WEDGE FLOWMETER Differential Pressure Design



FW1000 Series

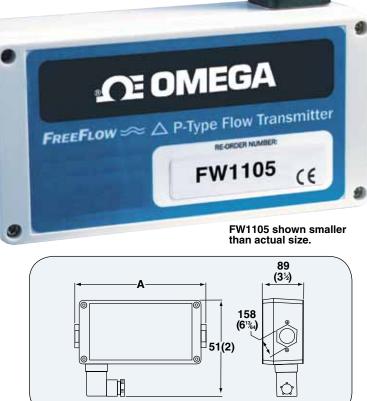


- No Required Inlet or Outlet Straight Plumbing
- High Accuracy and Repeatability
- Compact and Rugged
- Linear Analog Output

The FW1000 Series are minimally invasive, low-cost segmented wedge flow sensors. The segmented wedge element provides a simple and reliable restriction for sensing flow as related to pressure differential. The FW1000 design allows users to install the meter in any full pipe orientation (horizontal, vertical or inverted). It is compact and rugged measuring less than 254 mm (10") long and 89 mm (3¹/₂") wide, with a flanged mounting base for simple installation. This series is offered with several ranges of calibration to accommodate the requirements typical to process water applications. Three standard NPT port sizes are available to accommodate installations. The standard unit can also be converted to a 1 to 10 Vdc output in the field.

SPECIFICATIONS

Accuracy: ±2% of full-scale Repeatability: ±0.5% of full-scale Maximum Operating Pressure: 8.6 bar (125 psig) Maximum Operating Temperature: 76°C (170°F) Standard Test Media: Tap water @ 21°C (70°F) Electronic Output: Standard: 0 to 5 Vdc, 1 to 10 Vdc Optional: 4 to 20 mA Power Requirements: 12 to 35 Vdc Flow Measuring Range: 0.5 to 15 GPM (1.9 to 57 LPM) full-scale Turn Down Ratio: 10:1 Maximum Current Consumption: <50 m Adc Minimum Load Resistance: 1000 Ω Maximum Transmission Distance: <61m (<200') **Resolution:** Infinite Response Time: <500 ms to 90% (step change) Protection: Short circuit, transient and reverse polarity End Ports: PVC Wedge Element: PVC Pressure Sensor: Polyetherimide Electrical Enclosure: Polycarbonate



Dimensions: mm (inch)

| Size | 3/8 Female NPT | 1/2 Female NPT | 3/4 Female NPT |
|------|----------------|----------------|----------------|
| Α | 197 (7¾) | 197 (7¾) | 254 (10) |

| To Order | | |
|-----------|---|--|
| Model No. | Description | |
| FW1105 | PVC wedge flowmeter 3/8 NPT, 0.5 to 5 GPM | |
| FW1110 | PVC wedge flowmeter 3/8 NPT, 1 to 10 GPM | |
| FW1115 | PVC wedge flowmeter 3/8 NPT, 1 to 15 GPM | |
| FW1205 | PVC wedge flowmeter 1/2 NPT, 0.5 to 5 GPM | |
| FW1210 | PVC wedge flowmeter 1/2 NPT, 1 to 10 GPM | |
| FW1215 | PVC wedge flowmeter 1/2 NPT, 1 to 15 GPM | |
| FW1305 | PVC wedge flowmeter ³ / ₄ NPT, 0.5 to 5 GPM | |
| FW1310 | PVC wedge flowmeter ³ / ₄ NPT, 1 to 10 GPM | |
| FW1315 | PVC wedge flowmeter 3/4 NPT, 1 to 15 GPM | |

Accessories

| Model No. | Description |
|-----------|-------------------------------------|
| PSU-93 | Unregulated 24 Vdc power supply |
| TX4-100 | 4-conductor cable 30 m (100') spool |

Comes complete with operator's manual.

For units with 4 to 20 mA output, in place of the 0 to 5 V output, add "-I" to the model number, no additional charge.

Ordering Examples: FW1210, PVC wedge flowmeter, ¹/₂ NPT, 1 to 10 GPM, DPF64, digital rate meter and TX4-100, multi conductor wire.

FW1315, PVC wedge flowmeter, ³/₄ NPT 1 to 15 GPM, and PSU-93 power supply.