

# SV833, SV834 & SV836

3-Way Normally Closed, Normally Open and Universal Direct Acting Solenoid Valves



Valcor Engineering Corporation



## DESCRIPTION

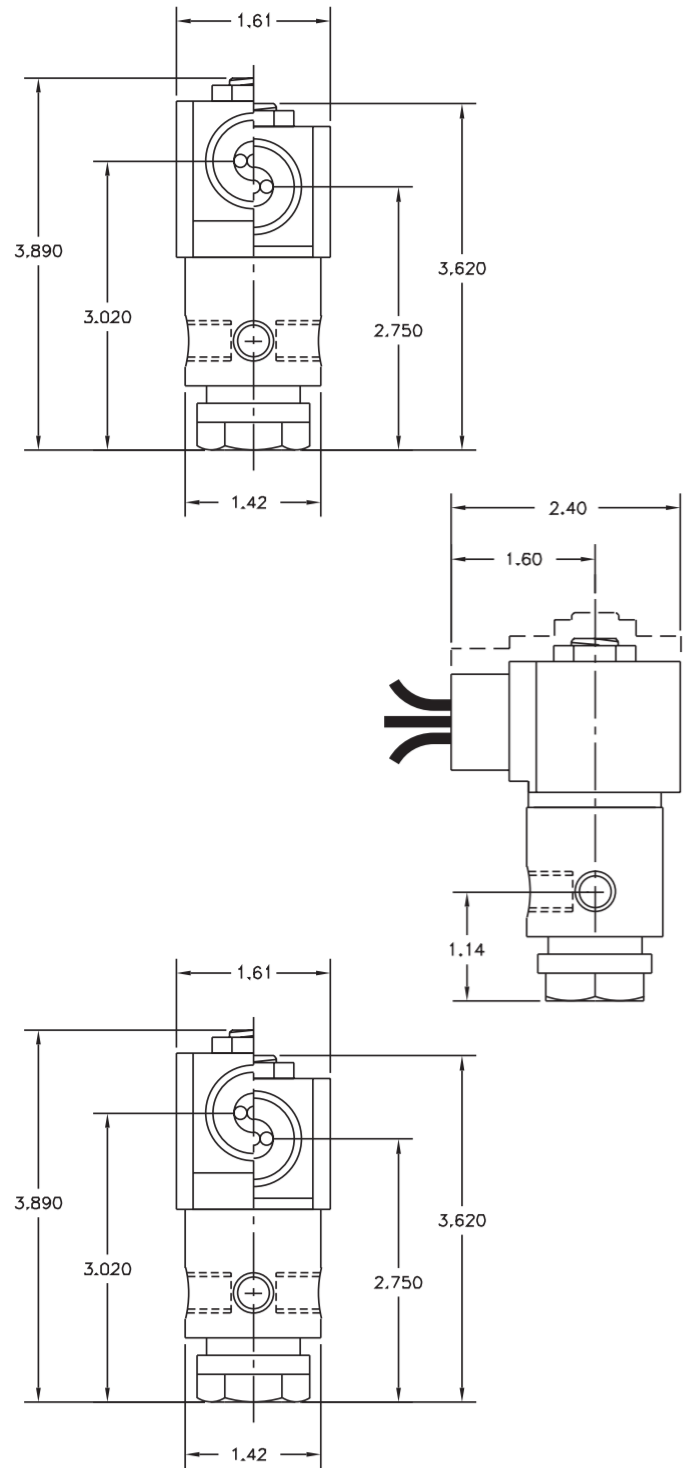
The SV833/SV784/SV836 series are direct acting 3-way/2 position solenoid valves designed to control the flow of non-corrosive and corrosive gases and liquids. They feature machined bar stock bodies for exceptional durability in typical industrial applications. These valves are direct acting, and do not require system pressure to operate. 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

The SV833/SV784/SV836 are commonly used with fuel, hydraulic fluid and non-corrosive gases and liquids and are typically used to select flow from one of two sources or divert flow to one of two process streams. They are also used in normally open or normally closed configuration and are suitable for piloting higher flow or higher pressure valves and single-acting cylinders and actuators.

## FEATURES

- Maximum Operating Pressure: 160 PSI
- Fast 50ms response time
- Flow Rate: Body Cv of .05 to .41; Vent Cv of 0.1 to .38 available
- Leak rate: Internal: bubble tight on gas, drip tight on liquid. External: 0 cc/min at 160 PSIG
- Temperature: -40° F to 150° F max standard
- 10 watts at 115/60 Hz or 24 VDC 70° F; continuous duty
- NEMA 4 coil housing standard, NEMA 7 available
- Electrical connection: 24" pigtailed standard with 1/2" conduit hub available
- Two 10-32 UNF panel mounting holes in side of body
- 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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## Construction

Operating Mode	Normally Closed: Open when energized, closed when de-energized Normally Open: Closed when energized, open when de-energized Universal: Either normally open or normally closed with pressure at any port.
Port Size (in.)	1/8, 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	Mounts in any position (Best position is solenoid upright and vertical)
Agency Listings	UL Listed, CSA Approved by order
Options	Manual override

### Valve Parts in Contact With Fluid

Body	Brass, 303 stainless steel
Seals	FKM, Buna N
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

Coil Type		CS3 (for body code 3 & 7)		CS4 (for body code 4 & 8)	
Frequency (Hz)		50	60	50	60
Power (VA)	Inrush	26	22	37	30
	Holding	14	11	18	13
Power Consumption	AC	8		10	
	DC	9		10	

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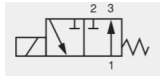
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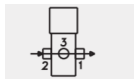
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## Specifications for SV833 Normally Closed

