



LL-101 SERIES

SPECIFICATIONS

- Proven ultrasonic technology
- Effective in virtually any liquid, regardless of viscosity or aeration
- Compact design
- Standard 3/4" NPT mounting
- Miniaturized, encapsulated electronics use a smaller, more compact enclosure than comparable systems

The Pointsense™ Model LL-101 Liquid Level Switch is the ideal solution to a host of liquid level sensing and control applications. It uses proven ultrasonic technology to operate in virtually any liquid, regardless of viscosity or aeration. Its small size and standard 3/4" NPT mounting make it the perfect choice for new or existing applications. The LL-101 consists of a 316 LSS sensor and an integral miniaturized, encapsulated electronic control unit which is mounted in a cast aluminum, watertight enclosure.

FEATURES

- 500:1 wet to dry ratio
- Epoxy painted enclosure
- 316 LSS sensor and encapsulated electronic control unit
- No calibration or special installation requirements
- Customizable activation point distance from end of threads (1 – 36 inches)

APPLICATIONS

- Food processing
- Chemical
- Petrochemical
- Pharmaceutical

PERFORMANCE SPECIFICATIONS

Parameter	Typical Value
Repeatability	2 mm typical
Delay	0.5 seconds (standard)
Input Power	115 V - 230 V 50/60 Hz AC (standard); 12 - 24 VDC (optional)
Output	10 A DPDT relay
Housing	NEMA 4/NEMA 7 watertight, cast aluminum enclosure.
Mounting	3/4" NPT standard, flanges available

Parameter	Typical Value
Sensor Material	316L SS (standard)
Weight	1 lbs (0.45 Kg) approximate
Operating Pressure	Up to 1000 PSIG (6895 Kpa)
Temperature	Sensor: -40 to 300 °F (-40 to 149 °C) Electronics: -20 to 170 °F (-29 to 77 °C)

MECHANICAL DIMENSIONS IN INCHES [MM]

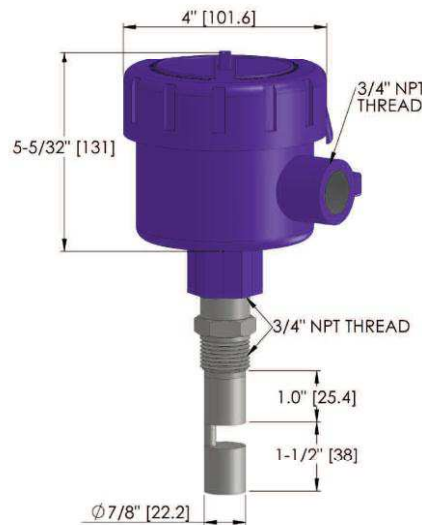


Figure 1: LL-101 series elements

OPERATION

The Model LL-101 uses a single ultrasonic wave propagation sensor that is mounted in the liquid medium. The electronics generate a continuous wave ultrasonic signal that completely illuminates the liquid sensing area. The absence of liquid in the sensing area causes the ultrasonic signal to dissipate, which the electronics senses as a “dry” condition. When liquid is present, the amplitude of the ultrasonic signal increases, indicating a “wet” condition. This signal is converted by the electronics to control a relay output. The relay may be used to control the power to an alarm, pump, or other electrical device on either the dry or wet condition. High level failsafe operation is also available.

APPLICATION SCHEMATICS

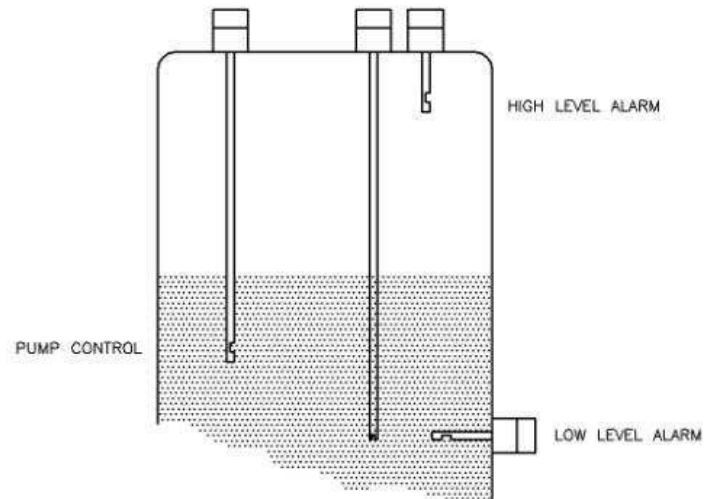
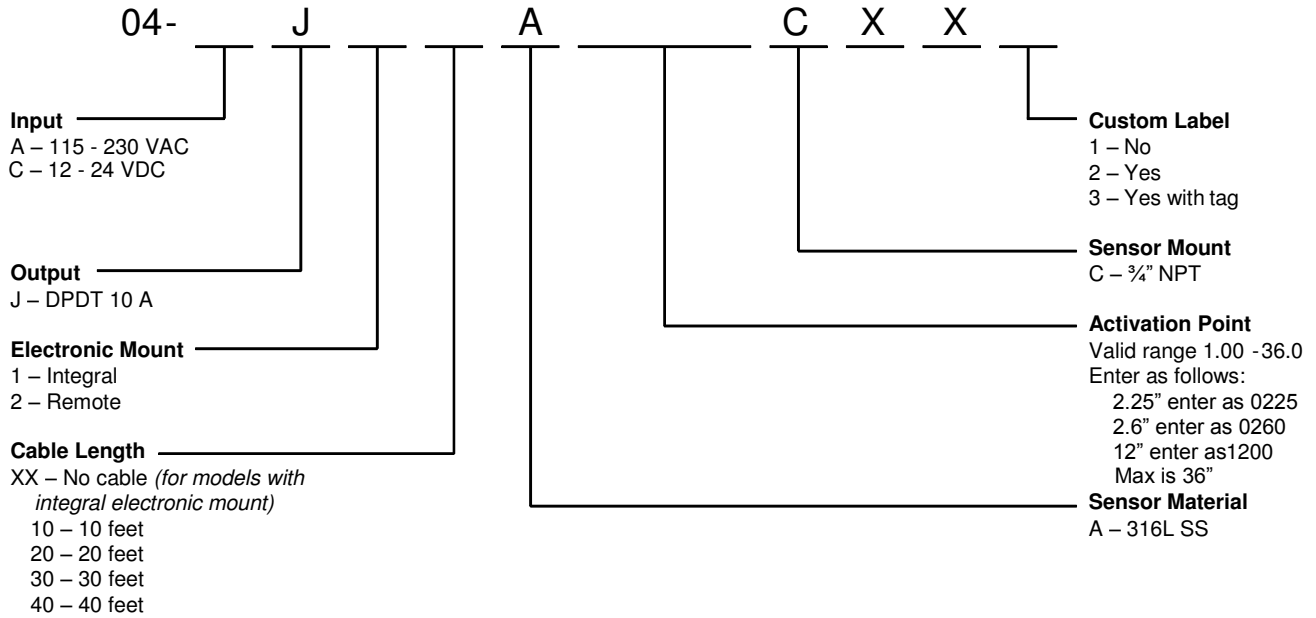


Figure 2: Schematic drawing depicting the LL-101 series elements used in high and low level alarm applications.

ORDERING INFORMATION



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