

# Signet 5090 Sensor-Powered Flow Monitor

Member of the ProPoint® Family of Monitors



Sensor Powered - external power not required.

## Features

- High visibility analog display
- Sensor-powered flow rate indication up to 60 m (200 ft) from sensor installation
- Wide flow range: 1 to 20 ft/s in pipe sizes DN15 to D900 (1/2 to 36 in.)
- Single-point calibration from front panel
- Factory Mutual (FM) approved for intrinsic safety in Classes I, II and III, Division I

## Applications

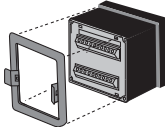


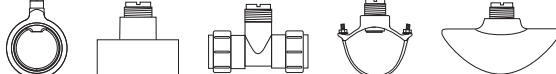
- Filtration Systems
- Hazardous Locations
- Remote Flow Monitoring
- Process Cooling Water
- Distribution Systems
- HVAC
- Process Flow Monitoring

## Description

The Signet 5090 Sensor Powered Flow Monitor is the simplest and most economical instrument in the Signet offering. It features a balanced-spring meter movement that is powered by the AC output of the Signet 515 Paddlewheel Flow Sensor. No additional power source is required.

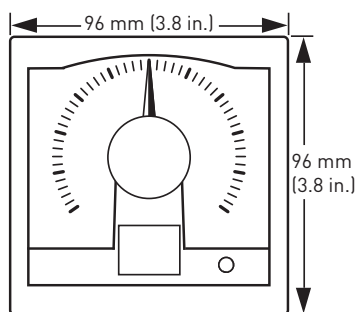
This unique system is suitable for a wide range of flow rates, and is Factory Mutual (FM) approved for intrinsic safety without the need for barriers. Packaged in a 1/4 DIN housing with a NEMA 4X/IP65 front panel, the 5090 is the first choice for simple flow monitoring, even in the most demanding industrial environments.

## System Overview

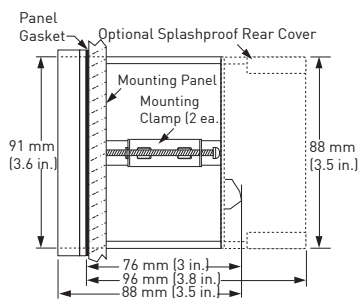
|  |   |
|--|---|
| <p><b>Panel Mount</b><br/> <b>Signet Flow Instrument</b><br/>                 (includes mounting bracket and panel gasket)</p>  |  |
| <p>Signet 515 Flow Sensor only<br/>                 (sold separately)</p>   |   |
| <p>Signet Fittings<br/>                 (sold separately)</p>   |   |



## Dimensions



Front View



Side View

## Specifications

### General

Operating Range:

- 0.3 to 6 m/s (1 to 20 ft/s) in pipes  
DN15 to DN900 (½ to 36 in.)
- 7 ft/s (min. full scale range)

Reversible dial face kit includes ranges 0 to 2, 4, 6, 8 and 100.

Display:

Taut-band suspension meter movement, 250° deflection (not suitable for prolonged exposure to vibration)

Repeatability: ±1% of full scale

### Materials

- Enclosure: ABS Plastic
- Panel and case gasket: Neoprene
- Window: Hard-coated polycarbonate

### Electrical

Power Requirements: None

### Environmental

Operating Temperature:  
-10 °C to 65 °C (14 °F to 149 °F)

Relative Humidity:  
0 to 95%, non-condensing

Enclosure: NEMA 4X/IP65 front

**Shipping Weight** 0.45 kg 1 lb

### Standards and Approvals

- FM, UL, CUL
- Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management

### Model 5090

#### Ordering Notes

- 1) Panel cutout should be 92 x 92 mm (3.62 x 3.62 in.)
- 2) Reversible dials are included and are scaled from 0 to 2, 0 to 4, 0 to 6, 0 to 8, 0 to 10, and 0 to 100.
- 3) An optional splash proof rear cover can be ordered separately if needed for most environments.
- 4) Flow rate unit tags are provided for labeling dials appropriately in units of gpm, lpm, etc.

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

## Ordering Information

| Mfr. Part No | Code               | Description                      |
|--------------|--------------------|----------------------------------|
| 3-5090       | <b>198 825 000</b> | 5090 Sensor-Powered Flow Monitor |

## Accessories and Replacement Parts

| Mfr. Part No                   | Code               | Description  |
|--------------------------------|--------------------|--|
| <b>Mounting</b>                |                    |  |
| 3-5000.395                     | <b>198 840 227</b> | Splashproof rear cover kit   |
| 3-5000.399                     | <b>198 840 224</b> | 5 x 5 inch adapter plate to retrofit older Signet installations    |
| 3-5000.598                     | <b>198 840 225</b> | Surface mount bracket (panel mount only)                           |
| 3-0000.596                     | <b>198 000 641</b> | Heavy duty wall mount bracket (panel mount only)                   |
| <b>Liquid Tight Connectors</b> |                    |  |
| 3-9000.392                     | <b>159 000 368</b> | Liquid tight connector kit (includes 3 connectors)                 |
| 3-9000.392-1                   | <b>159 000 839</b> | Liquid tight connector kit, NPT (1 connector)                      |
| 3-9000.392-2                   | <b>159 000 841</b> | Liquid tight connector kit, PG 13.5 (1 connector)                  |
| <b>Replacement parts</b>       |                    |  |
| 3-5000.390                     | <b>159 000 323</b> | Installation kit (ProPoint® screws, clamps, and mounting brackets) |
| 3-5000.396                     | <b>159 000 325</b> | 5090 window kit  |
| 3-5000.525-1                   | <b>198 840 226</b> | Bezel, 5000 series   |
| 3-5090.390                     | <b>159 000 334</b> | Dial kit   |
| 3-5090.611                     | <b>198 840 228</b> | Unit tags  |
| 3-5000.396                     | <b>159 000 325</b> | 5090, 5091 window Kit  |