ULTRASONIC LEVEL SENSORS

LVU-150-R Series

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

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.

SPECIFICATIONS

Accuracy: ±1 mm (0.04") in water
Repeatability: ±0.5 mm (0.02") in water
Dead Band Hysteresis: 1 mm in water
Voltage Input: 12 to 36 Vdc
Current Output: 25 mA maximum
Relay:
- GP: 120 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 to 90°C (-40 to 194°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')
Maximum Cable Length: 305 m (1000')
Dimensions:
- 76.2 or 114.3 L x 26.7 mm Dia.
  (3.0 or 4.5 x 1.05") (¾ NPT)
Enclosure Rating: NEMA 6 (IP68) submersible sensor and cable

To Order

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
<th>Material</th>
<th>Size (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVU-150-R</td>
<td>Ultrasonic sensor</td>
<td>PP</td>
<td>3 x ¾ NPT</td>
</tr>
<tr>
<td>LVU-151-R</td>
<td>Ultrasonic sensor</td>
<td>PFA</td>
<td>3 x ¾ NPT</td>
</tr>
<tr>
<td>LVU-152-R</td>
<td>Ultrasonic sensor</td>
<td>PP</td>
<td>4.5 x ¾ NPT</td>
</tr>
<tr>
<td>LVU-153-R</td>
<td>Ultrasonic sensor</td>
<td>PFA</td>
<td>4.5 x ¾ NPT</td>
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</table>

Comes complete with operator’s manual and 3 m (10') cable.
Two extended cable lengths available. For 7.62 m (25') add suffix “-25” to model number, for PP models, or PFA models, for additional cost. For 15.24 m (50') 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 ¾ NPT LVU-153-R, PFA ultrasonic sensor, 4.5 x ¾ NPT.