



Technology Solutions

TEK-FLEX 4100C

Programmable Two-Wire TDR Level Transmitter
With Hart & Display



LEVEL



Introduction

The Tek-Flex 4100C Programmable Two-Wire TDR Level Transmitter With Hart & Display measures liquid in environments where there are volatile matter or vapors. The 4100C is able to adapt to environments with complex processes and conditions.

Measuring Principle

High frequency microwave pulses travels along the detecting component (steel rope or rod) and reflects when reaching the product surface. The time from emission to reception is proportional to the distance between the surface and the reference plane on the instrument.



Features

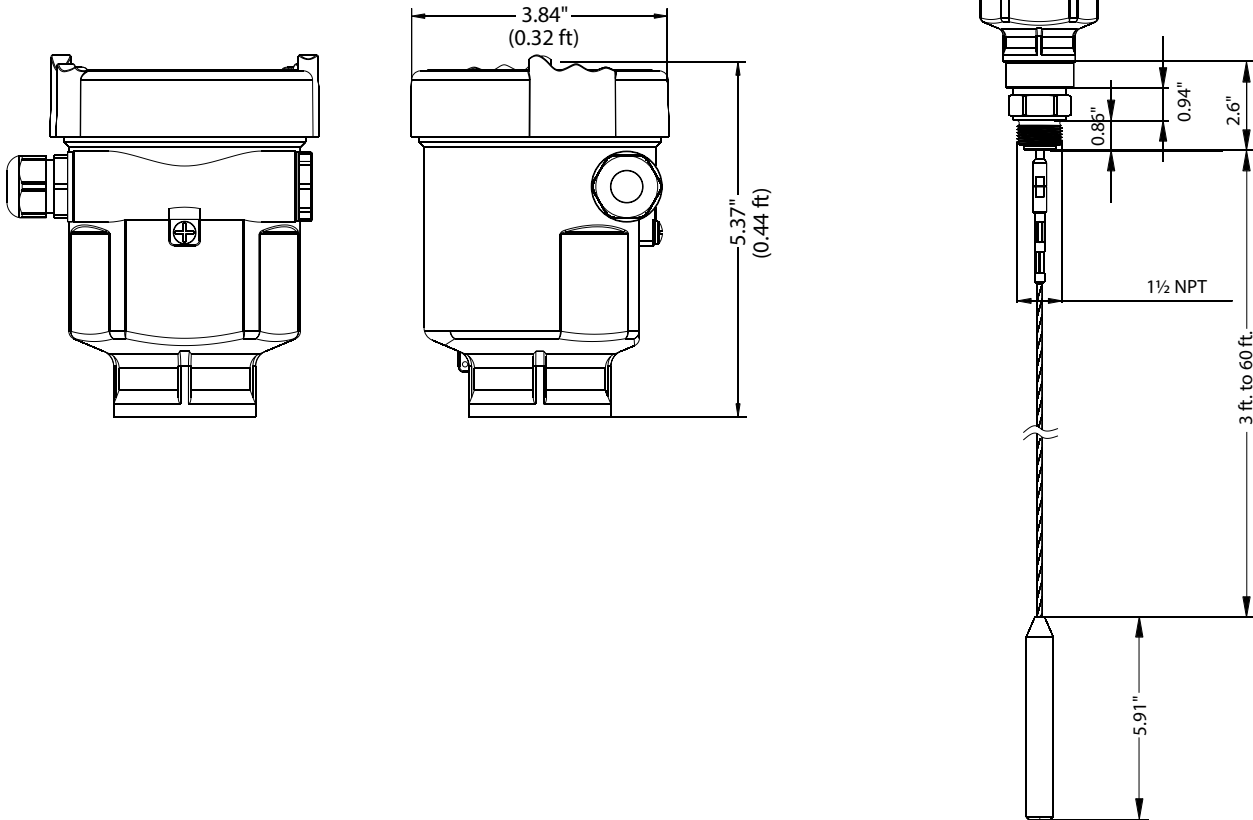
- 2 wire-loop-powered level meter with HART
- Measuring range up to 60'
- Local display and push button programming
- Probes and process connections are made of stainless steel
- For process temperature up to 302°F and pressure up to 580 psig
- Not affected foam, vapor or mist

