

NON-INTRUSIVE RF CAPACITANCE SENSORS

LVP-51-R



- ✓ Detects Liquid Through Plastic or Fiberglass Tank Walls Up to 25.4 mm (1") Thickness
- ✓ SPST Relay Output Standard
- ✓ Sensor Conveniently Slides In and Out of Mounting Bracket in PE or PP
- ✓ Ideal For Many Ultrapure and Sanitary Applications
- ✓ Easy Two Step Calibration
- ✓ Selectable Normally Open or Normally Closed

OMEGA® non-intrusive RF capacitance sensors deliver accurate and reliable liquid level detection with an SPST mechanical relay output. A versatile weld-on fitting enables the sensor to be mounted directly to the wall of any standard polyethylene, fiberglass or polypropylene tank. Simply align the fitting with the tank and press it into place. An engineered adhesive holds the fitting during welding and provides a seal between the sensor and the tank wall. Omega's two-step calibration feature ensures the highest level of dielectric sensitivity.

SPECIFICATIONS

Accuracy: ±1 mm (0.04") in water
Repeatability: ±0.5 mm (0.02") in water
Dielectric Range: 10 to 80 dielectric units @ 1 MHz
Tank Compatibility: Plastic and fiberglass (non-metallic)
Tank Wall Thickness: Up to 25.4 mm (1") maximum
Voltage Input: 12 to 36 Vdc
Consumption: 25 mA maximum



LVP-51-R shown smaller than actual size.

Relay:

GP: 120 Vac/Vdc @ 1 A
CE: 60 Vac/Vdc @ 1 A

Switch Mode:

Selectable, NO or NC states

Switch Display: Single LED provides calibration and liquid status feedback

Loop Resistance: 600 Ω @ 24 Vdc

Maximum Temperature Rating: -40 to 80°C (-40 to 176°F)

Enclosure Material: Polysulfone

Enclosure Rating:

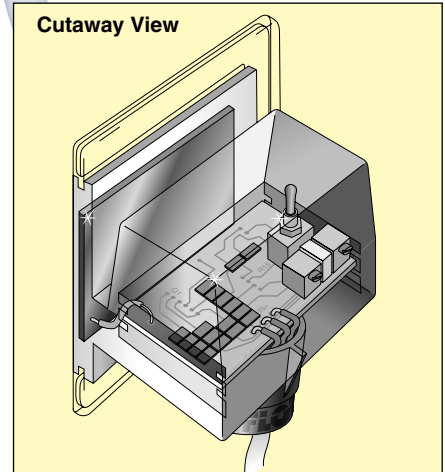
NEMA 4 (IP65), splash proof and chemical resistant design

Std. Cable Length: 3 m (10')

Maximum Cable Length: 305 m (1000')

Dimensions: 6.4 x 4.3 x 3.8 cm (2.5 x 1.7 x 1.5")

Cutaway View



To Order

All sensors have FET switch and 4 or 20 mA outputs

Model No.	Description	Material	Size cm (inch)
LVP-51-R	Non-intrusive capacitance sensor	PP	6.4 x 4.3 x 3.8 (2.5 x 1.7 x 1.5)
LVP-91	PE sensor fitting	PE	6.4 x 6.4 (2.5 x 2.5)
LVP-92	PP sensor fitting	PP	6.4 x 6.4 (2.5 x 2.5)

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

LVP-51-R has an SPST mechanical relay output standard.

Two extended cable lengths available. For 7.62 m (25') add suffix "-25" to model number, for additional cost. For 15.24 m (50') add suffix "-50" to model number, for additional cost.

Ordering Example: LVP-51-R sensor and LVP-92, PP sensor fitting.