

## Solenoid Valve - Proportional - Manifold Mount



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## Proportional Control - Solenoid Valve

### General Features

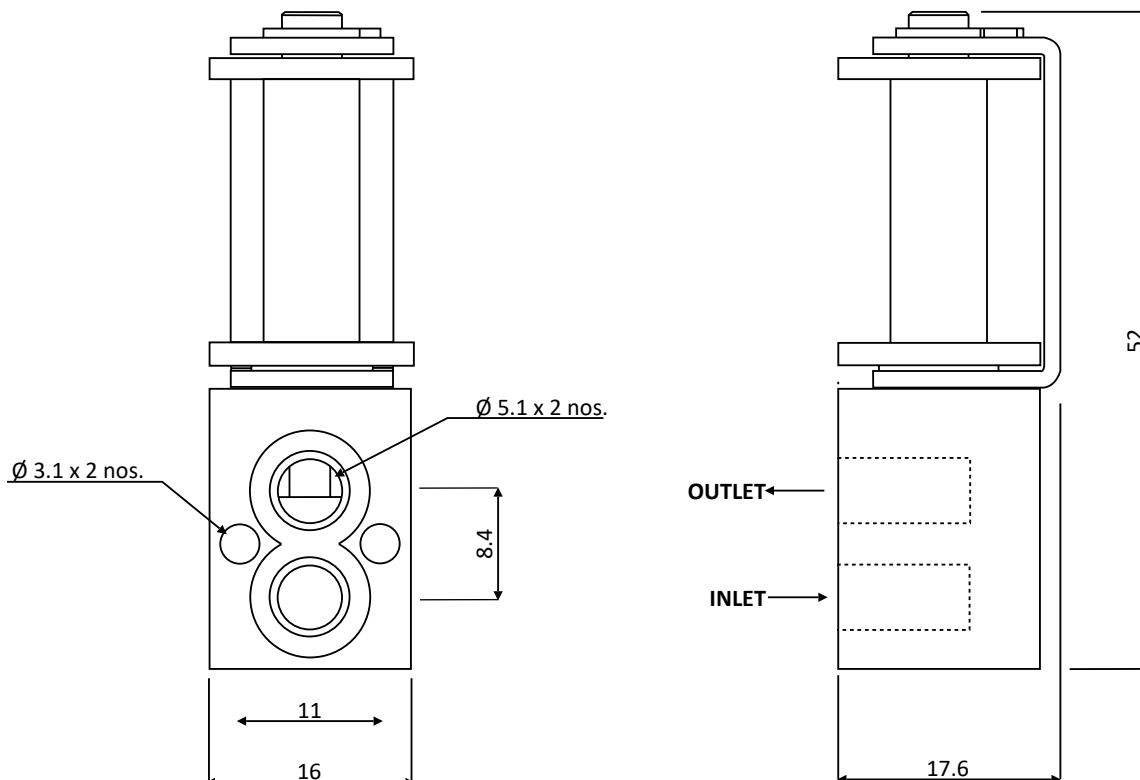
- Two Way Normally Closed Proportional Solenoid Valve
- Manifold Mount applications
- Pressure range: 0 to 45psi
- Flow: 150 LPM @ 35psi differential pressure
- Body material: Brass
- Stem base: 430 FR stainless steel
- Internal parts: stainless steel
- Seals: VITON
- Media: Air, Oxygen
- Operating Environment: 0 to +55°C
- Storage temperature: -40°C to +70°C
- Ambient Temperature: max. +50°C
- Weight: 56g

