LVU-150-R Series

Ultrasonic Level Sensors

OMEGA
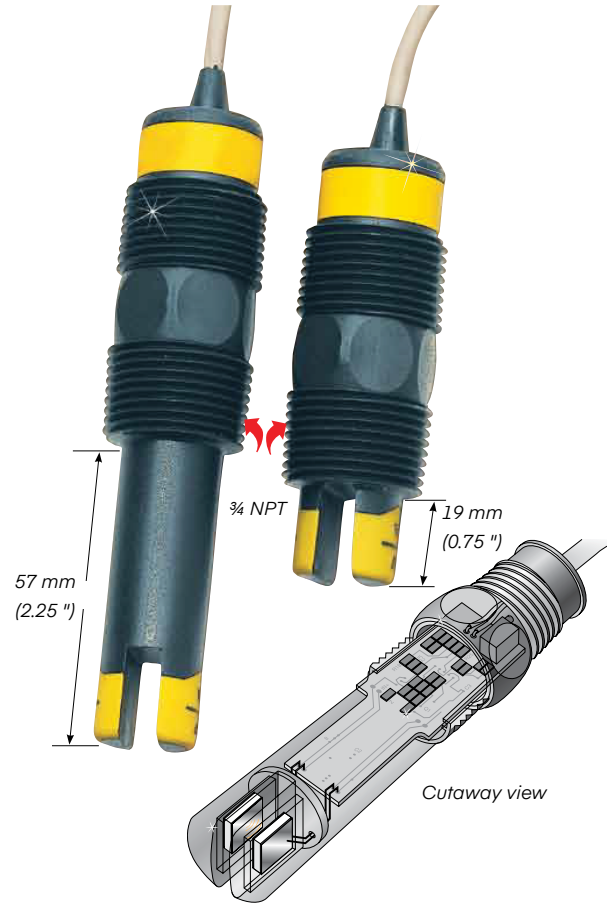a DwyerOmega brand

1 YEAR WARRANTY

RoHS

- Not Sensitive to Changes In Viscosity, Density, or Conductivity
- SPST Relay Standard
- Resists Vapor and Turbulence
- NEMA 6 (IP68) Submersible Sensor and Cable

Description

OMEGA's ultrasonic sensors deliver accurate and reliable liquid level detection with an SPST mechanical relay output. The technology provides a high level of ultrasonic sensitivity, including resistance to vapor and turbulence. The ultrasonic sensor utilizes a fork-shaped sensor which contains two piezoelectric crystals, one of which acts as the ultrasonic transmitter, and the other as a receiver. If the air gap between the points of the fork fills with liquid, the sonic wave passes from one crystal to the other.

¾ NPT

57 mm (2.25 ")

19 mm (0.75 ")

Cutaway view

Specifications

Accuracy	±1 mm (0.04 in) in water
Repeatability	±0.5 mm (0.02 in) in water
Dead Band Hysteresis	1 mm in water
Voltage Input	12 Vdc to 36 Vdc
Current Output	25 mA maximum
Relay	**GP:** 60 Vac/Vdc @ 1 A **CE:** 60 Vac/Vdc @ 1 A
Switch Mode	Selectable, NO or NC states
Wetted Materials	Polypropylene (PP) or Perfluoroalkoxy (PFA)
Temperature Rating	-40 °C to 80 °C (-40 °F to 176 °F)
Maximum Pressure Rating	PP: 150 psi @ 25°C (76°F) derated @ 1.667 psi per °C above 25 °C (76 °F)
Loop Resistance	600 Ω @ 24 Vdc
Standard Cable Length	3 m (10 ft)
Maximum Cable Length	305 m (1000 ft)
Dimensions	76.2 mm or 114.3 mm L x 26.7 mm Dia. (3.0 in or 4.5 in x 1.05 in) (3/4 NPT)
Enclosure Rating	NEMA 6 (IP68) submersible sensor and cable

Ordering Guide

Model No.	Description	Material	Size (inch)
LVU-150-R	Ultrasonic Sensor	PP	3 x 3/4 NPT
LVU-151-R	Ultrasonic Sensor	PFA	3 x 3/4 NPT
LVU-152-R	Ultrasonic Sensor	PP	4.5 x 3/4 NPT
LVU-153-R	Ultrasonic Sensor	PFA	4.5 x 3/4 NPT

Comes complete with operator's manual and 3 m (10 ft) cable.

Two extended cable lengths available. For 7.62 m (25 ft) add suffix "-25" to model number, for

PP models, or PFA models, for additional cost. For 15.24 m (50 ft) add suffix "-50" to model number for PP models, or PFA models, for additional cost.

***Ordering Examples: LVU-150-R**, polypropylene ultrasonic sensor, 3 x 3/4 NPT*

***LVU-153-R**, PFA ultrasonic sensor, 4.5 x 3/4 NPT.*

DS-LVU-150

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