

Product



FC



CE



Application

The general purpose 26 GHz. pulse radar level transmitter provides continuous level measurement up to 32.8' (10m) 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 or water storage applications in above grade metal or reinforced concrete tanks or below grade tanks of any material. Select this sensor for easy application conditions with corrosive media, light agitation, condensation or vapor, and installation in a low-profile tank adapter or flange fitting.

Features

- ✓ PTFE encapsulated antenna and mount 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

The US produces 40 million tons of sulfuric acid per year that is widely used in fertilizer manufacturing, wastewater treatment, oil refining, lead-acid battery and cleaning product applications. Here, a LR10 radar sensor is installed on a 22' sulfuric acid bulk storage tank at a chemical distribution company. With a concentration of 62%, sulfuric acid is highly vaporous and corrosive. The LR10 sensor is an excellent choice for this application, as its 26 GHz. pulse radar measurement is unaffected by vapor, and both the antenna and process mount are encapsulated in corrosion resistant PTFE for years of reliable service.



Specifications

Range:	12" to 32.8' (30cm to 10m)
Frequency:	26 GHz.
Accuracy:	± 5mm
Dead band:	12" (30cm)
Beam angle:	22°
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: -40° to 266° C: -40° to 130°
Temp. comp.:	Automatic
Storage temp.:	F: -40° to 176° C: -40° to 80°
Pressure:	-14.5 to 43.5 psi (-1 to 3 bar)
Enclosure rating:	IP67
Encl. material:	Aluminum w/silicone gasket, PBT FR neck & wrench flat
Encl. window mat.:	Polycarbonate
Conduit entrance:	(1) 1/2" NPT connector (1) M20 x 1.5 plug
Antenna material:	PTFE
Process mount:	1 1/2" NPT
Classification:	General purpose
Certification:	cTUVus FCC
Compliance:	CE, RoHS

Fittings

Reducer Bushings (NPT)

LM53-2800

LM53-3800



LM53-2400 2" x 1.5", PVC, S40

LM53-2800 2" x 1.5", PVC, S80

LM53-3800 3" x 1.5", PVC, S80

ANSI Flanges (#150)



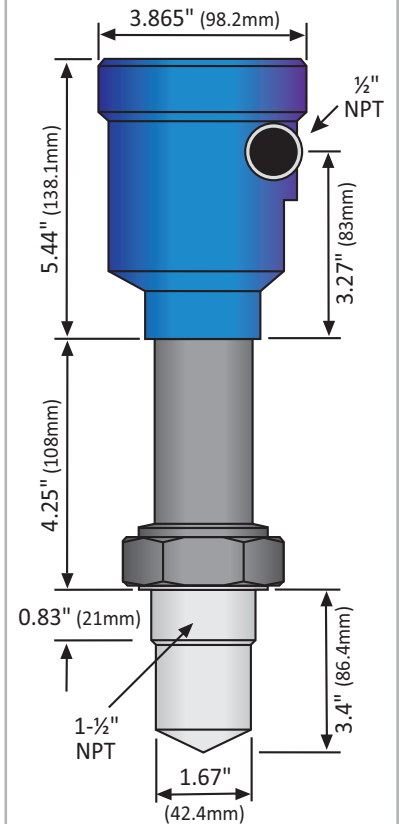
LM53-3850

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



Indicator & Controller

DataLoop™ Indicator



LI25 Series

DataView™ Controller



LI55 Series

Ordering



LR10-0010 (1) (2)

Notes

- 1) 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.
- 2) Install the radar sensor using Flowline installation fittings or equivalents.