

# SV91

## 2-Way Normally Closed and Normally Open Cryogenic Solenoid Valve



Valcor Engineering Corporation



### DESCRIPTION

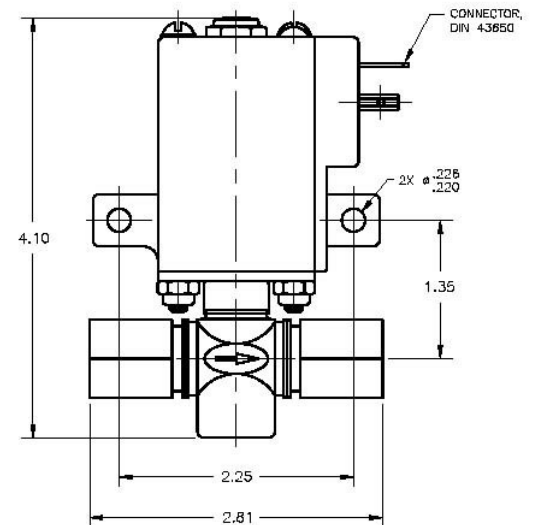
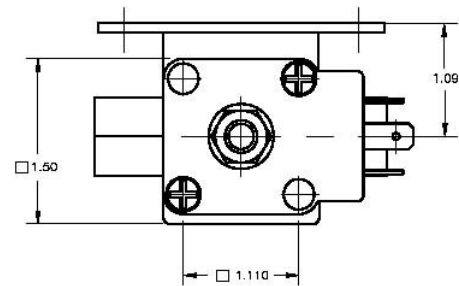
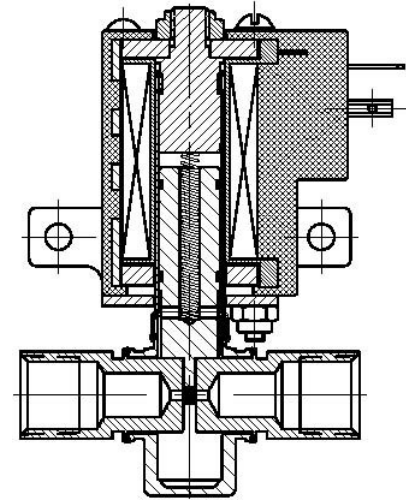
The SV91 series are direct acting 2-way normally closed and normally open cryogenic solenoid valves designed to control the flow of hot, cold, and cryogenic gases and liquids to -452°F. They feature all-welded construction to eliminate external leakage at any temperature and utilize Valcor's proprietary floating seal technology which provides tight shut-off, long service life, and the ability to handle particulates in the fluid stream without leaking. These valves do not require system pressure to operate, and their compact size and low weight allow them to be used in the tightest space available. Their low mass minimizes thermal loss as well.

### APPLICATION

The SV91 are designed for hot gas applications, but are particularly well suited for controlling cryogenic liquids such as LOX, LN2, LAR, LHe, LH2, and LCO2. Examples include: absolute temperature environmental chambers, gas and Liquid chromatography, analytical and medical instruments and equipment, low temperature electronic component testing, food flash freezers, beverage carbonation, and calibration and test stands.

### FEATURES

- Maximum Operating Pressure: 1200 PSI
- Fast response time
- Flow Rate: Body Cv of 0.2 to 4.90 available
- Leak rate: Internal: bubble tight on gas, drip tight on liquid. External: 0 cc/min at 1200 PSIG
- Temperature: -452°F to 200° F max standard; higher temperatures available
- 14 watts at 115/60 Hz or 21 watts @ 24 VDC 70° F; continuous duty
- NEMA 4 molded coil
- Electrical connection: 18 mm DIN connector
- ¼" NPT, socket weld



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

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### Valve Parts in Contact with Fluid

Body	Stainless Steel
Seal Disc	Polyimide
Plunger Tube	303 SS
Plunger	430F SS
Plunger Stop	430F SS
Spring	303 SS
Rider Rings	PTFE

### Electrical

Standard Voltages	115/60 AC & 24 VDC. Consult factory for other voltages available.
Standard Coil Housing	Encapsulated with DIN terminals for 18 mm (43650A) connector. General purpose with 1/2" NPT conduit, explosion proof, and grommited pigtailed are available. Consult factory.

### Specifications

Port Size (NPT)	Orifice Size (ins.)	Cv	Max. Pressure (PSI)				Model Number				Wattage	
			AC		DC		Normally Closed		Normally Open		115/ 24/ 60Hz	DC
			Gas	Liquid	Gas	Liquid	AC	DC	AC	DC		
<b>2-Way Normally Closed &amp; Normally Open</b>												
3/8	3/32	0.20	1200	800	400	125	SV91D28C1C	SV91D24C1C	SV91D28O1C	SV91D24O1C	14	21
3/8	5/32	0.46	650	300	125	100	SV91D28C3C	SV91D24C3C	SV91D28O3C	SV91D24O3C	14	21
3/8	15/64	1.00	300	180	100	60	SV91D28C5C	SV91D24C5C	SV91D28O5C	SV91D24O5C	14	21
3/8	5/16	1.85	150	75	65	25	SV91D28C6C	SV91D24C6C	SV91D28O6C	SV91D24O6C	14	21
3/8	3/8	2.70	75	45	20	17	SV91D28C7C	SV91D24C7C	SV91D28O7C	SV91D24O7C	14	21
<b>2-Way High Flow Construction</b>												
1/2	5/16	3.60	150	75	65	25	SV91D28C6VF	SV91D24C6VF	SV91D28O6VF	SV91D24O6VF	14	21
3/4	3/8	4.90	75	45	20	17	SV91D28C7VG	SV91D24C7VG	SV91D28O7VG	SV91D24O7VG	14	21

Bi-directional flow is available for some constructions. Contact factory for details.  
 Minimum pressure differential of 1 PSI in the direction of flow is required for bubble tight shut-off.  
 Consult factory for other duty cycle applications.  
 Liquid O<sub>2</sub> cleaning and testing is available. Consult factory.