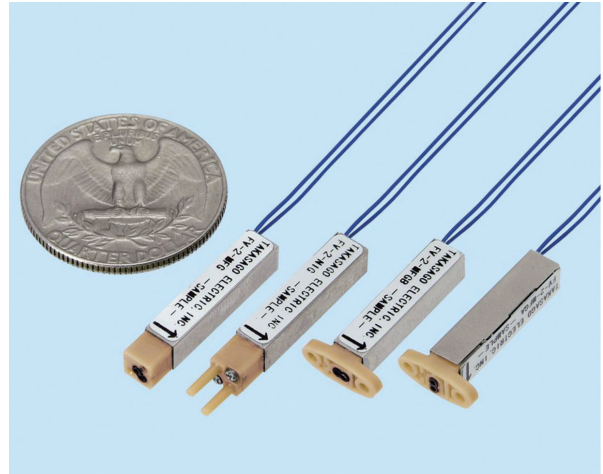
DESCRIPTION

FV series valves are only 4.2mm square(4.2x4.2x23.1mm not including wires).They are an innovative and ground-breaking ultra-small solenoid valve that can be mounted in the smallest of spaces, minimizing the manifold size and shortening the length of flow paths.

FV valves have excellent chemical resistance – PEEK and perfluoroelastomer are used for the wetted materials and materials can be changed according to your requirements.

Miniaturization has resulted in very small internal volumes ranging from 1.1 to 4.3µl depending on the model. These low volumes contribute to reductions in reagent and sample quantities and improvements in analysis accuracy.

The FV type valve is a normal solenoid type while the FLV is a latching type that changes state by reversing the magnetic field of the valve coil. This is accomplished by changing the coil wire polarity. A magnet maintains the changed state.



SPECIFICATIONS

Model	FV(FLV)-2-N1G	FV(FLV)-2-MFGA(B) ¹	FV(FLV)-2-MFG
Type	2-way N.C.		
Orifice Diameter	0.4 mm		
Internal Volume	1.1µl	4.3µl	1.5µl
Operating Pressure Range	IN: 0-100 kPa OUT: 0-50 kPa		
Port Connection	Hose Barb	Gasket	
Media Temp. Range	10 to 50°C		
Ambient Temp. Range	10 to 50°C		
Rated Voltage	FV: 5 VDC FLV: 5,12,24 VDC		
Power Consumption	FV: 1 W FLV: 2.4 W		
Duty Cycle	FV: 40%, Max. on time 90 Seconds FLV:20%, 0.2 to 1 second to energize		
Coil Temperature Increase	FV: Max 80°C from ambient temperature (when energized for 90 seconds at rated voltage)		
Insulation Class/Dielectric Strength	Class B/800 VAC for 60%		
Diaphragm Materials	Perfluoroelastomer, FPM optional		
Body Material	Peek, Optionally PPS		
Hose Barb Material	Peek, Optionally PPS	-	

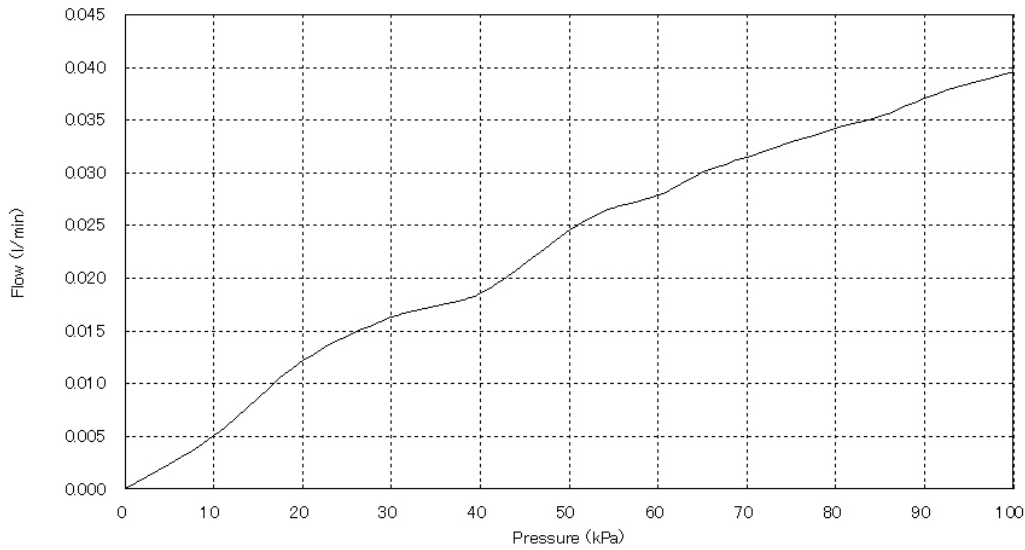
¹ A & B have a 90° difference in port orientation