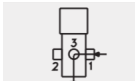
Normally Closed



Energized



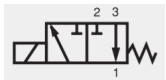
De-Energized



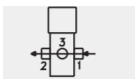
Port Size (NPT) (in.)	Orifice Size (ins.)	C <sub>v</sub>	Min PSI	Operating Pressure Differential		Max Fluid Temp °F	Body Code	Model Number	
				Max Pressure (PSI)				Normally Closed	
				Air/Gas, Water, Lt. Oil				Brass	Stainless Steel
				AC	DC				
1/8	1/16	0.09	0	160	100	200	3	SV833AF02N3AC5	---
	3/32	0.15	0	100	50	200	3	SV833AF02N3AC9	---
	1/8	0.26	0	50	30	200	3	SV833GF02N3AD5	---
1/4	1/16	0.09	0	160	100	200	3-7	SV833GF02N3BC5	SV833GF02J7BC5
	3/32	0.15	0	100	50	200	3-7	SV833GF02N3BC9	SV833GF02J7BC9
	1/8	0.31	0	50	30	200	3-7	SV833GF02N3BD5	SV833GF02J7BD5
1/4	1/16	0.09	0	200	160	180	4-8	SV833GF02N4BC5	SV833GF02J8BC5
	3/32	0.15	0	150	114	180	4-8	SV833GF02N4BC9	SV833GF02J8BC9
	1/8	0.31	0	84	60	180	4-8	SV833GF02N4BD5	SV833GF02J8BD5
	11/64	0.38	0	45	24	180	4	SV833GF02N4BD8	---

## Specifications for SV834 Normally Open

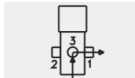
Normally Open



Energized



De-Energized



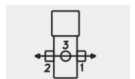
Port Size (NPT) (in.)	Orifice Size (in.)	C <sub>v</sub>	Min PSI	Operating Pressure Differential		Max Fluid Temp °F	Body Code	Model Number	
				Max Pressure (PSI)				Normally Closed	
				Air/Gas, Water, Lt. Oil				Brass	Stainless Steel
				AC	DC				
1/8	1/16	0.09	0	160	100	200	3	SV834GF02N3AC5	---
	3/32	0.15	0	100	50	200	3	SV834GF02N3AC9	---
	1/8	0.26	0	50	30	200	3	SV834GF02N3AD5	---
1/4	1/16	0.09	0	160	100	200	3-7	SV834GF02N3BC5	SV834GF02J7BC5
	3/32	0.15	0	100	50	200	3-7	SV834GF02N3BC9	SV834GF02J7BC9
	1/8	0.31	0	50	30	200	3-7	SV834GF02N3BD5	SV834GF02J7BD5
1/4	1/16	0.09	0	200	160	180	4-8	SV834GF02N4BC5	SV834GF02J8BC5
	3/32	0.15	0	150	114	180	4-8	SV834GF02N4BC9	SV834GF02J8BC9
	1/8	0.31	0	84	60	180	4-8	SV834GF02N4BD5	SV834GF02J8BD5
	11/64	0.38	0	45	24	180	4	SV834GF02N4BD8	---

## Specifications for SV836 Universal

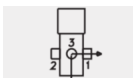
Normally Open



Energized



De-Energized



Port Size (NPT) (in.)	Orifice Size (ins.)	C <sub>v</sub>	Min PSI	Operating Pressure Differential		Max Fluid Temp °F	Body Code	Model Number	
				Max Pressure (PSI)				Normally Closed	
				Air/Gas, Water, Lt. Oil				Brass	Stainless Steel
				AC	DC				
1/8	1/16	0.09	0	90	50	200	3	SV836GF02N3AC5	---
	3/32	0.15	0	55	40	200	3	SV836GF02N3AC9	---
	1/8	0.26	0	25	20	200	3	SV836GF02N3AD5	---
1/4	1/16	0.09	0	90	50	200	3-7	SV836GF02N3BC5	SV836GF02J7BC5
	3/32	0.15	0	55	40	200	3-7	SV836GF02N3BC9	SV836GF02J7BC9
	1/8	0.31	0	25	20	200	3-7	SV836GF02N3BD5	SV836GF02J7BD5
1/4	1/16	0.09	0	100	80	180	4-8	SV836GF02N4BC5	SV836GF02J8BC5
	3/32	0.15	0	60	50	180	4-8	SV836GF02N4BC9	SV836GF02J8BC9
	1/8	0.31	0	34	30	180	4-8	SV836GF02N4BD5	SV836GF02J8BD5
	11/64	0.38	0	22	11	180	4	SV836GF02N4BD8	---

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## Part Number Configurator

Example Part Number: SV833GF02N3AD5



Numbers 1 thru 5		6	7	8-9		10	11		12		13-14		15				
Series	Operating Mode	Housing	Coil Insulation		Applicable Voltage		Seal Material		Body Code		Port Connection (NPT) (in.)		Orifice Size (in.)		Option		
SV833	Normally Closed	A	Conduit	F	Class F	02	120V/60Hz	N	Buna N	3	Brass	A	1/8	C5	1/16	M	Manual Override
		P	Open Frame	H	Class H	04	110V/50Hz	V	FKM	4	Brass	B	1/4	C9	3/32		
		B	Grommet			01	220V/60Hz	J	Buna N*	7	303 SS			D5	1/8		
		X	Explosion Proof NEMA 7				24V/60Hz	L	FKM*	8	303 SS			D8	11/64		
SV834	Normally Open	S	Junction Box			15	12V DC										
		G	Water-tight NEMA 4			16	24V DC										
SV836	Universal	Y	DIN														

\*Standard shading coil material is copper. J and L have silver shading coils.

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

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