

Model SLF-100

Ultrasonic Liquid Flow Meter

Description

The Model SLF-100 Ultrasonic Flow Meter is an accurate, reliable and cost-effective clamp-on ultrasonic instrument capable of measuring low flow rates through small diameter PFA tube without altering the piping. Typical applications are D.I. water and chemical solutions in the semiconductor market, or any installation when it is preferable not to have an instrument exposed to the process fluid. The SLF-100 was designed with the latest solid state technology providing the major economic benefit of many years of uninterrupted service.

Employing digital signal processing (DSP) techniques, the Model SLF-100 Ultrasonic Liquid Flow Meter provides outstanding accuracy and repeatability. The same meter can be used on 3/8", 1/2" and 3/4" line sizes without recalibration, and will cover a wide range of flow rates.

Installation and setup of the Model SLF-100 is fast and easy. Integral to the display unit, the set-up software leads the installer through a series of questions related to pipe material and size, display configuration and desired outputs. This makes the initial installation or reconfiguring for different applications a straightforward process. The sensors are provided with a robust mounting fixture that provides line size position indicators for adjustment of the sensor mounting position for optimum performance. The meter was designed with no moving parts, thus reducing its cost of ownership and eliminating common maintenance requirements.

Features

- No moving parts
- Low cost of ownership
- Easy installation with clamp-on sensor
- No cutting pipes
- No intrusion into the process line
- No pressure drop
- Increased energy savings
- Zero maintenance requirements
- No need for meter recalibration
- Wide rangeability with a single unit
- Fast response time
- 3/8", 1/2" and 3/4" line sizes
- PFA line material



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Specifications

Display/Converter

Measurement Method

Time difference calculation method of ultrasonic wave propagation
±2% RD (operating range 3.3 to 33 ft./sec.)

Accuracy

±0.2%

Repeatability

Applicable Liquids

D.I.W. and chemical solutions

Applicable Pipes

Nominal diameter: 3/8", 1/2", 3/4"

Flow Rate

3/8": 0.4 – 4.4 GPM with 0.250" I.D.

1/2": 1.2 – 11.8 GPM with 0.375" I.D.

3/4": 3.1 – 31.1 GPM with 0.625" I.D.

Analog Output Range

Setting within 0–33 ft./sec.

Enclosure

Panel Mount IP50

Material

Glass fiber resin (Noril)

Installation

Temperature Range

50° to 122° F (10° to 50° C)

Power Supply

12–30 VDC

Power Consumption

1.5 watts or less

Installation

Panel mount



Specifications (cont'd)

Analog Output

Output Information	Instantaneous forward flow
Output Signal	4–20 mA
Load Resistance	450 ohm or less
Flow Rate Low Cut Off	0 – 10% (variable in 1% steps)

Contact Output

Output Information	Selectable from accumulated pulse of forward flow and upper/lower limit flow rate
Output Signal	Open collector no voltage
Rating	30 VDC @ 0.25 A
Scaled Units	Selectable from: 0.1, 1, 10, 100 Gal or Lit
Low Cut Off	0 to 10% in 1% steps
Weight	Approximately 1 lb.

Display

LCD Display	16 characters x 2 lines
Information	Rate and Total
Available Units	GPM, GPH, ml/sec., ml/min., LPM, LPH, m/s, cm/s, FPS and FPM

Sensor

Model	SLT-12
Structure	Clamp-on method
Material	PFA tube
Operating Temperature	50° to 140° F (10° to 60° C)
Cable Length	16.4 ft. (5 m)
Weight	Approximately 0.5 lbs.
Straight Run	10D upstream and 5D downstream minimum

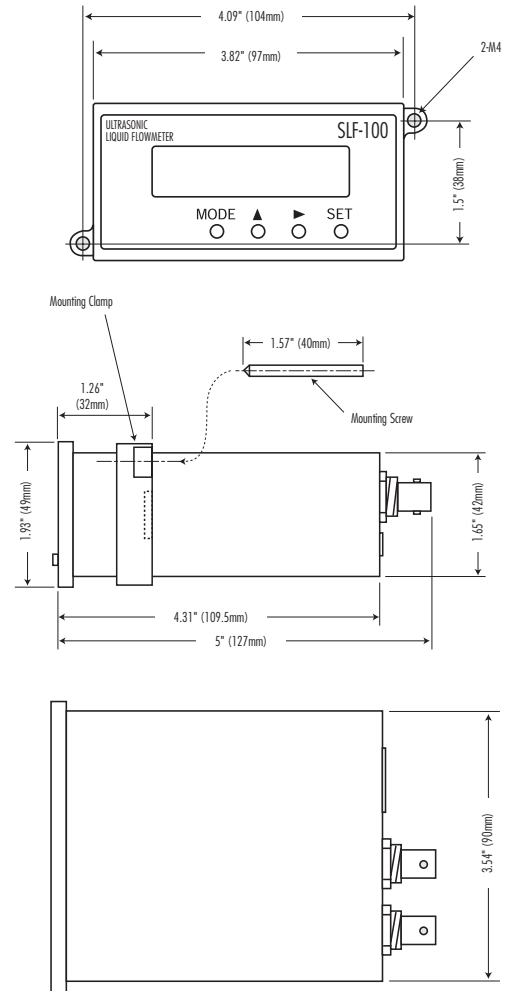
Model Number

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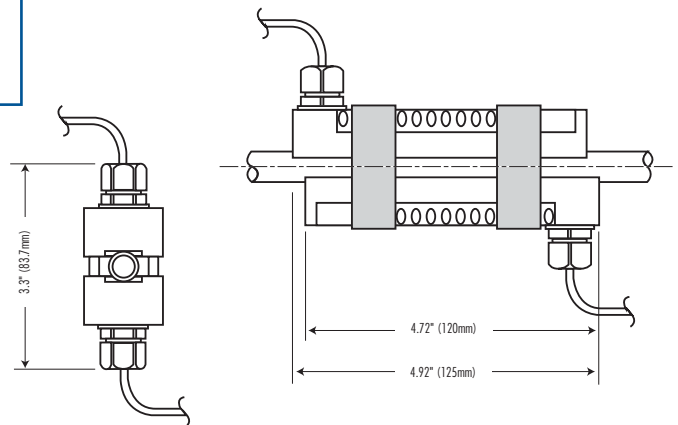
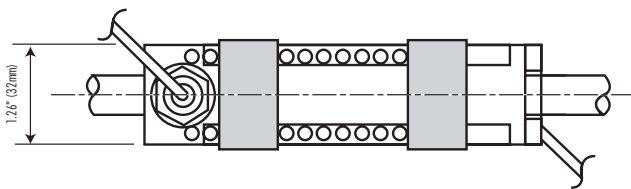
Includes	Display/converter, sensors and cabling
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Dimensions

Converter



Sensor



Specifications are for reference only and are subject to change without notice.

Local Representative:



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