

BSUF-SMCL

Ultrasonic Flowmeter



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 12~6000 mm 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 4~20 mA inputs so user can use this inputs to receive pressure and temperature data without PLC.

Features

- 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
- 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 graphics 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 (25 m/s optional)

Measuring Pipe Ranges

12...6000 mm

ELECTRICAL DATA

Output

Two 4-20 mA
Two Relays

Input

Two 4-20 mA (for pressure, temperature, etc)

Power Supply

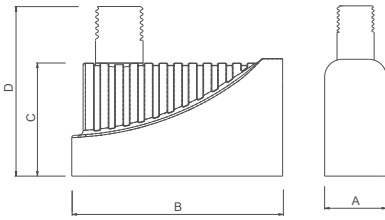
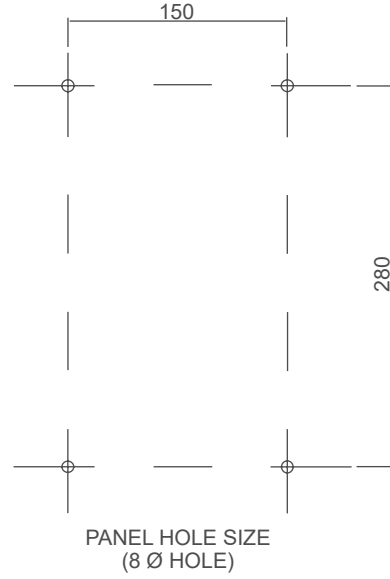
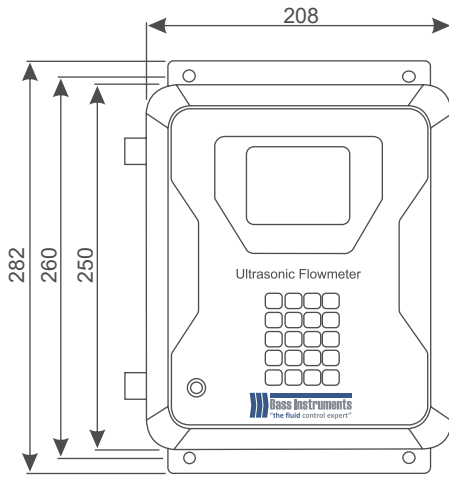
AC110-220V, 24VDC

Communication

RS-232C, RS-485



TECHNICAL DRAWING AND DIMENSIONS



Pipe Size	A	B	C	D
15...100	37	42	23	63
50...300	45	60	35	72
200...800	50	93	35	86
500...6000	76	145	51	111

ORDERING

Model	
BSUF-SMCL	Ultrasonic Flowmeter

Pipe Size	
XX	Please specify pipe diameter as unit as 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

