



NWT FI-001 Flow Integrator

The NWT FI-001 Integrator for use with high purity water consists of flow and readout modules. The unit is battery powered, and no electrical connections are necessary. Each unit is supplied with a calibration certificate for high purity water and interconnecting cabling between the flow and readout module.

Flow Module

The flow module is a positive displacement flowmeter designed for the measurement of very small flow rates in applications requiring high accuracy. It allows remote registration and totalization using a reed switch output.

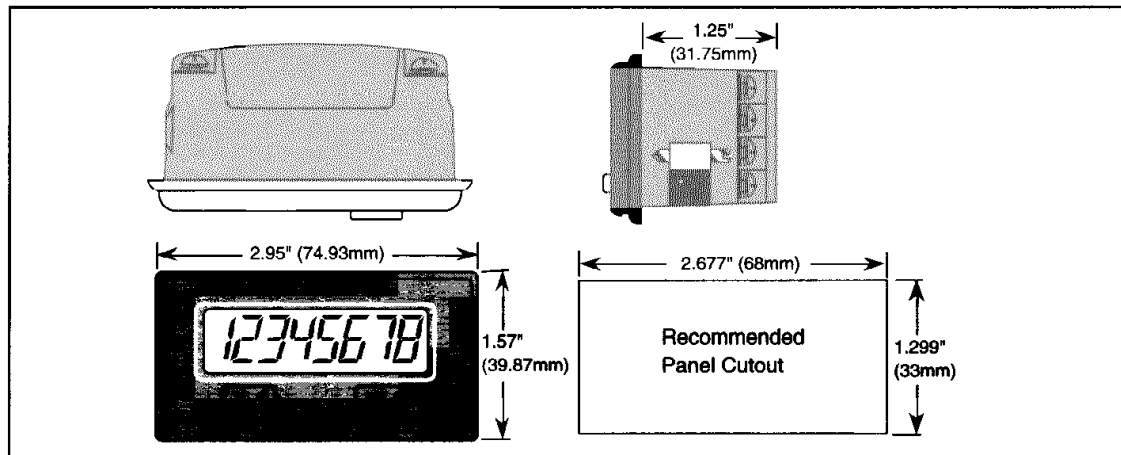
Each flow module is equipped with two oval shaped gears which rotate when fluid passes through a fixed measuring chamber. Rotation of gears displaces a fixed volume of fluid. The sensor picks up gear rotation, which is proportional to fluid volume and flow rate. The meter is designed to minimize slippage between the gears and measuring chamber body. As a result, the meter is less affected by liquid viscosity and lubricity than other flowmeter designs.

| General Specifications | |
|-------------------------------|---|
| Size: | 1.56" W x 1.56" H x 1.38"D |
| Accuracy: | ±2% of reading |
| Process Fluid: | Clean liquid |
| Max Working Temp: | -4°F to 176°F (-20°C to 80°C) |
| Max working Pressure: | 150 psi |
| Flow ranges: | 70 to 1000 ml/minute |
| Construction: | Housing: stainless steel |
| Material: | Rotor: Stainless steel |
| Output | Reed switch for remote registration or totalization |
| Connections: | 1/8" NPT female or 1/4" Swagelok |



Totalizer Readout Module

The readout module is shown below:



Readout module features are as follows:

| | |
|----------------------------|---|
| Power | |
| Internal Battery: | 3v lithium |
| Life expectancy | 5+ years |
| Physical | |
| Operating temperatures: | 32°F to 131°F (0°C to 55°C) |
| Storage temperature: | -4°F to 158°F (-20°C to 70°C) |
| Operating humidity: | 60% Non-condensing |
| Weight: | 2.2 oz. net |
| Display size: | .43" high |
| Front panel rating: | NEMA 4X when mounted with provided gasket |
| Case material: | Cyclac X-17 |
| Totalizer/Ratemeter | |
| Type: | UP counting |
| Digits: | 8 |
| Scalar: | 0.0001-100.0000 |
| Decimal point: | 5 positions, programmable |
| Front panel operation: | Mode select (totalizer or ratemeter), reset |
| Count Accuracy | 100% when operated within specifications |



Manufacturing Corporation

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Installation

Installation requirements are as follows:

- Panel mount readout module (see above drawing)
- Connect cabling between flow and readout modules
- Connect tubing to inlet and outlet of the flow module

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