Applications

- Irrigation
- Water Tanks
- Utilities
- Chemical Measurement
- Mining

Dimension Drawing

Tek-Flex 4100C Two Wire TDR Level Transmitter with HART

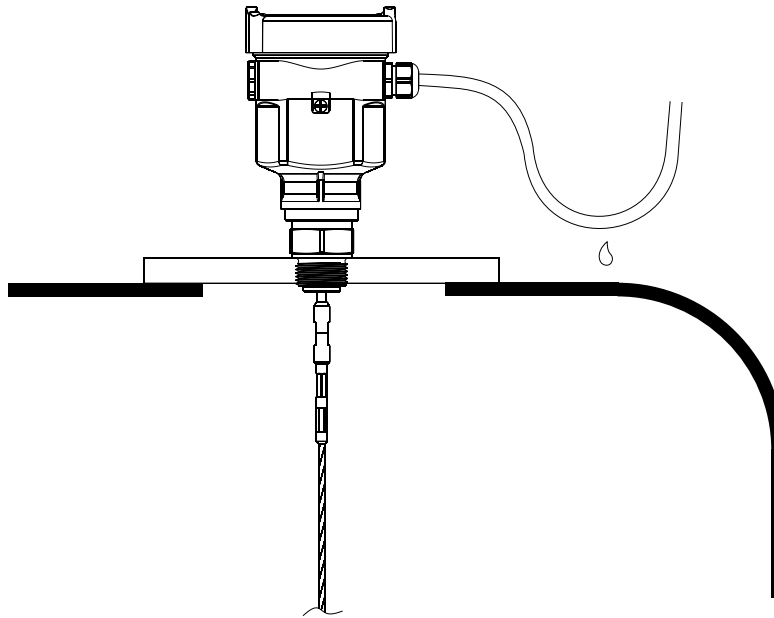


Specifications

Application	Compatible Liquids and Solids
Wetted Material	316 SS and Kalrez
Measuring Principle	TDR (Time Domain Reflectometry)
Ranges	Up to 60 ft
Accuracy	± 0.4"
Process Pressure	-14.5 to 580 psi
Process Temperature	-40 to 302°F (-40 to 150°C)
Process Connection	1.5" Male NPT
Protection Category	NEMA 4X, IP 66
Housing	Epoxy Coated Aluminum
Cable Entry	Two 1/2 NPT
Power Supply	16 to 36 VDC
Power Consumption	22.5 mA
Damping	0 to 40 seconds
Output Signal	4 to 20 mA with HART (2 wire)
Minimum Dielectric Constant	0.3
User Interface Options	LCD Display

Installation

When mounting outdoors, humid indoors or on cooling/heating vessels, seal rings can become damp. In order to avoid dampness, seal rings used on cables should be screwed tight and the cable must be positioned downward outside the cable entry, as outlined on the diagram below.



Model Chart

Example	Tek-Flex 4100C	P	A	NP	B	B	A	N	A	XXX	Tek-Flex 4100C-P-A-NP-B-B-A-N-A-XXX
Series	Tek-Flex 4100C										2 Wire TDR Level Transmitter with HART
Enclosure		P									Standard NEMA 4X
Probe Type			A B								316SS 316L SS Rod (10' Max)
Process Connection				NP							1½" NPT
Seal					B						Kalrez FFKM (-40 to 302°F)
Output						B					4-20mA with HART (2-wire)
Housing							A				Aluminum
Electrical Connection								N			Two ½" NPT
Display									A		LCD
Cabel Length										XXX	Probe Length in inches

Customer Service & Support



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