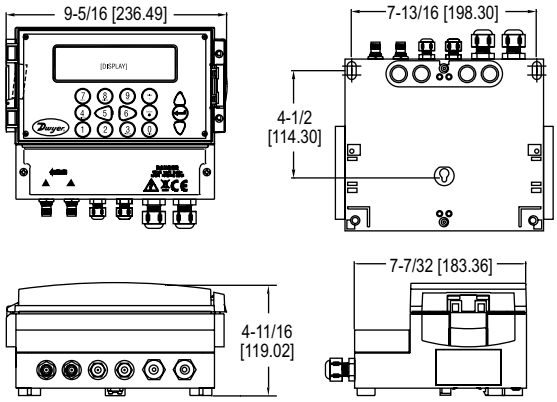
Dwyer

SERIES UFB

ULTRASONIC FLOWMETER SETS

Non-Invasive Pipe Flow Measurement, Easy Operation

CALIBRATION SERVICES AVAILABLE



The **Series UFB 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 4-20 mA and pulse output capabilities for pipe sizes from 1/2 to 79″ (13 to 2000 mm).

BENEFITS/FEATURES

- 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		
Model	**Pipe Size Range in (mm)**	**Power Supply**
UFB-122	0.5 to 4.5 (13 to 115)	86-264 VAC
UFB-123	2 to 79 (50 to 2000)	86-264 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

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

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); ±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); ±6% of flow reading for flow rate < 0.03 ft/s (0.01 m/s).
Power Requirements: 86-264 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: 4-20 mA, 0-16 mA or 0-20 mA (selectable); Error current: 0-26 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).
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).
Compliance: 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.

USA: California Proposition 65
⚠**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.