

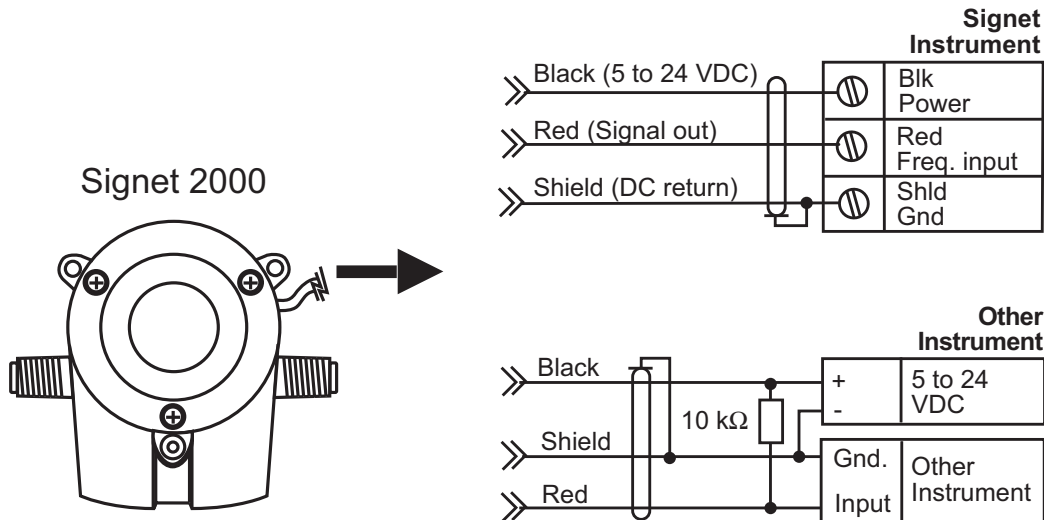


SAFETY INSTRUCTIONS

1. Depressurize and vent system prior to installation/removal.
2. Confirm chemical compatibility before use.
3. Do not exceed maximum temperature/pressure specifications.
4. Wear safety goggles or faceshield during installation/service.
5. Do not alter product construction.



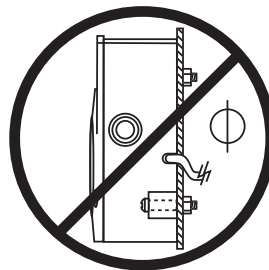
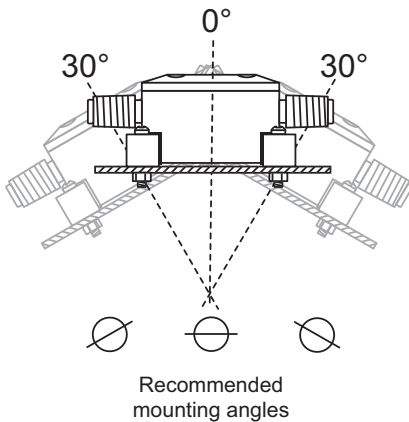
1. Compatible Instrument Wiring



Technical Notes:

- Use 2-conductor twisted-pair shielded cable for sensor cable splices up to 300 m (1000 ft) max.
- Maintain cable shield through cable splice.
- Route sensor cable away from AC power lines.
- AUX power required when used with any Signet 8550 Process Pro Flow Transmitter.

2. Recommended Sensor Position

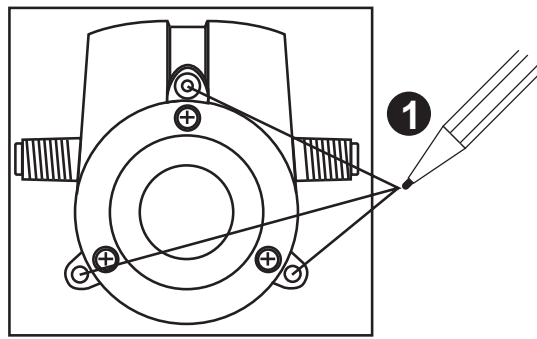


Vertical mounting not recommended

Technical Notes:

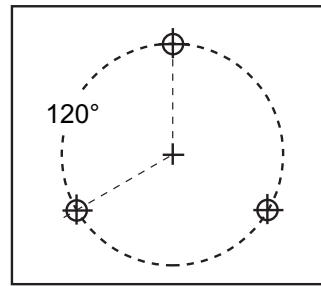
- Horizontal surface mount ($\pm 30^\circ$) recommended for optimum performance.
- Suitable for clean fluids only. Suspended solids will cause mechanical failure.
- 1/4 in. NPT or ISO 7/1 - R1/4 (male) port connections
- NEMA 4X/IP65 splashproof enclosure

3. Surface Mount Instructions

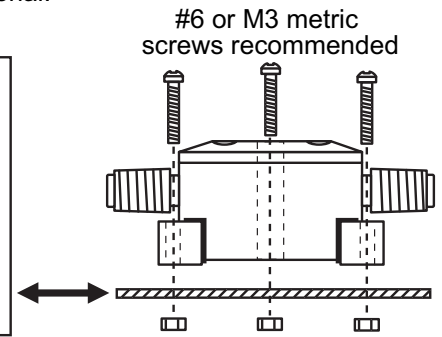


Mounting surface

2 Remove sensor then use correct screws for panel material.



Mounting surface (top),
68 mm (2.68 in.) bolt circle



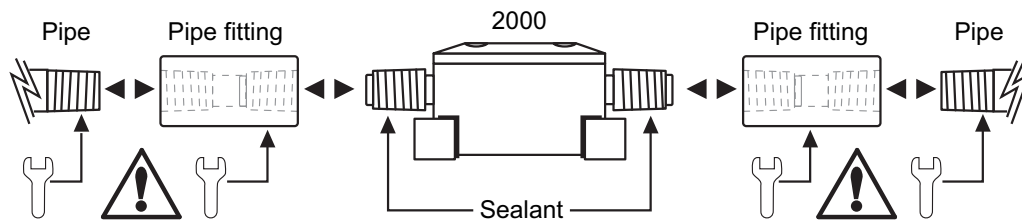
Mounting surface (side)

4. Fitting Installation



CAUTION:

- Maximum pipe fitting torque: 13 Nm (10 lb)
- DO NOT overtighten. Failure to observe torque specification may permanently damage sensor ports.



