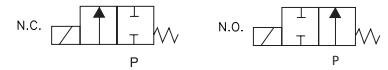


# SV320 & SV420

2-way Zero Differential Normally Open and Normally Closed  
Piloted Diaphragm Solenoid Valves



Valcor General Purpose Series



## DESCRIPTION

These 2-way piloted diaphragm solenoid valves are designed to operate at zero differential pressure. These sturdy construction valves are capable of handling a wide range of fluids with an operating pressure range of 0 to 200 PSI. For special applications, contact your Valcor Scientific customer service representative.

## APPLICATIONS

The SV320 & SV420 series are suitable for a broad range of industrial applications. Typical applications include:

- Tank drain valves
- Differential pressures down to zero PSI
- Process control and production piping
- General on-off control of water, oil, and gas
- Gas and liquid distribution systems
- Economical choice for OEM applications

## FEATURES

- Zero differential pilot operated construction
- Wide selection of construction materials allow for use on a variety of fluids
- AC and DC solenoid coils in a wide range of standard voltages
- NEMA4 as standard coil enclosure, NEMA7 Explosion proof and others available
- Pressures rating of up to 200 psi
- Mountable in any position



## VALCOR SV320 & SV420 SPECIFICATIONS

### Construction

Operating Mode	Normally Closed: Open when energized, closed when de-energized Normally Open : Closed when energized, open when de-energized.
Port Size (in.)	3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2
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, next page
Mounting Position	Mounts in any position (Best position is solenoid upright and vertical)
Agency Listings	UL Listed, CSA Approved by order
Options	Manual override, mounting bracket, neon lamp, surge suppressor

#### Valve Parts in Contact with Fluid

Body	Brass, 303 stainless steel
Seals	Viton, 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 Housings	Standard: Watertight NEMA 4 Options : Explosion proof NEMA 7, DIN, conduit, grommet, open frame, junction box
Coil	Class F and H
Lead Length	24 inch

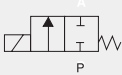
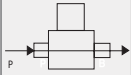
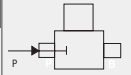
\*Consult the factory for specifications other than those listed above

### Coil Data

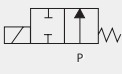
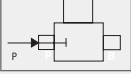
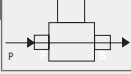
Model		SV320		SV420	
Frequency (Hz)		50	60	50	60
Power (VA)	Inrush	37	30	43	37
	Holding	18	13	23	16
Power Consumption (W)	AC	10		11	
	DC	10		10	

## VALCOR SV320 & SV420 SPECIFICATIONS

### Specification for SV320 Normally Closed

Port Size (NPT) (in.)	Orifice Size (in.)	C <sub>v</sub>	Operating Pressure Differential								Max Fluid Temp °F	Model Number						
			Min PSI	Max Pressure (PSI)				Normally Closed										
				Air / Gas		Water		Lt. Oil		Steam		Brass	Stainless Steel					
				AC	DC	AC	DC	AC	DC	AC								
Normally Closed																		
							Energized						De-Energized					
3/8	5/8	3.3	0	140	90	140	90	90	70	-	180	SV320GF02N5CG4	SV320GF02L7CG4					
	5/8	3.3	0			100	50	-	-	-	210	SV320GF02C5CG4	SV320GF02E7CG4					
	5/8	3.3	0	-	-	-	-	-	-	50	295	SV320GH02C5CG4	SV320GH02E7CG4					
1/2	5/8	4.1	0	140	90	140	90	90	70	-	180	SV320GF02N5DG4	SV320GF02L7DG4					
	5/8	4.1	0			100	50	-	-	-	210	SV320GF02C5DG4	SV320GF02E7DG4					
	5/8	4.1	0	-	-	-	-	-	-	50	295	SV320GH02C5DG4	SV320GH02E7DG4					
3/4	3/4	5.5	0	140	90	140	90	90	70		180	SV320GF02N5EG5	SV320GF02L7EG5					
	3/4	5.5	0			100	50	-	-	-	210	SV320GF02C5EG5	SV320GF02E7EG5					
	3/4	5.5	0	-	-	-	-	-	-	50	295	SV320GH02C5EG5	SV320GH02E7EG5					
1	1	11.0	0	100		50	-	-	-	-	180	SV320GF02N5FG9	SV320GF02L7FG9					
	1	11.0	0			50	-	-	-	-	210	SV320GF02C5FG9	SV320GF02E7FG9					
	1	11.0	0	-	-	-	-	-	-	50	295	SV320GH02C5FG9	SV320GH02E7FG9					
1 1/4	1 1/4	18.0	0	50	-	-	-	-	-	-	180	SV320GF02N5GJ2	SV320GF02L7GJ2					
	1 1/4	18.0	0	-	-	-	-	-	-	50	295	SV320GH02C5GJ2	SV320GH02E7GJ2					
1 1/2	1 1/4	18.0	0	50	-	-	-	-	-	-	180	SV320GF02N5HJ2	SV320GF02L7HJ2					
	1 1/4	18.0	0	-	-	-	-	-	-	50	295	SV320GH02C5HJ2	SV320GH02E7HJ2					

