



7250X Digital Stik Sensor Data Sheet

Proven Magnetostrictive Sensing Performance in a Revolutionary New Package

The 7250X Digital Stik takes field proven magnetostrictive sensing technology and packages it in a revolutionary new way for greater reliability and easier installation and mounting. It is ideal for liquid level monitoring, interface level and leak detection in a variety of liquid media in both above ground and underground storage tanks.

The 7250X Digital Stik combines low power consumption with a patented high resolution design. It requires only 5 volts DC making it ideal for mobile, battery operated and wireless applications.

The system has been designed to meet EPA Leak Detection and API Inventory Monitoring requirements and has been approved for use in hazardous environments.

The sensor's electronics are SMT components and integrated into a 5/8" diameter sensing tube. This breakthrough design eliminates the bulky electronics enclosure at the top of the sensor and offers greater options for insertion and mounting.

The probe is constructed of 316 Stainless Steel and comes with a variety of connectors, including a mini connector for quick connect applications, a single 3/4" NPT that can be used with a compression fitting, a double 3/4" NPT for mounting with a flange or bushing, and a 1/2" right angle for use in low overhead applications.

The 7250 communicates through a single signal. The data is transmitted via asynchronous serial communications and is offered with serial protocol options including an ASCII format. There are other options available to OEMs for use in developing a communications interface with the probe. The patented design

allows for very high resolution on a low power budget. The resolution of the 7250X is 0.0001" with a linearity of 0.01% (See specifications).

Factory Mutual (FM) certified that the 7250X Digital Stik is Intrinsically Safe for use in ethylene and propane (petroleum) applications (See specifications). The 7250X has been approved to the following standards:

CSA C22.2 Nos. 25,142,157 and 213
 FM 3600, 3610, 3611 and 3810
 Genelec EN 50014, 50020 and 50284

The 7250X has an inherently lower cost design which results in savings. It provides the same performance and reliability as sensors that consume more power. Combining low power requirements with high resolution provides the ultimate performance and reliability.

