

SV350 & SV450

2-Way Normally Closed and Normally Open High Pressure Pilot Operated Solenoid Valves



Valcor Engineering Corporation



DESCRIPTION

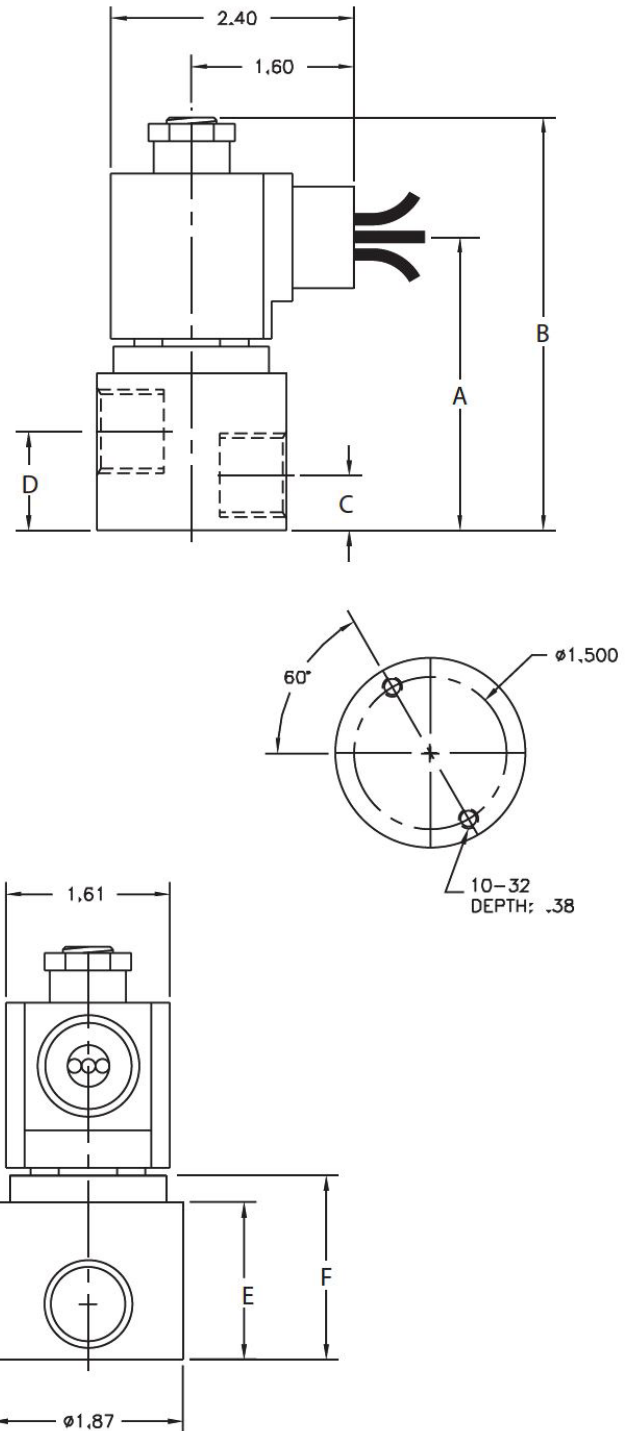
The SV350/SV450 series are direct acting, 2-way normally closed and normally open general purpose high pressure, pilot-operated poppet-style solenoid valves designed to control inert gases and liquids. They are designed to operate with no operating pressure (MOP) and control high pressure inert gases and liquids. Featuring machined bar stock bodies for exceptional durability in typical industrial applications, their compact size and low weight allow these valves to be used in the tightest space available. They are available with UL and CSA listing upon request.

APPLICATION

The SV350/SV450 series are suitable for a broad range of light industrial applications including: industrial pneumatic, fuel gas and hydraulic systems, hydrogen fuel cells, CNG fuel systems, and calibration and test stands.

FEATURES

- Maximum Operating Pressure: 2200 PSI
- No minimum operating pressure required
- Flow Rate: Cv of 0.8 to 1.5 available
- Leak rate: Internal: bubble tight on gas, drip tight on liquid. External: 0 cc/min at 2200 PSIG
- Temperature: +32°F to 230°F max standard
- 10 watts @ 115/60 Hz or 14 watts @ 24 VDC 70°F; continuous duty
- NEMA 4 coil housing standard, NEMA 7 available
- Electrical connection: 24" pigtailed standard, with 1/2" conduit hub standard
- Brass or stainless steel bar stock body
- 1/4", 3/8" or 1/2" NPT ports
- Two 10-32 UNF mounting holes in bottom of body
- Mountable in any orientation
- Fully customizable for your application



Custom designs are our specialty. Contact us today to see how we can help on your next project.

