

Product CRN LR20-0310-30 CE Shown

Application

The general purpose 26 GHz. pulse radar level transmitter provides continuous level measurement up to 98.4' (30m) with a 4-20 mA signal output, and is configured via its integral push button display module. The non-contact liquid level sensor is intended for chemical storage or process applications in above or below grade tanks of any material. Select this sensor for challenging application conditions with corrosive media, light surface foam or agitation, higher temperature or pressure, condensation or vapor, and installation in a flange fitting. Offered in two antenna sizes, select the appropriate size based upon the desired beam angle, available mounting port size and process condition. The longer the antenna, the narrower the beam width and stronger the RF signal output for more challenging processes.

Features

- 316 L antenna with PTFE inner shield for corrosive media
- Simple configuration via integral push button display module
- 26 GHz. pulse radar is unaffected by vapor or condensation
- ✓ 12" (30cm) dead band enables utilization of the entire tank
- ✓ LCD displays level in feet or meters with percent of span bar
- Optional display mode indicates the echo signal return curve
- Auto-temperature compensation for accurate measurement
- Fail-safe diagnostics with selectable signal fail-safe outputs
- Recognition, storage and rejection of false echo signal returns
- Rugged IP67 aluminum enclosure with polycarbonate window

Success

Hydrochloric acid is an inorganic acid that's widely used in industrial and commercial applications. Both highly corrosive and vaporous, it's difficult to measure. Here, a LR20 is flange mounted on a 18' HCL storage tank at a steel fabrication company. Its 26 GHz. pulse radar measurement is unaffected by the extreme vapor, and the antenna's PTFE inner shield, provides reliable corrosion resistance.



EchoPulse® LR20 Pulse Radar Level Transmitter



Specifications

Configuration:

Range: 12" to 65.6' (30cm to 20m)

Frequency: 26 GHz.

Accuracy: ± 3mm

Dead band: 12" (30cm)

Beam angle: - 30: 12°

- 40: 8°

Push button

Memory: Non-volatile
Display type: LCD, dot matrix
Display units: Feet and meters
Display bar: Percent of span
Display graph: Echo signal curve

Supply voltage: 16-26 VDC Max. consumption: 22.5 mA

Signal output: 4-20 mA, two-wire
Signal invert: 4-20 mA, 20-4 mA
Signal fail-safe: 3.9 mA, 20.5 mA, 22 mA

Process temp.: F: -40° to 302°

C: -40° to 150°

Temp. comp.: Automatic
Storage temp.: F: -40° to 176°

C: -40° to 80°

Pressure: -14.5 to 72 psi (-1 to 5 bar)

Enclosure rating: IP67

Encl. material: Aluminum w/silicone gasket

Encl. window mat.: Polycarbonate

Conduit entrance: (1) 1/2" NPT connector

(1) M20 x 1.5 plug

Antenna material: 316 L w/PTFE inner shield

Process mount: - 30: 3" flange (ANSI)

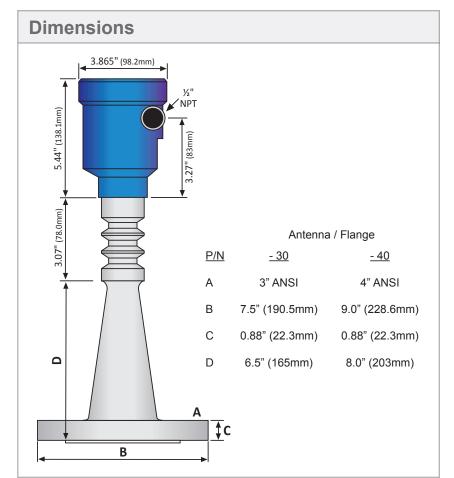
- 40: 4" flange (ANSI)

Classification: General purpose

Certification: cTUVus

FCC

Compliance: CE, CRN, RoHS





Ordering

LR20-0310- 0 (1)

Flange size (1) = 3 3" ANSI

4 4" ANSI



Notes

 To select a radar sensor for distributor purchase, please go to www.flowline.com/LAQ and submit a level application questionnaire for review. You will receive a suggested part number and comments based on your requirements.