

NRF-1T-Rigid RF Capacitance Tri-Clamp® Level Probe

Product Features

- High quality 1.5" to 3" Tri-Clamp® fitting design
- Continuous loop powered 4-20 mA operation
- Microprocessor Based
- Accuracy 1% of span for constant dielectric of material
- Non-interactive zero and span calibration for easy set-up

The KOBOLD NRF-1T are highly reliable and microprocessor based RF level sensors designed to measure tank levels of conductive and non-conductive liquids in metal tanks. The probe measures the change in capacitance that occurs as the tank level changes and outputs a standard loop-powered 4-20 mA signal. NRF-1T probes use very high frequency and very low amplitude sensing circuitry to greatly minimize the effects of coating on the sensing probe.

The NRF-1T includes a standard 4-20 mA loop powered transmitter housed in a rugged enclosure, a rigid probe and a polished stainless steel Tri-Clamp® fitting. Probe material is SS316, supplied bare or PFA jacketed. Optional, remote mounted DIN Rail transmitter is also available, which can be connected to the level sensor via a 3-conductor cable up to 1000 ft. long. This option provides ease of set-up when access to the probe electrical enclosure is limited. The calibration is accomplished via 4 push buttons, located on the transmitter. The series NRF-1T RF probe is truly designed with tough applications in mind.

Applications

- Food and beverage industry
- Pharmaceutical plants
- Milk and dairy plants



KOBOLD NRF-1T RF Capacitance Tri-Clamp® Level Probe

Specifications

Accuracy : ±1% of span
(constant dielectric)

Repeatability : ±0.1% of span

Electrical Specifications

Input Power : 12–36 VDC
Output : 4–20 mA, 2-wire
Max. Loop Res.: 700 Ohm @ 24 VDC

Calibration : Via 4 push button switches non-interactive settings

Dampening Adjust : 0 - 30 Seconds.

Temperature Range

Process : –100 to 350°F
Ambient : –58 to 140°F
Probe Length : Max. 12 feet

Wetted Materials

Tri-Clamp® : 316 SS
Probe: Fully PFA Teflon® clad

Enclosures : Nylon® NEMA 4 or 316 SS NEMA 4X

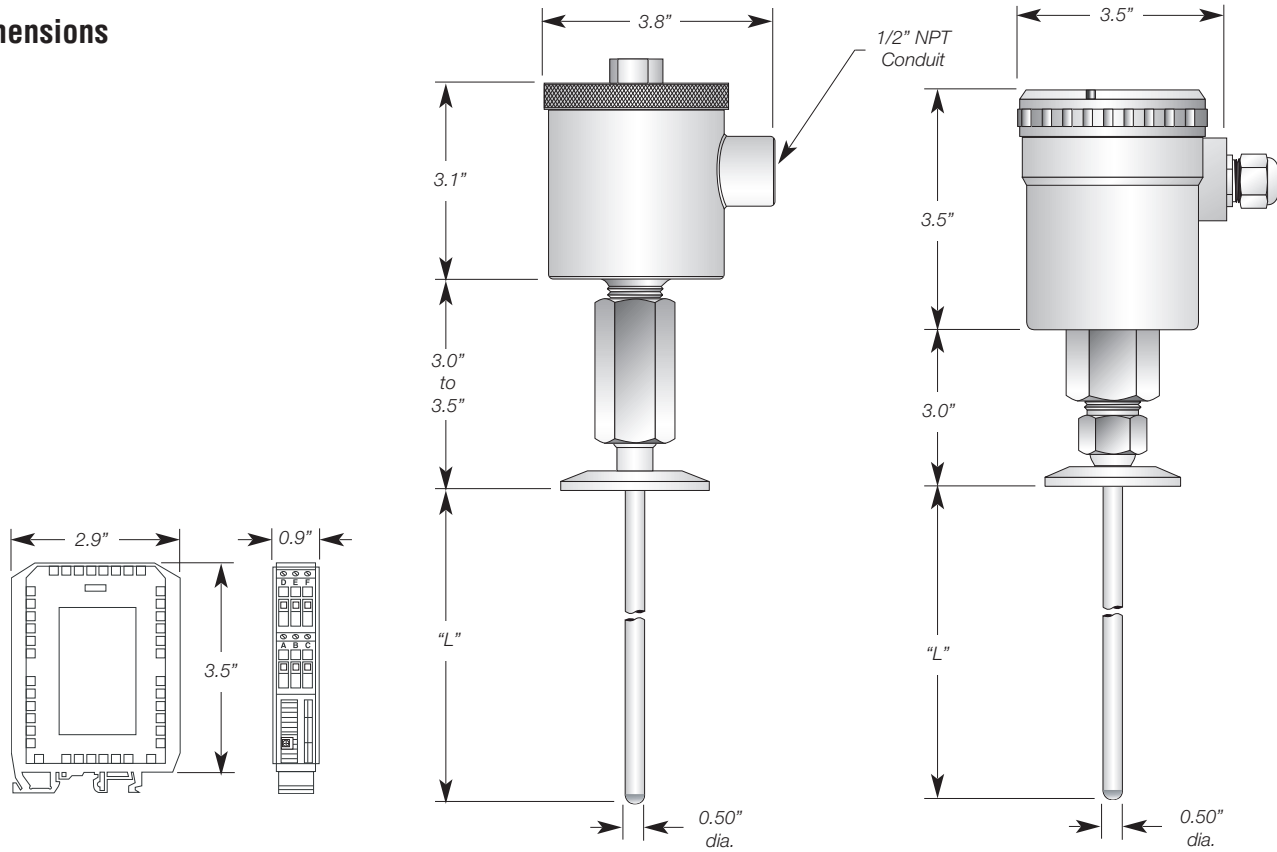
Maximum Pressure

Tri-Clamp® : 500 PSIG @ 70°F
 250 PSIG @ 300°F
 100 PSIG @ 350°F



NRF-1T-Rigid RF Capacitance Tri-Clamp® Level Probe

Dimensions



Din Rail Remote Transmitter

Stainless Steel Housing

Nylon Housing

NRF-1T Ordering Information					
NRF-1T	= Rigid RF Capacitance Tri-Clamp® Level Probe				
NRF-1TR	= w/Remote DIN Rail Module				
	-1	= Nylon® (NEMA 4) Housing			
	-2	= Stainless Steel 316 (NEMA 4X)			
		-3	= 1½" Tri-Clamp® Fitting		
		-4	= 2" Tri-Clamp®		
		-8	= 2½" Tri-Clamp®		
		-9	= 3" Tri-Clamp®		
			-1	= Rigid Probe, PFA Teflon® Clad Standard Probe Style	
			-L	= Probe Length (in inches)	
NRF-1T	-1	-3	-1	060	Sample NRF-1T Part Number