The compact LV140 single-float, liquid-level sensor is ideal for use in steel double-wall tanks or containment sump areas. It requires no calibration, and is easy to install and maintain. When positioned vertically at the bottom of a steel tank’s stand pipe or in a sump, it detects liquids such as hydrocarbons and water, as low as 3⁄4” from the bottom of a tank or sump. The epoxy-encapsulated design is ideal for harsh environments. An integral slosh shield guards the float from debris.

The principle behind the LV140 is straightforward. The float is equipped with powerful, permanent magnets. As the float rises or lowers with liquid level, it actuates a magnetic reed switch mounted within the stem. In response, the electrical circuit opens or closes, activating an external alarm or control circuit. When mounted vertically, the LV140 provides a consistent accuracy of ±1⁄8”.

The reed switch ensures long, trouble-free service. Hermetically sealed, these switches allow for repeatability, with actuation points that remain constant over the life of the unit.

\[\text{Note: The LV140 sensor is a non-voltage-producing device and does not contain energy-storing components. However, since primary use is in hazardous locations, an appropriate intrinsically safe (IS) interface device is required for its use.}\]
To Order

Model No. Cable
LV141 PVC jacketed, level sensor normally closed, dry
LV142 PFA jacketed level sensor normally closed, dry

Comes complete with 7.6 m (25'), 2-conductor PVC or PFA jacketed cables and operator’s manual. For normally open switch, add suffix “-NO” at the end of the part number; no extra cost.

Ordering Example: LV142, PFA jacketed sensor.

Typical Wiring Diagram

Note: If 2 signal lines must be maintained at above ground potential, an individual zener barrier is required per single line.

SPEcIFICATIONS

Wetted Materials: Brass, Buna, nylon, PVC, beryllium, copper

Operating Temperature:
-40 to 110°C (-40 to 230°F)
Water: Up to 82.2°C (180°F)

Accuracy: ±3.2 mm (1/8")

Switch Rating: 20 VA, 120 to 240 Vac pilot duty; 20 W, 50 to 240 Vdc resistive

Cable: 2-conductor PVC or PFA coated jackets [7.6 m (25') extended]

Weight: 453 g (1 lb)