In-Line Flow Switches
P3 Series

Installation
All NPT threads should be installed using a suitable thread sealant (Teflon tape or Permatex “No more Leaks”). Sealant must be kept out of unit during installation. Ten diameters of straight run piping are recommended upstream and downstream of the flow sensor.

Specifications

<table>
<thead>
<tr>
<th>Wetted Materials</th>
<th>Hydrolytically Stable Glass Reinforced Polypropylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing, End Fitting</td>
<td></td>
</tr>
<tr>
<td>Piston</td>
<td>PPS Composite</td>
</tr>
<tr>
<td>Spring</td>
<td>316 Stainless Steel</td>
</tr>
<tr>
<td>O-Ring</td>
<td>Fluorocarbon</td>
</tr>
<tr>
<td>Oper. Pressure, Max.</td>
<td>200 PSI at 70°F, 100 PSI at 212°F</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°F to +212°F (100°C)</td>
</tr>
<tr>
<td>Required Filtration</td>
<td>100 Micron or Better</td>
</tr>
<tr>
<td>Set Point Accuracy</td>
<td>±20%, Maximum</td>
</tr>
<tr>
<td>Set Point Differential</td>
<td>20% Maximum</td>
</tr>
<tr>
<td>Switch, See “Switch Ratings”</td>
<td>SPST, 10 VA</td>
</tr>
<tr>
<td>Inlet / Outlet</td>
<td>3/8” NPT Male or Quick Connect</td>
</tr>
<tr>
<td>Electrical Termination</td>
<td>No. 24 AWG, 24” to 26” Polymeric Leads</td>
</tr>
</tbody>
</table>

Pressure Drop - Typical

Switch Ratings
Contact rating: 10W
Switching Voltage (DC or AC Peak): 200 Max.
Switching Current (DC or AC): 0.4 A Max.
Carry Current (DC or AC): 0.4 A Max.
Break down Voltage: 230 VDC Min.

Wiring Diagram
Normally Open
## Dimensions

### 3/8" NPT Ports

- **1" (25 mm)**
- **11/16" Hex.**
- **4" (102 mm)**

### Quick Disconnect Ports

- **1" (25 mm)**
- **11/16" Hex.**
- **.43" (11 mm) Dia. Typ.**
- **.75" (19 mm) Across Flats**
- **4.22" (107 mm)**

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### MAINTENANCE/REPAIR

Regular maintenance of the total system is recommended to assure sustained optimum performance. These devices are not field repairable and should be returned to the factory if recalibration or other service is required. After first obtaining a Returned Goods Authorization (RGA) number, send the unit freight prepaid to the following. Please include a clear description of the problem plus any application information available.

Dwyer Instruments, Inc.
Attn: Repair Department
102 Highway 212
Michigan City, IN 46360

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### Important Points!

Product must be maintained and installed in strict accordance with the National Electrical Code and Dwyer product catalog and instruction bulletin. Failure to observe this warning could result in serious injuries or damages.

For hazardous area applications involving such things as (but not limited to) ignitable mixtures, combustible dust and flammable materials, use an appropriate explosion-proof enclosure or intrinsically safe interface device.

The pressure and temperature limitations shown on the individual catalog pages and drawings for the specified flow switches must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/temperatures and their frequencies.

Selection of materials for compatibility with the media is critical to the life and operation of Dwyer products. Take care in the proper selection of materials of construction, particularly wetted materials.

Life expectancy of switch contacts varies with applications. Contact Dwyer if life cycle testing is required.

Ambient temperature changes do affect switch set points, since the specific gravity of a liquid can vary with temperature.

Dwyer Products have been designed to resist shock and vibration; however, shock and vibration should be minimized.

Filter liquid media containing particulate and/or debris to ensure the proper operation of our products.

Electrical entries and mounting points in an enclosed tank may require liquid/vapor sealing.

Dwyer Products must not be field-repaired.

Physical damage sustained by the product may render it unserviceable.