Shuttle-Type Flow Switches
P5 Series

Specifications . . .

<table>
<thead>
<tr>
<th>Materials</th>
<th>PVC</th>
<th>Buna N</th>
<th>Epoxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing, Shuttle, Bonnet</td>
<td>PVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-Ring</td>
<td>Buna N</td>
<td></td>
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<tr>
<td>Other Wetted Parts</td>
<td>Epoxy</td>
<td></td>
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</table>

**Operating Pressure, Max.**
- 120 PSIG @ +70°F to +100°F (+21°C to +37.8°C)
- 50 PSIG @ +101°F to 120°F (+38.3°C to +48.9°C)

**Operating Temperature, Max.**
- +120°F (+48.9°C)

**Set Point Accuracy**
- ±20%

**Set Point Differential**
- 20% Maximum

**Switch**
- SPST, 20 VA, N.O. @ No Flow

**Inlet/Outlet Ports**
- 1/2" NPT, 3/4" IPS, or 1" IPS

**Mounting Attitude**
- Vertical, Inlet Down

**Electric Termination**
- No. 22 AWG, 24" L., PVC Lead Wires

Notes
1. Care should be taken by specifiers to ensure fluid compatibility with the wetted materials listed.
2. Use of 150 micron filtration is recommended

Typical Wiring Diagram . . .

![Typical Wiring Diagram](image)

**Standard Models . . .**

<table>
<thead>
<tr>
<th>PVC Mat’l.</th>
<th>Port Size</th>
<th>Actuation on Incr. Flow</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>1/2&quot; NPT*</td>
<td>0.5 GPM ±20%</td>
<td>P5-1</td>
</tr>
<tr>
<td></td>
<td>3/4&quot; IPS</td>
<td>0.5 GPM ±20%</td>
<td>P5-2</td>
</tr>
<tr>
<td></td>
<td>1&quot; IPS</td>
<td>2.0 GPM ±20%</td>
<td>P5-3</td>
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</tbody>
</table>

* 3/4" IPS Model with 1/2" NPT port adapter installed

**Switch Ratings**

<table>
<thead>
<tr>
<th>Max. Resistive Load</th>
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<tbody>
<tr>
<td>VA</td>
</tr>
<tr>
<td>20</td>
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</table>
Disassembling for Cleaning ...
It is not necessary to remove the unit from the piping system.

CAUTION: Make sure the system is turned off and that no residual pressure remains in the piping.

1. Carefully slide out the two retaining keys, using a screwdriver or similar tool.
2. Insert wide-bladed screwdriver in one of bonnet removal slots and twist screwdriver slowly, forcing bonnet out of housing. Do not pull on lead wires, as this can damage unit.

Cleaning ...
Clean shuttle, stem and inside of housing by lightly scraping and/or wiping. Be careful not to damage guide finders in bottom of housing or flutes inside of shuttle. Check O-Ring, bonnet assembly and shuttle, and replace if necessary See “Replacement Parts” (below). Note: Replacement of O-Ring is recommended whenever unit is disassembled.

To Reassemble Unit...
1. Assemble shuttle on bonnet stem, making sure large, round end of shuttle is downward.
2. Hold shuttle on stem and insert bonnet squarely into housing. Gently press bonnet into place.
3. Slide two retaining keys into slots in housing.

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

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.