

Series 7100

Leak Detect Stik™

Liquid Level Sensor

Proven Magnetostrictive Sensing Performance in a Revolutionary New Package!

The Series 7100 Stik Level Sensor takes field proven Patriot magnetostrictive sensing technology and packages it in a revolutionary new way for greater reliability, and for easy installation and mounting. It is ideal for liquid level monitoring of product level, interface level and leak detection in a wide variety of liquid media in both above ground and below ground storage tanks.

All the Electronics are Down the Tube

All sensor electronics are SMT components integrated into the 5/8" diameter sensing tube. Sensors are available in stainless steel or flexible Kynar® housings. The stainless steel version has either a mini connector or a right angle conduit fitting. The flexible Kynar version is available with a threaded fitting and a 2' cable (see engineering drawing on reverse side for connector details).

This breakthrough in package design eliminates the bulky electronics enclosure at the top of the sensor and offers you greater options for insertion and mounting in tanks and vessels. In addition, standard float packages are available, including our new FlipFloat™ which allows sensor insertion into tank openings as small as two inches.

The 316 stainless steel version is totally welded construction, and has a cathodic protection boot for use in a wide variety of applications. The Flex-Stik™ version employs a flexible Kynar housing and provides cost effective level monitoring in deep tanks.

The all SMT electronics have PPM (Pulse Position Modulated) outputs for product and interface level and for temperature measurement, which are all superimposed on the 2 wire power line. All units are UL IS Entity Listed.

The Series 7100 Liquid Level Sensor's inherently lower cost design provides more options, offers savings on installation and mounting and has the ultimate in "designed-in" reliability.



Reference Specifications	
Input Voltage	23 – 28 Vdc
Sensor Length	Stainless Steel up to 24' Flexible Kynar up to 50'
Enclosure Rating	Material 316 SS or Kynar IP68
Resolution	0.010" Inventory Mode 0.001" Leak Detection Mode
Linearity	+/- 0.01% of Full Scale +/- 0.010", Whichever is Greater
Repeatability	+/- 0.001% of Full Scale +/- 0.00025", Whichever is Greater
Temperature Measurement	Up to five along the sensor span
Temperature Accuracy, Absolute	+/- 2°F
Temperature Measurement, Resolution	+/- 0.01°F
Temperature Sensing Range	-40°F to +150°F
Operating Temperature Range	-40°F to +160°F
Sensor Output	Pulse Position Modulated Digital
Distance to Monitor	Over 2000' using twisted pair wire
Environment	Nema 4
Floats (not included)	Specs based on 4" standard floats
Listings	UL, Intrinsically Safe
Specifications may change without notice. Patent Pending	

Series 7100 Liquid Level Sensor Part Numbers

7100 — M — 048 — R5 — X — F — LXXX

Liquid Level Sensor PPM Output	Span (Active Length) Enter span required in one inch increments	Tank Mounting Method X None	Overall Length (optional) Insert overall length in inches in place of XXX. Data below includes nominal null and dead zones. Longer custom lengths are available in 1' increments.
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Type	Connector Style
M	Stainless steel tube w/mini-connector
R	Stainless Steel tube with right angle NPT fitting & 2' leads
K	Flexible Kynar® tube with male NPT Kynar conduit fitting and 2' potted Teflon® cable

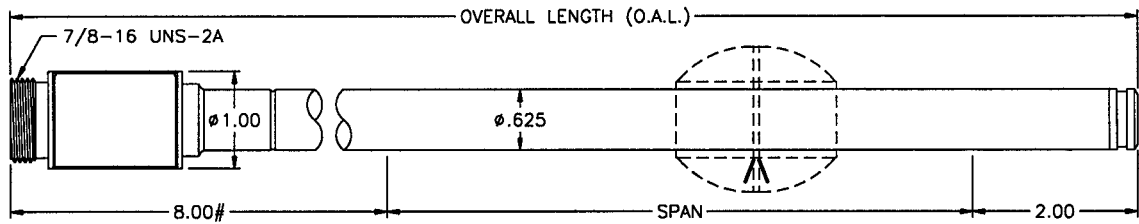
	Number of Thermistors
R1	Single temperature zone
R5	Five temperature zones
Note: If one thermister is ordered, it will be placed 18" from the bottom of the sensor.	

	Number of Floats Sensed
F1	One float
F2	Two floats: 1 product, 1 interface

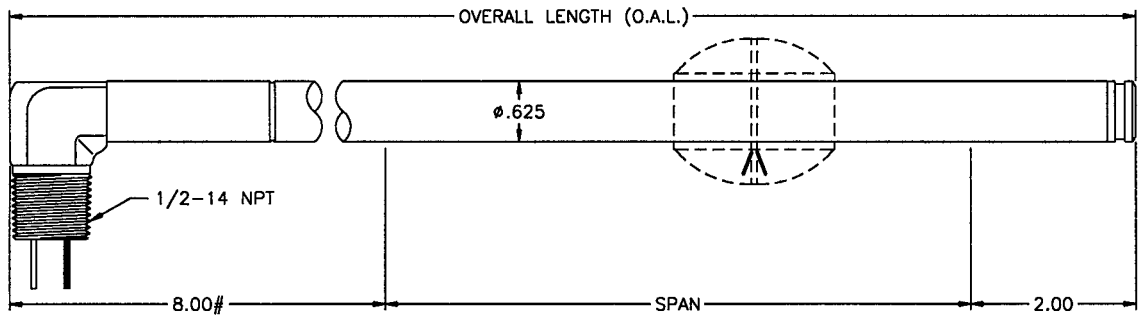
Kynar is a trademark of EFL ATOCHEM NA • Teflon is a trademark of Dupont

Engineering Data

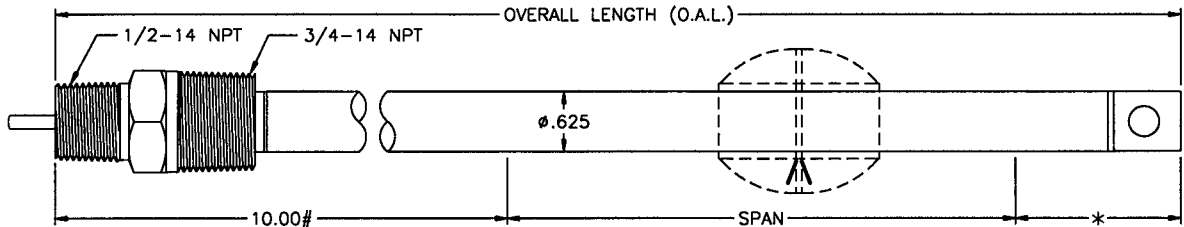
M Style



R Style



K Style



Span (in)	55 – 288	289 – 480	481 – 600
*Dimension (in)	6.00	8.00	9.00