## Solenoid Valve Specifications and Dimensions: 2V130-250 Series



Valve Model	2V130-3/8	2V130-1/2	2V130-3/4	2V250-1
Valve Type	2 Way Normally Closed (NC)			
Action	Pilot Lift Diaphragm			
Cv (Orifice)	4.8 (13MM)	4.8 (13MM)	12 (25MM)	12 (25MM)
Operating Pressure	5 to 115 PSI , 5 to 150 PSI (with high power coil)			
Operating Temperature	14 to 176 °F (-10 TO 80 °C); 5 to 248 °F (-15 TO 120 °C) (with Viton Seal)			
Port Size (NPT)	3/8	1/2	3/4	1
Body Materials	Brass			
Seal Materials:	NBR (Option: Viton)			
Coil Protection Insulation Class	F Class IP65, Option: Explosion Proof Coil (200C-E)			
Coil Duty	100% ED			
Coil Power	3-6.5W			
Electrical Connections	DIN			
Coil Certifications	Standard: CE, Options: UL/CSA, FM Explosion Proof			
Service	Air, Liquid, Oil, Water, Gas			

ALL Standard valves are supplied with CONTINUOUS DUTY COILS of the proper class of insulation for the service indicated on the valve. The coil temperature may become hot after being energized for extended periods, but it is normal. Smoke or burning odor indicates excessive coil temperature and should disconnect the power to the coil immediately.

VOLTAGES: Standard: 12-24V DC and 24-110-220-230V/50-60 Hz AC. Voltage tolerances: +10% -5% for DC, +10%-10% for AC; .

SERVICE LIFE: The service life of the solenoid valve depends on the operating conditions such as pressure, temperature, type of medium and the voltage.

Electrical Coil Connections		
For DIN Coil	<ul> <li>To connect DIN coil:</li> <li>1. Remove the Philip screw from the plastic housing and unplug it from the DIN coil.</li> <li>2. From the screw opening, push the terminal block out from the plastic housing.</li> <li>3. Note the 1, 2 and ground markings on underside of DIN enclosure.</li> <li>4. For DC DIN Coil, Connect 1 to Positive, 2 to Negative.</li> <li>5. For AC DIN Coil, connect 1 to HOT wire, 2 to Neutral wire, and if required connect ground to ground wire.</li> </ul>	
For Grommet Coil	<ul> <li>To connect Grommet coil:</li> <li>1. For DC Coil, connect one of the two wires to Positive, and the other wire to Negative.</li> <li>2. For AC Coil, connect one of the two wires to HOT wire, and the other wire to neutral wire.</li> </ul>	

## 2V130-250 Series 2/2 Pilot Operated Diaphragm Solenoid Valve NC

To open: when the solenoid valve is energized, a magnetic field from the coil attracts the plunger covering the pilot orifice to lift off, causing system pressure (holding the diaphragm closed) to drop. As system pressure on the top of the diaphragm is reduced, full system pressure on the other side of the diaphragm acts to lift the diaphragm away from the main orifice, which allows media flow through the valve. Since the bleed orifice is dimensionally smaller than the pilot orifice, the system pressure cannot rebuild on the top of the diaphragm as long as the pilot orifice remains open.

To close: when the solenoid value is de-energized, it releases its hold on the plunger, allowing the plunger spring forces the plunger to covers the main orifice. The system pressure builds up on the top of the diaphragm through the bleed orifice, forcing the diaphragm down until it covers the main orifice and stops media flow through the value













