

Mini Interface Meter

Model 122M - Laser Marked PVDF Coaxial Cable

Solinst Mini Oil/Water Interface Meters give clear and accurate measurements of product level and thickness in wells and tanks. Determination of both light (floating) non-aqueous phase liquids (LNAPL) and dense (sinking) non-aqueous phase liquids (DNAPL) is quick and easy.

The Model 122M Mini Interface Meter with PVDF laser marked cable is a convenient small version, which can easily fit in a backpack, or an optional custom mini carry case. It uses narrow laser marked PVDF cable, in 80 ft or 25 m lengths.

The Mini Interface Meter enhanced electronics include automatic circuitry testing; 300 hours of on-time battery life; clear signals; and high accuracy. The circuits are powered by one standard 9V battery housed in easy-access drawer in the faceplate.

Also available is the standard Solinst Model 122 Interface Meter with laser marked PVDF flat tape in lengths up to 1000 ft (300 m).

Probe

The 122M uses the P8 Probe, which is 5/8" in diameter (16 mm) and stainless steel. It is pressure proof, up to 500 psi. The beam is emitted from within a Hydrex cone-shaped tip. The tip is protected by an integral stainless steel shield, and is excellent for the vast majority of product monitoring situations.



Model 122M P8 Probe

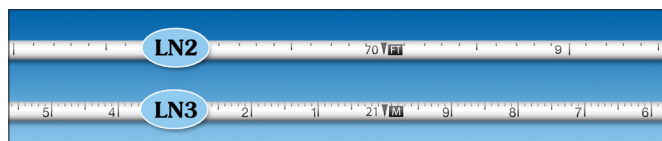
Laser Marked PVDF Cable

The PVDF cable is, traceable to NIST and EU measurement standards.

The 0.12" (3 mm) coaxial cable has a durable PVDF jacket with permanent laser markings every 1/100 ft. or each millimeter. The cable has a braided copper outer conductor, a stranded stainless steel central conductor, and a smooth chemical-resistant surface that is easy to decontaminate.

LN2: Feet and tenths: with markings every 1/100 ft.

LN3: Meters and centimeters: with markings every mm.



Model 122 is QPS approved for use in hazardous locations Class I, Div 1, Groups C&D based on CSA Standards and is ATEX certified under directive 94/9/EC as II 3 G Ex ic IIB T4 Gc



Laser Marked PVDF Coaxial Cable

Features

- Sensor accuracy to 1/200 ft or 1.0 mm
- Certified intrinsically safe
- 5/8" (16 mm) diameter probe
- Easy access battery: minimum 300 hours of life
- Stable electronics with automatic circuitry testing
- Compact and easy to transport in a backpack
- Designed for rugged field use

Operating Principles

Product (Non-conductive liquid) = Steady light and tone

Water (Conductive liquid) = Intermittent light and tone

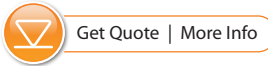
To detect liquids, the Model 122M Mini Interface Meters use an infra-red beam and detector. When the probe enters a liquid the beam is refracted away from the detector which activates an audible tone and light. If the liquid is a non-conductive oil/product the signals are steady. If the liquid is water (conductive liquid greater than 20 $\mu\text{S}/\text{cm}$), the conductivity of the water completes a conductivity circuit. This overrides the infra-red circuit, and the tone and light are intermittent.

Both sensors use exactly the same zero point, giving accuracy as good as 1/200 ft or 1.0 mm. The high accuracy enables the sensors to detect the slightest sheen of oil on the surface of the water.

Hazardous Locations Use

The Model 122M Mini Interface Meter with PVDF Cable has been approved by QPS for use in hazardous locations, Class I, Div 1, Groups C&D based on CSA Standards. It is also ATEX certified under directive 94/9/EC, as II 3 G Ex ic IIB T4 Gc.

The ground cable is a safety essential when the meter is used in potentially explosive environments. It also ensures that the electronics are properly protected.



Mini Interface Meter

Model 122M - Heat Embossed Polyethylene Narrow Flat Tape

The Model 122M Mini Interface Meter with narrow flat tape is a convenient small version, small enough to fit in a backpack, or an optional custom mini carry case. It uses narrow heat-embossed polyethylene flat tape, in 65 ft or 20 m lengths.

The Mini Interface Meter enhanced electronics include automatic circuitry testing; 300 hours of on-time battery life; clear signals; and high accuracy. The circuits are powered by one standard 9V battery housed in easy-access drawer in the faceplate.



Narrow Polyethylene Flat Tape

Probe

The stainless steel 122M P1 Probe is 5/8" in diameter (16 mm). The beam is emitted from within a cone-shaped tip made from rigid polyurethane. The factory sealed probe does not need to be accessed by the user. An integral stainless steel shield protects the sensors. It is set permanently into place, yet allows for easy cleaning. This pressure proof probe is excellent for the vast majority of product monitoring situations.



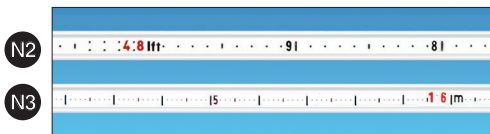
Model 122M P1 Probe

Narrow Flat Tape

The easy-to-read markings on the narrow 1/4" (6 mm) tape are permanently heat-stamped into the tape. The dog bone shaped tape avoids adherence to wet surfaces in wells. It is resistant to most chemicals, and the smooth surface of the tape is easy to decontaminate and handle. A Tape Guide is also an option.

The polyethylene tape uses stranded stainless steel conductors that are non-stretch; resist corrosion, kinking and breaks; and make it easy to repair and splice.

- N2 Feet and tenths: with markings every 1/100 ft.
- N3 Meters and centimeters: with markings every mm.



Features

- Sensor accuracy to 1/200 ft or 1.0 mm
- Certified intrinsically safe
- 5/8" (16 mm) diameter probe
- Easy access battery: minimum 300 hours of life
- Stable electronics with automatic circuitry testing
- Compact and easy to transport in a backpack
- Designed for rugged field use

Operating Principles

Product (Non-conductive liquid) = Steady light and tone

Water (Conductive liquid) = Intermittent light and tone

To detect liquids, the Model 122M Mini Interface Meters use an infra-red beam and detector. When the probe enters a liquid the beam is refracted away from the detector which activates an audible tone and light. If the liquid is a non-conductive oil/product the signals are steady. If the liquid is water (conductive liquid greater than 50 µS/cm), the conductivity of the water completes a conductivity circuit. This overrides the infra-red circuit, and the tone and light are intermittent.

Both sensors use exactly the same zero point, giving accuracy as good as 1/200 ft or 1.0 mm. The high accuracy enables the sensors to detect the slightest sheen of oil on the surface of the water.

Hazardous Locations Use

The Model 122M Mini Interface Meter has been approved by the Canadian Standards Association (CSA) for use in explosive environments. It is suitable for use in hazardous locations Class I, Groups C&D.

The ground cable is a safety essential when the meter is used in potentially explosive environments. It also ensures that the electronics are properly protected.