

SV83 Series

3-Way Direct Acting Solenoid Valves

SV833 • Normally Closed

SV834 • Normally Open

SV836 • Universal

These compact 3-way directing acting solenoid valves are available in normally closed, normally open and universal operating modes. They are available with 1/8" or 1/4 " NPT pipe connections. This design allows coil replacement without disturbing fluid connections. Valves can be panel mounted to isolate coil connections within an enclosure while fluid connections are located outside. For special applications, contact your Valcor customer service representative.



Specifications

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 operation; pressure at any port	
Pipe Size (in.)	1/8 • 1/4		
Body	Brass, 303 S.S.		
Sealing/Seat	Buna N, Viton		
Poppet	Polyacetals		
Housing	Standard	Watertight NEMA 4	
	Options	Explosion proof NEMA 7, Open Frame, Junction box	
Available Voltages	AC24V 60Hz	AC110V 50Hz AC120V 60Hz	12V DC
	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 (Best position is solenoid upright and vertical)		
Agency Listings	Consult Factory		
Options	Manual Override, Mounting Bracket, Neon Lamp, Surge Suppressor		

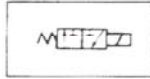
•Consult the factory for specifications other than those listed above.



Valve Selection Sheet

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

Normally Closed



Pressure Supply Port: No. 2 Port

De-energized

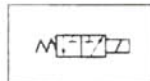


Energized



1/8	1/16	0.09	0	160	100	200	N	3	G	8	9	F	120	SV833GF02N3AC5	---
	3/32	0.15	0	100	50	200	N	3	G	8	9	F	120	SV833GF02N3AC9	---
	1/8	0.26	0	50	30	200	N	3	G	8	9	F	120	SV833GF02N3AD5	---
1/4	1/16	0.09	0	160	100	200	N	3-7	G	8	9	F	120	SV833GF02N3BC5	SV833GF02J7BC5
	3/32	0.15	0	100	50	200	N	3-7	G	8	9	F	120	SV833GF02N3BC9	SV833GF02J7BC9
	1/8	0.31	0	50	30	200	N	3-7	G	8	9	F	120	SV833GF02N3BD5	SV833GF02J7BD5
1/4	1/16	0.09	0	200	160	180	N	4-8	G	10	10	F	120	SV833GF02N4BC5	SV833GF02J8BC5
	3/32	0.15	0	150	114	180	N	4-8	G	10	10	F	120	SV833GF02N4BC9	SV833GF02J8BC9
	1/8	0.31	0	84	60	180	N	4-8	G	10	10	F	120	SV833GF02N4BD5	SV833GF02J8BD5
	11/64	0.38	0	45	24	180	N	4	G	10	10	F	120	SV833GF02N4BD8	---

Normally Open



Pressure Supply Port: No. 3 Port

De-energized

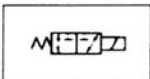


Energized



1/8	1/16	0.09	0	160	100	200	N	3	G	8	9	F	120	SV834GF02N3AC5	---
	3/32	0.15	0	100	50	200	N	3	G	8	9	F	120	SV834GF02N3AC9	---
	1/8	0.26	0	50	30	200	N	3	G	8	9	F	120	SV834GF02N3AD5	---
1/4	1/16	0.09	0	160	100	200	N	3-7	G	8	9	F	120	SV834GF02N3BC5	SV834GF02J7BC5
	3/32	0.15	0	100	50	200	N	3-7	G	8	9	F	120	SV834GF02N3BC9	SV834GF02J7BC9
	1/8	0.31	0	50	30	200	N	3-7	G	8	9	F	120	SV834GF02N3BD5	SV834GF02J7BD5
1/4	1/16	0.09	0	200	160	180	N	4-8	G	10	10	F	120	SV834GF02N4BC5	SV834GF02J8BC5
	3/32	0.15	0	150	114	180	N	4-8	G	10	10	F	120	SV834GF02N4BC9	SV834GF02J8BC9
	1/8	0.31	0	84	60	180	N	4-8	G	10	10	F	120	SV834GF02N4BD5	SV834GF02J8BD5
	11/64	0.38	0	45	24	180	N	4	G	10	10	F	120	SV834GF02N4BD8	---

Universal



Pressure Supply Port: All Port

De-energized



Energized



1/8	1/16	0.09	0	90	50	200	N	3	G	8	9	F	120	SV836GF02N3AC5	---
	3/32	0.15	0	55	40	200	N	3	G	8	9	F	120	SV836GF02N3AC9	---
	1/8	0.26	0	25	20	200	N	3	G	8	9	F	120	SV836GF02N3AD5	---
1/4	1/16	0.09	0	90	50	200	N	3-7	G	8	9	F	120	SV836GF02N3BC5	SV836GF02J7BC5
	3/32	0.15	0	55	40	200	N	3-7	G	8	9	F	120	SV836GF02N3BC9	SV836GF02J7BC9
	1/8	0.31	0	25	20	200	N	3-7	G	8	9	F	120	SV836GF02N3BD5	SV836GF02J7BD5
1/4	1/16	0.09	0	100	80	180	N	4-8	G	10	10	F	120	SV836GF02N4BC5	SV836GF02J8BC5
	3/32	0.15	0	60	50	180	N	4-8	G	10	10	F	120	SV836GF02N4BC9	SV836GF02J8BC9
	1/8	0.31	0	34	30	180	N	4-8	G	10	10	F	120	SV836GF02N4BD5	SV836GF02J8BD5
	11/64	0.38	0	22	11	180	N	4	G	10	10	F	120	SV836GF02N4BD8	---

