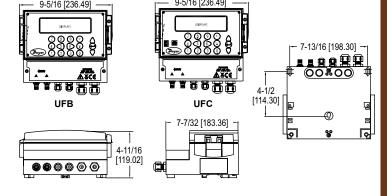
RASONIC FLOWMETER SET

Non-Invasive Pipe Flow Measurement, Easy Operation and Data Logging Option









The SERIES UFB & UFC Ultrasonic Flowmeter Sets utilize the transit-time difference for measuring flow rates in pipes. These units are permanent mount, where the converters can be mounted on a surface or pipe with a 4 to 20 mA and pulse output capabilities for pipe sizes from 1/2 to 79" (13 to 2000 mm). The Series UFC offers the same features plus data logging capability.

FEATURES/BENEFITS

- Non-invasive pipe measurement
- · Easy-to-use compact and lightweight design, intended for homogeneous liquids that contain no air
- · Simple installation with all necessary components included such as converter, sensor, cables and mounting accessories
- · Sturdy IP65 rating, protecting it from dust and direct water contact

APPLICATIONS

- · Water treatment
- · Industrial systems
- · Irrigation applications
- · Treated water flow
- · River water
- · Sea water
- · Potable water
- · Demineralized water
- · Glycol/Water mix
- · Hydraulic system
- · Diesel oil
- · Water use data logging

KIT INCLUDES

- Converter
- · Set of transducers
- · Ruled guide rail
- · Steel banding
- · Banding clips
- · Set of transducer cables
- · Set of high temperature interface cables
- · Ultrasonic coupling grease

MODEL CHART - STANDARD VERSION			
	Pipe Size Range	Power	
Model	in (mm)	Supply	
	0.5 to 4.5 (13 to 115)		
UFB-123	2 to 79 (50 to 2000)	86 to 264 VAC	
UFB-222	0.5 to 4.5 (13 to 115)	24 VAC/VDC	
UFB-223	2 to 79 (50 to 2000)	24 VAC/VDC	

MODEL CHART - DATA LOGGING VERSION			
	Pipe Size Range	Power	
Model	in (mm)	Supply	
UFC-122	0.5 to 4.5 (13 to 115)	86 to 264 VAC	
UFC-123	2 to 79 (50 to 2000)	86 to 264 VAC	
UFC-222	0.5 to 4.5 (13 to 115)	24 VDC/VAC	
UFC-223	2 to 79 (50 to 2000)	24 VDC/VAC	

SPECIFICATIONS

Service: Homogeneous liquids that do not contain more than 3% of air bubbles or particulate and capable of ultrasonic wave propagation.

Inputs: TNC cable from sensors.

Range: 0.33 to 33 ft/s (0.1 to 10 m/s).

Display: 240 x 64 pixel graphic display, high contrast black on white with backlight; Languages: English, French, German, Swedish, Italian, Spanish, Portuguese, Russian, Norwegian, and Dutch; 5" W x 1.3" H (5 x 33.02 mm).

Accuracy: ±0.5 to ±2% of flow reading of flow rate > 0.03 ft/s (0.01 m/s) and pipe OD > 3.0 in (75 mm); $\pm 3\%$ of flow reading for flow rate > 0.03 ft/s (0.01 m/s) and pipe OD 0.5 to 3 in (13 to 75 mm); $\pm 6\%$ of flow reading for flow rate < 0.03 ft/s (0.01

Power Requirements: 86 to 264 VAC (50 to 60 Hz) or 24 VAC/VDC (1 A max).

Power Consumption: 10.5 W.

Temperature Limits: Transducer: -4 to 275°F (-20 to 135°C); Controller: -4 to 122°F (-20 to 50°C).

Outputs: Analog 1 opto-isolated output: 4 to 20 mA, 0 to 16 mA or 0 to 20 mA (selectable); Error current: 0 to 26 mA (selectable); Load resistance: 620 Ω max; Alarm: 2 opto-isolated MOSFET NO relays, 48 V at 500 mA, maximum 200 Hz; Pulsed: 1 opto-isolated MOSFET relay, 48 V at 500 mA, 1 to 250 pps; Pulse width: 2 to 500 ms (selectable).

Serial Communications: USB (UFC only).

Enclosure Rating: IP65 when using TNC connector; Transducers IP54.

Materials: Plastic ABS and aluminum.

Repeatability: ±0.5 % of measured value or 0.03 ft/s (0.01 m/s). Electrical Connections: Removable screw-in type terminal block.

Mounting: Wall mounted using 3 type M4 screws. Turbidity: < 3 % by volume of particulate content. Permissible Air Content: < 3% by volume.

Response Time: < 500 ms.

Weight: Unit not including accessories: 2.80 lb (1.26 kg); Unit including

accessories: 9.92 lb (4.5 kg). Agency Approvals: CE.

ADDITIONAL SPECIFICATIONS

Applicable Pipe Material: Carbon steel, SS, copper, UPVC/PVDF, concrete, mild steel, glass, brass.

Applicable Pipe Lining: Rubber, glass, concrete, epoxy, steel, other*.

Pipe Wall Thickness: 0.04 to 3" (1 to 75 mm). Pipe Lining Thickness: < 1" (< 25 mm).

*Selectable option for special material with known propagation rate of lining material.

OPTIONS			
Use order code:	Description		
NISTCAL-FU	NIST traceable calibration certificate		



Flow Transmitters, Ultrasonic