

Ultrasonic Flowmeter

BSUF-SMCL



LIQUID



OVERVIEW

Operation

BSUF-SMCL measure transit-time of flow and use DSP (digital signal processing) technology to analyze ultrasonic signals. This DSP technology can remove any noise from pipe and electronics. Measuring pipe is from 12 ~ 6000mm, and velocity range is from 0.02 ~ 20 m/sec. BSUF-SMCL can measure very slow flow, so very suitable for block flow (leak) monitoring system. Also, it has two 4-20mA inputs, so user can use this inputs to receive pressure and temperature data without PLC.

Application

- Block Flow Monitoring
- Municipal Water, Waste Water
- Strong Acid, Solvent
- Milk, Beer, Demi-water
- Oil, Chemicals
- Cool and Hot Water
- Liquids contains Heavy Slurry and Air
- Pulp, Steel Industries
- Nuclear Power Plant
- Sea Water

Features

- Clamp-On Installation
- Easy Installation
- DSP Technology
- No cutting pipe for installation
- Anti-Round Mode Ultrasonic Wave
- Touch Key Programming
- Large Color Graphic LCD Display
- Two Analog Inputs for Pressure, Level
- Oscilloscope Function
- Measure Water Contains 30% Air and Slurry
- Self-Diagnostic Functions
- Positive & Negative Flow Measurement

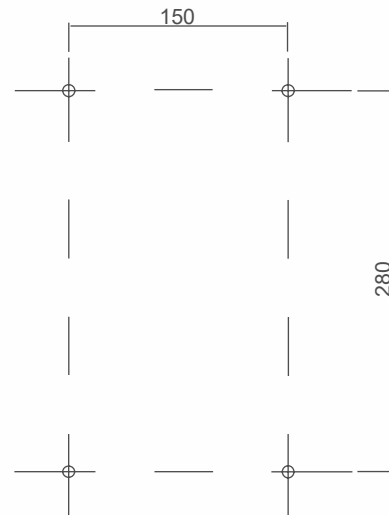
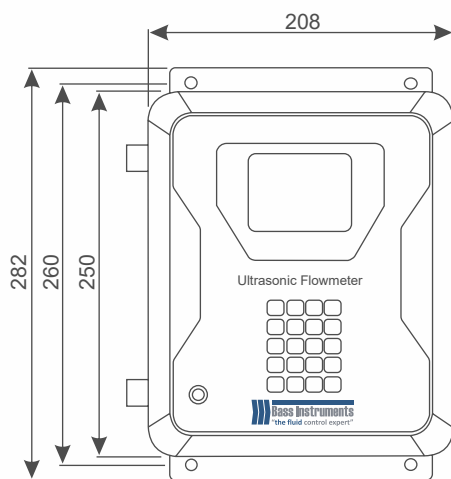
OPERATING DATA

Temperature Limit	-40°C...+120°C for transducer -20°C...+75°C for flow comp.
Accuracy	±1.0 % single path ±0,5 % dual path
Sensitivity	0.01 m/s
Enclosure	IP65 for flow computer IP68 for transducers
Required Straight Run	10D upstream, 5D downstream for single path 7D upstream, 3D downstream for dual path
Data Logger	32 Mb, Up to 1000000 point
Turndown Ratio	500:1
Transducer Types	LTE 0.25 MHz LTD 0.5 MHz LTC 1.2 MHz LTB 2 MHz

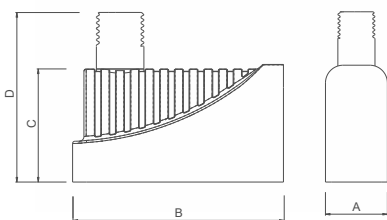
MEASURING RANGES

Velocity Ranges	0.02 m/s to 20 m/s
Measuring Pipe Ranges	12...6000 mm

TECHNICAL DRAWINGS AND DIMENSIONS



PANEL HOLE SIZE
(8 Ø HOLE)



Pipe Size	A	B	C	D
15...100	37	42	23	63
50...300	45	60	35	72
200...1300	50	93	35	86
500...6000	76	145	51	111

ELECTRICAL DATA

Output	Two 4-20 mA Two Relays
Input	Two 4-20 mA (for pressure, temperature, etc)
Power Supply	AC110-220V, 24V DC
Communication	RS-232C, RS-485

ORDERING

BSUF-SMCL			Ultrasonic Flowmeter
Pipe size	XX		Please specify pipe diameter as unit is mm
Sensor		LTB	2 MHz
		LTC	1.2 MHz
		LTD	0.5 MHz
		LTE	0.25 MHz
Cable length		XX	Please specify cable length as unit is meter
Data logger		N	None
		Y	32 Mb, 1000000 point