

ULB & Ultrasonic Level Transmitter

Integrated LCD Display, Automatic Temperature Compensation, Non-Contact Level Sensing



4-7/32 1-15/32 [107.0] _[37.0] -3/16 [30.0] 7-5/8 [194.0] 1/2" NPT 13/32 [10.0] 2″ NPT 2-9/16 1 [25.1] 3-3/4 [95.0] [65.0] 2-5/32 [55.0]

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.

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FEATURES

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

| Model | Description | Max. Range |
|----------|-------------|-----------------|
| ULB-11 | Bulk Solids | 11.5 ft (3.5 m) |
| ULB-12 | Bulk Solids | 28 ft (8.5 m) |
| ULL-1KFN | Liquids | 16.4 ft (5 m) |
| ULL-2KFN | Liquids | 49.2 ft (15 m) |

SPECIFICATIONS

Service: ULB: Bulk solids; ULL: Compatible liquids. 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); ULL-1XXX: 0.82 to 16.4 ft (0.25 to 5 m); ULL-2XXX: 1.96 to 49.2 ft (0.6 to 15 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); ULL-1XXX: 0.8' (0.25 m).

Beam Angle: 5° @ 3 db point. Temperature Limits: -40 to 158°F (-40 to 70°C); ULL-2XXX: 1.96' (0.6 m). 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. 727 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 min delay before transmission of an error signal. Memory: Non-volatile. Display: 4 digit LCD. Units: ft, m (optional). Programming: 4 button. Weight: 3.1 lb (1.4 kg).

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