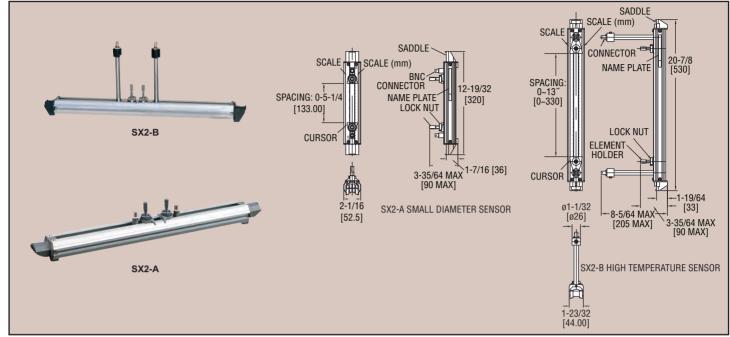


Series SX2 Portable Ultrasonic Flowmeter Detector

Compact and Lightweight



Series SX2 Ultrasonic Flowmeter Detectors are paired with Series UXF1 and UXF3 converters in order to utilize the transit-time method for measuring flow rates in pipes from the outside. 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. Paired with the UXF1 or UXF3 Series converters, Series SX2 detectors provide ultrasonic flowmeter sensors for both small diameter needs as well as high-temperature applications.

Series SX2 Ultrasonic Flowmeter Detectors:

- · Easy installation, no pipe work required
- Simple maintenance, no moving parts
- Free from pressure loss, choking, and leakage
- · Clamp-on features allow for reduction of total ownership cost

ACCESSORIES

Model	Description	
A-186	Silicone-based grease acoustic couplant, 3 oz tube	
A-187	Silicone RTV acoustic couplant, 4 oz tube	
A-186 A-187 A-188	Silicone-free acoustic couplant, 4 oz tube	

Model	Description	Cable Length ft (m)
SX2-A	Detector, Small Diameter Sensor	16.4 (5)
SX2-B	Detector, High Temperature Sensor	16.4 (5)

SPECIFICATIONS

Service: Liquid flow through which ultrasonic signal can be transmitted (water, sea water, oil, and fluid of unknown velocity).

Turbidity: 10000 deg (mg/L) or less.

Type of Flow: Well-developed turbulent or laminar flow in a full-filled pipe. **Range:** 0 to ± 105 fps (0 to ± 32 m/s) (bidirectional flow).

Flow Pipe Sizes: SX2-A: 0.51 to 3.94 in (13 to 100 mm), SX2-B: 1.97 to 15.75 in (50 to 400 mm).

Accuracy:

Pipe Size:

- 0.51 in (13 mm) to under 1.99 in (50 mm)
- ±0.03 m/s for flow rate: Under 2 m/s
- $\pm 0.75\%$ to $\pm 1.5\%$ of rate for flow rate: 2 m/s to 32 m/s;
- Pipe Size: 1.99 in (50 mm) to under 11.8 in (300 mm)
- ±0.02 m/s for flow rate: Under 2 m/s
- $\pm 0.5\%$ to $\pm 1.0\%$ of rate for flow rate: 1 m/s to 32 m/s;
- Pipe Size: 11.8 in (300 mm) up to 19.69 ft (6000 mm)
- ±0.01 m/s for flow rate: Under 1 m/s
- $\pm 0.5\%$ to $\pm 1.0\%$ of rate for flow rate: 1 m/s to 32 m/s.

Response Time: 0.5s or less.

Temperature Limits: Ambient 176°F (80°C); Fluid temperature: -40 to 212°F (-40 to 100°C) for SX2-A, -40 to 392°F (-40 to 200°C) for SX2-B.

Enclosure Rating: NEMA 3 (IP52).

Materials: SX2-A: Plastic case, aluminum and plastic guide rail, silicone rubber coupler; SX2-B: 304SS case, aluminum and 304SS guide rail, silicone grease coupler.

Sensor Cable: Radio frequency coaxial cable (RG-58A/U), 16.4 ft (5 m).

Electrical Connection: Screw terminals.

Mounting: Clamped on pipe wall.

Weight: SX2-A: 1.32 lb (0.6 kg); SX2-B: 3.53 lb (1.6 kg).

Flow Transmitters, Ultrasonic