

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

FPR110 Series with Visual Indication Only



FPR111, \$42, shown actual size.



FPR113, \$120, shown actual size.

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.



FPR131 sensor, \$99, shown with DPF701 ratemeter, \$260. See page M-12.



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## 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:

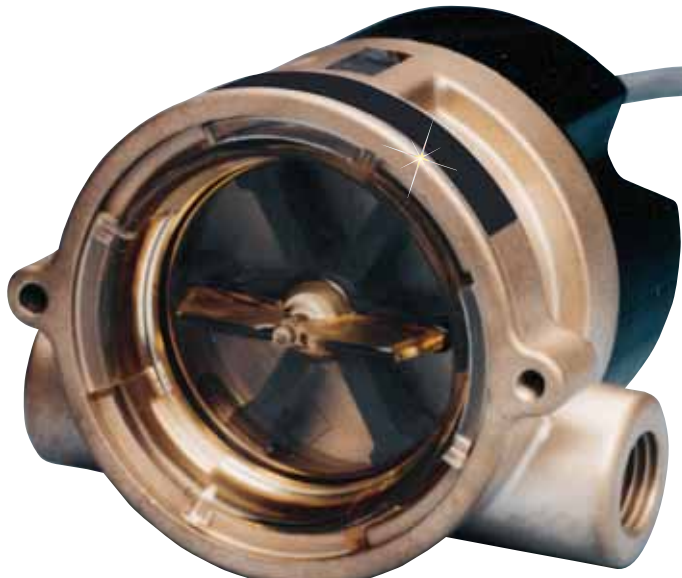
**FPR120, FPR130:** 82°C (180°F)

**FPR110:** 100°C (212°F)

**FPR130 Series with Pulse Output**

**FPR131, \$99, shown larger than actual size.**

**FPR133, \$151, shown larger than actual size.**



**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)

**ALL MODELS AVAILABLE FOR FAST DELIVERY!**

<b>To Order (Specify Model Number)</b>						
<b>Sensor with Visual Indication Only</b>						
Model Number	Price	Body Material	Port Size NPT	Input Power	Flow Ranges (GPM)	
					Low Range*	Std. Range
FPR111	\$42	Polypropylene	0.25	—	0.1 to 1	0.5 to 5
FPR112	42	Polypropylene	0.50	—	1.5 to 12	4.0 to 20
FPR113	120	Brass	0.25	—	0.1 to 1	1.0 to 6
FPR114	120	Brass	0.50	—	1.5 to 12	4.0 to 20
FPR115	120	Brass	0.75	—	—	6.0 to 30
<b>Sensor with Visual Indication and Flow Switch</b>						
FPR121	\$165	Polypropylene	0.25	12 Vdc	0.1 to 1.0	0.5 to 5
FPR122	172			24 Vdc		
FPR123	195			110 Vac		
FPR124	165		0.50	12 Vdc	1.5 to 12.0	4.0 to 20.0
FPR125	172			24 Vdc		
FPR126	195			110 Vac		
<b>Sensor with Visual Indication and Pulse Output</b>				<b>K Factor Low - High</b>	<b>Accuracy (% of Full Scale)</b>	
FPR131 <sup>†</sup>	\$99	Polypropylene	0.25	10,900 - 2196	0.1 to 1 (±7%)	0.5 to 5 (±7%)
FPR132 <sup>†</sup>	99	Polypropylene	0.50	959 - 611	1.5 to 12 (±7%)	4 to 20 (±15%)
FPR133 <sup>†</sup>	151	Brass	0.25	10,080 - 1529	0.1 to 1 (±7%)	0.5 to 5 (±7%)
FPR134 <sup>†</sup>	151	Brass	0.50	971 - 627	1.5 to 12 (±7%)	4 to 20 (±15%)
FPR135 <sup>†</sup>	151	Brass	0.75	243 - 243	—	6 to 30 (±15%)

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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