

SV327 & SV427

2-Way Zero Differential Normally Closed and Normally Open
Pilot Operated Solenoid Valves



Valcor Engineering Corporation



DESCRIPTION

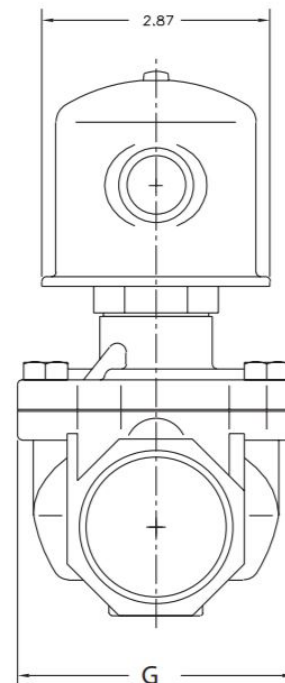
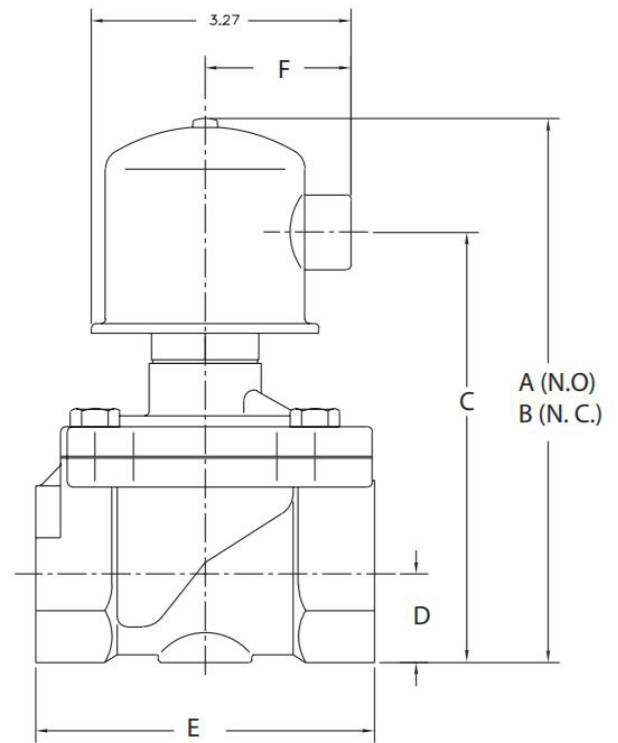
The SV327/SV427 series are pilot operated, 2-way normally closed and normally open general purpose solenoid valves designed to operate with no minimum operating or differential pressure, and control the high flow of inert gases and liquids. The pilot operation enables these valves to control high flows with low power consumption in a compact envelope. They feature forged bodies for exceptional durability in typical industrial applications. The 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

SV327/SV427 series are suitable for a range of light industrial applications including: industrial pneumatic, fuel gas and hydraulic systems, potable and wastewater treatment plants, associated gas purification systems, steam control in natural gas reformers, high BTU burner combustion gas control, tank drains, air humidifiers, and hot water in car/truck washes.

FEATURES

- Maximum Operating Pressure: 125 PSI
- No minimum operating or differential pressure
- Flow Rate: Cv of 13 to 28 available
- Leak Rate: Internal: bubble tight on gas, drip tight on liquid. External: 0 cc/min at 125 PSIG
- Temperature: -40° F to 150° F standard
- 18.5 watts at 115/60 Hz or 22.5 watts at 24 VDC and 70° F; continuous duty
- NEMA 4 coil housing standard, NEMA 7 available
- Electrical connection: 18" pigtails with 1/2" conduit hub standard
- Surge suppressor and neon indicator available when optional DIN connection is specified
- Brass or stainless steel forged body



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

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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.)	1, 1 1/4, 1 1/2, 2
Orifice Size (in.)	1, 1 1/4
Temperature Ratings	Ambient Temp -40°F to 150°F max. with class F coil 175°F max. with Class H coil Fluid Temp. See specifications on next page.
Mounting Position	Solenoid vertical and upright
Agency Listings	Consult factory.
Options	Manual override, neon lamp, surge suppressor

Valve Parts in Contact With Fluid

Body	Forged brass, 304 stainless steel, bronze
Seals	FKM, Buna N, ethylene propylene
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: Conduit (NEMA1) Options: Watertight NEMA4 terminal
Coil	Class F and H
Lead Length	18 inches

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

Coil Data

Model		SV327		SV427	
Frequency		50	60	50	60
Power	Inrush	150	130	160	130
	VA Holding	27	22	28	22
Power Consumption (W)	AC	17.5		18.5	
	DC	22.5		---	

Note: AC power consumption at 110V/50HZ, 120V/60HZ data

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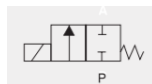


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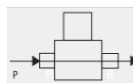
Specifications for SV327 Normally Closed