### Specification for SV420 Normally Open

Port Size (NPT) (in.)	Orifice Size (in.)	C <sub>v</sub>	Operating Pressure Differential								Max Fluid Temp °F	Model Number						
			Min PSI	Max Pressure (PSI)				Normally Open										
				Air / Gas		Water		Lt. Oil		Steam		Brass	Stainless Steel					
				AC	DC	AC	DC	AC	DC	AC								
Normally Open																		
							Energized						De-Energized					
3/8	5/8	3.3	0	200	125	200	125	200	125	-	180	SV420GF02N5CG4	SV420GF02L7CG4					
	5/8	3.3	0	-	-	100	100	-	-	-	210	SV420GF02C5CG4	SV420GF02E7CG4					
	5/8	3.3	0	-	-	-	-	-	-	50	295	SV420GH02C5CG4	SV420GH02E7CG4					
1/2	5/8	4.1	0	200	125	200	125	200	125	-	180	SV420GF02N5DG4	SV420GF02L7DG4					
	5/8	4.1	0	-	-	100	100	-	-	-	210	SV420GF02C5DG4	SV420GF02E7DG4					
	5/8	4.1	0	-	-	-	-	-	-	50	295	SV420GH02C5DG4	SV420GH02E7DG4					
3/4	3/4	5.5	0	200	125	200	125	200	125	-	180	SV420GF02N5EG5	SV420GF02L7EG5					
	3/4	5.5	0	-	-	100	100	-	-	-	210	SV420GF02C5EG5	SV420GF02E7EG5					
	3/4	5.5	0	-	-	-	-	-	-	50	295	SV420GH02C5EG5	SV420GH02E7EG5					

# VALCOR SV320 & SV420 SPECIFICATIONS

## Part Number Configurator

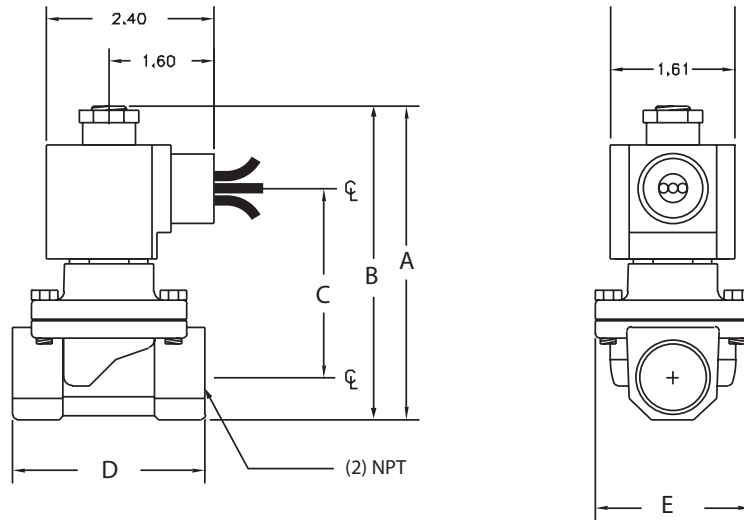
Example Part Number: SV320GF02N5CG4



Numbers 1 thru 5		6	7	8-9		10-11		12-13-14		15			
Series	Operating Mode	Housing		Coil Insulation		Applicable Voltage		Seal Material		Port Connection (NPT) Orifice Size (in.)	Option		
SV320	Normally Closed	A	Conduit	F	Class F	02	120V/60Hz 110V/50Hz	N5	Buna N, Brass	CG4	3/8 (5/8)	K	Mounting Bracket
		P	Open Frame	H	Class H	04	220V/60Hz 220V/50Hz	V5	Viton, Brass	DG4	1/2 (5/8)	M	Manual Override
SV420	Normally Open	B	Grommet			01	24V/60Hz	C5	EPR, Brass	EG5	3/4 (3/4)		
		X	Explosion Proof NEMA 7			15	12V DC	J7	Buna N, 304 SS	FG9	1 (1)		
		S	Junction Box			16	24V DC	L7	Viton, 304 SS, Ethylene	GJ2	1 1/4 (1 1/4)		
		G	Water-tight NEMA 4					E7	Propylene, 304 SS	HJ2	1 1/2 (1 1/4)		
		Y	DIN										

\*Class H Coil Recommended for Steam and Other High Temperature Applications

## External Dimensions



Port Conn. (NPT) (in.)	SV320 Normally Closed							SV420 Normally Open						
	A	B	C	D	E	F	Weight (lbs)	A	B	C	D	E	F	Weight (lbs)
3/8	3.9	3.35	2.20	2.76	2.20	1.61	2.00	4.33	3.78	2.32	2.76	2.20	1.61	2.00
1/2														
3/4	4.09	3.46	2.32	2.76	2.20	1.61	2.20	4.53	3.90	2.44	2.76	2.20	1.61	2.20
1	5.12	4.29	3.15	3.62	3.23		3.80							
1 1/4	5.71	4.61	3.46	4.33	3.62		5.30							
1 1/2							5.70							