

SV733, SV734 & SV736

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



Valcor Engineering Corporation



DESCRIPTION

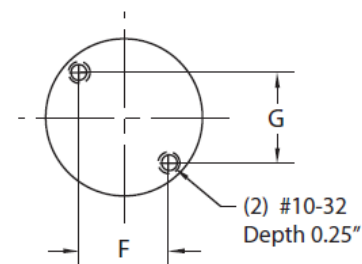
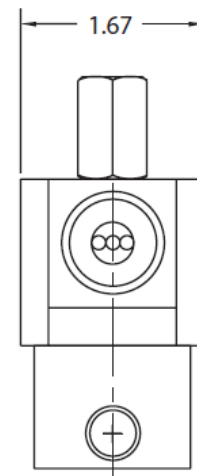
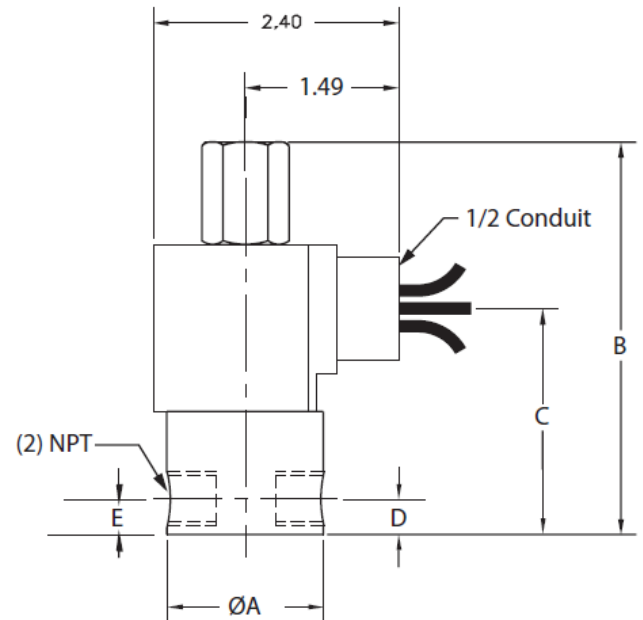
The SV733/SV734/SV736 series are direct acting 3-way/2 position solenoid valves designed to control the flow of non-corrosive and corrosive gases and liquids. They feature machined bar stock bodies for exceptional durability in typical industrial applications. These valves are direct acting, and do not 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

SV733/SV734/SV736 valves 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. Examples: industrial pneumatic, fuel gas and hydraulic systems, hydrogen fuel cells, CNG fuel systems, robotic pneumatic control systems, calibration and test stands, and air and water sampling for environmental analyzers.

FEATURES

- Maximum Operating Pressure: 200 PSI
- Fast 50mS response time
- Flow Rate: Body Cv of .05 to .41; Vent Cv of 0.1 to .23 available
- Leak rate: Internal: bubble tight on gas, drip tight on liquid. External: 0 cc/min at 200 PSIG
- 10 watts at 115/60 Hz or 24 VDC 70° F; continuous duty
- NEMA 4 coil housing standard, NEMA 7 available
- Two 10-32 UNF mounting holes in bottom 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.

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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

Valve Parts in Contact With Fluid

Body	Brass, 303 stainless steel
Internal Metal Parts	FKM, Buna N, PTFE
Seals	303 and 430F stainless steel, copper

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	SV733	SV734	SV736
Frequency	60	50	60
Power (VA)	Inrush	46.2	46.2
	Holding	19.8	19.8
Power Consumption	AC	10	10
	DC	Class H = 10	

*Explosion proof models are rated at 11 watts.

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Specifications for SV733 Normally Closed

Port Size (in.) (NPT)	Orifice Size (in.)		Cv		Operating Pressure Differential				Max Fluid Temp °F	Model Number	
					Max. Pressure (PSI)					Normally Closed	
	Body	Top	Body	Top	Air/Gas		Water/Lt. Oil				SS Body Standard
					AC	DC	AC	DC			
1/8	3/64	1/16	0.05	0.10	0	200	200	200	200	230	SV733GF02V2AV1
	1/16	1/16	0.08	0.10	0	150	150	150	150	230	SV733GF02V2AC5
	3/32	3/32	0.18	0.23	0	100	100	100	100	230	SV733GF02V2AC9
1/4	1/8	3/32	0.30	0.23	0	75	75	75	75	230	SV733GF02V2AV3
	3/16	3/32	0.53	0.23	0	30	30	30	30	230	SV733GF02V2AV9
	3/64	1/16	0.05	0.10	0	200	200	200	200	230	SV733GF02V3BV1
	1/16	1/16	0.08	0.10	0	150	150	150	150	230	SV733GF02V3BC5
	3/32	3/32	0.18	0.23	0	100	100	100	100	230	SV733GF02V3BC9
	1/8	3/32	0.30	0.23	0	75	75	75	75	230	SV733GF02V3BV3
	3/16	3/32	0.53	0.23	0	30	30	30	30	230	SV733GF02V3BV9
	5/32	3/32	0.41	0.23	0	50	50	50	50	295	SV733GF02C3BV7
	5/32	3/32	0.41	0.23	0	50	50	50	50	180	SV733GF02N3BV7
	5/32	3/32	0.41	0.23	0	50	50	50	50	230	SV733GF02V3BV7
5/32	3/32	0.41	0.23	0	50	50	50	50	366	SV733GF02T3BV7	

