

Type 2000 Micro Flow Rotor Sensor



Product description

The type 2000 Micro Flow 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.

Features

- Operating range 0.11 to 12.11 lpm (0.03 to 3.2 U.S. gpm)
- Simple mounting
- ¼ 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

Technical Details

General

Operating 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	±1.2% of full range		
Repeatability	±0.5% of full range		
Connections	¼ in. NPT (male) or ISO 7/1 - R¼ (male)		

Wetted Materials

Sensor Body and Cover	40% glass filled Polyphenylene Sulfide (PPS)
Rotor	PEEK®, natural, unfilled
Cover O-ring	FKM

Electrical

Power	5 to 24 VDC ±10%, regulated, 10 mA max.
Output type	Open-collector, sinking, 20 mA max.
Cable Length	7.6 m (25 ft), can be extended up to 300 m (1000 ft)
Cable type	2-conductor twisted pair w/shield, 22 AWG

Max. Temperature/Pressure Rating

	0 °C to 80 °C @ 5.5 bar max.	32 °F to 176 °F @ 80 psi max
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Shipping Weight

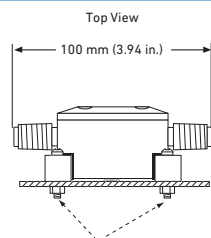
	0.03 kg	0.7 lb
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Standards and Approvals

	Manufactured under ISO 9001, ISO 14001 and ISO 45001
	Not available in EU

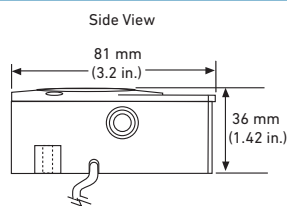
Dimensions

Top View

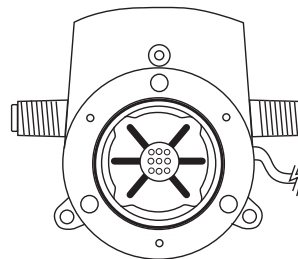


Mounting tabs for metric M3 or standard #6 screws on 68 mm (2.68 in.) bolt circle

Side View

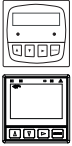
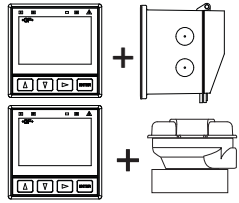



Cover Removed

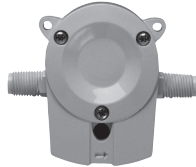


Mounting tabs for metric M3 standard #6 screws on 68 mm (2.68 in.) bolt circle

System Overview

Panel Mount	Pipe, Tank, Wall	Automation System
GF Instruments - 9900-1P - 9900-1BC - 9950	GF Instruments - 9900-1P with Rear Enclosure - 9900-1 with 3-8050 Universal Mount Kit	- 0486 Profibus Concentrator and Customer Supplied Programmable Logic Controller or - Programmable Automation Controller
		

Type 2000 Sensor



All sold separately

Flexible tubing or rigid pipe
(customer supplied)



Pressure-temperature diagram

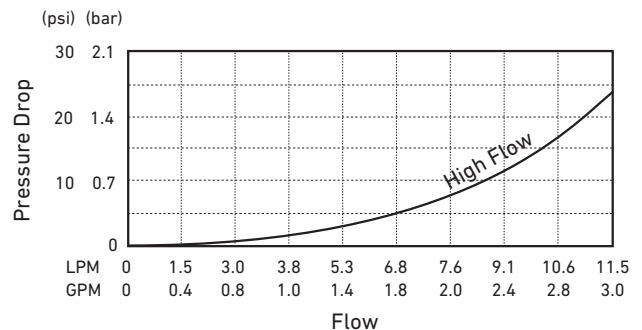
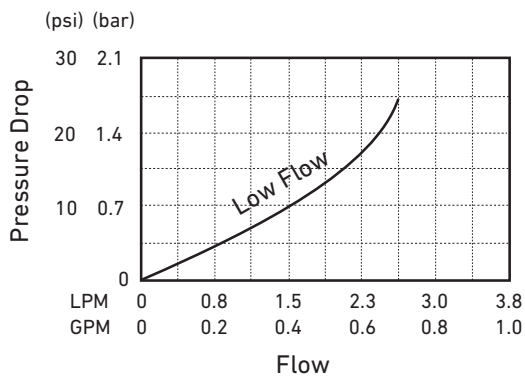
Note

The pressure-temperature diagrams are specifically for the GF sensor. During system designs the specifications of all components must be considered. In the case of a metal piping system, a plastic sensor will reduce the system specification

Low Flow

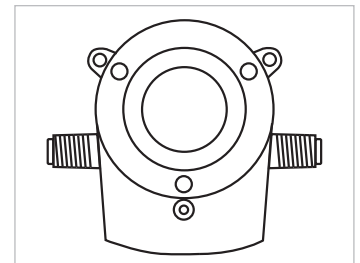
High Flow

2000 - Pressure Drop-High Flow



Ordering Information

Mfr. Part No.	Code	Flow Range	End Fittings
3-2000-11	198 822 000	Low flow, 0.11 to 2.61 lpm (0.03 to 0.7 gpm)	¼ NPT threads
3-2000-12	198 822 001	Low flow, 0.11 to 2.61 lpm (0.03 to 0.7 gpm)	ISO 7/1-R1/4 threads
3-2000-21	198 822 002	High flow, 1.13 to 12.11 lpm (0.3 to 3.2 gpm)	¼ NPT threads
3-2000-22	198 822 003	High flow, 1.13 to 12.11 lpm (0.3 to 3.2 gpm)	ISO 7/1-R1/4 threads



Accessories

Mfr. Part	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, each
5523-0222	159 000 392	Cable (per foot), 2 cond. w/shield, 22 AWG
3-8050-1	159 000 753	Universal junction box

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