

2000 MicroFlow Rotor Sensor



Features

- Flow rate range
0.11 to 12.11 lpm
(0.03 to 3.2 U.S. gpm)
- Simple Mounting
- 1/4 in. NPT or ISO threads for simple pipe or tubing connection
- Measures opaque and transparent liquids
- Low pressure drop
- Standard cable
7.6 m (25 ft.)

Applications

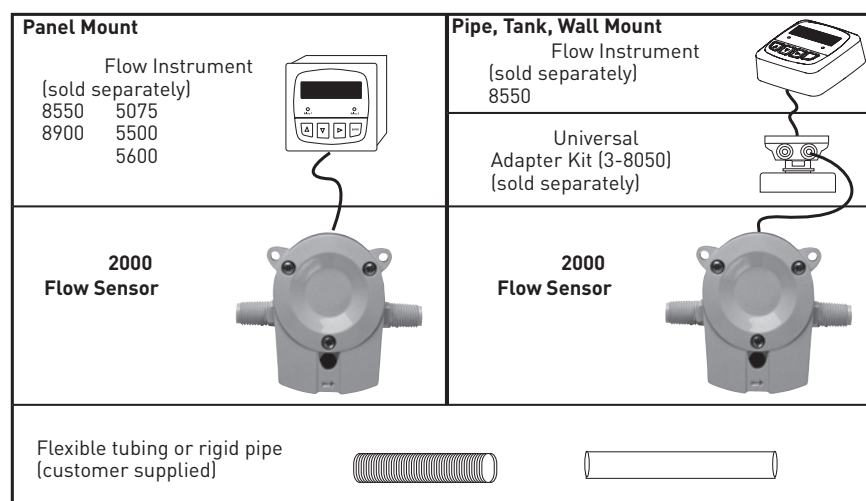
- Coolant Flow
- Dosing
- Batch Dispensing
- **Not recommended for strong oxidizers**

Description

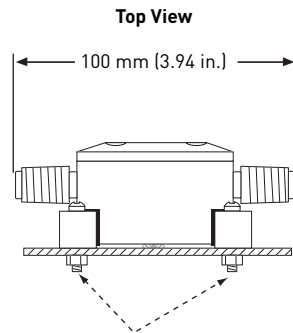
The 2000 MicroFlow Rotor Sensor is constructed of Polyphenylene Sulfide (PPS) which provides high material strength. The 2000 offers two flow ranges starting at 0.11 or 1.13 lpm (0.03 or 0.3 gpm), for clean process liquids, regardless of fluid color or opacity.

This sensor can be connected to flexible tubing or rigid pipe, and uses standard hardware for mounting. Only one moving part and a low pressure drop across the sensor reduces operating costs and maintenance requirements.

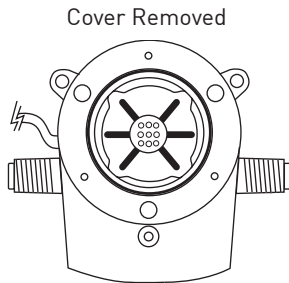
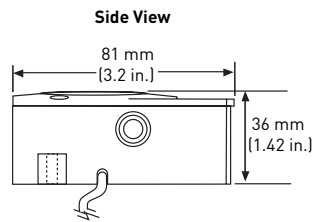
System Overview



Dimensions



Mounting tabs for metric M3 or standard #6 screws on 68 mm (2.68 in.) bolt circle



Application Tips:

- For use in clean fluids - no suspended solids.
- Use the mounting tabs to secure the sensor to a flat surface, $\pm 30^\circ$.
- Verify chemical compatibility before installation.

Please refer to Wiring, Installation and Accessories sections for more information.

Specifications

General

Flow rate range:

- -11 & -12 version:
0.11 to 2.6 lpm (0.03 to 0.7 U.S. gpm)
- -21 & -22 version:
1.13 to 12.11 lpm (0.3 to 3.2 U.S. gpm)

Linearity: $\pm 1.2\%$ of full range

Repeatability: $\pm 0.5\%$ of full range

Connections: 1/4 in. NPT (male) or ISO 7/1 - R1/4 (male)

Wetted Materials

- Sensor body and cover:
40% glass filled Polyphenylene Sulfide (PPS)
- Rotor: PEEK™, natural, unfilled
- Rotor O-ring: FPM
- Cover O-ring: FPM

Electrical

Power:

5 to 24 VDC @ 10 mA max.

Output type:

Open-collector NPN transistor,
10 mA max. sink

Cable length: 7.6 m (25 ft), can splice up to 300 m (1000 ft)

Cable type:

2-conductor twisted pair w/shield,
22 AWG

Max. Pressure/Temperature Rating:

0° to 80°C @ 5.5 bar max.
(32° to 176°F @ 80 psi max.)

See Temperature and Pressure Graphs for more information

Shipping Weight: 0.3 kg (0.7 lbs.)

Standards and Approvals

- Manufactured under ISO 9001:2000 for Quality and ISO 14001:2004 for Environmental Management

Flow

Ordering Information

Sensor Part Number			
3-2000			MicroFlow rotor flow sensor
			Flow range
	1		low flow, 0.11 to 2.61 lpm (0.03 to 0.7 gpm)
	2		high flow, 1.13 to 12.11 lpm (0.3 to 3.2 gpm)
			End fittings
		1	0.25 NPT threads
		2	ISO 7/1-R1/4 threads
3-2000	-1	1	Example Part Number

Mfr. Part No.	Code	Mfr. Part No.	Code
3-2000-11	198 822 000	3-2000-21	198 822 002
3-2000-12	198 822 001	3-2000-22	198 822 003

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2000.390	159 000 248	Replacement rotor kit
1220-0029	198 820 049	Cover O-ring
2450-0620	198 820 051	Cover screw
5523-0222	159 000 392	Cable, per foot