



LL-10 SERIES

SPECIFICATIONS

- ◆ **A direct replacement for mechanical float type liquid level devices**
- ◆ **Proven ultrasonic technology**
- ◆ **Solid state integral electronics**
- ◆ **Designed for years of maintenance-free service**

The Solid State Float™ LL-10 series liquid level switch is a direct replacement for mechanical float type liquid level devices. It employs proven ultrasonic technology and solid state integral electronics. The Solid State Float™ provides reliable operation in virtually any liquid and eliminates failures due to finite mechanical life inherent in the mechanical float design. With fully epoxy sealed electronics, combined with ultrasonic sensing technology, Solid State Float™ is designed for years of maintenance-free service.

FEATURES

Standard Features

- ◆ High pressure up to 1000 PSIG (6895 Kpa)
- ◆ Output: Relay output, 1 amp SPDT (normally open)
- ◆ No moving parts, easy to install
- ◆ Input 5 to 30 VDC
- ◆ Digital filter techniques enhance performance

Optional Features

- ◆ Electropolishing
- ◆ Higher temperature up to 212 °F (100 °C)
- ◆ Power Loop output, 4 – 20 mA

APPLICATIONS

- ◆ Pump protection
- ◆ Storage tanks
- ◆ Compressors
- ◆ Medical and laboratory equipment
- ◆ Hydraulic supply lines
- ◆ Oil film detection
- ◆ Coolant reservoirs
- ◆ Boiler water cutoff
- ◆ Sewage systems
- ◆ Pipe lines
- ◆ Hydraulic and lube reservoirs
- ◆ Chillers

PERFORMANCE SPECIFICATIONS

| Parameter | Typical Value |
|-------------------|-----------------------------------|
| Repeatability | 2 mm or better |
| Delay | 0.5 seconds |
| Input Voltage | 5 to 30 VDC |
| Input Power | 100 mA max |
| Leakage Current | Less than 50 μ A |
| Output (standard) | Relay Output: 1 AMP SPDT NO or NC |
| Mounting | 3/4" NPT STD |

| Parameter | Typical Value |
|--------------------|--|
| Protection | Transient, reverse polarity |
| Sensor Material | 316L Stainless Steel |
| Temperature | -20 to +176° F (-29 to 80 °C) |
| Operating Pressure | Up to 1000 PSIG (6895 Kpa) |
| Cable Length | 1, 4, 10, & 20 foot long lengths available |

MECHANICAL DIMENSIONS in inches [mm]

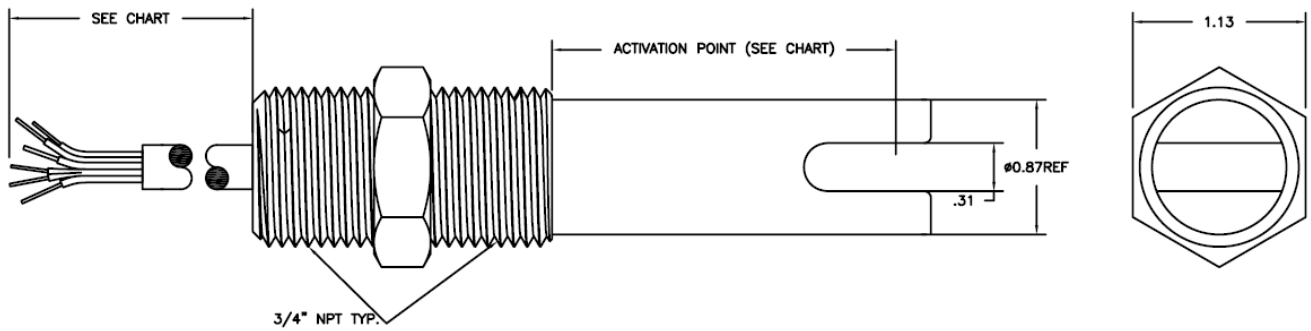


Figure 1: LL-10 series element

SCHEMATICS

Typical Wiring Diagram – Relay Output

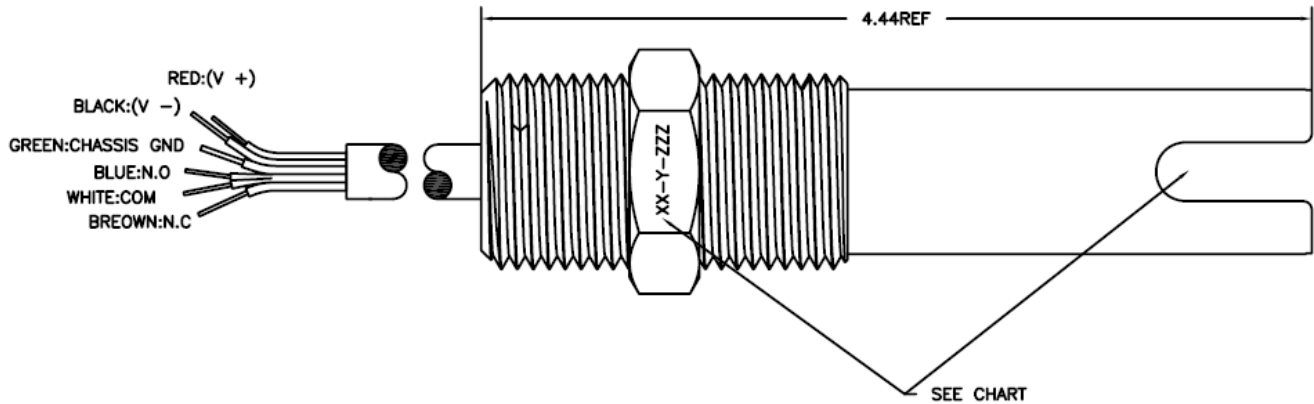


Figure 2: Typical wiring diagram for LL-10 series element