

This ultrasonic device combines sensor and electronics in a single package for effective liquid level measurement in open or closed vessels. The process sensor is available in Tefzel® or Kynar Flex® making it suitable for use in a wide variety of industries.

It's easy to install and maintain, and can be quickly removed for cleaning as required by the food, beverage and pharmaceutical industries.

The Probe features patented Sonic Intelligence® echo-processing for superior reliability. A filter discriminates between the true echo from the material and false echoes from acoustical or electrical noises and agitator blades in motion. The time for the pulse to travel to the material and back is temperature-compensated and converted into distance for display, mA output and relay actuation. It offers a digital communications option for data collection and remote access using Hart® field communication protocol.



Product Features

- Easy to install, program and maintain
- Accurate and reliable
- Kynar Flex® or Tefzel® sensors available
- Sanitary model available
- Patented Sonic Intelligence® echo-processing
- Built-in temperature compensation

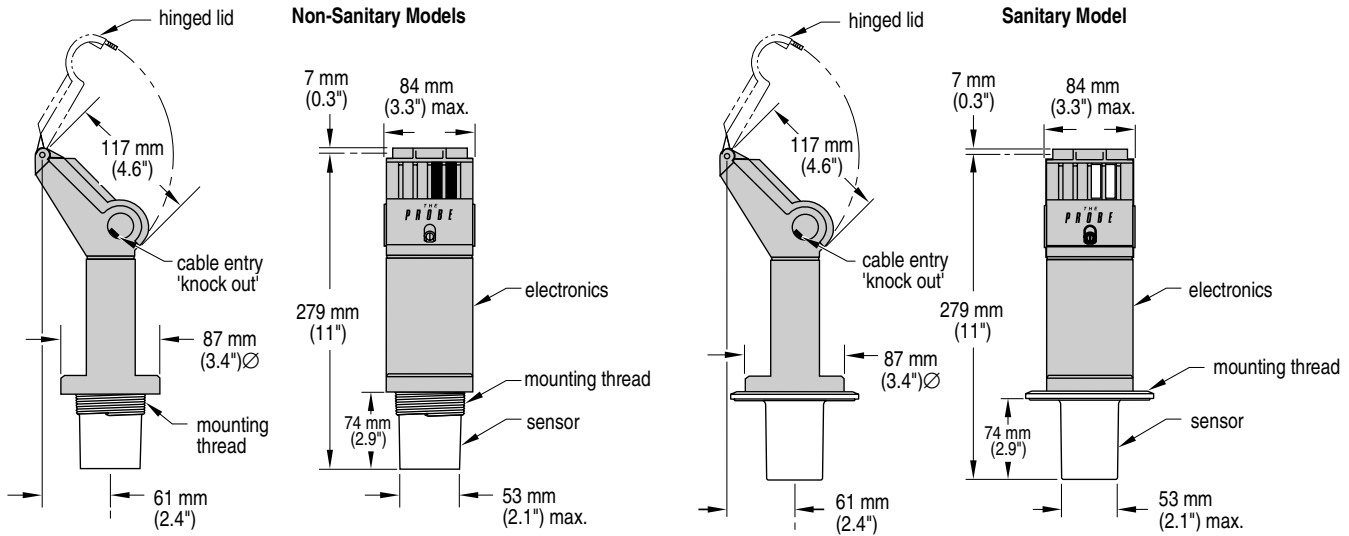
Technical Specifications

	3 Wire Model		2 Wire Model	
	Standard	Extended	Standard	Intrinsically Safe
Operations				
Measurement Range	0.25 to 5 m (0.8 to 16.4 ft.)	0.25 to 8 m (0.8 to 26.2 ft.)	0.25 to 5 m (0.8 to 16.4 ft.)	0.25 to 5 m (0.8 to 16.4 ft.)
Accuracy (in air)	0.25% of target range	0.25% of target range	0.25% of target range	0.25% of target range
Resolution	3 mm (0.125")	3 mm (0.125")	3 mm (0.125")	3 mm (0.125")
Ambient Temperature	-40 to 60°C (-40 to 140°F)	-40 to 60°C (-40 to 140°F)	-40 to 60°C (-40 to 140°F)	-40 to 60°C (-40 to 140°F)
With Metallic Mounting	-20 to 60°C (-5 to 140°F)	-20 to 60°C (-5 to 140°F)	-20 to 60°C (-5 to 140°F)	-20 to 60°C (-5 to 140°F)
Temp. Compensation	Built in	Built in	Built in	Built in
Echo Processing	Sonic Intelligence	Sonic Intelligence	Sonic Intelligence	Sonic Intelligence
Power Supply	18 to 30 Vdc, 0.2 A max.	18 to 30 Vdc, 0.2 A max.	12 to 28 Vdc, 0.1 A surge	12 to 28 Vdc, 0.1 A surge
Max. Power Consumption	5w (200 mA @ 24 Vdc)	5w (200 mA @ 24 Vdc)	0.75w (25 mA @ 28 Vdc)	0.75w (25 mA @ 28 Vdc)
Max. Static Operating Pressure	Vent to atmosphere	Vent to atmosphere	Vent to atmosphere	Vent to atmosphere
Interface				