FLV Table of Lead Color, Polarity & Valve Status		
Polarity/Lead Color	+ White - Blue	+ Blue - White
Status	From open to closed	From closed to open

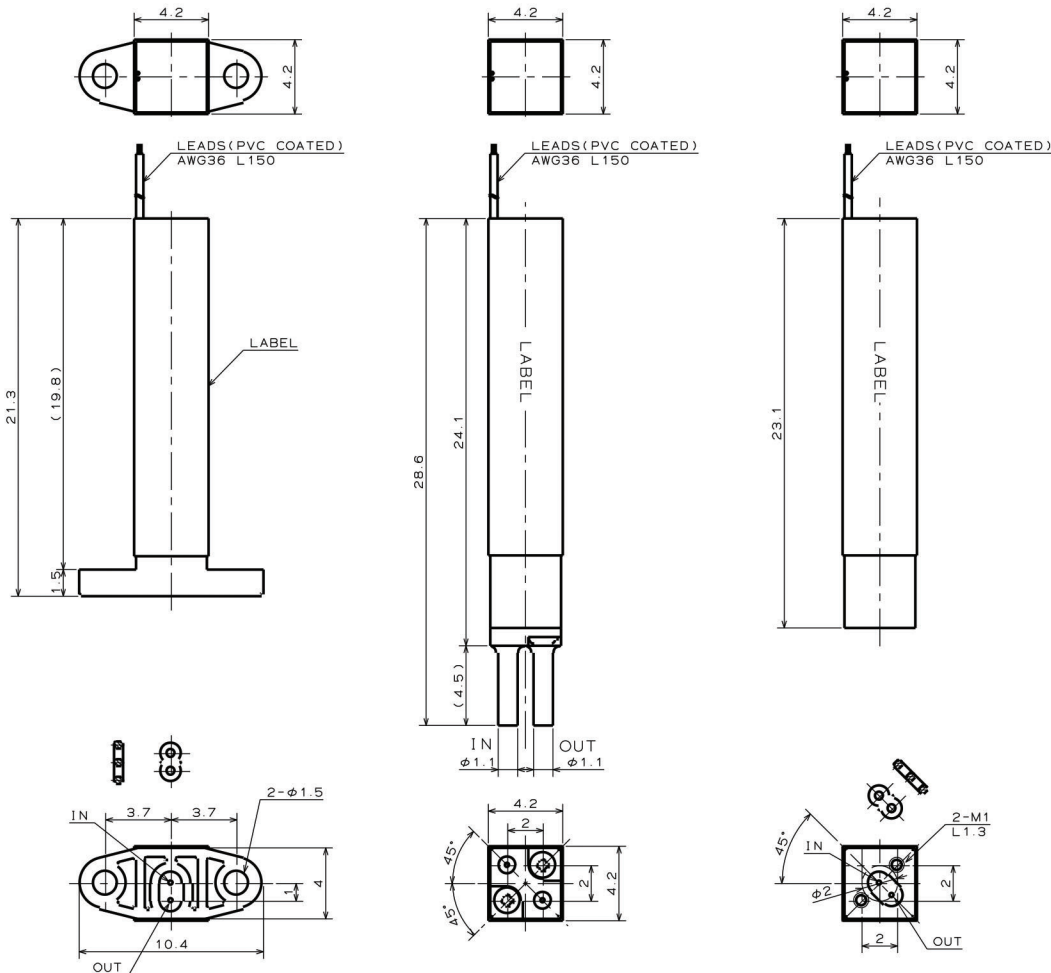
FLOW CURVE

FLOW RATE (Water)

FLV-2



DIMENSIONS (MM)



ORDERING INFORMATION

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