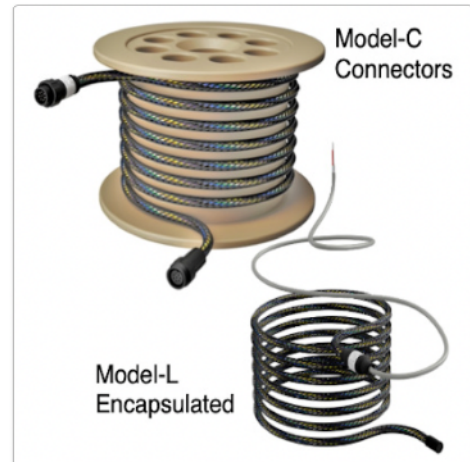


FLD-DHSC

Hydrocarbon Sensor

The FLD-DHSC is a high-performance passive hydrocarbon/solvents detector designed specifically for detecting the unwanted presence of a wide range of liquid hydrocarbons or organic solvents. The FLD-DHSC has two sensor wires multiplexed cable provides quick reaction to the target liquids and can be used in outdoor environment without being affected by exposure to water.

The detected fluids are primarily gasoline, diesel, jet fuel, acetone/MEK, methanol, ethanol, esters, transformer oils, etc. The FLD-DHSC sensor cable is offered as factory-assembled modular sensor with heavy-duty waterproof connectors (model-C), or as fixed-length multi-section encapsulated sensor string with oil-resistant 10-ft leader cable (model -L).



The sensor is specially engineered for reliable operation in both indoor and outdoor conditions. The waterproof connectors of -C model allow the sensor to be temporarily immersed in water. The encapsulated -L model is designed for long-term immersion in water in demanding outdoor conditions. The semi-conductive sensor material is extremely durable and can withstand exposure to temperatures more than 212°F (100°C). The sensor cable is UV resistant, anti-termite and anti-rodent and can be used in tropical applications.

The sensor cable contains all the wiring necessary for long-range applications and a series connection of several sensors to the same Naftosense monitoring module.



Figure 1. FLD-DHSC-ML

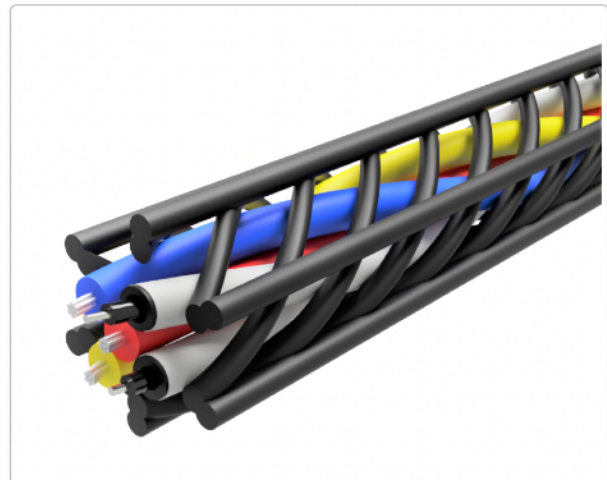


Figure 2. FLD-DHSC-TL

FLD-DHSC

Hydrocarbon Sensor

When used for applications in hazardous areas, the sensor cable will be wired to an intrinsically safe monitoring modules, or alternatively through a Zener barrier to a sensor module installed in the safe zone. Please contact Naftosense for additional information.

Features and Benefits

- Detects reliably all fuels, oils and solvents
- Reusable after contamination
- Insensitive to vibrations, methane, water
- Reduced maintenance and easy troubleshooting
- 10-year warranty with expected service life of 20+ years

