

# SV320 & SV420 Series

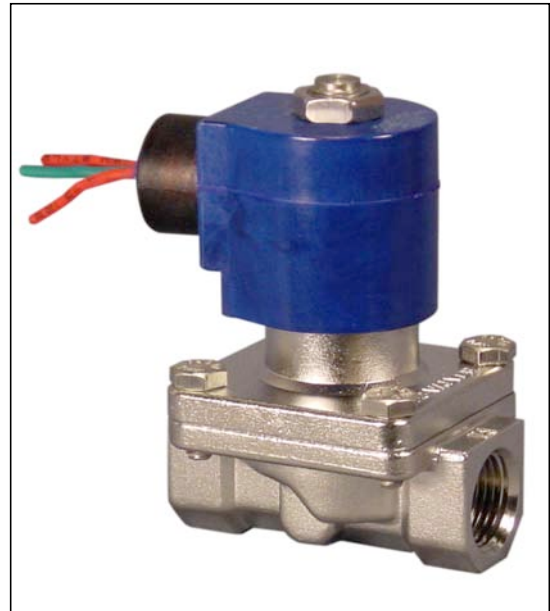
## 2-Way Zero Differential

### Piloted Diaphragm Solenoid Valves

**SV320 • Normally Closed**

**SV420 • Normally Open**

These 2-way piloted diaphragm solenoid valves are capable of operating at zero differential pressure. They are capable of handling an operating pressure range from 0 PSI to 200 PSI. These valves are offered in a wide variety of diaphragm and body materials to provide on-off control of various fluids. For special applications, contact your Valcor Scientific customer service representative.



#### Specifications

Operating Mode	Normally Closed	Open when energized, closed when de-energized.	
	Normally Open	Closed when energized, open when de-energized.	
Pipe Size (in.)	3/8 • 1/2 • 3/4 • 1 • 1 1/4 • 1 1/2		
Orifice Size (in.)	5/8 • 3/4 • 1 • 1 1/4		
Body	Forged Brass, 304 Stainless Steel		
Sealing/Seat	Buna N, Ethylene Propylene, Viton		
Housing	Standard	Watertight NEMA 4	
	Options	Explosion-proof NEMA 7, Grommet, Open frame, Junction box, Others	
Available Voltages	AC24V 60Hz		12V DC
	AC110V 50Hz AC120V 60Hz AC220V 50Hz AC240V 60Hz		24/DC
Voltage Tolerance	+10% to -15% of applicable voltage		
Coil	Class F and H		
Lead Length	24 Inch		
Temperature Ratings	Ambient Temp. -40°F to 150°F max. with Class F Coil; 175°F max. with Class H Coil.		
	Fluid Temp. See the "HOW TO ORDER" Table.		
Mounting position	Mounts in any position		
Agency Listings	Consult factory		
Options	Manual Override, Mounting Bracket, Neon Lamp, Surge Suppressor		

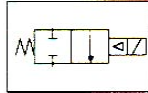
\*Consult the factory for specifications other than those listed above.



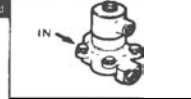
# Valve Selection Sheet

Pipe Size (ins.) NPT	Orifice (ins.)	Cv	Operating Pressure Differential								Max. Fluid Temp. °F	Housing	Power Consumption (W)		Coil Insulation	Voltage 60 HZ	Model Code			
			Max. PSI										AC	DC			Brass		Stainless Steel	
			Air/Gas		Water		Lt. Oil		Steam											
			AC	DC	AC	DC	AC	DC	AC	DC										

