

# Flow Set Point Switching – RFS Types

- Combines visual confirmation of flow with dynamic, electronic switch operation
- Easy, adjustable switch point calibration: a local LED signals when set point is reached

RotorFlow® Switches build an extra level of reliability and protection into your equipment. By principle of operation, the rotor cannot be deceived into indicating a positive flow situation when no flow

actually exists. Once set to a desired actuation point, RotorFlow will switch to a "no-flow" condition should the rotor stop for any

reason.

# **Typical Applications**

Protect expensive electronic equipment from coolant flow failure on...

- Semiconductor Processing Equipment
- Lasers Medical Equipment
- · X-Ray and Other High Power Tubes
- Robotic Welding Equipment



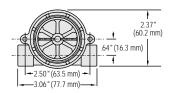
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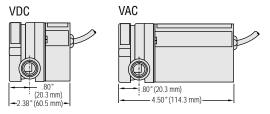
#### **Specifications**

Wetted Materials Body	Brass, Stainless Steel or Polypropylene (Hydrolytically Stable, Glass Reinforced)		
Rotor Pin	Ceramic		
Rotor	PPS Composite, Black		
Lens	Polysulfone		
0-Ring	Viton® (Alloy Bodies); Buna N (Polypropylene Body)		
Low Flow Adaptor	Glass Reinforced Polypropylene		
Operating Pressure, Maximum Brass or Stainless Steel Body	200 PSIG @ 70°F		
Polypropylene Body	100 PSIG @ 70°F, 40 PSI Max. @ 180°F		
Operating Temperature, Brass or Stainless Steel Body	-20°F to 212°F (-29°C to 100°C)		
Polypropylene Body	-20°F to 180°F (-29°C to 82°C)		
Electronics	150°F (65°C) Ambient		
Viscosity, Maximum	200 SSU		
Input Power	24 VDC or 110 VAC		
Relay Contact Ratings (SPDT)	1 Amp, 24 VDC Resistive; 0.3 Amp, 110 VAC		
Repeatability	2% Maximum Deviation		
Set Point Accuracy (Factory Set)	± 5%		
Set Point Differential	15% Maximum		
Electrical Termination	20 AWG PVC-Jacketed, 24" Cable. Color Codes: Red = +VAC/VDC, Black = Ground, White = N.O. Contact, Brown = N.C. Contact, Green = Common		

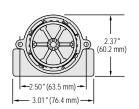
### **Dimensions**

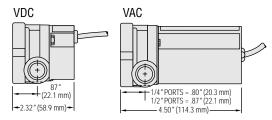
Polypropylene Bodies



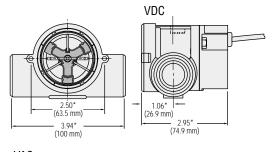


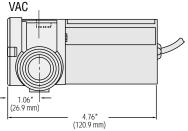
Brass and Stainless Steel Bodies - .25" and .50" Port





Brass and Stainless Steel Bodies - .75" and 1.00" Port





# Switch Set Point Calibration With LED Signal (RFS Type)

With the unit installed in the line and power supplied, complete the following steps to calibrate switch actuation point with proper flow rate. A small flat-blade screwdriver is the only tool required.

- 1. Adjust liquid flow in the line to the rate at which switch actuation is desired.
- 2. Insert screwdriver into opening on backside of housing and fit blade into the potentiometer adjustment screw inside.
- 3. If LED is not illuminated, slowly turn screwdriver counterclockwise and stop as soon as LED illuminates.
- 4. If LED is illuminated, turn screwdriver clockwise until LED light goes out. Then, slowly turn screwdriver counterclockwise and stop as soon as LED illuminates.

#### How To Order

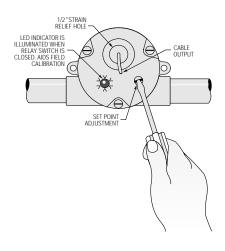
Specify Part Number based on desired body material, port size and input power rating.

Body Material	Port Size	Flow Ranges - GPM		Input	Part
	NPT	Low Range*	Standard Range	Power	Number
Polypropylene	.25″	0.1 to 1.0	0.5 to 5.0	24 VDC	155425 🗲
				110 VAC	155876 🗲
	.50″	1.5 to 12.0	4.0 to 20.0	24 VDC	155485 🗲
				110 VAC	155886 🗲
Brass	.25″	0.1 to 1.0	0.5 to 5.0	24 VDC	156265 🗲
				110 VAC	156266 🗲
	.50″	1.5 to 12.0	4.0 to 20.0	24 VDC	156268 🗲
	100	110 (0 1210		110 VAC	156269 🗲
	.75″	-	5.0 to 30.0	24 VDC	180395 🗲
				110 VAC	180396 🗲
	1.00″	-	8.0 to 60.0	24 VDC	181688 🗲
				115 VAC	181689 🗲
Stainless Steel	9/16-18** 0	0.1 to 1.0	0.5 to 5.0	24 VDC	165073 🗲
		011 10 110		110 VAC	165074
	.50″	1.5 to 12.0	4.0 to 20.0	24 VDC	165077 🗲
				110 VAC	165078 🗲
	.75″	-	5.0 to 30.0	24 VDC	181691
				115 VAC	181692
	1.00″	-	8.0 to 60.0	24 VDC	181693
				115 VAC	181694

<sup>\*</sup> With use of Low Flow Adapter supplied. See Page J-7 for more information.

# **Special Requirements:**

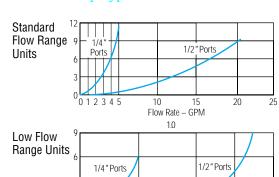
GEMS caters to OEM needs with special configurations for potable water and enhanced chemical capabilities. Consult factory for further details.

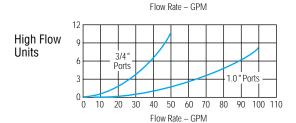


High Resolution Black Rotor PPS composite. Each of the six rotor arms is magnetized.



### Pressure Drop-Typical





<sup>\*\*</sup> Straight thread with O-ring seal.