

Model 7100V AST Flex Probe

(Available in lengths from 12 to 70 feet / 3.7 to 21 meters)

Monitoring of products in above ground storage tanks (ASTs) can be dangerous at times and inaccurate at best. OPW's 7100V Series flexible probe utilizes magnetostrictive technology to deliver industry-leading liquid-level monitoring of AST product and water levels for all common fuel types.

The 7100V Series flexible probe allows greater precision and reliability in measuring AST product levels. This probe is ideal for liquid-level monitoring of product and water levels in a wide variety of liquids in AST's, including gasoline, diesel, ethanol, biodiesel and lubricants.

The 7100V Series can be outfitted with a low-level, inventory-only float kit, giving the operator inventory visibility to the bottom of the tank, as well as water levels in a wide variety of liquids in above ground storage tanks, including gasoline, diesel, ethanol, biodiesel, lubricants and some chemicals.

Model 7100V AST Flex Probe Features

Part of the
Site Sentinel®
family of products



Easy Integration

Probe electronics are integrated into the sensing tube, which eliminates the bulky enclosure at the top of the probe and offers installation flexibility



Easy Installation

The PVDF probe is coiled with a threaded fitting on the end of the probe, creating an AST measurement solution that is nearly "plug and play"



Accurate

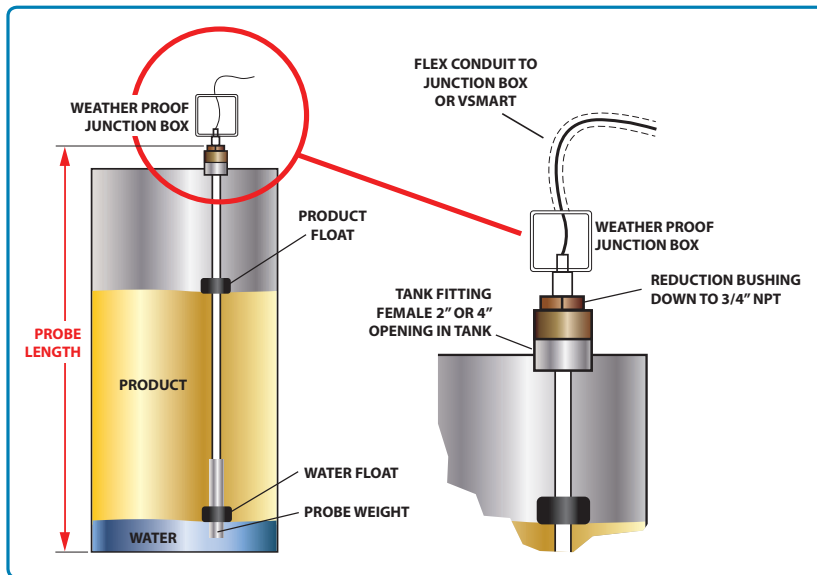
Precision technology enables the measurement of product level changes to a resolution of 0.01 inch (0.254 mm).

Note: The recommended fittings are not included in the AST Flex Probe, but can easily be purchased through a local supplier.

Listings and Certifications



Flex Probe Installation Using Pipe Fittings



(If optional water float is needed, a minimum 4-inch (10 cm) opening is required in the tank.)

Flex Probe Catalog Number

Example: 7100V-F1T5-193

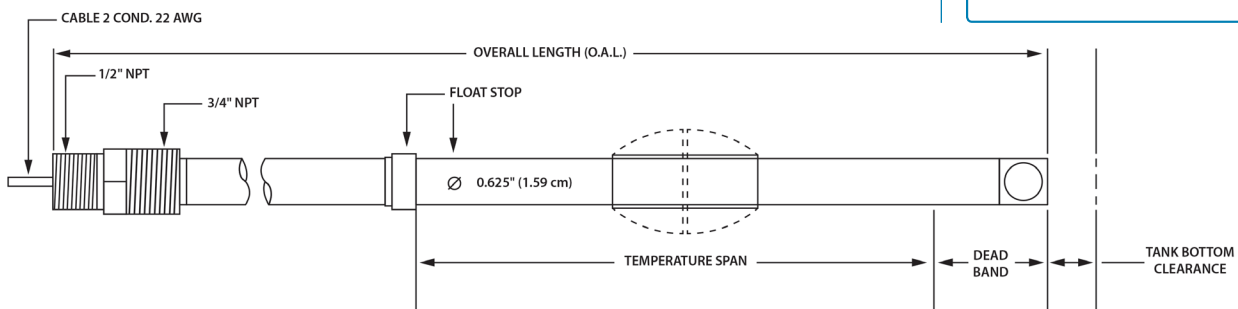
Probe Float Kits

Model #	# of Floats	# of Thermistors	Overall Length
7100V	F1	T1	193
	F2	T5	–

Flex Probe Lengths

Overall Length	Dead Band	Tank Bottom Clearance
51" – 144" (130 - 366 cm)	6.00" (15.2 cm)	1.00" (2.5 cm)
145" – 288" (368 - 732 cm)	8.00" (20.3 cm)	2.00" (5.1 cm)
289" – 432" (734 - 1097 cm)	12.00" (30.5 cm)	3.00" (7.6 cm)
433" – 600" (1100 - 1524 cm)	14.00" (35.6 cm)	4.00" (10.2 cm)
601" – 720" (1527 – 1778 cm)	17.00" (43.2 cm)	5.00" (12.7 cm)
721" – 840" (1831 – 21,134 cm)	19.00" (48.3 cm)	6.00" (15.2 cm)

7100V-Style Drawing



Specifications

Input Voltage: 23–28 VDC

Enclosure Material: PVDF

Resolution: 0.01-inch Inventory Mode

Linearity: +/- 0.01% of Full Scale, +/- 0.01 inch (0.254 mm), whichever is greater

Repeatability: +/- 0.001% of Full Scale, +/- 0.00025 inch (0.0064 mm), whichever is greater

Temperature Accuracy: Absolute +/- 2°F (+/- 1.11°C)

Temperature Measurement Resolution: +/- 0.01°F (0.02°C)

Temperature Sensing Range: -40°F to 150°F (-40°C to 66°C)

Operating Temperature Range: -40°F to 158°F (-40°C to 70°C)

Water Float Lift-Off: 2.5 inches (6.35 cm) at 70°F (21°C)

Distance to VSmart Module: 1,000 feet (305 m) Belden 88760; 500 feet (152 m) maximum Belden 88761

Environment: NEMA 4

Listings: UL, Intrinsically Safe, ATEX and IECEx approval

Maximum Tank Capacity: 99,999,999 gallons (approximately 378,541,175 liters)

VSmart 24-Volt Barrier Wiring Diagram