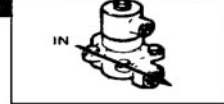
Normally Closed



Dc energized

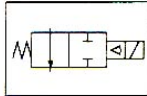


Energized



3/8	5/8	3.3	0	140	90	140	90	90	70	-	180	G	10	10	F	120	SV320GF02N5CG4	SV320GF02L7CG4
	5/8	3.3	0			100	50	-	-	-	210	G	10	10	F	120	SV320GF02C5CG4	SV320GF02E7CG4
	5/8	3.3	0	-	-	-	-	-	-	50	295	G	10	-	H	120	SV320GH02C5CG4	SV320GH02E7CG4
1/2	5/8	4.1	0	140	90	140	90	90	70	-	180	G	10	10	F	120	SV320GF02N5DG4	SV320GF02L7DG4
	5/8	4.1	0			100	50	-	-	-	210	G	10	10	F	120	SV320GF02C5DG4	SV320GF02E7DG4
	5/8	4.1	0	-	-	-	-	-	-	50	295	G	10	-	H	120	SV320GH02C5DG4	SV320GH02E7DG4
3/4	3/4	5.5	0	140	90	140	90	90	70		180	G	10	10	F	120	SV320GF02N5EG5	SV320GF02L7EG5
	3/4	5.5	0			100	50	-	-	-	210	G	10	10	F	120	SV320GF02C5EG5	SV320GF02E7EG5
	3/4	5.5	0	-	-	-	-	-	-	50	295	G	10	-	H	120	SV320GH02C5EG5	SV320GH02E7EG5
1	1	11	0	100		50	-	-	-	-	180	G	10	-	F	120	SV320GF02N5FG9	SV320GF02L7FG9
	1	11	0			50	-	-	-	-	210	G	10	-	F	120	SV320GF02C5FG9	SV320GF02E7FG9
	1	11	0	-	-	-	-	-	-	50	295	G	10	-	H	120	SV320GH02C5FG9	SV320GH02E7FG9
1 1/4	1 1/4	18	0	50	-	-	-	-	-	-	180	G	10	-	F	120	SV320GF02N5GJ2	SV320GF02L7GJ2
	1 1/4	18	0	-	-	-	-	-	-	50	295	G	10	-	H	120	SV320GH02C5GJ2	SV320GH02E7GJ2
1 1/2	1 1/4	18	0	50	-	-	-	-	-	-	180	G	10	-	F	120	SV320GF02N5HJ2	SV320GF02L7HJ2
	1 1/4	18	0	-	-	-	-	-	-	50	295	G	10	-	H	120	SV320GH02C5HJ2	SV320GH02E7HJ2

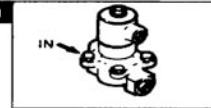
Normally Open



Dc energized



Energized



3/8	5/8	3.3	0	200	125	200	125	200	125	-	180	G	11	10	F	120	SV420GF02N5CG4	SV420GF02L7CG4
	5/8	3.3	0	-	-	100	100	-	-	-	210	G	11	10	F	120	SV420GF02C5CG4	SV420GF02E7CG4
	5/8	3.3	0	-	-	-	-	-	-	50	295	G	11	-	H	120	SV420GH02C5CG4	SV420GH02E7CG4
1/2	5/8	4.1	0	200	125	200	125	200	125	-	180	G	11	10	F	120	SV420GF02N5DG4	SV420GF02L7DG4
	5/8	4.1	0	-	-	100	100	-	-	-	210	G	11	10	F	120	SV420GF02C5DG4	SV420GF02E7DG4
	5/8	4.1	0	-	-	-	-	-	-	50	295	G	11	-	H	120	SV420GH02C5DG4	SV420GH02E7DG4
3/4	3/4	5.5	0	200	125	200	125	200	125	-	180	G	11	10	F	120	SV420GF02N5EG5	SV420GF02L7EG5
	3/4	5.5	0	-	-	100	100	-	-	-	210	G	11	10	F	120	SV420GF02C5EG5	SV420GF02E7EG5
	3/4	5.5	0	-	-	-	-	-	-	50	295	G	11	-	H	120	SV420GH02C5EG5	SV420GH02E7EG5

## Model Code

**S V 3 2 0**

**G F 0 2 N 5 C G 4**

1-2-3-4-5		6	7	8-9	10-11	12-13-14	15	
Series	Operating Mode	Housing	Coil Insulation	Applicable Voltage	Material (Seat, Body)	Pipe Connection Size	Orifice	Option
<b>SV320</b>	Normally Closed	A= Conduit	F= Class F	02= 120V/60HZ 110V/50HZ	N5= Buna N, Brass	CG4= 3/8" (5/8")		M= Manual Override
<b>SV420</b>	Normally Open	P= Open Frame	H= Class H	04= 220V/60HZ 220V/50HZ	V5= Viton, Brass	DG4= 1/2" (5/8")		K= Mounting Bracket
		B= Grommet		01= 24V/60HZ	C5= EPR, Brass Buna N, 304 SS	EG5= 3/4" (3/4")		
		X= Explosion Proof NEMA 7		15= 12V DC	J7= SS	FG9= 1" (1")		
		S= Junction Box		16= 24V DC	L7= Viton, 304 SS	GJ2= 1 1/4" (1 1/4")		
		G= Watertight NEMA 4			E7= Polyethylene Propylene, 304 SS	HJ2= 1 1/2" (1 1/4")		