Model Code

S V 8 3 3

G F 0 2 N 3 A D 5

1-2-3-4-5		6	7	8-9		10	11	12	13-14	15
Series	Operating Mode	Housing	Coil Insulation	Applicable Voltage		Seat Material	Body Code	Pipe Connection	Orifice Size	Option
SV833	Normally Closed	A= Conduit	F= Class F	02=	120V/60HZ 110V/50HZ	N= Buna N	3= Brass	A= 1/8	C5= 1/16	M= Manual Override
SV834	Normally Open	P= Open Frame	H= Class H	04=	220V/60HZ 220V/50HZ	V= Viton	4= Brass	B= 1/4	C9= 3/32	K= Mounting Bracket
SV836	Universal	B= Grommet		01=	24V/60HZ	J= Buna N*	7= 303 S.S.		D5= 1/8	
		X= Explosion Proof NEMA 7		15=	12V DC	L= Viton*	8= 303 S.S.		D8= 11/64	
		S= Junction Box		16=	24V DC					
		G= Watertight NEMA 4								

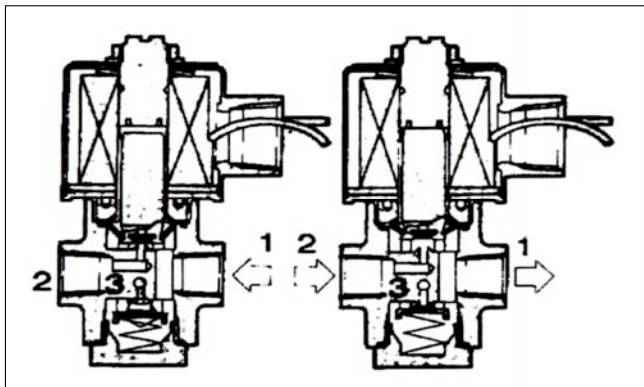
Coil Data

Note: 1)* Standard shading coil material is copper. "J*", "L*" has silver shading coil.
2) Mounting bracket is standard with SS body

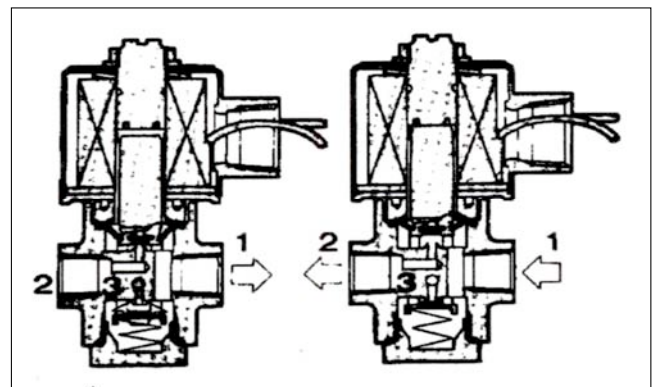
Coil Type		CS3 (for body code 3 & 7)		CS4 (for body code 4 & 8)	
Frequency (HZ)		50	60	50	60
Power (VA)	Inrush	26	22	37	30
	Holding	14	11	18	13
Power Consumption (W)	AC	8		10	
	DC	9		10	

Construction / Operation

Normally Closed

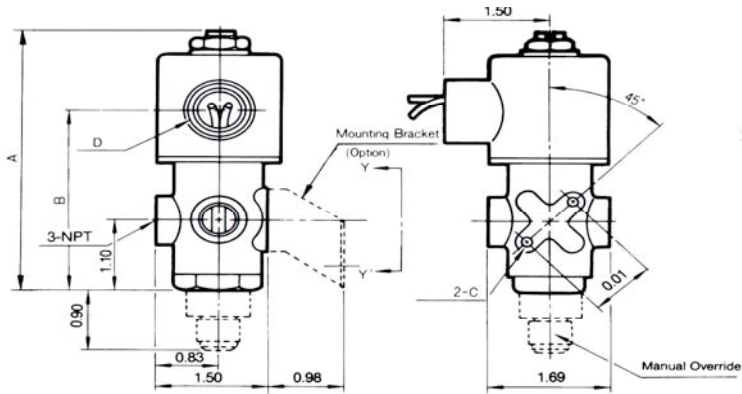


Normally Open

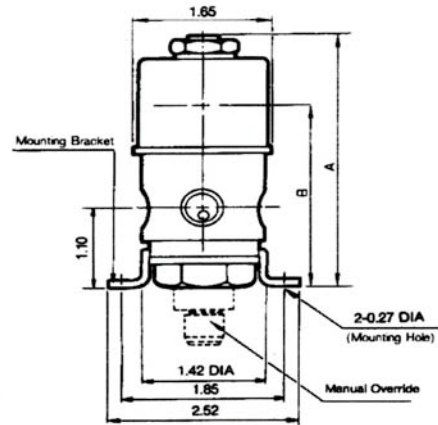


External Dimensions

Brass Bodies



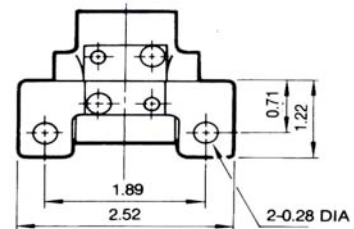
Stainless Steel Bodies



Weight

- Brass Body: 1.1 LB.
- S.S. Body: 1.6 LB.

View of Arrow Y-Y'
(Mounting Bracket)



Body Code	A	B	C (Brass Body Only)	D
3 · 7	3.62	2.68	M5 Screw Depth: 0.20	1/2 Conduit
4 · 8	3.9	2.76		

Unit: inch



Valcor Scientific

Valcor Engineering Corporation®

2 Lawrence Road • Springfield, New Jersey 07081

973-467-8400 • Fax: 973-467-9592

valcorscientific@valcor.com • www.valcor.com

© 2002 Valcor Engineering Corporation® Printed in USA

Scientific Business Unit