

REFLECTIVE ULTRASONIC LEVEL TRANSMITTER

With Alarms for Small Tanks

- ✓ **Offered in 1.5m (4.9') and 3m (9.8') measurement ranges**
- ✓ **Fail-safe diagnostics with selectable relay and signal outputs**
- ✓ **Narrow 2" (5cm) beam width for applications with limited space**
- ✓ **Corrosion resistant PVDF transducer and compact PP enclosure**
- ✓ **Short 1.5" (3.8cm) dead band maximizes tank filling capacity**
- ✓ **Automatic temperature compensation from -40° to 80° C.**

The LVU500 Series general purpose reflective ultrasonic multi-function level transmitter provides continuous level measurement up to 3 m (9.8') with a 4-20 mA analog signal output and four relays and is configured via web calibration software. The non-contact liquid level sensor features our proprietary Reflective Technology™ that delivers reliable level measurement in condensing environments. Each relay can be configured for alarm, automatic fill or empty functions. Select this sensor for small tanks with chemicals, water, wastewater and oil (non-foaming and/or highly vaporous liquids). Typical applications include day tank, IBC or drum, cooling tower, skid or machine, process tank and waste sumps.

Specifications

Range: LVU501: 1.5" to 4.9' (3.8 cm to 1.5 m), LVU503: 4" to 9.8' (10.1 cm to 3 m)
Accuracy: LVU501: 0.125" (3 mm), LVU503: ± 0.2% of range
Resolution: LVU501: 0.019" (0.5 mm), LVU503: 0.039" (1 mm)
Deadband: LVU501: 1.5" (3.8 cm), LVU503: 4" (10.1 cm)
Beam width: 2" (5 cm)
Configuration: WebCal® PC Windows® USB® 2.0
Memory: Non-volatile
Supply voltage: 14-28 VDC



Max. consumption: 0.5W

Loop resistance: 500 ohms @ 24 VDC

Signal output: 4-20 mA, two-wire

Signal invert: 4-20 mA or 20-4 mA

Signal fail-safe: 4 mA, 20 mA, 21 mA, 22 mA, hold last

Contact type: (4) SPST relays

Contact rating: 60 VA, 1A maximum

Contact fail-safe: Open, closed, hold last

Contact hysteresis: Selectable

Process temp.: F: -40 to 176°, C: -40 to 80°

Temp. comp.: Automatic

Ambient temp.: F: -31 to 140°, C: -35 to 60°

Pressure: 30 psi (2 bar)

Enclosure rating: Type 6P (IP68)

Encl. material: Polypropylene

Transducer type: Reflective Ultrasonic

Transducer mat.: Polyvinylidene fluoride

Cable jacket mat.: Polyurethane

Cable type: 9-conductor, shielded

Cable length: 48" (1.2m)

Process mount: 2" NPT, or 2" G

Mount gasket: 2" G FKM®

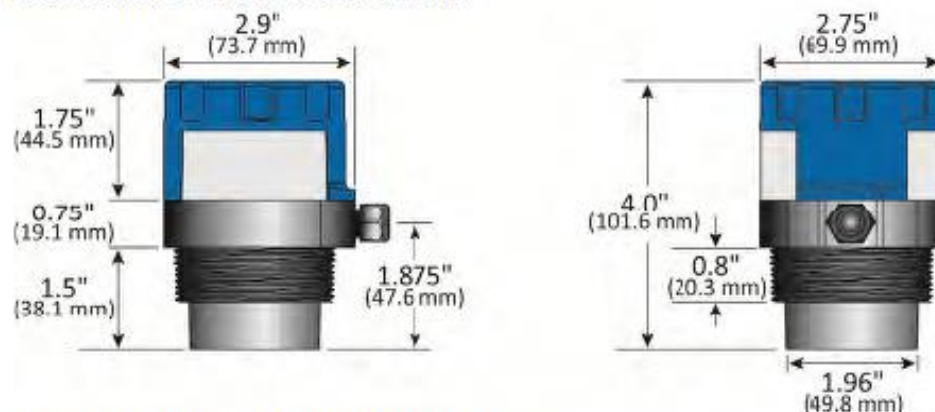
Classification: General purpose

Approval: UL 61010-1

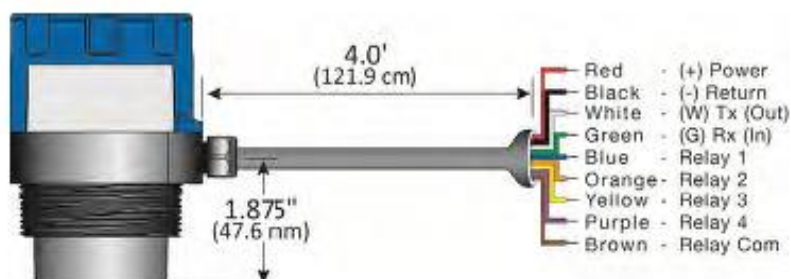
Compliance: CE, RoHS

Dimensions

Dimensions for LVU501 & LVU503 Series



Cable Dimensions for LVU501 & LVU503 Series



2" Tank Adapter
Socket x Thread
(LVU800-2B shown)



Tank Adapter (LVU800-3B)
w/ 3"x 2" Reducer Bushing
(LVU800-3N40)



LVU500-USB USB® Fob



LVM-30 Shown



LVU800-3N40

To Order	
Model No.	Description
LVU501	2" NPT Level Transmitter 4.9' (1.5M) range, 4 SPST relays, w/ Fob USB Interface
LVU501-B	2" NPT Level Transmitter 4.9' (1.5M) range, 4 SPST relays, w/o Fob USB Interface
LVU501-G	2" BSPP Level Transmitter 4.9' (1.5M) range, 4 SPST relays, w/ Fob USB Interface
LVU501-G-B	2" BSPP Level Transmitter 4.9' (1.5M) range, 4 SPST relays, w/o Fob USB Interface
LVU503	2" NPT Level Transmitter 9.8' (3M) range, 4 SPST relays, w/ Fob USB Interface
LVU503-B	2" NPT Level Transmitter 9.8' (3M) range, 4 SPST relays, w/o Fob USB Interface
LVU503-G	2" BSPP Level Transmitter 9.8' (3M) range, 4 SPST relays, w/ Fob USB Interface
LVU503-G-B	2" BSPP Level Transmitter 9.8' (3M) range, 4 SPST relays, w/o Fob USB Interface
Accessories	
Model No.	Description
LVU800-2B	2" NPT bulkhead fitting, PVC
LVU800-3B	3" NPT bulkhead fitting, PVC
LVU800-3N40	3" thread x 2" thread, NPT, PVC, schedule 40
LVU800-3S40	3" Socket x 2" thread, NPT, PVC, schedule 40
LVU800-3N80	3" thread x 2" thread, NPT, PVC, schedule 80
LVU800-3S80	3" Socket x 2" thread, NPT, PVC, schedule 80
LVU800-4N80	4" thread x 2" thread, NPT, PVC, schedule 80
LVU800-4S80	4" Socket x 2" thread, NPT, PVC, schedule 80
LVM-30	2" NPT side mount bracket, PP
LVM-30G	2" G side mount bracket, PP
LVU500-USB	FOB for programming LVU500 or LVU700 series level transmitters