LIQUID FLOW SENSORS FOR VISUAL INDICATION, REMOTE SENSING, AND FLOW ALARM

FPR100 Series
Starts at $42

- Low Cost
- Pulse or Alarm Output Optional
- For Flows from 0.1 to 30.0 GPM
- Flow Switch Rotor Cannot Seize in “ON” State
- Integral Mounting Holes Standard

The rugged, low-cost FPR100 Series sensors feature a one-piece composite rotor, sturdy unibody construction, ceramic shafts, and superior sealing. The FPR110 sensors, with bright orange spinning rotors, provide visual indication of flow only. The FPR120 Series features visual indication and an adjustable 0.5 A @ 110 Vac SPDT mechanical flow switch. The FPR130 Series has visual indication and a square-wave pulse output for use with remote ratemeters/totalizers, such as the DPF700 Series meters.

For panel mounting, all polypropylene units come with mounting ears that accept #8 self-tapping screws; all brass units come with mounting holes that accept #8-32 UNC-2B screws. For all FPR100 sensors, incoming flow can be directed to either port; a minimum of 8 inches of straight inlet pipe is required. Filtration of 150 microns is recommended.

SPECIFICATIONS

Wetted Parts: Brass or hydrolytically stable glass-reinforced polypropylene body; ceramic rotor pin; nylon composite rotor; polysulfone lens; and Buna-N O-ring with polypropylene body, Viton® O-ring with brass body

Max Pressure:
- Polypropylene: 100 psig, 40 psig @ 100°C (212°F)
- Brass: 200 psig

Max Liquid Temperature:
- FPR120, FPR130: 82°C (180°F)
- FPR110: 100°C (212°F)
**To Order (Specify Model Number)**

### Sensor with Visual Indication Only

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Price</th>
<th>Body Material</th>
<th>Port Size NPT</th>
<th>Input Power</th>
<th>Flow Ranges (GPM)</th>
<th>Low Range*</th>
<th>Std. Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPR111</td>
<td>$42</td>
<td>Polypropylene</td>
<td>0.25</td>
<td>—</td>
<td>0.1 to 1</td>
<td>0.5 to 5</td>
<td></td>
</tr>
<tr>
<td>FPR112</td>
<td>42</td>
<td>Polypropylene</td>
<td>0.50</td>
<td>—</td>
<td>1.5 to 12</td>
<td>4.0 to 20</td>
<td></td>
</tr>
<tr>
<td>FPR113</td>
<td>120</td>
<td>Brass</td>
<td>0.25</td>
<td>—</td>
<td>0.1 to 1</td>
<td>1.0 to 6</td>
<td></td>
</tr>
<tr>
<td>FPR114</td>
<td>120</td>
<td>Brass</td>
<td>0.50</td>
<td>—</td>
<td>1.5 to 12</td>
<td>4.0 to 20</td>
<td></td>
</tr>
<tr>
<td>FPR115</td>
<td>120</td>
<td>Brass</td>
<td>0.75</td>
<td>—</td>
<td>—</td>
<td>6.0 to 30</td>
<td></td>
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</tbody>
</table>

### Sensor with Visual Indication and Flow Switch

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Price</th>
<th>Body Material</th>
<th>Port Size NPT</th>
<th>Input Power</th>
<th>Flow Ranges (GPM)</th>
<th>Low Range*</th>
<th>Std. Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPR121</td>
<td>$165</td>
<td>Polypropylene</td>
<td>0.25</td>
<td>12 Vdc</td>
<td>0.1 to 1.0</td>
<td>0.5 to 5</td>
<td></td>
</tr>
<tr>
<td>FPR122</td>
<td>172</td>
<td>Polypropylene</td>
<td>0.50</td>
<td>24 Vdc</td>
<td>1.5 to 12</td>
<td>4.0 to 20</td>
<td></td>
</tr>
<tr>
<td>FPR123</td>
<td>195</td>
<td>Polypropylene</td>
<td>110 Vac</td>
<td>12 Vdc</td>
<td>1.5 to 12.0</td>
<td>4.0 to 20.0</td>
<td></td>
</tr>
<tr>
<td>FPR125</td>
<td>172</td>
<td>Polypropylene</td>
<td>0.50</td>
<td>24 Vdc</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>FPR126</td>
<td>195</td>
<td>Polypropylene</td>
<td>110 Vac</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

### Sensor with Visual Indication and Pulse Output

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Price</th>
<th>Body Material</th>
<th>Port Size NPT</th>
<th>Input Power</th>
<th>K Factor Low - High</th>
<th>Accuracy (% of Full Scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPR131</td>
<td>$99</td>
<td>Polypropylene</td>
<td>0.25</td>
<td>10,900 - 2196</td>
<td>0.1 to 1 (±7%)</td>
<td>0.5 to 5 (±7%)</td>
</tr>
<tr>
<td>FPR132</td>
<td>99</td>
<td>Polypropylene</td>
<td>0.50</td>
<td>959 - 611</td>
<td>1.5 to 12 (±7%)</td>
<td>4 to 20 (±15%)</td>
</tr>
<tr>
<td>FPR133</td>
<td>151</td>
<td>Brass</td>
<td>0.25</td>
<td>10,080 - 1529</td>
<td>0.1 to 1 (±7%)</td>
<td>0.5 to 5 (±7%)</td>
</tr>
<tr>
<td>FPR134</td>
<td>151</td>
<td>Brass</td>
<td>0.50</td>
<td>971 - 627</td>
<td>1.5 to 12 (±7%)</td>
<td>4 to 20 (±15%)</td>
</tr>
<tr>
<td>FPR135</td>
<td>151</td>
<td>Brass</td>
<td>0.75</td>
<td>243 - 243</td>
<td>—</td>
<td>6 to 30 (±15%)</td>
</tr>
</tbody>
</table>

Comes with complete operator’s manual.
* With use of low flow adaptor (included).
† Pull-down resistor required.

**Ordering Example:** FPR124, flow sensor with visual indication and flow switch, polypropylene body, 0.50 NPT port size, 1.5 to 12 GPM low range, 4 to 20 GPM standard range, powered by 12 Vdc, $165.

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Max Pressure Drop: 11 psid
Max Ambient Temperature: FPR120, FPR130: 65.6°C (150°F)
Max Liquid Viscosity: 200 SSU
FPR120 Power: 12 Vdc, 24 Vdc, or 110 Vac (per model number)
FPR130 Pulse Output: Pulse amplitude = DC power input

FPR130 Pulse Output Range:
12 Hz @ lowest flow rate of both ranges; 225 Hz @ highest flow rate of both ranges
FPR120, FPR130 Repeatability: 2% of rate
FPR130 Power: 4.5 to 24 Vdc @ 70 mA max

FPR120 SPDT Switch Rating (Resistive):
0.5 A @ 110 Vac; 1 A @ 24 Vdc
FPR120 Setpoint Deadband: 15% of rate
Weight:
PP Body: FPR110, 340 g (12 oz); FPR120, 454 g (1 lb); FPR130, 397 g (14 oz)
Brass Body: FPR110, 680 g (1.5 lb), FPR-120, 907 g (2 lb)

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**ALL MODELS AVAILABLE FOR FAST DELIVERY!**
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- **Flow and Level**
  Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

- **pH and Conductivity**
  Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

- **Data Acquisition**
  Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers, Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

- **Pressure, Strain and Force**
  Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

- **Heaters**