Ultrasonic Flow Converter

Excellent Performance and Easy Operation

MOUNTING PLATE
5-1/8 [130]
MOUNTING 2X ø23/64 [ø9]
2-3/4 [70]
PIPE MOUNT (OPTION)
3/32 [2.5]
2-23/32 [69]
23/64 [9]
6-45/64 [170]
7-3/4 [197]
5-33/64 [140]
(M8) U BOLT
MOUNTING PIPE
CABLE GLAND
5-13/32 [137]
EARTH TERMINAL
3-5/16 [84]
(PG13.5) FOR POWER SUPPLY & OUTPUT CABLE
(PG9) FOR SENSOR CABLE
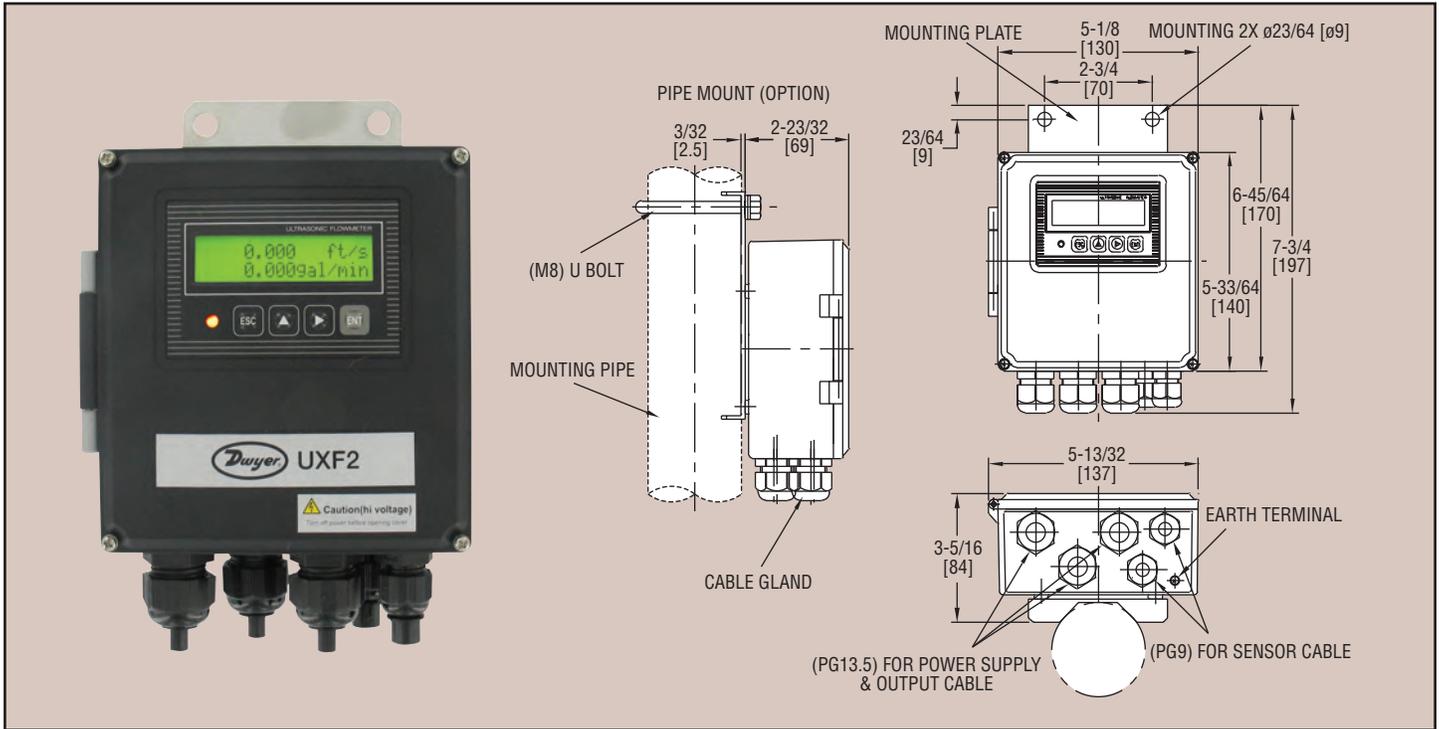
Series UXF2 Ultrasonic Flow Converters are paired with Series SX3 detectors in order to utilize the transit-time measuring method. Two ultrasonic sensors are mounted on the pipe exterior, and each transmits an ultrasonic pulse to the opposite sensor. The difference in the transit times of the two waves is used to calculate the flow velocity. This meter is a clamp-on type ultrasonic flowmeter for permanent use and is ideal for clean liquids containing no air bubbles such as pure water. The easy-to-use compact and lightweight design is intended for integration into mechanical devices. The adoption of a sound velocity measurement system, which calculates sound velocity from the transit time, keeps the flowmeter unaffected by the temperature and the pressure of the fluid to be measured. Additionally, with the use of a high-speed transit time processor, the system cycle is 0.2 seconds and applicable to short batch processes.

Series UXF2 Ultrasonic Flowmeter Converter:
• Compact and lightweight
• Easy operation by external keypads
• Plastic housing with IP65 rating
• Communication and synchronization options available

Model	Power Supply	Communication
UXF2-11P1	100 to 120 VAC	None
UXF2-21P1	200 to 240 VAC	None
UXF2-31P1	20 to 30 VDC	None
UXF2-12P1	100 to 120 VAC	RS-232
UXF2-22P1	200 to 240 VAC	RS-232
UXF2-32P1	20 to 30 VDC	RS-232
UXF2-13P1	100 to 120 VAC	RS-485
UXF2-23P1	200 to 240 VAC	RS-485
UXF2-33P1	20 to 30 VDC	RS-485
UXF2-14P1	100 to 120 VAC	Sync
UXF2-24P1	200 to 240 VAC	Sync
UXF2-34P1	20 to 30 VDC	Sync

SPECIFICATIONS

Service: Clean liquids that pass ultrasound and do not contain air bubbles (such as pure water and chemical solution).
Input: BNC connector, coaxial cable from sensor.
Range: 0 to ± 32.8 FPS (0 to ±10 m/s).
Display: 2-color LED (normal: green, abnormal: red), LCD with 2 lines of 16 characters and back light, Languages: English, Japanese, French, German, or Spanish.
Accuracy: See SX3.
Power Requirement: 100 to 120 VAC ± 10% 50/60 Hz, or 200 to 240 VAC ± 10% 50/60 Hz, or 20 to 30 VDC.
Power Consumption: 15 VA or less for AC power supply, 5W or less for DC power supply.
Temperature Limits: Ambient 122°F (50°C).
Outputs: Analog: 4 to 20 mA DC, 1 point; Digital: Open Collector: 1 point; Relay contact: 1 point.
Serial Communications: RS-232C or RS-485.
Enclosure Rating: IP65.
Materials: Plastic ABS.
Electrical Connections: Screw terminals.
Mounting: Wall or pipe mount.
Weight: 1.8 lb (0.8 kg).

OPTION
For NIST traceable calibration certificate, use order code NISTCAL-FU.