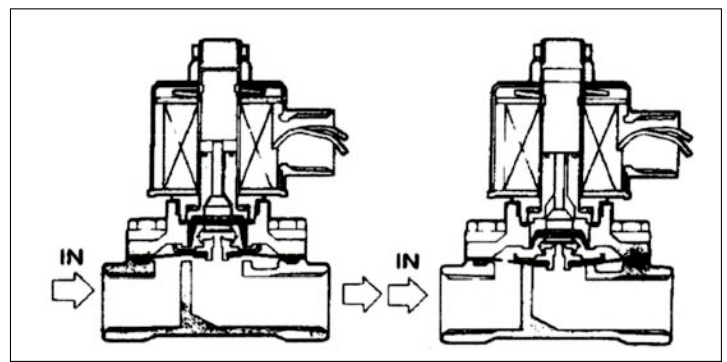
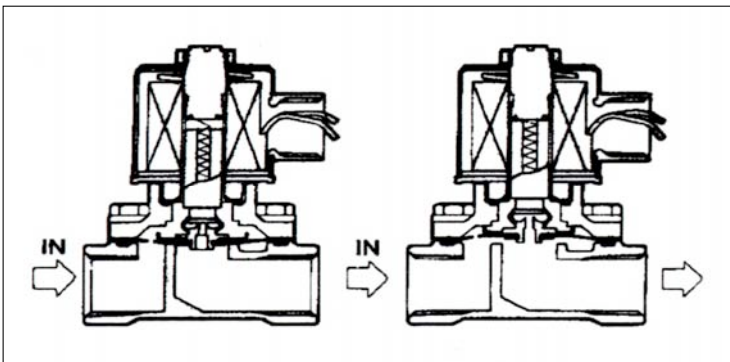
## Coil Data

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			

## Construction / Operation

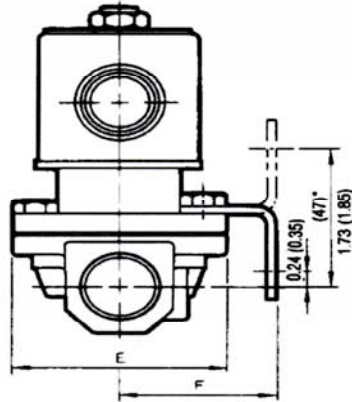
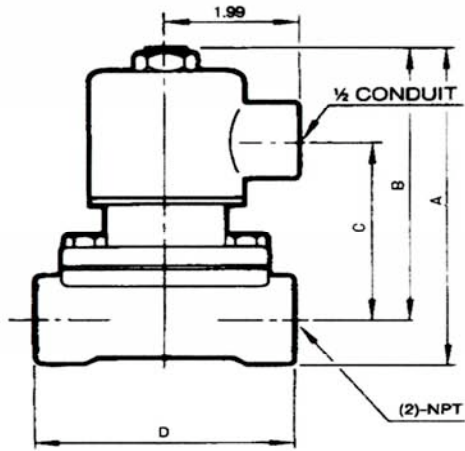
Normally Closed

Normally Open

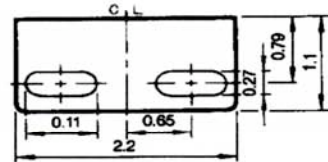


# External Dimensions

Brass Body



**Mounting Bracket (option)**  
(for 3/8, 1/2, 3/4 NPT)



Pipe Conn. (NPT)	SV320 Normally Closed							SV420 Normally Open						
	A	B	C	D	E	F	Weight (LB)	A	B	C	D	E	F	Weight (LB)
3/8	3.90	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														



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