

## Flow Rate Monitoring – RFA Types

### ► 0 to 10 VDC Analog Output

GEMS Sensors popularized the RotorFlow's paddlewheel design by combining high visibility rotors with solid-state electronics that are packaged into compact, panel mounting housings. They provide accurate flow rate output with integral visual confirmation...all with an unprecedented price/performance ratio. RFA Types feature a 0 to 10 VDC analog output which is proportional to flow rate.

### Specifications

<b>Wetted Materials</b>	
<b>Body</b>	Brass, 316 Stainless Steel or Polypropylene (Hydrolytically Stable, Glass Reinforced)
<b>Rotor Pin</b>	Ceramic
<b>Rotor</b>	PPS Composite, Black <sup>1</sup>
<b>Lens</b>	Polysulfone
<b>O-Ring</b>	Viton® (Alloy Bodies); Buna N (Polypropylene Body)
<b>Low Flow Adaptor</b>	Glass Reinforced Polypropylene
<b>Operating Pressure, Maximum</b>	
<b>Brass or Stainless Steel Body</b>	200 PSIG (13.8 bar) @ 70°F (21°C), 100 PSIG (6.9 bar) @ 212°F (100°C) <sup>2</sup>
<b>Polypropylene Body</b>	100 PSIG (6.9 bar) @ 70°F (21°C), 40 PSI (2.8 bar) Max. @ 180°F (82°C)
<b>Operating Temperature</b>	
<b>Brass or Stainless Steel Body</b>	-20°F to 212°F (-29°C to 100°C)
<b>Polypropylene Body</b>	-20°F to 180°F (-29°C to 82°C)
<b>Electronics</b>	150°F (65°C) Ambient
<b>Viscosity, Maximum</b>	200 SSU
<b>Input Power</b>	24 VDC, ±10%
<b>Output Signal</b>	0-10 VDC Analog Signal @ 1mA, Max.
<b>Current Consumption</b>	25 mA, Max.
<b>Current Source Output, Max.</b>	10 mA
<b>Accuracy</b>	See Table Below
<b>Electrical Termination</b>	22 AWG PVC-Jacketed, 24" Cable. Color Coded: Red = +VDC; Black = Ground; White = Signal Output

#### Notes:

1. Standard on Stainless Steel bodies.
2. For higher pressure/temperature ratings stainless steel face plates are available. Consult factory.

### How To Order

For standard configurations, specify Part Number based on desired body material and port size.

Body Material	Port Size NPT	Flow Ranges – GPM			
		Low Range (Accuracy)	Part Number	Standard Range (Accuracy)	Part Number
Polypropylene	.25"	0.1 to 1.0 (±7.0%)	<b>230206</b>	0.5 to 5.0 (±7.0%)	<b>230205</b>
	.50"	1.5 to 12.0 (±7.0%)	<b>230207</b>	4.0 to 20.0 (±15.0%)	<b>230201</b>
Brass	.25"	0.1 to 1.0 (±7.0%)	<b>230209</b>	0.5 to 5.0 (±7.0%)	<b>230202</b>
	.50"	1.5 to 12.0 (±7.0%)	<b>230210</b>	4.0 to 20.0 (±15.0%)	<b>230203</b>
	.75"	—	—	5.0 to 30.0 (±10.0%)	<b>230212</b>
	1.00"	—	—	8.0 to 60.0 (±15.0%)	<b>230214</b>
Stainless Steel	9/16"-18	0.1 to 1.0 (±7.0%)	<b>230211</b>	0.5 to 5.0 (±7.0%)	<b>230204</b>
	.50"	1.5 to 12.0 (±7.0%)	<b>230216</b>	4.0 to 20.0 (±15.0%)	<b>230208</b>
	.75"	—	—	5.0 to 30.0 (±10.0%)	<b>230213</b>
	1.00"	—	—	8.0 to 60.0 (±15.0%)	<b>230215</b>

⚡ – Stock Items.

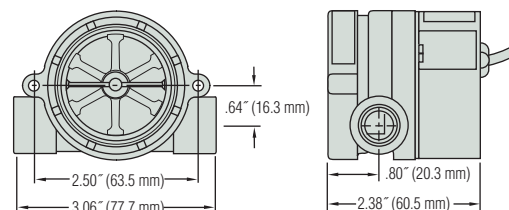


### Typical Applications

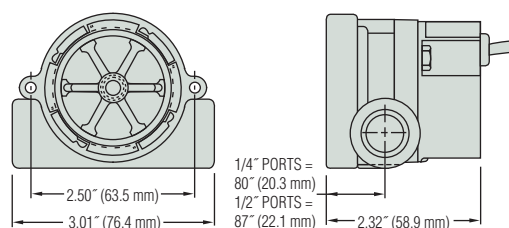
- Water Purification/Dispensing Systems
- Chemical Metering Equipment
- Lasers and Welders
- Water Injection Systems
- Semiconductor Processing Equipment
- Chillers and Heat Exchangers

### Dimensions

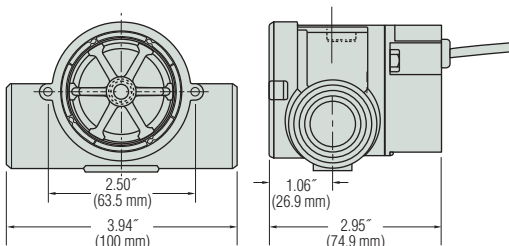
#### Polypropylene Bodies



#### Brass and Stainless Steel Bodies - .25" and .50" Ports



#### Brass Bodies – .75" and 1.00" NPT Ports



### High Resolution Black Rotor

PPS composite. Each of the six rotor arms is magnetized. A PTFE loaded bushing ensures long life.

