

# Model 7100V AST Flex Probe

## Accurate Inventory Measurement for ASTs

OPW's Model 7100V AST Flex Probe leverages field-proven magnetostrictive technology to deliver precise and reliable above ground storage tank product level measurements.



### The 7100V AST Flex Probe

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.

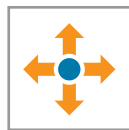
### Applications

- ◆ Available in lengths from 12 to 70 feet (3.7 to 21 meters), the 7100V accurately measures product levels in large ASTs, including bulk-fueling sites
- ◆ With the ability to connect to gauges from up to 300 meters away, the flex probe is ideal for any size site
- ◆ Compatible with gasoline, diesel, ethanol, biodiesel and lubricants, the 7100V fits seamlessly in almost any AST application



#### ACCURATE

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



#### INTEGRATED

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"



#### RESPONSIBLE

The incorporation of a 7100V probe into AST inventory management practices enhances site safety by eliminating the need for manual tank sticking

**Contact your OPW representative to learn about the highly accurate Model 7100V AST Flex Probe today!**

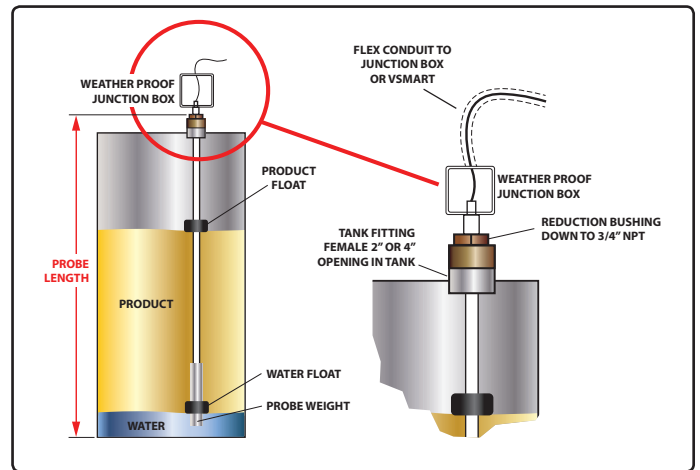
Phone: (708) 485-4200 ◆ Fax: (708) 485-4630 ◆ 6900 Santa Fe Drive ◆ Hodgkins, Illinois USA 60525 ◆ [www.opwglobal.com](http://www.opwglobal.com)

# Model 7100V AST Flex Probe

## 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)

## Flex Probe Installation Using Pipe Fittings



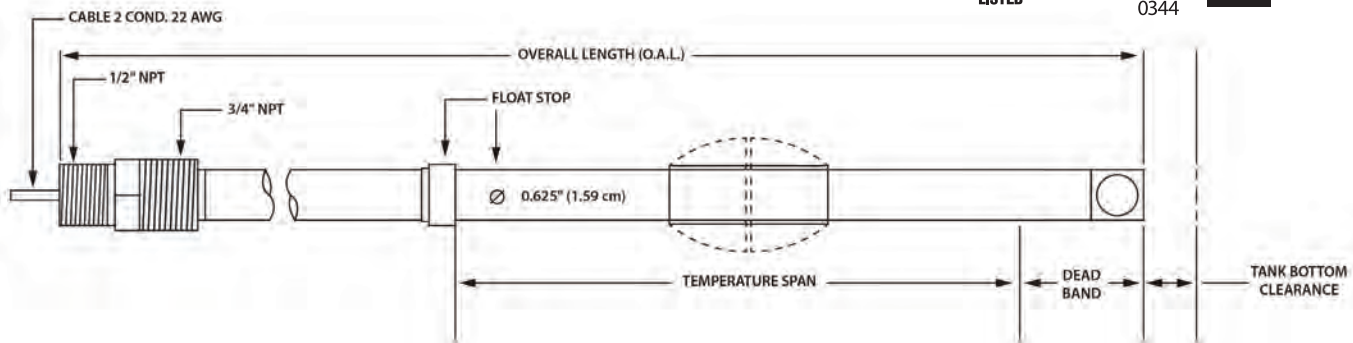
(If optional water float is needed, a minimum 4-inch (10 cm) opening is required in the tank.)

## Flex Probe Catalog Number

Example: 7100V-F1T5-193

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

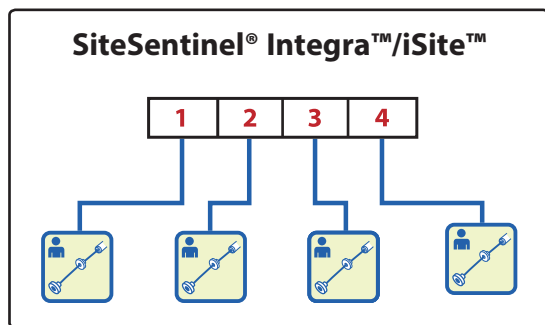
## 7100V-Style Drawing



## Certifications:



## VSmart 24-Volt Barrier Wiring Diagram



## 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)

IMPORTANT ORDERING NOTE: OPW will deduct the tank bottom clearance from the overall length of the probe that is ordered. For example, customers who order a 300-inch 7100V AST Flex Probe will receive a 297-inch probe.