



## LL-01 SERIES – RELAY VERSION

### SPECIFICATIONS

- 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)
- Output: Relay output, 0.5 amp SPST (normally open)
- No moving parts, easy to install
- Input 5 to 30 VDC
- Digital filter techniques enhance performance

#### Optional Features

- 3.3 volt input power
- Electropolishing
- Higher pressure up to 500 PSIG (3447 Kpa)
- Normally closed relay or Power Loop output, Wet 20±1 mA; Dry 4±1 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

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### PERFORMANCE SPECIFICATIONS

Parameter	Typical Value
Repeatability	2 mm or better
Delay	0.5 seconds
Input Power	5 to 30 VDC
Leakage Current	Less than 50 $\mu$ A
Output (standard)	Mechanical Relay: 0.5 A, 10 W max; SPST (normally open)

Parameter	Typical Value
Sensor Material	316L Stainless Steel
Temperature	-20 to +176° F (-29 to 80 °C)
Operating Pressure	Up to 250 psig (1724 Kpa)
Mounting	1/4" NPT or 1/2" NPT
Cable Length	1, 4, 10, & 20 foot lengths available

### MECHANICAL DIMENSIONS in inches [mm]

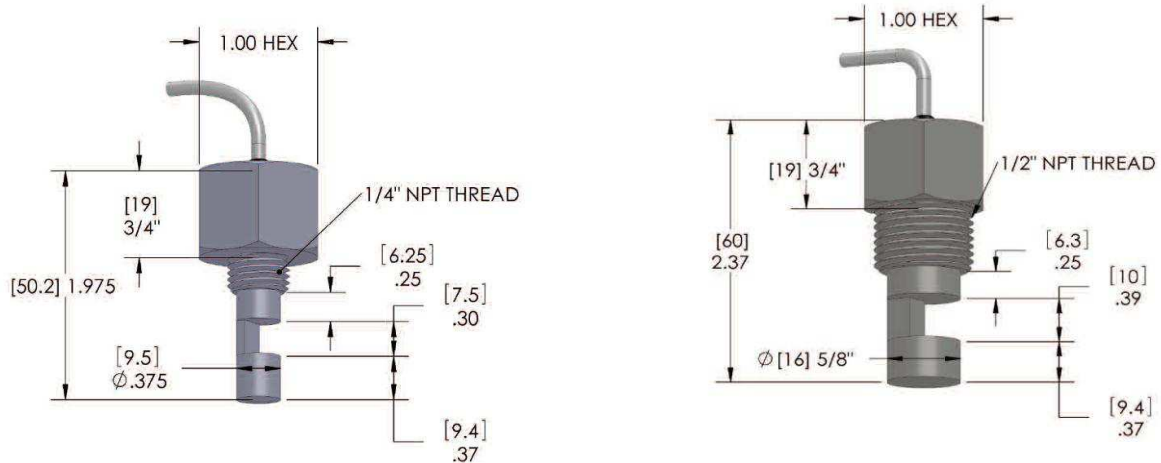


Figure 1: Left - LL-01 series element with 1/4" NPT sensor mounting  
 Right - LL-01 series element with 1/2" NPT sensor mounting

### TYPICAL WIRING DIAGRAM

#### Relay Output

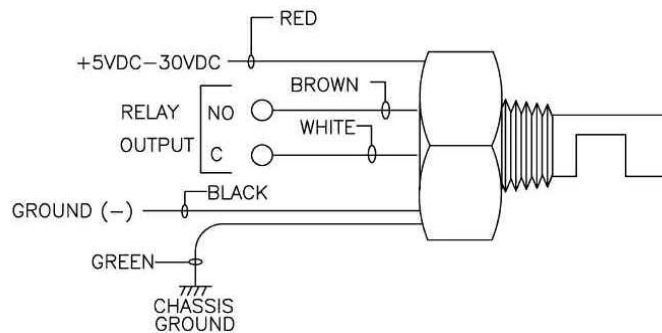
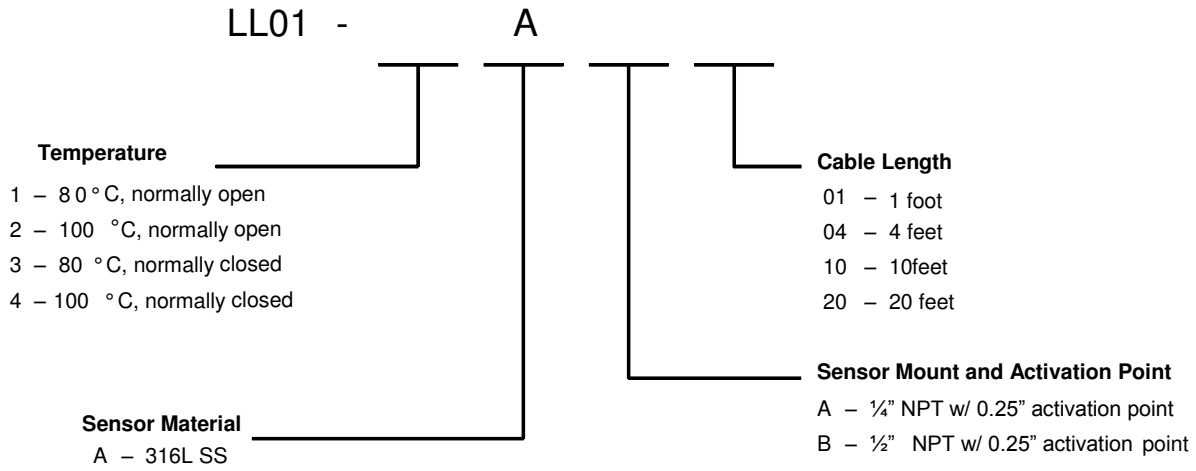


Figure 2: Typical wiring diagram for LL-01 series elements

**ORDERING INFORMATION**



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