The Series AFS Adjustable Flow Switch is externally adjustable and is ideal for protecting machine tools from coolant flow failure, protecting bearings from loss of lubricant or assuring proper air flow. The Series AFS offers an infinite number of flow settings from 0.5 to 20 GPM at pressures up to 1000 psig, with low pressure drop and precise repeatability. The AFS is housed in either brass or stainless steel and can be used with water, compatible liquids, oils, and gases.

### Specifications
- **Service:** Compatible gases or liquids.
- **Wetted Materials:** See model chart for housing and piston, Spring: 316SS, O-ring: Fluoroelastomer, Other: Epoxy.
- **Temperature Limits:** -20 to 300°F (-29 to 149°C), -20 to 225°F (-29 to 107.2°C) with polysulfone piston.
- **Pressure Limit:** 1000 psi (68 bar).
- **Accuracy:** ±10% of setpoint.
- **Repeatability:** ±1% maximum deviation.
- **Switch Type:** SPDT.
- **Electrical Rating:** .17A @ 120 VAC, .08A @ 240 VAC, .13A @ 120 VDC, .06A @ 240 VDC.
- **Electrical Connections:** 18 AWG, 24˝ (61 cm), polymeric lead wires, optional 1/2˝ male NPT conduit connection.
- **Process Connection:** 1/2˝ female NPT ports.
- **Setpoint Adjustment:** Liquids: 0.5 to 20 GPM (1.9 to 75.7 LPM), Gases: 1.0 to 75 SCFM (28 to 2124 LPM) at 5 psig.
- **Required Filtration:** 50 microns or better.
- **Weight:** 2 lb, 11 oz (1.22 kg).

### Model and Media

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Media</th>
<th>Electrical Connection</th>
<th>Piston</th>
<th>Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFS-131</td>
<td>Oil</td>
<td>Wire leads</td>
<td>Brass</td>
<td>Brass</td>
</tr>
<tr>
<td>AFS-141</td>
<td>Water</td>
<td>Wire leads</td>
<td>Polysulfone</td>
<td>Brass</td>
</tr>
<tr>
<td>AFS-151</td>
<td>Liquids</td>
<td>Wire leads</td>
<td>316SS</td>
<td>316SS</td>
</tr>
<tr>
<td>AFS-231</td>
<td>Gases</td>
<td>Wire leads</td>
<td>Brass</td>
<td>Brass</td>
</tr>
<tr>
<td>AFS-251</td>
<td>Gases</td>
<td>Wire leads</td>
<td>316SS</td>
<td>316SS</td>
</tr>
<tr>
<td>AFS-132</td>
<td>Oil</td>
<td>1/2˝ NPT Conduit</td>
<td>Brass</td>
<td>Brass</td>
</tr>
<tr>
<td>AFS-142</td>
<td>Water</td>
<td>1/2˝ NPT Conduit</td>
<td>Polysulfone</td>
<td>Brass</td>
</tr>
<tr>
<td>AFS-152</td>
<td>Liquids</td>
<td>1/2˝ NPT Conduit</td>
<td>316SS</td>
<td>316SS</td>
</tr>
<tr>
<td>AFS-232</td>
<td>Gases</td>
<td>1/2˝ NPT Conduit</td>
<td>Brass</td>
<td>Brass</td>
</tr>
<tr>
<td>AFS-252</td>
<td>Gases</td>
<td>1/2˝ NPT Conduit</td>
<td>316SS</td>
<td>316SS</td>
</tr>
</tbody>
</table>

The Series TFS Flow Switch with adjustable setpoint offers precise flow monitoring of water-based fluids. Units have five selectable flow rate settings from 0.2 m/s (0.66 ft/s) to 3.0 m/s (9.8 ft/s). Flow is indicated as a percentage of the flow range on a string of LEDs. The setpoint, adjustable from 15% to 90% of the flow range setting, is displayed as a flashing LED.

### Specifications
- **Service:** Water-based fluids.
- **Wetted Material:** 303 SS.
- **Measuring Ranges:** 0.2 m/s (0.66 ft/s), 0.4 m/s (1.3 ft/s), 1.0 m/s (3.3 ft/s), 2.0 m/s (6.6 ft/s), and 3.0 m/s (9.8 ft/s).
- **Repeatability:** Less than 2.0%.
- **Linearity:** Less than 5%.
- **Hysteresis:** 10% (approximate).
- **Temperature Limits:** -4 to 176°F (-20 to 80°C).
- **Pressure Limit:** 435 psi (30.0 bar).
- **Switching Output:** PNP, normally open.
- **Housing Material:** Glass fiber reinforced PBTP (Ultradur), meets IP65.
- **Setpoint Range:** 15% to 90% of range setting.
- **Response Time:** 2 to 10 seconds (relative to range setting).
- **Supply Voltage:** 18 to 30 VDC, including residual ripple.
- **Switching Current:** 400 mA maximum.
- **Power Consumption:** 1 watt (approximate).
- **Electrical Connection:** Plug-in 78˝ (198 cm) oilflex cable (included).
- **Process Connection:** 1/2˝ male NPT.
- **Weight:** 0.66 lb (301 g).
- **Agency Approvals:** CE.