i Polymer Sub-miniature Solenoid Valves

Our iPolymer Sub-miniature Solenoid Valves offer precision performance under extreme conditions. Offered as 2-Way and 3-Way Valves with four internal body configurations and three seat sealing methods, our iPolymer Sub-miniature Solenoid Valves are suitable for a wide range of ultra clean to highly corrosive media applications.

Our PTFE wetted surface design is ideally suited for semiconductor, pharmaceutical, bio-medical and chemical process applications.

Configurable with a FKM (Viton Eq.)



Seat, FEPM-AFLAS Seat or FFKM (Kalrez Eq.) Seat, the Sub-mini Series Solenoid Valve line provides unsurpassed chemical compatibility with a wide range of flow media. The PTFE body, valve stem and one piece diaphragm maintain a material inert boundary for ultra-clean and harsh-caustic applications.

HIGHLIGHTS:

- PTFE design optimized for ultra clean and chemical compatibility.
- Configurations available for various DC & AC voltages.
- Fast, accurate and repeatable coil response time from proven technology.
- Valve seat and diaphragm designed for positive flushing and bubble-tight shut off.
- Non-porous diaphragm configured to completely isolate solenoid coil from media.
- 100% coil driven does not require energizing pressure or vacuum to operate.
- Designed for aggressive media and elevated temperature.

*Refer to page 32 for more information regarding duty cycle, dwell time, and heat generation.

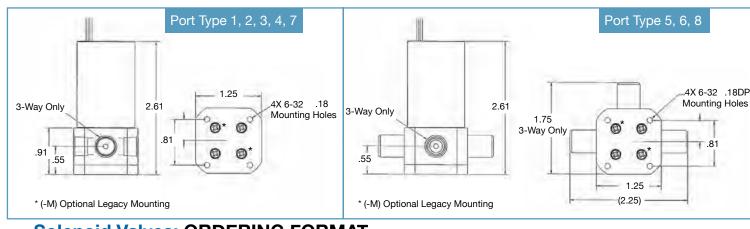
Maximum Port Pressure Rating (psi)	O-Ring Seat 3-Way	
Common Port	80	
Normally Closed Port	40	
Normally Open Port	40	
	2-Way NC	
Inlet Port	80	
Outlet Port	40	
	2-Way NO	
Inlet Port	80	
Outlet Port	40	

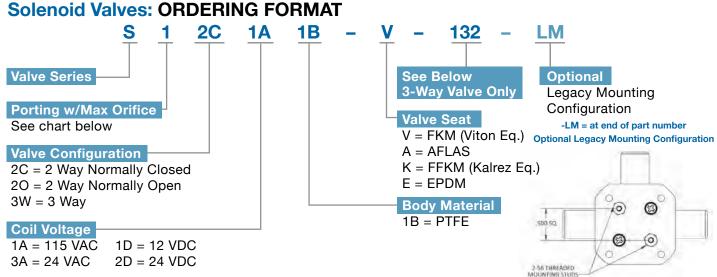


General Valve Parameters		
0.063" Orifice Cv (2W-NC, 2W-NO, 3W)	rifice Cv (2W-NC, 2W-NO, 3W) 0.06 / 0.04 / 0.04	
0.094" Orifice Cv (2W-NC, 2W-NO, 3W)	0, 3W) 0.12 / 0.10 / 0.10	
Common Port Vacuum in-Hg (max)	20	
Media Temperature (range)	0 - 80°C / 32 - 176°F	
Ambient Temperature (range)	0 - 60°C / 32 - 140°F	
Wattage Range	10 -12 W	
Voltage Tolerance	-2% +10%	
Coil Lead Length (2 Wire)	24"	









Consult Factory For Custom Configurations.

Porting w/ Max Orifice

Port Type/Size and Standard Orifice			
1	1/4"-28-UNF Female with 0.063" Orifice		
2	1/8" FNPT with 0.094" Orifice		
3	#10-32-UNF Female with 0.063" Orifice		
4	1/4" FNPT with 0.094" Orifice		
5	1/8" Tube with 0.094" Orifice		
6	1/4" Tube with 0.094" Orifice		
7	1/16" FNPT with 0.063" Orifice		
8	1/16" Tube with 0.032" Orifice		
9	1/4" Flare with 0.094" Orifice		

*Low Power Coils and Power Management options are available. Consult factory for further details and de-rated pressure values.

Port Arrangements

The port orientation can be arranged in four possible patterns on our 3-Way Solenoid Valves. Please select one of the four arrangements.

Looking Down at the Top of the Coil				
¹²³ C	¹³² C	²¹³ NO	³²¹ NC	
NC NO	NO NC	NC C	C NO	
NC-C-NO	NO-C-NC	NC-NO-C	C-NC-NO	

STD = 123 & 132 are our standard port arrangements. *For use with sensitive controls equipment, optional flyback diode available upon request. Call factory for more information.

iPolymer Product Notes:

- 1. Please email Customer Service at info@ipolymer.com.
- 2. Call us for special applications. We can manufacture our Valves with special mounting and interface dimensions.
- 3. Upon request, alternate material selection from those listed will allow for expanding temperature ratings or other performance characteristics.
- 4. Unauthorized disassembly of this product will void the original factory one-year product warranty. For further details please contact your local Distributor or our factory directly.