



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 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

**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]**

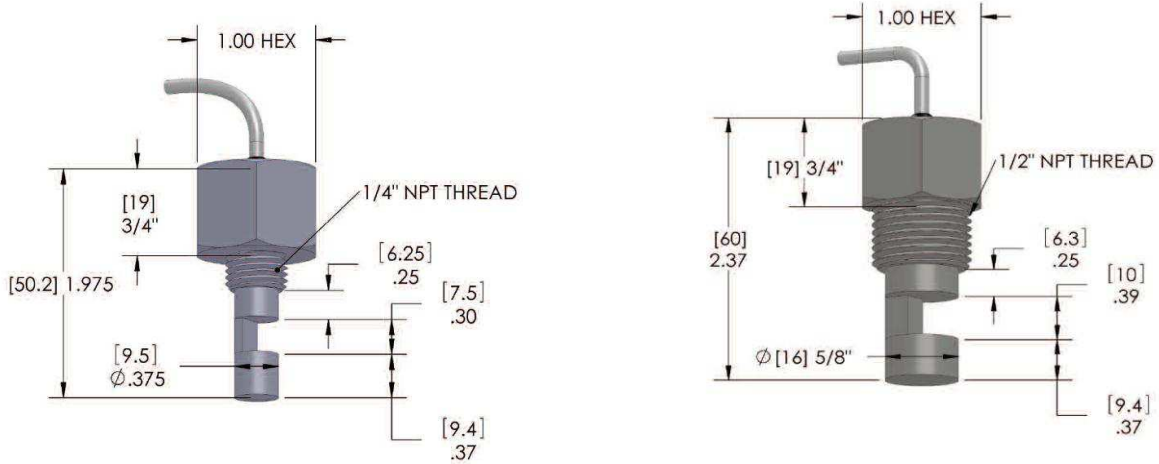


Figure 1: Left - LL-01 series element with 1/4" NPT sensor mounting  
 Right - LL-01 series element with 1/2" NPT sensor mounting

**TYPICAL WIRING DIAGRAM**

**Relay Output**

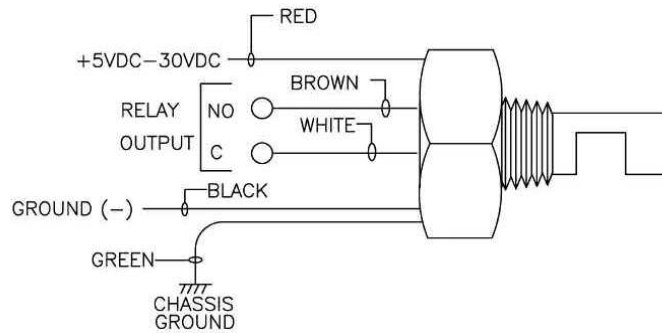
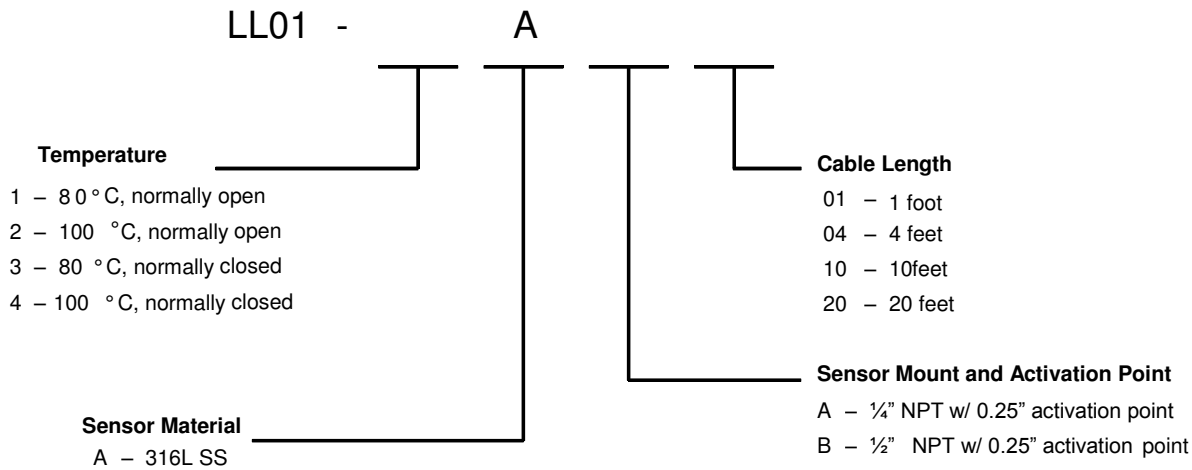


Figure 2: Typical wiring diagram for LL-01 series elements



**ORDERING INFORMATION**



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