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GLI International

the
F53 Analyzer
and **Impeller Flow Sensors**

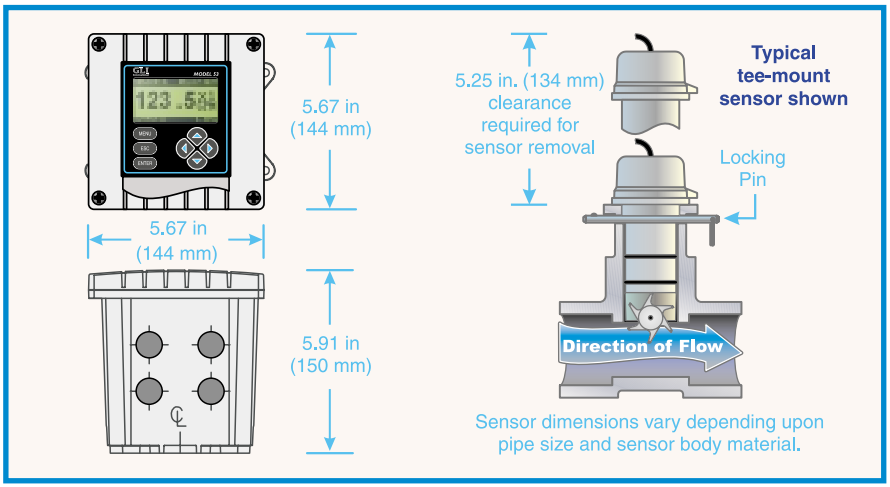
Liquid Flow Performance!

The Model F53 Flow Analyzer is full featured and easy to use. It is ideally suited for applications in reverse osmosis, drinking water, facilities management, and other water treatment systems. Designed with the cost conscious user in mind, this analyzer offers ***four sensor inputs*** enabling independent monitoring of liquid flow rate and totalized flow for each sensor. The user-friendly menu screens support multiple language operation.

GLI's Impeller Flow Sensors feature a unique ***non-magnetic sensing*** technique that does not attract metal particles. This non-magnetic property also reduces the drag that affects low flow and low volume measurements. The six-bladed impeller design further enhances low-level accuracy down to 1 ft./sec. The ceramic impeller shaft significantly increases sensor life.

The F53 includes two 0/4-20mA outputs, RS-232 output, and optional HART® communications capability. Also, four relays can be user-configured independently for alarm or control functions with overfeed timer capabilities, or for simple batching operations.

CE



F53 Flow Analyzer

- **Up to Four Sensor Inputs**
- **Uses GLI or Non-GLI Sensors**
- **Multiple Measurement Readouts and Outputs**
- **Simple Look-up Table Calibration for GLI Sensors**
- **Backlit Display**

Specification Highlights

Display: Backlit dot matrix LCD

Measuring Ranges:
Flow Rate: 0-9999, 0-999.9, or 0-99.99 with selectable units and multiplier
Volume: 0-999,999,999 with selectable units

Relays: Four SPDT

Inputs: Up to Four

Current Outputs:
Analog: Two 0/4-20 mA
Digital: Serial RS-232

Communications:
Optional HART® protocol

Power: 105-250 VAC, 50/60 Hz.

EMI/RFI Immunity: CE compliant

Analyzer Performance:
Accuracy: ± 0.10% of span
Stability: ± 0.05% of span
Repeatability: ± 0.05% of span

Enclosure: 1/2 DIN, NEMA 4X with hardware for panel, surface, and pipe mounting.

Weight: ~3.5 lb. (1.6 kg)

Impeller Sensors

- **Non-Magnetic Sensing Technique**
- **Pulsed Output**
- **Wide Rangeability 30:1**
- **Superior Low-Velocity Performance**
- **Six-bladed Impeller Design**

Specification Highlights

Measuring range:
Depends on pipe size

Temperature Range:
32-221°F (0-105°C) sensor configuration dependent

Pressure Range: 0-400 psi sensor configuration dependent

Repeatability: ± 0.5% of full scale

Linearity: ± 1% of full scale

Accuracy: ± 1% of full scale

Ordering Information

Flow Analyzer:
F53A4A1N

Also available in a 1/4 DIN panel mount F33 version:
F33A1N

Flow Sensor:
See data sheets DS-F1A11 and DS-F1A13 to find the specific sensor for your application.

For a complete listing of options, mounting configurations and accessories, please contact GLI International.

System Technology

GLI's impeller flow sensors measure liquid flow in a pipe of known size. The measurement is determined by rotating a conductor through an electrical field generated between RF (Radio Frequency) elements in the sensor body.

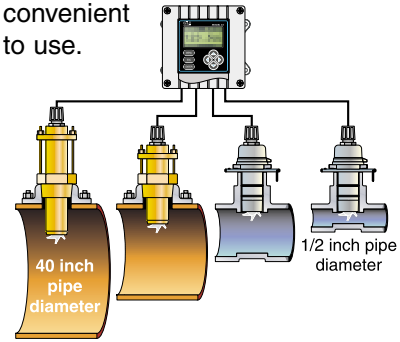
Liquid flow within a pipe causes the sensor impeller to rotate. As the impeller rotates, electrical coupling occurs, transferring a pulse from the sending element to the receiving element. The number of pulses transmitted in a known time is a function of the fluid velocity.

The result is a strong, clear sensor signal that can be transmitted over long distances without the need for signal amplifiers. The signal is then processed by the analyzer and the resultant flow rate is displayed in the engineering units desired.

Separate flow rate and volume readouts show various sensor rate/volume combinations. A calculated measurement can also be made for any two sensors.

Economical and Practical

The F53 analyzer provides four separate sensor inputs, making this system both economical and convenient to use.



A single analyzer can independently monitor and display readings for up to four sensors in pipes with diameters ranging from 0.5 to 40 inches.

WE'VE GOT HART ABILITY