### Electrical

- Power: 12VDC 2.5W
- Electrical Termination: 15" flying lead, 2 core



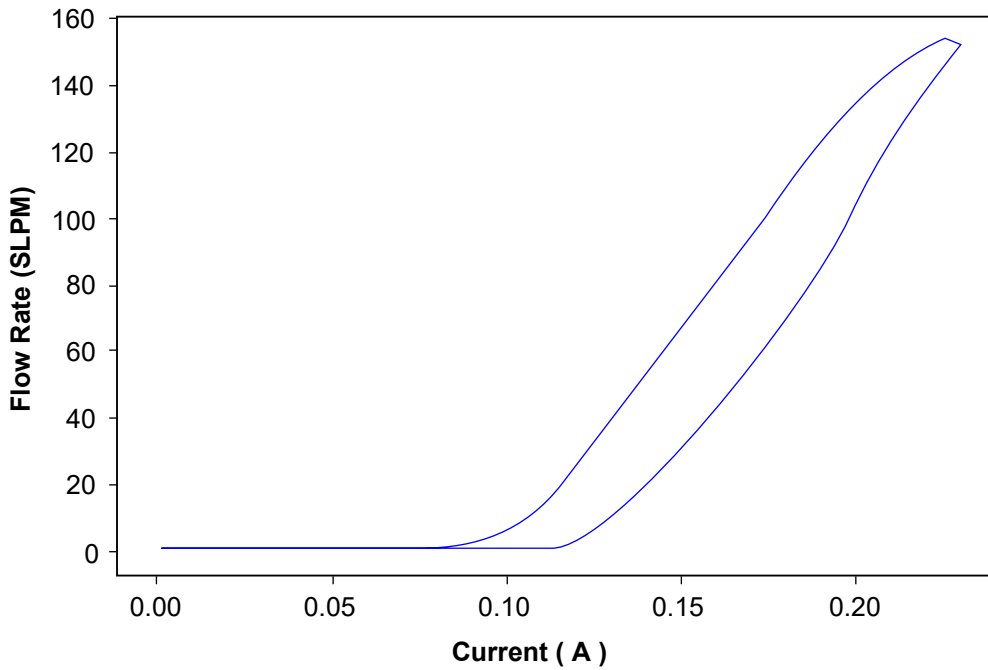
### Dimensions mm



## Proportional Control - Solenoid Valve

### Flow Rate vs. Current

Typical Air Flow with 12VDC Coil





## Section 2: How to install Solenoid Valves

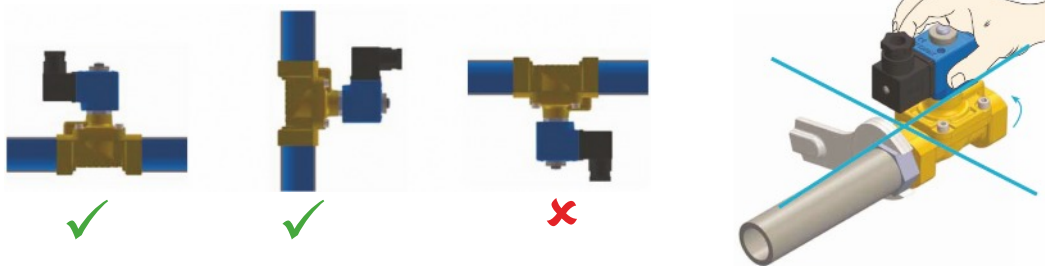
Solenoid Valves can normally be installed and operate in any orientation. However, certain models are designed to operate in horizontal installations. See figure (2) below for best practice.

### Installation Procedure:

Check that the Solenoid Valve is the correct product ordered for the application:

- Isolate the site electrical power supply
- Isolate the site media supply (dependant on the application)...air, water, steam etc. Leave until cool/safe.
- Insert the valve onto the pipe, ensuring that the flow direction is observed.....IN for incoming media, or an arrow stamped on the valve body. We suggest using a filter on the inlet in order to protect the valve (fig.3)
- Ensure that the pipe connections are free from burrs or loose pipe thread tape
- Tighten all pipe joints using suitably sized spanners (fig.4)
- Connect electrical power supply via DIN electrical socket connector, as detailed on page 5
- Ensure that DIN connector is properly connected to solenoid coil and the gasket is installed correctly
- Apply media pressure and check for leaks

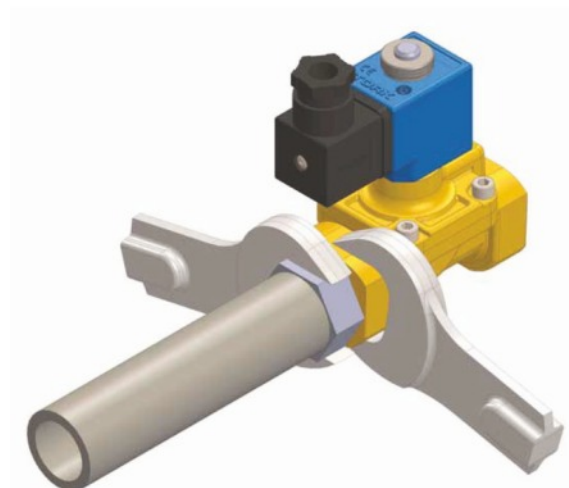
**Figure 2: Solenoid Valve Orientation**



**Figure 3: Solenoid Valve Filter**



**Figure 4: Solenoid Valve Pipe Mounting**





## GENERAL Maintenance Procedures For Solenoid Valves

In the unlikely event of a valve malfunction, or routine maintenance, follow these instructions:

- Isolate the site electrical power supply
- Isolate the site media supply (dependant on the application)...air, water, steam etc.
- For IP65 safe area valves: Remove the solenoid coil by unscrewing the coil retention nut anti-clockwise ( fig. 1 )
- For Explosion Proof solenoid valves: Loosen then remove the retaining nut that passes through the explosion proof housing ( fig. 2 )
- Remove the coil tube stem by unscrewing anti-clockwise
- Carefully remove the plunger assembly (inside the coil stem)
- Check the plunger assembly for damage or worn seals
- Check the face inside the coil stem for foreign particles that could prevent correct operation
- For Pilot Diaphragm Solenoid Valves: remove the top cover housing and check the diaphragm for damage and blocked transfer port.
- Re-assemble the valve in reverse order, ensuring that all parts are cleaned and assembled correctly

**Fig. 1**



**Fig. 2**