Valcor Engineering Corporation
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www.valcor.com

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Construction

Operating Mode	Normally Closed: Open when energized, closed when de-energized Normally Open: Closed when energized, open when de-energized
Port Size (in.)	Normally Closed: 1/4, 3/8, 1/2 Normally Open: 1/4, 3/8, 1/2
Orifice Size (in.)	3/8
Temperature Ratings	Ambient Temp 32°F to 125°F Fluid Temp. See specifications on next page.
Mounting Position	Any position
Agency Listings	UL recognized

Valve Parts in Contact With Fluid

Body	303 stainless steel
Seals	FKM, PTFE
Internal Metal Parts	303 and 430F stainless steel

Electrical

Standard Voltages	AC 24V 60Hz AC 110V 50Hz, AC 120V 60Hz AC 220V 50Hz, AC 240V 60Hz DC 12V, DC 24V
Voltage Tolerance	+10% to -15% of applicable voltage
Standard Coil Housing	Standard: Watertight NEMA 4 Options: Explosion proof NEMA 7, open frame, junction box
Coil	Class F and H
Lead Length	24 inches

*Consult the factory for specifications other than those listed above.

Coil Data

Model		SV350	SV450
Frequency		60	50
Power VA	Inrush	46	46
	Holding	20	21
Power Consumption (W)	AC	10	10
	DC	14	14

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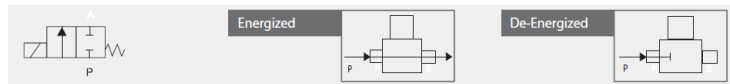
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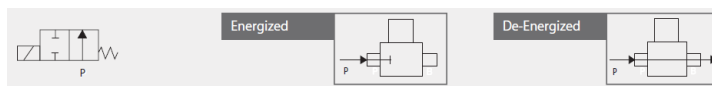
Specifications for SV350 Normally Closed

Port Size (in.) (NPT)	Orifice Size (in.)	Cv	Minimum Operating Pressure (PSIG)	Max. Operating Pressure (PSIG)						Max Fluid Temp °F	Model Number*
				Air/Gas		Water		Lt. Oil			
				AC	DC	AC	DC	AC	DC		
1/4	3/8	1.1	0	2200	2200	2200	2200	2200	2200	230	SV350GF02Z1BF5
3/8	3/8	1.5	0	2200	2200	2200	2200	2200	2200	230	SV350GF02Z1CF5
1/2	3/8	1.5	0	2200	2200	2200	2200	2200	2200	230	SV350GF02Z1DF5



Specifications for SV450 Normally Open

Port Size (in.) (NPT)	Orifice Size (in.)	Cv	Minimum Operating Pressure (PSIG)	Max. Operating Pressure (PSIG)						Max Fluid Temp °F	Model Number*
				Air/Gas		Water		Lt. Oil			
				AC	DC	AC	DC	AC	DC		
1/4	3/8	0.8	0	2200	2200	2200	2200	2200	2200	230	SV450GF02Z1BF5
3/8	3/8	1.0	0	2200	2200	2200	2200	2200	2200	230	SV450GF02Z1CF5
1/2	3/8	1.0	0	2200	2200	2200	2200	2200	2200	230	SV450GF02Z1DF5



*PTFE seats may allow for a small amount of internal leakage at pressures less than 100 PSI.

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Part Number Configurator

Example Part Number: SV350GF02Z1BF5

S	V	3	5	0	G	F	0	2	Z	1	B	F	5		
Numbers 1 thru 5					6	7	8-9		10	11	12	13-14			
Series	Operating Mode	Housing		Coil Insulation		Application Voltage		Seal Material		Body Code		Port Connection (NPT) (in.)		Orifice Size (in.)	
SV350	Normally Closed	X	Explosion Proof NEMA 7	F	Class F	02	120V/60Hz 110V/50Hz	Z	FKM/PTFE	1	SS	B	1/4	F5	3/8
SV450	Normally Open	G	Watertight NEMA 4	H	Class H	45	12V DC					C	3/8		
		Y	DIN			46	24V DC					D	1/2		

*Please specify media and pressure when ordering.

External Dimensions

Port Connection NPT (in.)	A		B		C		D		E		F		Weight (lbs)
	NC	NO	NC	NO	NC	NO	NC	NO	NC	NO	NC	NO	
1/4	2.66	2.73	3.61	4.10	0.42	0.42	0.95	0.95	1.47	1.47	1.74	1.74	1.80
3/8	2.66	2.73	3.61	4.10	0.42	0.42	0.95	0.95	1.47	1.47	1.74	1.74	1.80
1/2	2.74	2.81	3.69	4.17	0.54	0.54	0.97	0.97	1.55	1.55	1.82	1.82	2.00

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