

Product



FC

CRN



LR15-0010-20
Shown

CE



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 petroleum, water, wastewater and diluted chemical storage or process applications in above or below grade tanks of any material. Select this sensor for challenging application conditions with low or non-corrosive media, light surface foam or agitation, higher temperature or pressure, condensation or vapor, and installation in a tank adapter, flange fitting or metal stand-pipe. Offered in three 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

- ✓ Rugged 316 L stainless steel antenna and process mount
- ✓ 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

There are 612k restaurants in the US that generate waste vegetable oil. Viscous with floating particulate and animal fat, waste oil is difficult to measure. Rendering companies collect, process and sell waste oil to secondary markets. Here, a LR15 is flange mounted on a 23' storage tank at an oil rendering plant. Its 26 GHz. pulse radar measurement is unaffected by the liquid condition.



Specifications

Range:	12" to 98.4' (30cm to 30m)
Frequency:	26 GHz.
Accuracy:	± 3mm
Dead band:	12" (30cm)
Beam angle:	- 20: 18° - 30: 12° - 40: 8°
Configuration:	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: -76° to 302° C: -60° to 150°
Temp. comp.:	Automatic
Storage temp.:	F: -40° to 176° C: -40° to 80°
Pressure:	-14.5 to 150 psi (-1 to 10 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
Process mount:	1 1/2" NPT
Classification:	General purpose
Certification:	cTUVus FCC
Compliance:	CE, CRN, RoHS

Fittings

Reducer Bushings (NPT)

LM53-2S10 LM53-2800



LM53-2400	2" x 1.5", PVC, S40
LM53-2800	2" x 1.5", PVC, S80
LM53-3800	3" x 1.5", PVC, S80
LM53-2S10	2" x 1.5", 316

ANSI Flanges (#150)



LM53-4S50

LM53-3S50	3" w/1.5" NPT, 316
LM53-4S50	4" w/1.5" NPT, 316
LM53-6S50	6" w/1.5" NPT, 316

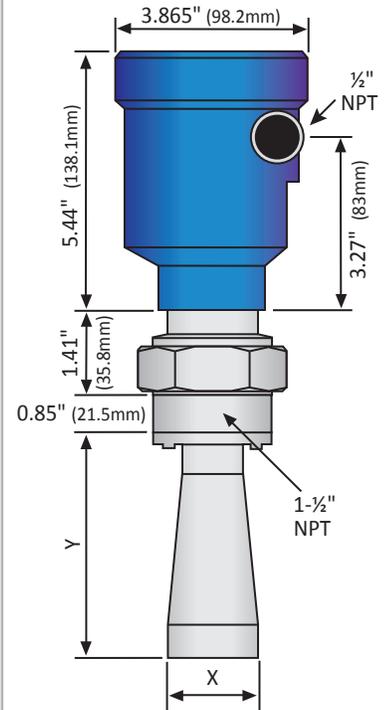
ANSI Flanges (#150)



LM53-3850

LM53-3850	3" w/1.5" NPT, CPVC
LM53-4850	4" w/1.5" NPT, CPVC
LM53-6850	6" w/1.5" NPT, CPVC

Dimensions



Antenna

P/N	X	Y
- 20	2" (48mm)	5.51" (140mm)
- 30	3" (78mm)	8.94" (227mm)
- 40	4" (98mm)	11.34" (288mm)



Echo Signal Return Curve Shown

Ordering

LR15-0010- 0^{(1) (2)}

Antenna size (1) (2)

2	2" (48mm) horn
3	3" (78mm) horn
4	4" (98mm) horn



LR15-0010-30 Shown

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.
- To install the radar sensor with a flange or reducer bushing, order the fitting separately, and follow the antenna preparation instructions in the manual.