

VEGAFLEX 81

TDR Sensor for Continuous Level



OVERVIEW

The VEGAFLEX 81N Guided Wave Radar (TDR) is a microwave sensor used for continuous liquid level and interface measurement. This instrument is currently installed on the LCS, PC Classes of US Navy surface vessels, as well as, several MSC and USCG ships with great success. The sensor delivers precise and reliable measured values even in applications with steam, buildup, foam generation or condensation.

Common applications include: Lube Oil Tanks, Water Tanks and Day Tanks.

FEATURES

- Maintenance free reliable operation
- Unaffected by steam, dust, foam, or changes in density
- Operates independently of noise, pressure, or temperature fluctuations
- Customizable in-tank rods and cable for specific tank and customer requirements

VEGAFLEX 81N SPECIFICATIONS

Technical Data

Measuring Range	- Cable probe up to 75 m (246.1 ft) - Coaxial up to 6 m (19.69 ft)
Measuring Interval	0.35 second
Resolution	1 mm (0.039")
Measuring Accuracy	± 2 mm
Vessel Pressure	150 Psi
Operating Temperature Housing	-40 to +80 °C (-40 to +176 °F)
Operating Temperature Antenna	-40 to +80 °C (-40 to +176 °F)

Physical

Dimensions	Housing: 3.125"W x 3.5"D x 7.75"H Cable Ø 4mm (0.16") Coaxial Ø21.3mm (0.84")
Weight	Sensor: 1.58kg (3.5 lbs) Cable Ø 4mm: - 0.29kg/m (0.65oz/ft) Coaxial Ø21.3mm: 1.12kg/m (2.47 lbs/ft)
Antenna	Coaxial, 74mm (Ø 2 29/32")

Electrical

Supply Voltage	9.6 to 35 VDC
Max Current	21.5 mA
Signal Output	4 to 20 mA/HART

Materials

Wetted Parts	Stainless Steel 316L
Display	LCD w/4-key operation and integrated lightning
Instrument Seal	FKM (SHS FPM 70C3 GLT)
Housing	Plastic single chamber / IP66 / IP67

Approvals

FCC	Part 15, no restrictions - no site license required
Military Approval	ASTM F 2044-00
Shock	Grade A, MIL S-901D
Vibration	MIL-STD-1671-1
EMI	MIL STD 461E