

Conductivity Level Sensor

Overview

The LT364 Level Sensor provides point fluid detection with virtually any conductive fluid. Two 316 stainless steel pins provide for operation in mildly corrosive fluids within plastic or metal containers. Fluid presence is measured by passing a low voltage AC signal between the stainless steel probes. The use of an AC voltage eliminates the effects of galvanic corrosion on the probes. Power to the sensor and output from the sensor is derived from a current loop. Sensor output is 8 mA with fluid present and 16 mA with no fluid present.

- No calibration necessary.
- Injection molded, high-temperature plastic case.
- Electronics can be used in applications with an ambient temperature up to 185°F (85°C).
- Connection is made using an industry-standard Packard/Delphi Metri-pack 150 connector providing an easy-to-connect, polarized connection.

Application Ideas

- Radiator low-fluid level detection
- Pump recovery tanks
- Fluid leak detection
- Parts washers
- Automated test equipment

Specifications

Sensor Output:

8 mA \pm 1 mA with fluid present and 16 mA \pm 1 mA with no fluid present



Ambient Temperature (electronics):

Operation: -40 to 185°F, non-condensing

Storage: -67 to 212°F, non-condensing

Supply Voltage: 7.6 to 35VDC, reverse polarity protected

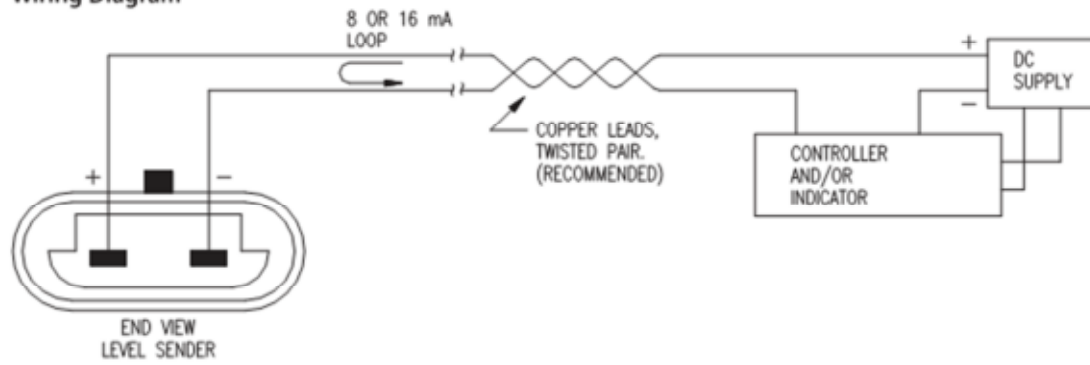
Loop resistance: Maximum allowable resistance of the signal-carrying loop, including wires and load resistors given by: $R_{loopmax} = (V_{supply} - 7.6) / .02Amps$

Voltage Stability: Change in loop current $< \pm 0.01$ mA from 7.6 to 35 VDC

Sensor Housing: $\frac{3}{8}$ - 18 NPT process thread, nylon with 30% glass plastic encapsulation; end connector is Packard/Delphi Metri-pack 150.

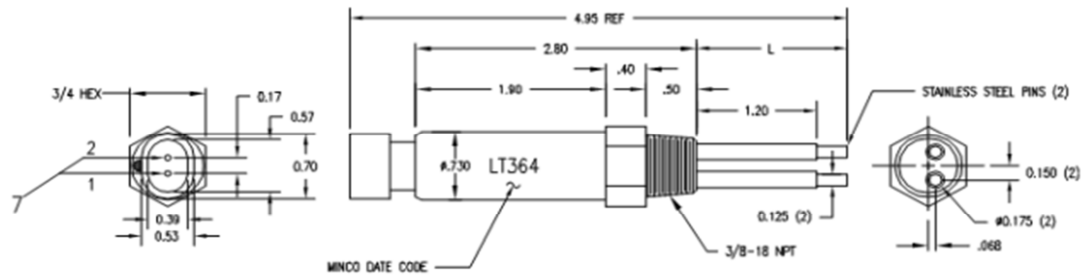
Weight: Approximately 2.5 oz (70 g)

Wiring Diagram

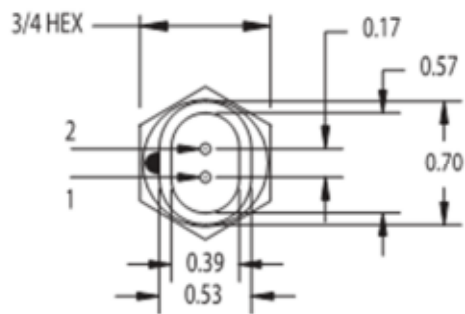


Dimensional Drawings

Side View



Connection End



Measurement End