mA Output	<ul style="list-style-type: none"> • Range • Span • Loading 	<ul style="list-style-type: none"> • Range • Span • Loading 	<ul style="list-style-type: none"> • Range • Span • Loading 	<ul style="list-style-type: none"> • Range • Span • Loading
Status Relay	Programmed for level alarm or fault	Programmed for level alarm or fault	No	No
PLC Compatibility	Yes	Yes	Yes	Yes
Enclosure				
• Electronics	Molded PVC	Molded PVC	Molded PVC	Molded PVC
• Sensor	Tefzel® or Kynar Flex®	Tefzel® or Kynar Flex®	Tefzel® or Kynar Flex®	Tefzel® or Kynar Flex®
Communications	Hart® protocol optional	Hart® protocol optional	No	No
Mounting Hardware				
Threaded	2" NPT, 2" BSP, PF2	2" NPT, 2" BSP, PF2	2" NPT, 2" BSP, PF2	2" NPT, 2" BSP, PF2
Flange Adaptors	3" universal, 4" sanitary	3" universal, 4" sanitary	3" universal, 4" sanitary	3" universal
Weight (without flange)	1.5 kg (3.3 lb.)	1.5 kg (3.3 lb.)	1.5 kg (3.3 lb.)	1.5 kg (3.3 lb.)
(with flange adaptor)	1.7 kg (3.7 lb.)	1.7 kg (3.7 lb.)	1.7 kg (3.7 lb.)	1.7 kg (3.7 lb.)
Beam Angle	10° at -3dB boundary	10° at -3dB boundary	10° at -3dB boundary	10° at -3dB boundary
Selectable Damping (m/min.)	5, 1, 0.03	5, 1, 0.03	5, 1, 0.03	5, 1, 0.03
Cable Entry	Two 2.2 mm (0.87") entrances. For use with the 13.5 cable or 1/2" NPT conduit connection			
Approvals	<ul style="list-style-type: none"> • CE, CSA <small>NRTL/C</small> FM for general purpose locations 	<ul style="list-style-type: none"> • CE, CSA <small>NRTL/C</small> FM for general purpose locations 	<ul style="list-style-type: none"> • CE, CSA <small>NRTL/C</small> FM for general uses 	<ul style="list-style-type: none"> • Intrinsically Safe • CSA/FM Class I & II, Div. 1, Group A, B, C, D, E, F & G • BASEEFA/CENELEC EEx ia IIC T4 • SAA, Ex ia IIC T6 IP65

* Universal Mounting, Tefzel flange adaptor for 3" flanges
 Kynar Flex® is a registered trademark of ELF Atochem. Tefzel® is a registered trademark of Dupont.
 Specifications are subject to change without notice.

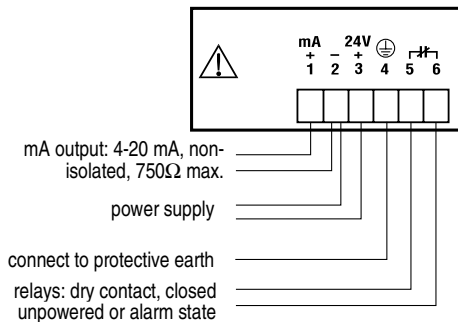
The Probe

Dimensions

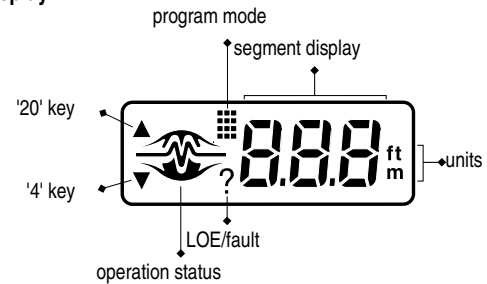


Wiring

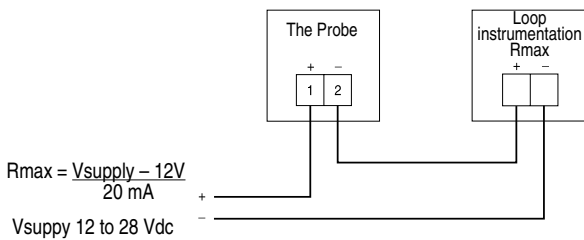
3 Wire Model (Standard, Extended and Sanitary Models)



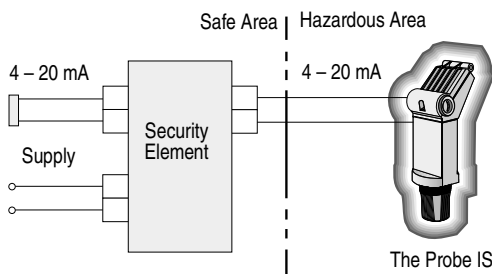
Display



2 Wire Model (Standard and Sanitary Models)



2 Wire Model (Intrinsically Safe Model)



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