Port Size	Orifice Size (ins.)	C _v	Min PSI	Operating Pressure Differential								Max Fluid Temp °F	Model Number	
				Max Pressure (PSI)									Normally Closed	
				Air/Gas		Water		Lt. Oil		Steam			Brass	Stainless Steel
AC	DC	AC	DC	AC	DC	AC	DC	AC						
1	1	13	0	125	125	100	100	70	70	-	180	SV327AF02N5FG9	SV327AF02L7FG9	
	1	13	0	-	-	100	50	-	-	-	210	SV327AF02C5FG9	SV327AF02E7FG9	
1 1/4	1 1/4	19	0	125	125	50	50	70	70	-	180	SV327AF02N5GJ2	SV327AF02L7GJ2	
	1 1/4	19	0	-	-	50	50	-	-	170	210	SV327AF02C5GJ2	SV327AF02E7GJ2	
1 1/2	1 1/4	25	0	125	125	50	50	70	70	-	180	SV327AF02N5HJ2	SV327AF02L7HJ2	
	1 1/4	25	0	-	-	50	50	-	-	-	210	SV327AF02C5HJ2	SV327AF02E7HJ2	
2	1 1/4	28	0	125	125	50	50	70	70	-	180	SV327AF02N5JJ2	---	
	1 1/4	28	0	-	-	50	50	-	-	170	210	SV327AF02C5JJ2	---	

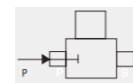
Normally Closed



Energized



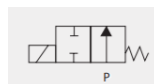
De-Energized



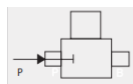
Specifications for SV427 Normally Open

Port Size	Orifice Size (ins.)	C _v	Min PSI	Operating Pressure Differential								Max Fluid Temp °F	Model Number	
				Max Pressure (PSI)									Normally Open	
				Air/Gas		Water		Lt. Oil		Steam			Brass	Stainless Steel
AC	DC	AC	DC	AC	DC	AC	DC	AC						
1	1	13	0	125	-	125	-	70	-	-	180	SV427AF02N5FG9	SV427AF02L7FG9	
	1	13	0	-	-	100	-	-	-	-	210	SV427AF02C5FG9	SV427AF02E7FG9	
1 1/4	1 1/4	18	0	125	-	125	-	70	-	-	180	SV427AH02C5GJ2	SV427AF02L7GJ2	
	1 1/4	18	0	-	-	100	-	-	-	-	210	SV427AF02C5GJ2	SV427AF02E7GJ2	
1 1/2	1 1/4	23	0	125	-	125	-	70	-	-	180	SV427AF02N5HJ2	SV427AF02L7HJ2	
	1 1/4	23	0	-	-	100	-	-	-	-	210	SV427AF02C5HJ2	SV427AF02E7HJ2	
2	1 1/4	27	0	125	-	125	-	70	-	-	180	SV427AF02N5JJ2	---	
	1 1/4	27	0	-	-	100	-	-	-	-	210	SV427AF02C5JJ2	---	
	1 1/4	27	0	-	-	-	-	-	-	50	295	SV427AH02C5JJ2	---	

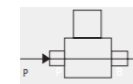
Normally Open



Energized



De-Energized



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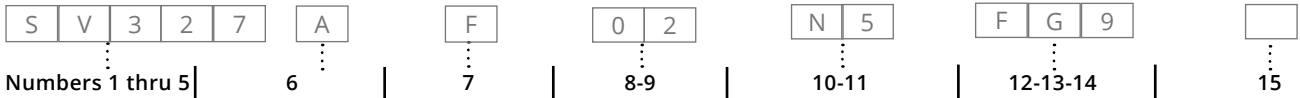
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Part Number Configurator

Example Part Number: SV327GAF02N5FG9



Series	Operating Mode	Housing	Coil Insulation	Applicable Voltage	Material (Seal, Body)	Pipe Connection NPT (in.)	Option
SV327	Normally Closed	A Conduit W Watertight NEMA 4	F Class F H Class H	02 120V/60Hz 110V/50Hz	N5 Buna N, Brass V5 FKM, Brass J7 Buna N, 316 SS	FG9 1 (1) GJ2 1 1/4 (1 1/4) HJ2 1 1/2 (1 1/4)	M Manual Override N Neon Lamp Z Surge Suppressor
				04 220V/60Hz 220V/50Hz			
				01 24V/60Hz			
SV427	Normally Open	A Conduit W Watertight NEMA 4	F Class F H Class H	15 12V DC	C5 EPR, Brass L7 FKM, 316 SS E7 Ethylene Propylene, 316 SS	JJ2 2 (1 1/4)	
				16 24V DCs			

External Dimensions

Port Connection NPT (in.)	A	B	C	D	E	F	G	Weight (lbs)
1	7.3	6.61	4.78	0.84	3.7	1.83	3.22	5.1
1 1/4	7.99	7.3	5.47	1.08	4.35	1.83	3.7	6.7
1 1/2	7.99	7.3	5.47	1.08	4.35	1.83	3.7	6.7
2	8.59	7.9	6.07	1.47	5.58	1.83	3.68	9.1

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