

RF-1 Flowmeter

Precise Metering and Monitoring

The RF-1 Flowmeter has been developed for precise metering and monitoring of fluid flows. The flowmeter, in many cases, surpasses the performance of meters currently used.

Flow Rate Accuracy:

Flow rate accuracies of 0.5% are not uncommon with many fluids if the flowmeters are calibrated at or near the expected flow rates. Even with wide flow rate swings (such as when used with robots under analog control) accuracies of $\pm 2\%$ are achievable.

Reverse Flow Detection:

Sensors are of the quadrature type, which allows reverse flow detection, if necessary. Under conditions where reverse flow detection is not necessary, only one sensor output is used, leaving the second sensor output as a spare output that can be used if the first sensor should ever fail.

Specifications

Flow Rate:	.01-.50 GPM (.04 to 1.9 LPM)
Accuracy:	+/-0.5%
Working Pressure:	5000 PSI (345 Bar) MWP @ 100°F
Temperature:	180°F (85°C)
Maximum Output:	• 2 Channel Quadrature • 30,000 PPG (8100 PPL)
Power:	8-24 VDC
Materials:	
Body:	303 Stainless Steel
Gears:	Stainless Steel (Hardened)
Bearings:	Carbide
Shafts:	Carbide
Seals:	Teflon
Strainer:	100 Mesh
Connections:	Threaded 1/4" NPT (F)
Weight:	4.5 lbs. (2.0 kg)



Advantages:

- Increased pressure rating to 5000 psig (350 bar).
- Resolution to 31,500 pulses per gallon. Increased resolution means more pulses are averaged per update period providing less "bouncing" of the rate display, especially at lower flow rates.
- Uses NPT pipe fitting.
- Meter is easy to disassemble/reassemble.
- Uses standard American size fasteners, not metric.
- Increased low flow range. The meter's standard flow range is from 40 cc's/min to 1900 cc's/min. Flows down to 10 cc's/min can also be obtained dependent on the type of material being metered.
- Increased accuracy to + 1% over the standard flow range.
- Maximum fluid temperature of the meter is 180°F. With standard carbide shafts and carbide gear inserts.
- Cost Savings: The RF-1 meter is a good investment for your money.