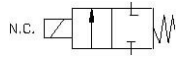


SV91

2-Way Normally Closed and Normally Open
Floating Seal Construction
Cryogenic Solenoid Valve



Valcor Cryogenic Series



DESCRIPTION

The SV91 series is a 2-way, direct acting, floating seal design solenoid valve for control of cryogenic fluids down to -454°F. It is available in normally closed and normally open configurations. The direct acting design is less prone to hang-up during operation and the floating seal has self wiping action for tight shut-off. The SV91 series has all welded joints eliminating external leakage. Along with the standard construction, Valcor offers a high flow design and a design made specifically for LCO₂. Consult a Valcor application engineer for help in specifying a valve.

APPLICATION

The SV91 series is a rugged construction suitable for a variety of cryogenic applications such as the following:

- Food processing/freezing
- Backup system for biologic freezers
- Environmental chambers
- Dewar transfer
- Gas chromatography
- Fogging machines
- Cryogenic surgery equipment

FEATURES

- Self wiping floating seal design for cryogenic fluids to -454°F
- Direct acting design with no minimum operating pressure
- All welded construction eliminates external leakage
- Special constructions for high flow and LCO₂
- Pressure rating up to 1200 PSI
- Straight thru flow path yields high flow with less turbulence
- Mountable in any position

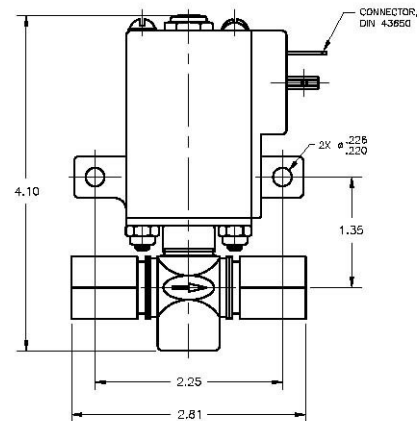
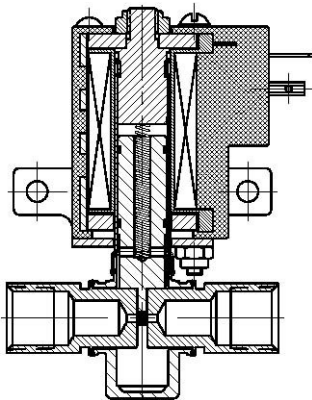
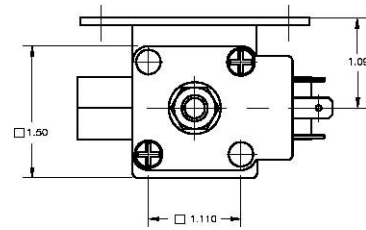


VALCOR SV91 SPECIFICATIONS

Construction

Valve Parts in Contact With Fluid

Body	SS
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 grommeted pigtails are available. Consult factory.

Specifications

Port Size (NPT)	Orifice Size (ins.)	C _v	Max. Pressure (PSI)				Model Number				Wattage	
			AC		DC		Normally Closed		Normally Open		115/ 24/ 60Hz DC	
			Gas	Liquid	Gas	Liquid	AC	DC	AC	DC		
2-Way Normally Closed & Normally Open												
3/8	3/32	0.20	1200	800	400	125	SV91D28C1C	SV91D24C1C	SV91D28OC1C	SV91D24OC1C	14	21
3/8	5/32	0.46	650	300	125	100	SV91D28C3C	SV91D24C3C	SV91D28OC3C	SV91D24OC3C	14	21
3/8	15/64	1.00	300	180	100	60	SV91D28C5C	SV91D24C5C	SV91D28OC5C	SV91D24OC5C	14	21
3/8	5/16	1.85	150	75	65	25	SV91D28C6C	SV91D24C6C	SV91D28OC6C	SV91D24OC6C	14	21
3/8	3/8	2.70	75	45	20	17	SV91D28C7C	SV91D24C7C	SV91D28OC7C	SV91D24OC7C	14	21
2-Way High Flow Construction												
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
2-Way Normally Closed - LCO2 Construction*												
3/8	5/32	0.46	-	1000	-	-	SV91C94HC3C-AE2	-	-	-	32*	-
3/8	15/64	1.00	-	350	-	-	SV91C94HC5C-AE3	-	-	-	32*	-

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.

(*) This construction is intermittent duty with a maximum on time 20 mins with a 25% duty cycle.

Consult factory for other duty cycle applications.

Liquid O₂ cleaning and testing is available. Consult factory.