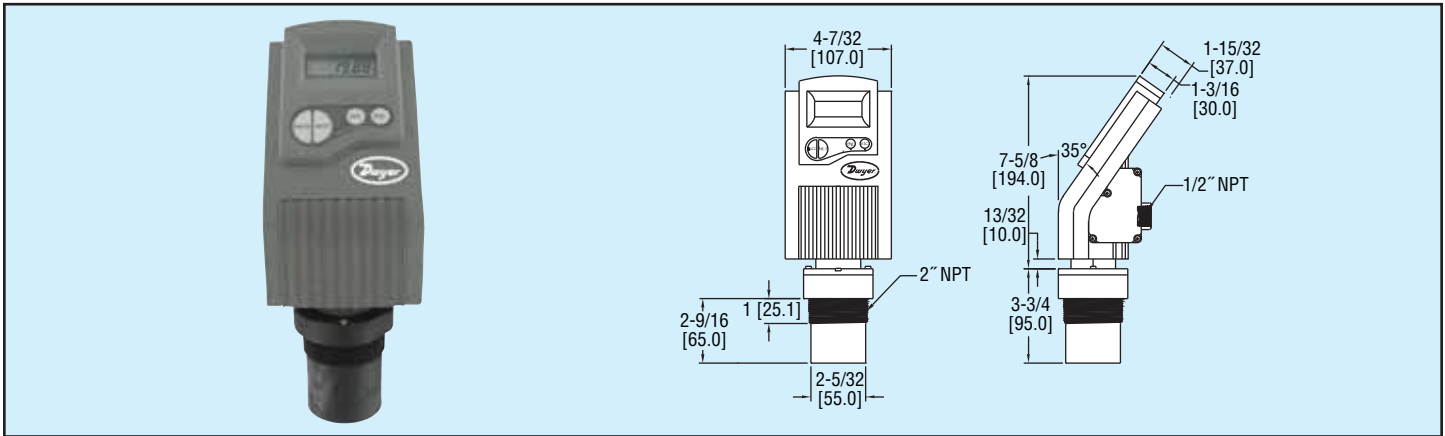




Series  
ULB

# Ultrasonic Level Transmitter for Solids

Integrated LCD Display, Automatic Temperature Compensation



The Series ULB is a direct-install level transmitter designed for non-contact measurement of solid levels. The ULB utilizes ultrasonic technology paired with automatic temperature compensation to provide reliable and accurate measurements in virtually all conditions. Sophisticated algorithms are used to overcome acoustic interferences and false echoes. An integrated LCD screen and four push buttons allow for quick and easy programming on a simple menu structure. Diagnostic capabilities and a failsafe output signal make the ULB an essential choice in critical applications.

## FEATURES

- Direct installation
- Integral LCD display
- High accuracy (0.25% of max range)
- Automatic ambient temperature compensation

## SPECIFICATIONS

**Service:** Bulk solids.

**Wetted Materials:**

Sensor: Polypropylene;  
Acoustic window: ECTFE.

**Ranges:**

ULB-11: .82 to 11.5 ft  
(0.25 to 3.5 m);  
ULB-12: 1.96 to 28 ft  
(0.6 to 8.5 m).

**Accuracy:** 0.25% of max. range  
(at 20°C).

**Resolution:** 0.04" (1 mm).

**Blind Zone:**

ULB-11: 0.8' (.25 m);  
ULB-12: 1.96' (0.6 m).

**Beam Angle:** 5° @ 3 db point.

**Temperature Limits:** -40 to  
158°F (-40 to 70°C).

**Temperature Compensation:**  
Automatic.

**Pressure Limits:** 13.5 to 30 psi  
(0.9 to 2 bar).

**Power Requirement:** 18 to 28  
VDC.

**Output Signal:** 4 to 20 mA.

**Loop Resistance:** Max. 750 Ω @  
28 VDC.

**Electrical Connections:** Screw  
terminal.

**Conduit Connection:** 1/2" NPT,  
cable gland (optional).

**Process Connection:** 2" NPT, 2"  
BSP (optional).

**Enclosure:** Plastic enclosure:  
ABS & UV resistant body.

**Enclosure Rating:** NEMA 4  
(IP65).

**Mounting Orientation:** Vertical.

**Failsafe:** 3 minute delay before  
transmission of an error signal.

**Memory:** Non-volatile.

**Display:** 4 character LCD.

**Units:** ft, m (optional).

**Programming:** 4 button.

**Weight:** 3.1 lb (1.4 kg).

Level

Model	Description	Max. Range
ULB-11	Ultrasonic Level Transmitter Standard Range	11.5 ft (3.5 m)
ULB-12	Ultrasonic Level Transmitter Extended Range	28 ft (8.5 m)