**FLOW TRANSMITTERS**

**COMPACT ULTRASONIC FLOWMETER**
Cost Effective, Compact & Adjustable Design, Non-Invasive

The **MODEL UFM** Compact Ultrasonic Flowmeters is an economical, clamp-on, ultrasonic flowmeter. The **MODEL UFM** implements the transit-time difference to measure flow rates in pipes and can measure velocity and flow in pipes with outside diameters ranging from 0.98 to 4.62" (24.89 to 117.35 mm). This model comes with a volume pulse and 4 to 20 mA flow rate output.

**FEATURES/BENEFITS**
- Non-invasive pipe measurement
- Simple installation with all necessary components included such as converter, sensor, cables and mounting accessories
- Compact and lightweight design, featuring an easily installed, all in one clamp-on unit intended for homogeneous liquids that contain no air
- Screen offers easy to read text displaying both flow rate and total with a convenient backlight for visual comfort

**APPLICATIONS**
- Flow measurement for heat metering
- Chilled water metering & monitoring
- Flow measurement for heat metering
- Potable water metering & monitoring
- HVAC
- Industrial applications
- Monitoring corrosion in closed vessels

**KIT INCLUDES**
- Ultrasonic coupling grease
- Set of small pipe adaptor V clamps
- Set of small pipe adaptor circle clamps
- Set of 2 to 5˝ (51 to 127 mm) clamps
- Set of 1.81 to 2.75˝ (46 to 70 mm) clamps

**SPECIFICATIONS**
- **Range:** 0.33 to 32 ft/s (0.1 to 10 m/s)
- **Accuracy:** ±0.5% of measured value
- **Resolution:** 0.001˝ / 0.1 mm
- **Temperature Limits:** Process: 32 to 185°F (0 to 85°C); Ambient: 32 to 122°F (0 to 50°C)
- **Power Consumption:** 7 W max.
- **Outputs:** Analog: 1 opto-isolated: 4 to 20 mA; Error current: 3.5 mA; Load resistance: 620 Ω max; Pulse: 1 opto-isolated MOSFET relay, 500 mA max, resistance: 620 Ω max; Pulse: 1 opto-isolated MOSFET relay, 500 mA max
- **Enclosure Rating:** IP54
- **Weight:** 2.9 lb (1.315 kg)
- **Agency Approvals:** CE

**ADDITIONAL SPECIFICATIONS**
- Applicable Pipe Material: Steel, copper, or plastic
- **Pipe Outside Diameter:** 0.98 to 4.62" (24.89 to 117.35 mm)
- **Pipe Wall Thickness:** 0.02 to 0.39˝ (0.5 to 10 mm)

**MODEL UTG**
**ULTRASONIC THICKNESS GAGE**
Ideal For Use with Ultrasonic Flow Transmitters, Adjustable Sound Velocity

The **MODEL UTG** Ultrasonic Thickness Gages measures the thickness of a variety of materials. The **UTG** works on a variety of parallel surface material ranging from 0.05 to 7.5" (1.2 to 200 mm).

**FEATURES/BENEFITS**
- Non-invasive thickness measurement
- Reads in inches or millimeters and features an adjustable sound velocity to allow for an array of materials to be measured
- Allows the user to find the wall thickness of the pipe when programming an ultrasonic transmitter without cutting or removing a section of the pipe to measure it
- Ideal for monitoring corrosion in closed vessels such as boilers and chemical tanks and with any ultrasonic flow transmitter

**APPLICATIONS**
- Pipe thickness measurement
- Finding wall thickness
- Monitoring corrosion in closed vessels
- Industrial applications
- Automotive
- HVAC
- Plumbing

**SPECIFICATIONS**
- **Range:** 0.047 to 7.874˝ (1.2 to 200 mm).
- **Resolution:** 0.001˝ / 0.1 mm.
- **Sound Velocity:** 1118 to 20132 mph (500 to 9000 m/s).
- **Temperature Limits:** 32 to 122°F (0 to 50°C)
- **Humidity Limit:** < 80%
- **Display:** 3 digits, 0.394˝ (10 mm) LCD.
- **Power Requirement:** (4) 1.5 V AAA alkaline batteries, not included, user replaceable.
- **Weight:** 5.78 oz (164 g)

**ADDITIONAL SPECIFICATIONS**
- Applicable Pipe Material: Steel, cast iron, aluminum, red copper, brass, zinc, quartz glass, polyethylene, PVC, gray cast iron, nodular cast iron, other. Selectable option for special materials with known sound propagation rate.
- **Temperature Limits:** Process: 32 to 185°F (0 to 85°C); Ambient: 32 to 122°F (0 to 50°C)
- **Power Requirement:** (4) 1.5 V AAA alkaline batteries, not included, user replaceable.
- **Weight:** 5.78 oz (164 g)

**USA:** California Proposition 65

**WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov