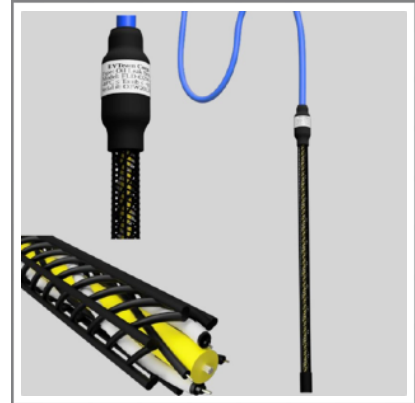


FLD-O2W-SP

Sensing Probe for Oil-On-Water Leak Detection

The FLD-O2W-SP is a highly sensitive oil-on-water sensor designed to detect as little as 1ml of hydrocarbons floating on water. Designed for vertical applications, permanently immersed in salt or ground water. This line of durable sensors can even respond to heavy, low lying hydrocarbon fumes or gases due to the multiple leak sensing wire construction. UV/ozone resistant, it is specially engineered for reliable operation during long-term immersion in water and in icing conditions and is suitable for polar applications.



The maximum length of sensor probe is limited to 96in (244cm / 2.4m). The sensing probe can be wired to the acquisition module through an optional jumper cable with a maximum length of 1000ft (300m). Advanced measurement techniques and data treatment algorithms are used by Naftosense acquisition modules to provide quick detection in a very wide temperature range. The sensor is reusable and easily detachable for cleaning.

The FLD-O2W-SP probe is designed to be used exclusively with any model of Naftosense monitoring modules providing industry-standard analog outputs, dry contacts, or serial communication protocols for flexible integration with third-party monitoring panels or PLC.

FLD-O2W-SP is a passive simple element and is safe for installations in hazardous locations when connected to intrinsically safe field box or wired through an approved Zener barrier. Please contact Naftosense for additional information.

Features and Benefits

- Reliable detection of all fuels, oils, solvents, and specialty hydrocarbon blends
- Reusable after contamination
- Volumetric leak alarms dynamically show sensor contamination level. Decipher old and new material leakage.
- Insensitive to vibrations, methane, water
- UV Rated outer jacket safe for continuous exposure to sun light
- Wide operating temperatures range
- Reduced maintenance and easy troubleshooting
- 10-year warranty

FLD-O2W-SP

Sensing Probe for Oil-On-Water Leak Detection

Typical Applications

- Liquid hydrocarbon leak detection in tank farms, terminals, refineries, and pipelines
- Detection of leaking fuel from airport hydrant systems, military, and custody transfer stations in harsh outdoor, demanding environmental conditions
- Monitoring of diesel generators, fuel storage tanks in commercial buildings, hospitals, data centers, etc.
- Monitoring of oil-filled power transformers, combustion turbines, pumps, filters, heat exchangers, etc.

Agency Approvals

- In the US: Intrinsically safe - Class I, Division 1, Groups A, B, C and D, Class I, Zone 0, AEx ia IIC
- Atex: Intrinsically safe - II 1 G, Ex ia IIC Gb T4
- IECEx: Intrinsically safe - Ex ia IIC Gb T4
- All testing provided by FM Approvals for compliance to the following standards:
- FM Class 3600
- FM Class 3610
- ANSI / ISA 60079-0 2013
- ANSI / ISA 60079-11
- CAN / CSA-C22.2 No. 60079-0
- CAN / CSA-C22.2 No. 60079-11
- IEC 60079-0
- IEC 60079-11
- EN 60079-0
- EN 60079-11

Typical Detection Time of 1 mm Hydrocarbon Film at 68°F (20°C)

Gasoline, Jet Fuel, Diesel	20 to 25 seconds
Light Crude Oil	45 to 60 seconds
Heavy Crude Oil, Dilbit	3 to 4 minutes
Motor Oil, Silicone Oil	8 to 10 minutes
Propane, Butane	25 to 30 seconds*

FLD-O2W-SP**Sensing Probe for Oil-On-Water Leak Detection**

Technical Data	
Operating Life	Tested 30+ years at 104°F (40°C) - 10-year warranty
Compatibility	ALL Naftosense monitoring modules*
Maximum diameter	1.06 in (27 mm)
Ingress Rating	IP68 - suitable for outdoor/direct burial
Operating Temperature Range	-67°F to 212°F (-55°C to 100°C)
Maximum Length of Cable/ Probe	Sensor Probe: 4 ft (120 cm) Leader Cable (AWG22 mini): 10000 ft (300 m)
Hazardous Locations Classification	IS/ I/ 1/ ABCD/ T4 ; I/ 0/ AEx/ ia IIC T4 ; Class I, Zone 0, Ex ia T4 Class I, Div. 1, Groups A,B,C,D; T4 II 1 G Ex ia IIC T4 Ga
Warranty	10 years

*FLD-O2W-SP probe can be interfaced with various approved field boxes for wired or wireless installations in hazardous locations. For additional information please consult Naftosense or its authorized distributors.

Product Codes	
FLD-O2W-SP-6	Passive Hydrocarbon Sensor Probe of 6 in (15 cm) with 10 ft (3 m) lead cable
FLD-O2W-SP-10	Passive Hydrocarbon Sensor Probe of 10 in (25 cm) with 10 ft (3 m) lead cable
FLD-O2W-SP-24	Passive Hydrocarbon Sensor Probe of 2 ft / 24 in (60 cm) with 10 ft (3 m) lead cable
FLD-O2W-SP-48	Passive Hydrocarbon Sensor Probe of 4 ft / 48 in (1.2 m) with 10 ft (3 m) lead cable
FLD-O2W-SP-96	Passive Hydrocarbon Sensor Probe of 8 ft / 96 in (2.4 m) with 10 ft (3 m) lead cable

On request, the leader cable can be extended to up to 100 ft (30 m) at the factory. Please consult for pricing options.