



CE

✓RoHS

- 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-104 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-104 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

LL-104 Series

PERFORMANCE SPECIFICATIONS

Parameter	Typical Value
Repeatability	2 mm typical
Delay	0.5 seconds (standard)
Input Power	9 to 30 VDC
Outputs	Low level failsafe: 4 ± 1 ma dry, 20 ± 1 ma wet, high level failsafe: 20 ± 1 ma dry, 4 ± 1 ma wet
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

Parameter	Typical Value
Mounting	3/4" NPT standard
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]

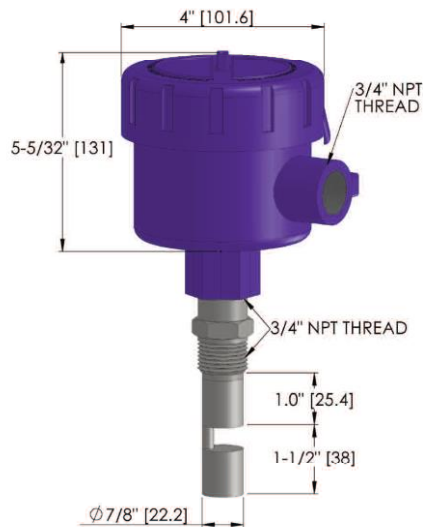


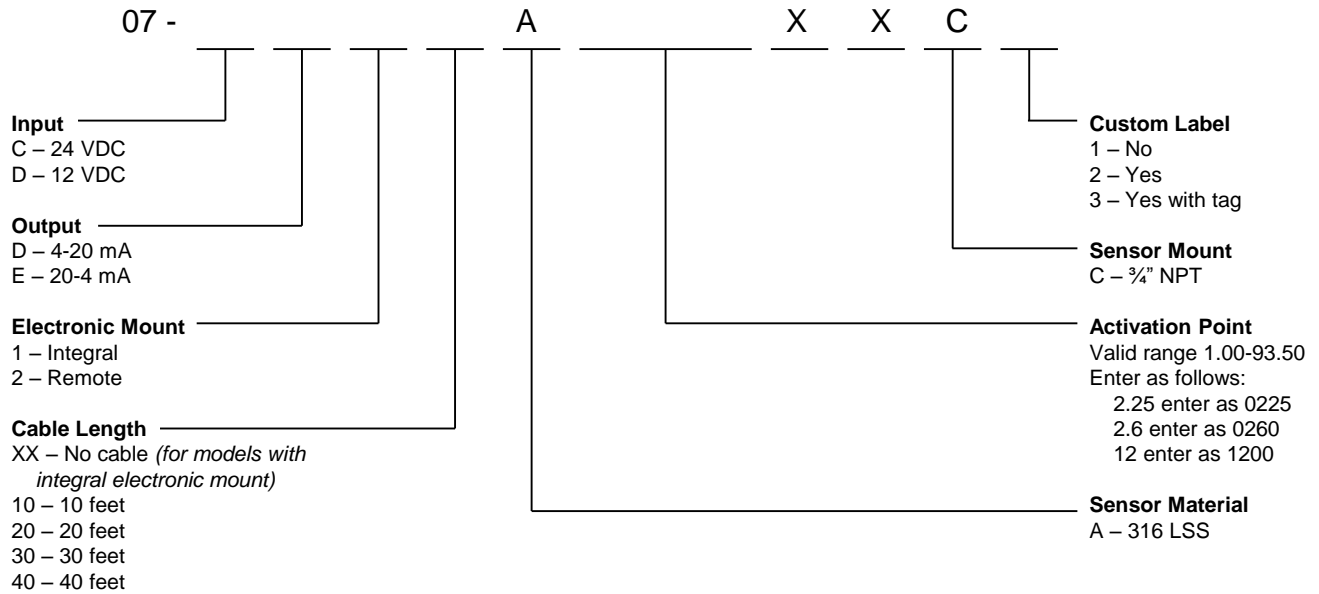
Figure 1: LL-104 series elements

OPERATION

The Model LL-104 uses an ultrasonic wave propagation sensor, which 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, and provides a 4 ma output signal. When liquid is present, the amplitude of the ultrasonic signal increases. This signal is converted by the electronics to a 20 ma output signal. High and low level failsafe operation is factory selectable.

LL-104 Series

ORDERING INFORMATION



联系方式



深圳市亿为测控电子有限公司
Shenzhen Bill-Well Measurement & Control Electronics Co., Ltd.

广东省深圳市南山区创业路怡海广场东座2407 邮编：518000

电话：+86 755 2641 9890 传真：+86 755 2641 9680

电子邮箱：sales@bill-well.com