Technical Notes:

- Compatible fittings (customer supplied): Female union (shown), reducer, or hose barb type.
- Always apply thread sealant to sensor port threads to prevent leakage.

5. Calibration

The K-Factors listed below represent the number of pulses the sensor will generate for each engineering unit of fluid which passes. They are listed in U.S. gallons, liters and ml by sensor model:

K-FACTORS			
Sensor Model	Pulses per U.S. GAL	Pulses per Liter	Pulses per ml
3-2000-11	9950	2629	2.629
3-2000-12	9950	2629	2.629
3-2000-21	3160	834.9	0.835
3-2000-22	3160	834.9	0.835

Conversion Formulas:

1 U.S. gallon =
0.83267 Imperial gallon

6. Specifications

General

Flow range:

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

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

Cable type: 2-conductor twisted pair w/shield
(Belden 8451)

Weight: 250 g (9.6 oz.)

Max. pressure/temperature:

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

Wetted Materials

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

Electrical

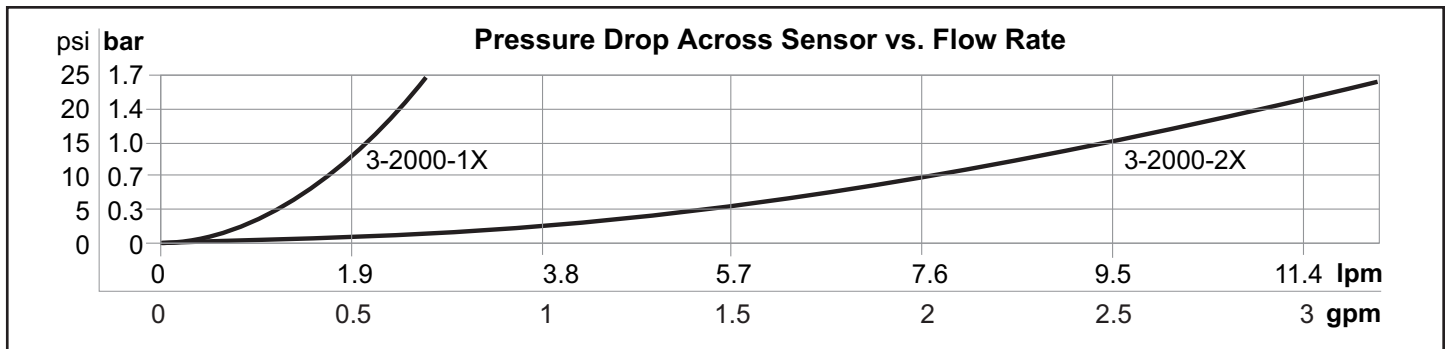
Power: 5 to 24 VDC $\pm 10\%$, regulated,
10 mA max.

Output type: Open-collector, sinking, 10 mA max.

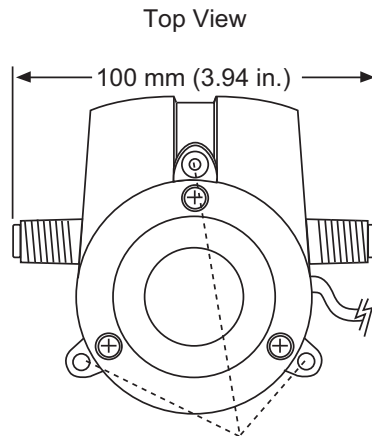
Standards and Approvals

- CE
- Manufactured under ISO 9001 and ISO 14001
- China RoHS (Go to www.gfsignet.com for details)

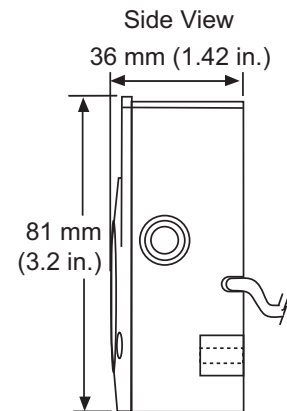
PEEK™ is a registered trademark of Victrex plc.



Dimensions



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



Ordering Information

Mfr. Part No.	Code	Description
3-2000-11	198 822 000	Micro Flow Sensor, low w/0.25 in. NPT
3-2000-12	198 822 001	Micro Flow Sensor, low w/ISO 7/1-R1/4
3-2000-21	198 822 002	Micro Flow Sensor, high w/0.25 in. NPT
3-2000-22	198 822 003	Micro Flow Sensor, high w/ISO 7/1-R1/4

Accessories

Mfr. Part No.	Code	Description
3-2000.090-1	198 869 911	Instruction manual
3-2000.390	198 820 050	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), 2 cond. w/shield, 22 AWG

+GF+

Georg Fischer Signet LLC, 3401 Aerojet Avenue, El Monte, CA 91731-2882 U.S.A. • Tel. (626) 571-2770 • Fax (626) 573-2057
For Worldwide Sales and Service, visit our website: www.gfsignet.com • Or call (in the U.S.): (800) 854-4090
For the most up-to-date information, please refer to our website at www.gfsignet.com