

Transit Time Flow Meter

with Clamp-on Ultrasonic Transducers

New!

Ultrasonic Flowmeter

Model TTFM 1.0

Displays, Totalizes
Transmits and Controls

Backlit LCD Display
Simple 5-key Calibration
Password Protected
4-20mA/0-5V Output
Plug & Play Options

Non-Contacting Flow Measurement

User-Friendly Operating System

GREYLINE
instruments inc.



Accurate Flow Measurement of Clean Liquids with Non-Contacting Transducers

Ultrasonic transducers mount on the outside of plastic or metal pipes to measure flow rate of clean, non-aerated fluids like water, chemicals, and oils. The clamp-on transducers can be mounted without shutting down flow. There is no pressure drop and no obstruction. Transducer separation distance is calculated by the flowmeter according to pipe diameter and wall thickness.

Use the built-in keypad for fast, easy calibration with menu selection of pipe diameter, pipe material, liquid type and measurement units (gallons, liters etc.) Settings, calibration values and totalizer are retained during power interruptions.

RELIABLE MEASUREMENT AND CONTROL

www.greyline.com

TTFM 1.0 Specifications

General Specifications

Operating Parameters:	For clean liquids in full pipes with less than 2% solids or gas bubbles
Calibration:	built-in 5-key calibrator with English, French or Spanish language selection
Electronics Enclosure:	Watertight and dust tight NEMA4X (IP 66) polycarbonate with clear, shatterproof cover
Accuracy:	±1% to 2% typical, Repeatability and Linearity: ±0.1%
Display:	White, backlit matrix - displays flow rate, totalizer, relay status, operating mode and calibration menu
Programming:	Built-in 5-key calibrator
Power Input:	100-240VAC 50-60Hz (see Options), 4.0 Watts maximum (with standard features)
Output:	Isolated 4-20mA/0-5V, 1000 ohm load maximum, programmable offset
Control Relays:	2 Relays, form 'C' dry contacts rated 5 amp SPDT; programmable flow alarm and/or flow proportional pulse
Operating Temp. (electronics):	-5° to 140°F (-20° to 60°C)
Approximate Shipping Weight:	12 lbs. (5.5 kg)

Greyline TTFM 1.0 Transit Time Flow Meter

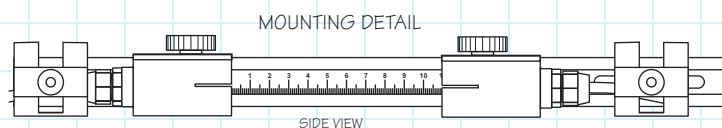
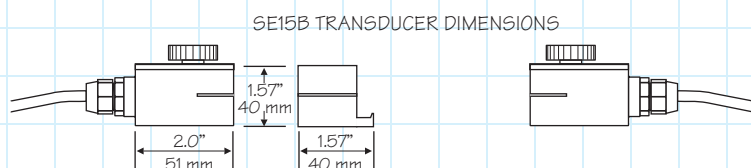
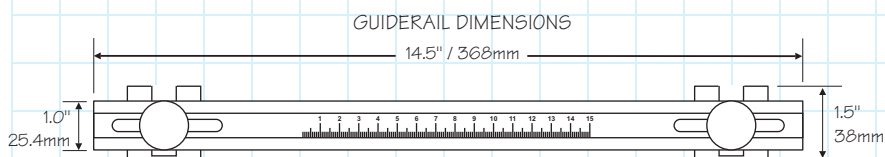
Transducer Specifications

Pipe Diameter:	1" / 25 mm minimum, 24" / 610 mm maximum
Pipe Materials:	Any sonic conducting material including carbon steel, stainless steel, PVC, PVDF, fiberglass, galvanized steel, mild steel, glass, copper, brass and pipes with bonded liners including epoxy, rubber and Teflon
Flow Velocity:	±0.07 to 39 ft/sec (±0.02 to 12 m/sec)
Operating Frequency:	640 KHz
Operating Temperature:	-40° to 300°F (-40° to 150°C)
Transducer Mounting Kit:	Includes set of stainless steel pipe clamps, steel guiderail and coupling compound
Sensor Cable:	RG62AU coaxial, 25 ft (7.6 m) standard length (See Options)

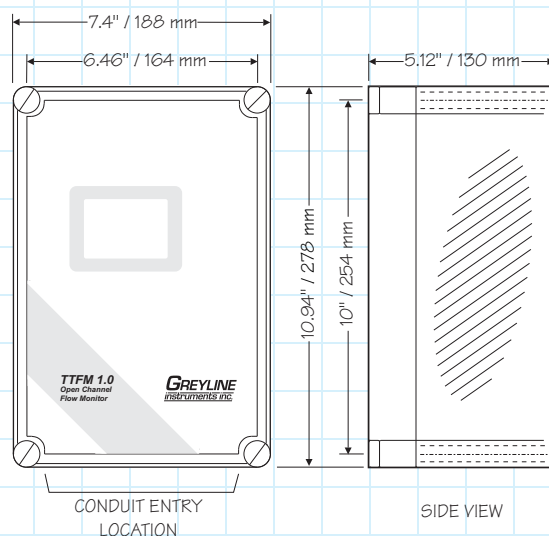
Popular Options

Sensor Cable:	Splice up to 250 ft (75 m) with Junction Box
Power Input:	9-32 VDC
Control Relays:	4 additional (6 total), rated 5 amp SPDT
Enclosure Heater:	Thermostatically controlled - recommended for temperatures below 32°F (0°C)
Sunscreen:	Enclosure sunscreen for outdoor installations

Dimensions



SE15B TRANSDUCERS



ENCLOSURE