

# ECONOMICAL CAPACITANCE LEVEL SWITCH

LVC-152-R



Single Switch Mounting Assemblies Available

- ✓ Reliable Detection of Conductive, Light to Medium Coating Liquids
- ✓ Unique Coating Circuit Rejects the Negative Effects of Coating or Scaling Build-up
- ✓ All Plastic Construction with PP Materials for Corrosive Environments
- ✓ Probe and Cable Rated NEMA 6X (IP68) for Submersible Operation in Tanks or Sumps
- ✓ SPST Relay Standard
- ✓ Selectable Normally Open or Normally Closed Output States

Warning: Do not install sensor within 15.24 cm (6") of any metal object



LVC-152-R shown actual size.

## APPLICATION MATRIX

		Variable	Yes	No
Liquid	Foam		✓	
	Bubbles		✓	
	Conductive		✓	
	Non-conductive			✓
	Translucent		✓	
	Opaque		✓	
	Clean		✓	
	Dirty			✓
Tank	Turbulent		✓	
	Non-coating		✓	
	Light coating			✓
	Medium coating			✓
	Heavy coating			✓
	Hazardous			✓

## APPLICATION

The LVC-152-R capacitance level switch is the perfect switch solution for conductive coating or scaling type liquids. The LVC-152-R is best applied in grounded vessels which contain water based, light to medium coating or scaling type liquids including soap, wastewater and brine solutions.

The LVC-152-R capacitance switch detects the presence of liquid or air by measuring the conductive or dielectric values which are present in all materials. The guard circuit rejects the negative effects of coating build-up on the probe by eliminating the coating signal path between the active and reference electrodes. As the probe tip becomes immersed in liquid, the capacitance effect is greatly increased and the switch changes state.

## SPECIFICATIONS

**Accuracy:** ±1 mm (0.04") in water  
**Repeatability:** ±0.5 mm (0.02") in water  
**Dielectric Range:** >20 constants  
**Conductive Range:** >100 micromhos  
**Supply Voltage:** 12 to 36 Vdc  
**Consumption:** 25 mA maximum  
**Relay:**  
**GP:** 120 Vac/Vdc @ 1 A  
**CE:** 60 Vac/Vdc @ 1 A  
**Switch Output:** Selectable NO or NC  
**Temperature Rating:**  
 -40 to 90°C (-40 to 194°F)

**Pressure Rating:** 150 psi @ 25°C (76°F), derated @ 1.667 psi per °C above 25°C (76°F)

**Probe Material:** Polypropylene  
**Probe Rating:** NEMA 6X (IP68)  
**Mounting Threads:** ¼ NPT  
**Cable Type:** 3 m (10'), 4-wire, 22 gage with ground, shield & PP jacket  
**Dimension:** 12.7 cm L (5.0") x ¼ NPT  
**Immersion Length:** 7 cm (2.6") from bottom of threads to tip of probe

To Order	
Model No.	Description
LVC-152-R	Capacitance switch, 12.7 cm (5") long

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 additional cost. For 15.24 m (50') add suffix "-50" to model number, for additional cost.  
**Ordering Example:** LVC-152-R level switch.