

LL-101 Series



- 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

DESCRIPTION

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

APPLICATIONS

- Food processing
- Chemical
- Petrochemical
- Cryogenic
- Pharmaceutical

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PERFORMANCE SPECIFICATIONS

Parameter	Typical Value
Repeatability	2 mm typical
Delay	0.5 seconds (standard)
Input Power	115 V or 230 V 50/60 Hz AC (standard); 12 or 24 VDC (optional)
Output	10 A DPDT relay
Housing	NEMA 4/NEMA 7 watertight, explosion proof enclosure. Cast Aluminum Class 1, Group C&D, Class II, Group E, F, & G; and Class III, Division 1 & 2
Mounting	3/4" NPT standard

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]

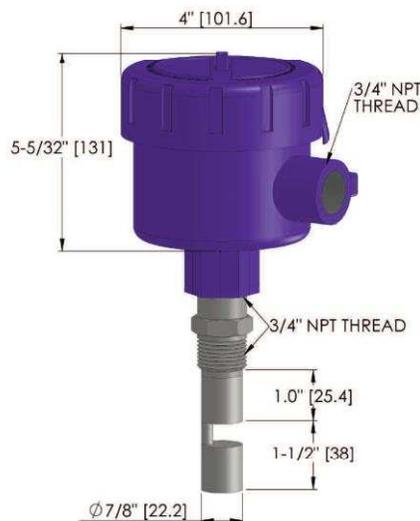
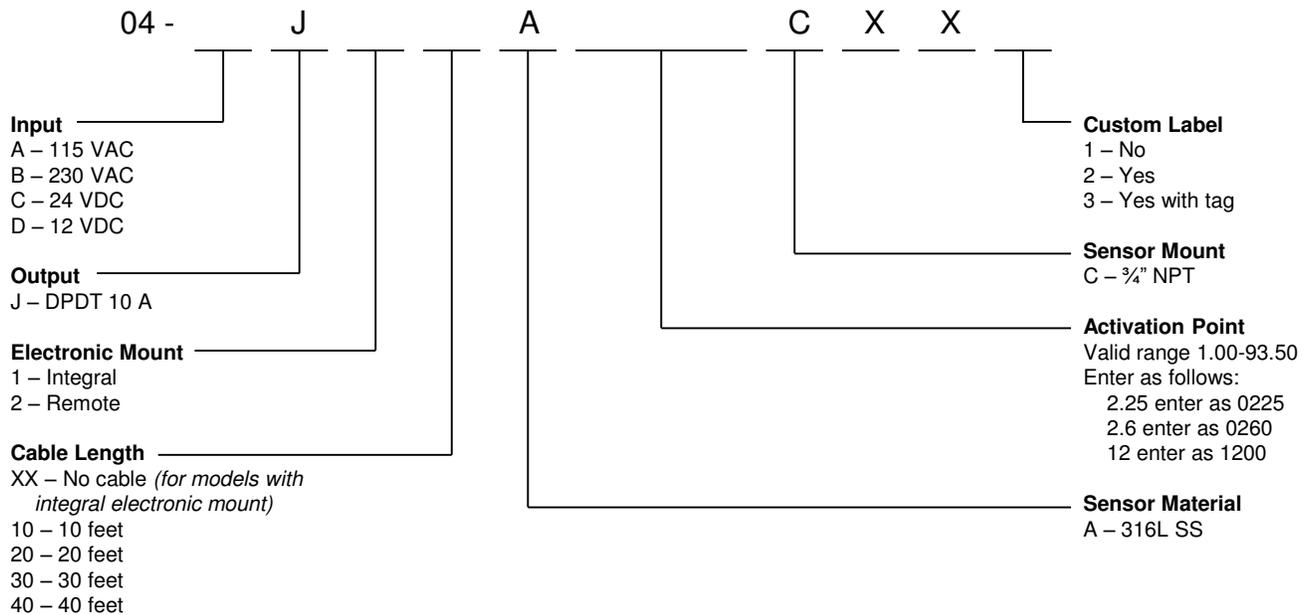


Figure 1: LL-101 series elements

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 a control output. The electronics may be set to provide the control output to an alarm, pump, or other device on either a dry or wet condition. High level failsafe operation is available.

ORDERING INFORMATION



TECHNICAL CONTACT INFORMATION

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