



## LL-01 SERIES

### POWER LOOP

Proven ultrasonic technology combined with compact electronics

Improved performance in aerated liquids

Cost effective design for tight spaces and direct replacement of electro optical and mechanical float switch

The LL-01 series Ultrasonic Sentio™ Miniature Liquid Level Switch uses proven ultrasonic technology combined with compact electronics yielding improved performance in aerated liquids.

#### Features

##### Standard Features

- High pressure up to 250 PSIG (1724 KPa)
- No moving parts, easy to install
- Input 5.5 to 30 VDC
- Digital filter techniques enhance performance
- Power Loop output, Wet  $20 \pm 1$  mA; Dry  $4 \pm 1$  mA

##### Optional Features

- Temperature options: 80°C or 100°C
- Mounting options: ¼" NPT or ½" NPT
- Relay output version also available (SPST-NO or NC)

#### Applications

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

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#### Specifications

<b>Repeatability</b>	2 mm or better
<b>Delay</b>	0.5 seconds
<b>Input Power</b>	5.5 to 30 VDC
<b>Output (standard)</b>	Wet 20±1 mA; Dry 4±1 mA
<b>EMC</b>	EN 61326-1 for fixed cable lengths <30 meters and not powered from a DC distribution system; Emissions Group 1 Class A
<b>Sensor Material</b>	316L Stainless Steel
<b>Temperature</b>	-20 to +176°F (-29 to 80°C) or -20 to +212°F (-29 to 100°C)
<b>Operating Pressure</b>	Up to 250 PSIG (1724 KPa)
<b>Mounting</b>	¼" NPT or ½" NPT
<b>Cable Length</b>	1, 4, 10, & 20 foot lengths available

#### Typical Wiring Diagram

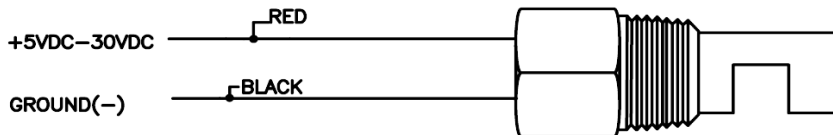


Figure 1  
Typical wiring  
diagram for LL-01  
series elements

# LL-01 SERIES

## POWER LOOP

### Mechanical Dimensions in inches [mm]

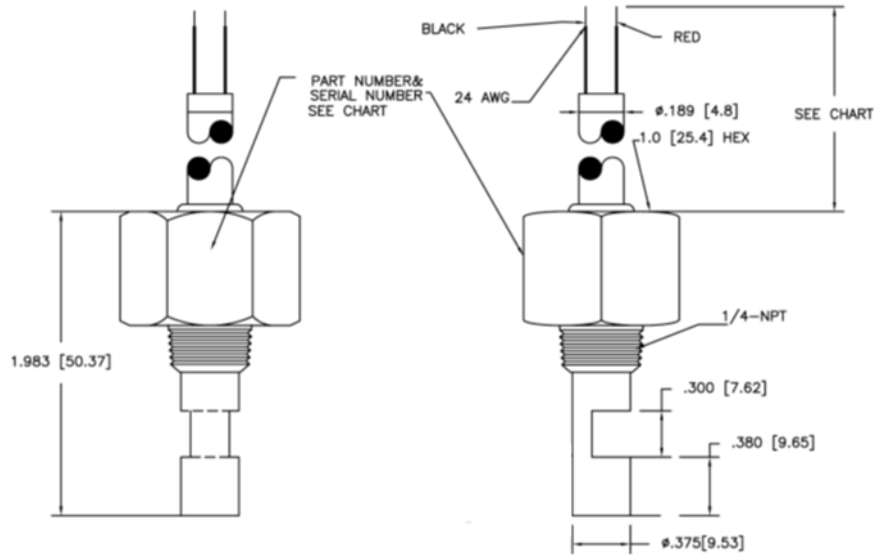
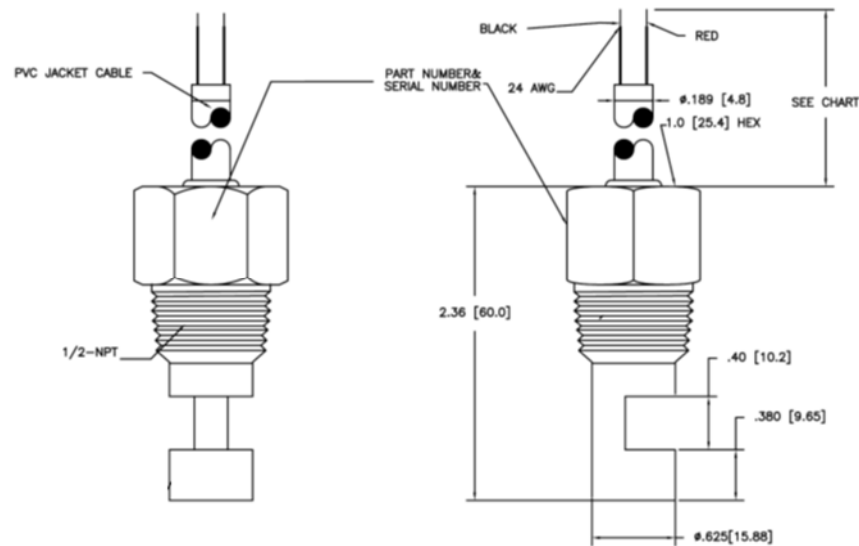


Figure 2

Top: LL-01 series element with 1/4" NPT sensor mounting

Bottom: LL-01 series element with 1/2" NPT sensor mounting



**LL-01 SERIES**  
POWER LOOP

Ordering Information

**Part Number**  
LL01 - \_ A \_ \_

**Temperature**

<b>5</b>	80°C, 4-20 mA
<b>6</b>	100°C, 4-20 mA

**Sensor Material**

<b>A</b>	316L SS
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**Cable Length**

<b>01</b>	1 foot
<b>04</b>	4 feet
<b>10</b>	10 feet
<b>20</b>	20 feet

**Sensor Mount and Activation Point**

<b>A</b>	¼" NPT w/ 0.25" activation point
<b>B</b>	½" NPT w/ 0.25" activation point

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