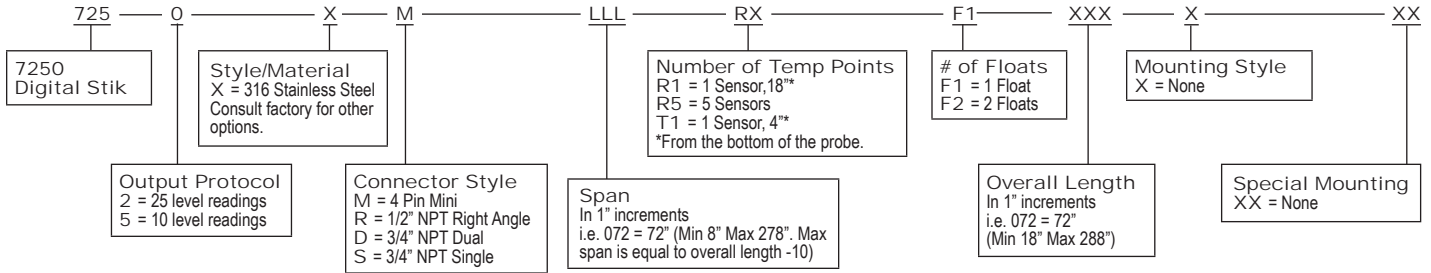


Specifications			
Power Supply Voltage	+5 VDC ± 10% typical (+3.7 VDC min.)	Probe Length Stainless Steel R Style	21" to 288"
Current (at +5 VDC)	10mA max. (8mA typical) plus 1.5mA max. (1mA typical) per temperature sensor	Stainless Steel D, S, M Style (Probes available in 1" increments)	20" to 288" Consult Factory for longer lengths
Operating Temperature Sensing Area	-40°C to 100°C (Non Hazardous Location) -40°C to 70°C (Hazardous Location)	Hazardous Areas Approvals	
Electronics Area	-40°C to 70°C	FM -40° ≤ Tamb ≤ 70° C Class I, II, III, Div. 1 Groups C, D, E, F, G, T4 Class I, Div. 2 Groups A, B, C, D, T4 Class I, Zone 0, AEx ia IIB T4	
Pressure Rating	Steel Probe: 1000 psi max. Float: Dependent. Call Factory.	ATEX Ex ia IIB T4 NEMKO 05 ATEX 1219X CE 0344 Ex II 1G	
Resolution	0.0001" (Protocol Dependent)		
Repeatability	Equal to Resolution		
Linearity	Probes up to 288": ± 0.01% of span or ± 0.015", whichever is greater.	Sanitary Approvals	
Hysteresis	Probes up to 288": ± 0.002% of span or ± 0.005", whichever is greater.		
Null Zone	R Style: 9" D, S and M Style: 8"		
Dead Band	2"		
Intrinsically Safe Barrier	See Installation Drawing E0241200. Consult Factory.		
Enclosure Material Rating	316 Stainless Steel IP68		

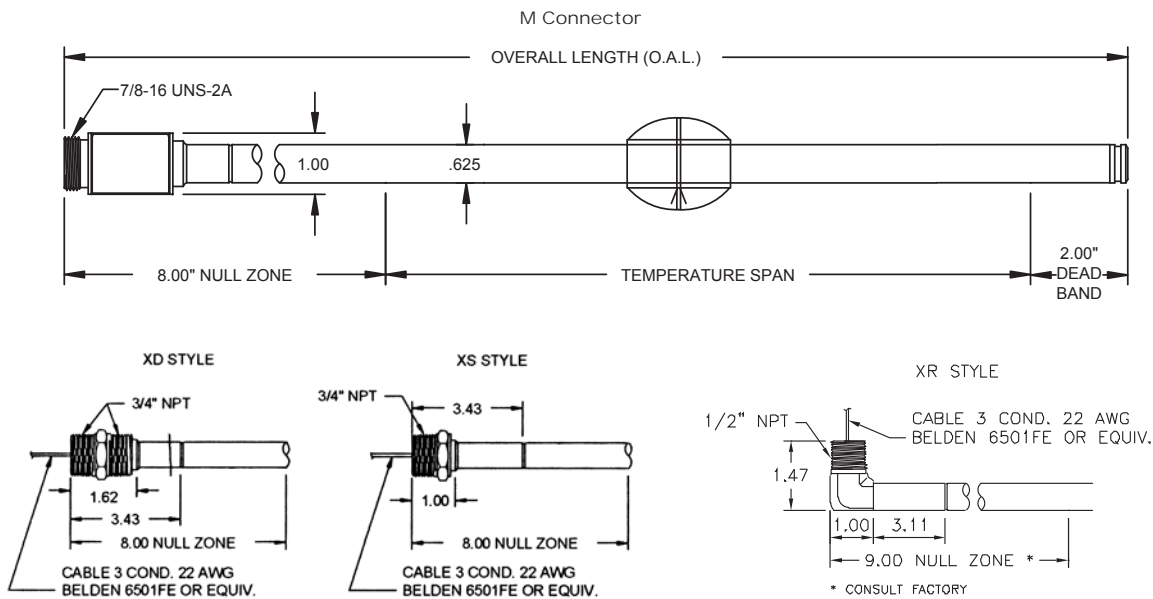
Specifications are subject to change without notice. Patented.

7250X Digital Stik Stainless Steel Sensor

Part Numbering



Dimension Drawing



Accessories

Item	Part Number
Float Kit, 316 SS, 2.05" Diameter w/ E Clip and Spacer 0.54s.g.	SD0515000
Float Kit, Nitrophyl, 2.02" Diameter w/ E Clip and Spacer 0.40s.g.	SD0536500
Cable Assembly, 4 pin, 6 feet long (M style only)	01533141
Adjustable Tube Coupling 5/8" x 3/4" NPT	04283800
Junction Box, side mount, N4X with zero & span push buttons	SD0536101
Bushing, 3/4" x 2" NPT 316SS	04587241

Intrinsically Safe Entity Parameters

V_{max}	I_{max}	P_I	C_I	L_I
7.93 V	280mA	1.0 W	30.1 μ F	0 μ H

Wiring Diagram

