ULTRASONIC LEVEL TRANSMITTER

LMU LEVEL METER

Level Measurement

& Monitoring

DESCRIPTION

The LMU level meter is a compact 2-wires series ultrasonic level transmitter for continuous non-contact level measurement of liquids and solids. In additional to intellectual signal treatment technology, it features an integrated LCD display with excellent anti-interference capability.

The measuring principle allow pulses reflected in direction of the product surface. Converter will measures the time, t between pulse transmission and reception. And, calculate the distance between the sensor membrane and surface of the medium. An integrated temperature sensor compensates for changes in the velocity of sound caused by temperature changes. This series can be widely applied to various industries.

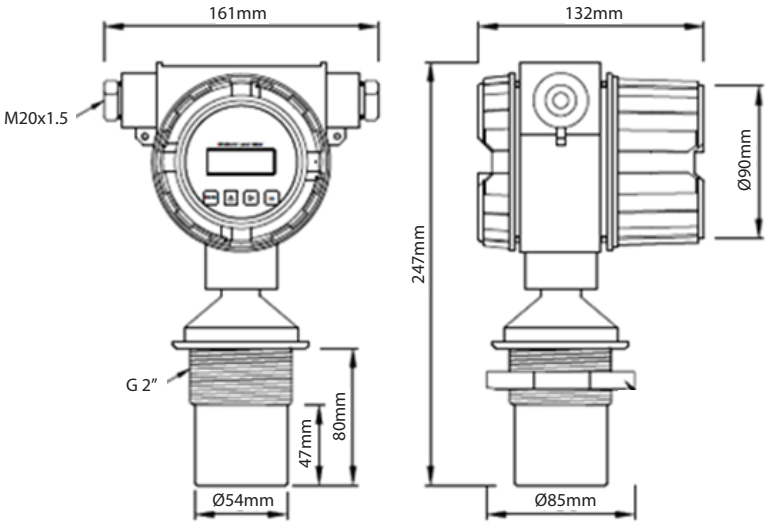
FEATURES

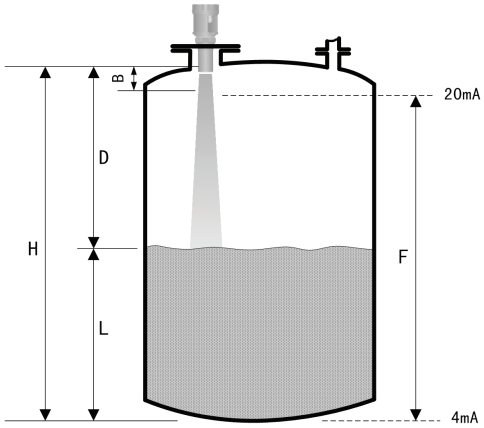
- ✓ Non-contact level ultrasonic
- ✓ Compact type
- ✓ Integrated design, simple and menu guided operation
- ✓ Installed conveniently
- ✓ 4-20 mA output

TECHNICAL FEATURES

Measuring Range	0-6m / 0-8m / 0-10m
Blocking distance	0.35 to 0.5 meter
Accuracy	± 0.3% of full span
Display	LCD display with 4 induction buttons
Power Supply	24V DC (2-wire)
Operating Temperature	Max 60°C
Operating Pressure	Max 4bar
Process Connection	G 2” thread (with DN32 iron flange)
Cable Gland	M20 x 1.5
Analogue Output	4-20 mA
Output Load	400Ω
Resolution	± 1mm
Material	Transmitter : Aluminum Die Casting Probe : Polyurethane
Protection	IP67

DIMENSION/DRAWING





H: Installation Height
D: Distance Value
L: Level Value
B: Blanking Distance
F: Full Scale

The meter measures time t between pulse transmission and reception, uses time t (and the velocity of sound c) to calculate distance D between sensor membrane and product surface: D = c •t/2. With pre-setting empty distance H, level value then be calculated: L = H – D

An integrated temperature sensor compensates for different in the velocity of sound caused by temperature changes. To calibrate the instrument, key in the empty distance H and the span F.

Blanking distance: Span F may not extend into the blanking distance B. Level echo from the blanking distance cannot be evaluated due to the transient characteristics of sensor.