Flow Switches, Thermal

Series TDS

Thermal Dispersion Flow Switch

Adjustable Switch Point, LED Indication

The Series TDS Thermal Dispersion Flow Switch offers solid-state flow detection of non-coating liquids and process protection. SPDT output allows for interfacing with remote PLC or relay control devices. The adjustable switch point is factory calibrated at 0.2 fps with LED indication of flow and calibration status. Units feature selectable NO or NC operation and are not damaged by overranging flow velocities.

<table>
<thead>
<tr>
<th>Model</th>
<th>Wetted Parts</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDS12</td>
<td>PP/PPS</td>
<td>3.0” (7.6 cm)</td>
</tr>
<tr>
<td>TDS212</td>
<td>PP/PPS</td>
<td>3.0” (7.6 cm)</td>
</tr>
<tr>
<td>TDS122</td>
<td>PP/PPS</td>
<td>4.5” (11.4 cm)</td>
</tr>
<tr>
<td>TDS222</td>
<td>PP/PPS</td>
<td>4.5” (11.4 cm)</td>
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</tbody>
</table>

**SPECIFICATIONS**

Service: Liquids.

Wetted Materials: Polypropylene / PPS or polyvinylidene fluoride.

Temperature Limits: 32 to 140°F (0 to 60°C).

Pressure Limits: 150 psi (10 bar) at 25°C, derated @ 1.667 psi (.113 bar) per °C above 25°C.

Repeatability: ±5% of setpoint.

Switch Type: SPDT.

Electrical Rating: 60 VAC/60 VDC @ 1 A.

Electrical Connections: 22 AWG 3-wire, 10 ft (3 m) length.

Process Connections: 3/4” male NPT.

Mounting Orientation: Any orientation, for pipe sizes 3/4” to 1-1/2” use 3.0” (7.6 cm) length switch; for 2” to 16” pipe sizes use 4.5” (11.4 cm) length switch.

Setpoint Adjustment: 0.04 to 3 fps (1.2X10⁻² to 91 m/s).

Setpoint Drift: 0.5% of setpoint.

Response Time: 1-10 seconds.

Viscosity Range: 1 to 200 centipoise.

Supply Voltage: 12 to 36 VDC.

Consumption: 50 mA (nominal).

Indication: LED for flow status.

Weight: 3 oz (94 g).

Agency Approvals: CE.