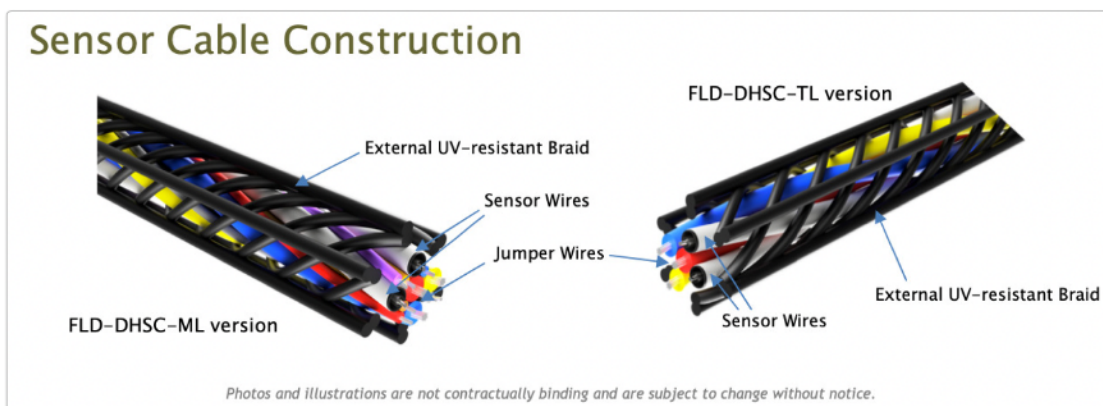
Typical Applications

- Liquid hydrocarbons leak detection in tank farms, compounds, along pipeline sections
- Detection of leaking fuel from airport hydrant systems, military, and custody transfer installations 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, lube oil storage tanks, etc.

Agency Approvals

Approved for use in:

- 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
- Tested by FM Approvals for compliance as per FM Class 3610



FLD-DHSC

Hydrocarbon Sensor

Technical Information Sensor Cable FLD-DHSC

Typical Detection Time at 68°F (20°C)	
Unleaded Gasoline	1 minute 20 seconds
Diesel/Jet Fuel	3 minutes
Methanol/Ethanol	5 to 7 minutes
Acetone/MEK	6 to 8 minutes
Motor/Silicone Oils	12 to 25 minutes

Technical Data	
Operating Life	10-year warranty expected life 20+ years (materials tested in natural aging conditions)
Weight	1.3oz / ft (120 g/m maximum)
Fire Rating	Non-flame propagating
Connector Ingress Rating	IP68 - suitable for outdoor/direct burial
Operating Temperature Range	-40°F to 185°F (-40°C to +85°C)
Recommended Maximum Section Length	50 ft (15 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

Warning! The sensor cable FLD-DHSC shall only be used with the Naftosense brand monitoring modules. Use with other applications will lead to unpredictable performance and unexpected results. For performance metrics, please contact Naftosense.

FLD-DHSC

Hydrocarbon Sensor

Product Codes	
FLD-DHSC-TL-C-10	Modular Multiplexed Sensor cable for hydrocarbons/solvents – up to 2 sections – length of 10 ft (3 m)
FLD-DHSC-ML-C-10	Modular Multiplexed Sensor cable for hydrocarbons/solvents – up to 4 sections – length of 10 ft (3 m)
FLD-DHSC-TL-C-25	Modular Multiplexed Sensor cable for hydrocarbons/solvents – up to 2 sections – length of 25 ft (7.5 m)
FLD-DHSC-ML-C-25	Modular Multiplexed Sensor cable for hydrocarbons/solvents – up to 4 sections – length of 25 ft (7.5 m)
FLD-DHSC-TL-C-50	Modular Multiplexed Sensor cable for hydrocarbons/solvents – up to 2 sections – length of 50 ft (15 m)
FLD-DHSC-ML-C-50	Modular Multiplexed Sensor cable for hydrocarbons/solvents – up to 4 sections – length of 50 ft (15 m)
FLD-DHSC-TL-Lx-10*	Encapsulated Sensor cable for hydrocarbons/solvents with 10 ft (3 m) leader cable – length of 10 ft (3 m)
FLD-DHSC-ML-Lx-10*	Encapsulated Sensor cable for hydrocarbons/solvents with 10 ft (3 m) leader cable – length of 10 ft (3 m)
FLD-DHSC-TL-yyy*	Bulk Sensor cable for hydrocarbons/solvents – up to 2 sections
FLD-DHSC-ML-yyy*	Bulk Sensor cable for hydrocarbons/solvents – up to 4 sections

*x in the product codes above denotes the number of sections per sensor string of -L model – up to 2 for FLD-DHSC-TL and up to 4 for FLD-DHSC-ML

*yyy in the product codes above denotes the length in feet for the bulk sensor cable. Maximum length of bulk sensor cable: 820 ft (250 m)