Specifications for SV734 Normally Open

Port Size (in.) (NPT)	Orifice Size (in.)		Cv		Operating Pressure Differential				Max Fluid Temp °F	Model Number	
					Max. Pressure (PSI)					Normally Open	
	Body	Top	Body	Top	Air/Gas		Water/Lt. Oil				SS Body Standard
					AC	DC	AC	DC			
1/8	1/8	3/32	0.36	0.20	0	75	25	75	25	230	SV734GF02V2AV3
1/4	1/8	3/32	0.36	0.20	0	75	25	75	25	230	SV734GF02V3AV3
1/4	5/32	3/32	0.41	0.23	0	75	20	75	20	295	SV734GF02C3BV7
1/4	5/32	3/32	0.41	0.23	0	75	20	75	20	180	SV734GF02N3BV7
1/4	5/32	3/32	0.41	0.23	0	75	20	75	20	230	SV734GF02V3BV7
1/4	5/32	3/32	0.41	0.23	0	75	20	75	20	366*	SV734GF02T3BV7

Specifications for SV736 Universal

Port Size (in.) (NPT)	Orifice Size (in.)		Cv		Operating Pressure Differential				Max Fluid Temp °F	Model Number	
					Max. Pressure (PSI)					Universal	
	Body	Top	Body	Top	Air/Gas		Water/Lt. Oil				SS Body Standard
					AC	DC	AC	DC			
1/8	3/64	1/16	0.05	0.08	0	150	120	150	120	230	SV736GF02V2AV1
	1/16	1/16	0.08	0.08	0	120	100	120	100	230	SV736GF02V2AC5
	3/32	3/32	0.18	0.19	0	75	25	75	25	230	SV736GF02V2AC9
1/4	1/8	3/32	0.30	0.23	0	50	20	50	20	230	SV736GF02V2AV3
	3/64	1/16	0.05	0.08	0	150	120	150	120	230	SV736GF02V3BV1
	1/16	1/16	0.08	0.08	0	120	100	120	100	230	SV736GF02V3BC5
	3/32	3/32	0.18	0.19	0	75	25	75	25	230	SV736GF02V3BC9
	1/8	3/32	0.30	0.23	0	50	20	50	20	230	SV736GF02V3AV3
	5/32	3/32	0.41	0.23	0	60	20	60	20	295	SV736GF02C3BV7
	5/32	3/32	0.41	0.23	0	60	20	60	20	180	SV736GF02N3BV7
	5/32	3/32	0.41	0.23	0	60	20	60	20	230	SV736GF02V3BV7
	5/32	3/32	0.41	0.23	0	50	50	50	50	366*	SV736GF02T3BV7

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

SV833, SV834 & SV836

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Part Number Configurator

Example Part Number: SV733GH02V2A V1



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 Body x Top (in.)		Option	
SV733	Normally Closed	A	Conduit	F	Class F	02	120V/60Hz 110V/50Hz	N	Buna N	2	SS 1/8" NPT	A	1/8	V1	3/64x1/16	N	Neon Lamp with Surge Suppressor
SV734	Normally Open	P	Open Frame	H	Class H	04	220V/60Hz 220V/50Hz	V	FKM	3	SS 1/4" NPT	B	1/4	C5	1/16x1/16	Z	Surge Suppressor
SV736	Universal	B	Grommet			01	24V/60Hz	T	PTFE	8	Brass			V3	1/8x3/32		
		X	Explosion Proof NEMA 7			15	12V DC							V7	5/32x3/32		
		S	Junction Box			16	24V DC							V9	3/16x3/32		Apply to housing with DIN (Y)
		G	Water-tight NEMA 4														
		Y	DIN														

External Dimensions

Body Code	Port Conn. (in.)	A	B	C	D	E	F	G	Weight (lbs)
2	1/8	1.22	3.48	1.63	0.29	0.29	0.61	0.73	1.00
3	1/4	1.56	3.80	1.66	0.34	0.34	0.88	1.00	1.20
9	1/8	1.63	3.60	1.63	0.37	na	na	25	1.00
9	1/4	1.63	3.84	1.71	0.37	na	na	20	1.20

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