

## Description

The DAG-HCS is a high-performance passive hydrocarbon detector designed specifically for detecting the unwanted presence of a wide range of liquid hydrocarbons. This multiplexed sensor cable provides quick reaction to light and heavy hydrocarbons and can be used in outdoor environment. Rapid detected hydrocarbons include gasoline, diesel, jet fuel, motor oils, lube, and transformer oils, etc. The DAG-HCS sensor cable is offered as factory-terminated modular sensor with heavy-duty waterproof connectors (model -C). On request, a fixed-length multi-section encapsulated sensor string with oil-resistant 3 m leader cable (model -L) can be supplied.

The sensor is specially engineered for reliable operation in both indoor and outdoor conditions. The waterproof connectors of -C model allow short-term immersion in water. The encapsulated -L version is designed for long-term immersion. The semi-conductive sensor material is extremely durable and can withstand long-term exposure to temperatures more than 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 for the connection in series of several sensors to the same approved monitoring module. The



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version DAG-HCS-ML allows up to 8 sensor sections to be connected to the same monitoring module while the version DAG-HCS-TL is limited to 3 sensor sections.

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

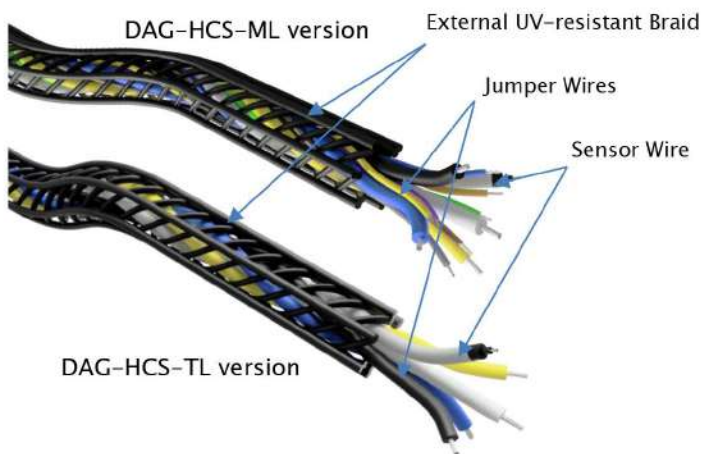
## Features and Benefits

- Detects reliably all fuels and oils
- Reusable after contamination
- Fully passive construction, guaranteed service life of 10 years
- 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

## 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.

## Sensor Cable Construction and Typical Application



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## Technical Data

Operating Life	20+ years at 40°C (materials tested) 10-year factory warranty
Weight	120 g/meter max.
Fire Rating	Non-flame propagating
Connector Ingress Rating	IP68 – suitable for outdoor/direct burial
Operating Temperature Range	-40°C to +85°C
Maximum Section Length	15 meters
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  Ex II 1 G Ex ia IIC T4 Ga
Tested and approved sensor modules	Dagman: DAG-SMD-HC, DAG-COST(+)-HC; Evteam: FLD-MXM, FLD-F4RTD

**Warning!** The sensor cable DAG-HCS can only be used with the sensor modules approved by Dagman. Other applications will lead to unpredictable performance and unexpected results. For performance metrics, please contact Dagman or consult the compatible sensor modules datasheets.

## Product Codes

DAG-HCS-TL-C-15	Modular Multiplexed Sensor cable for hydrocarbon fluids – up to 3 sections – length of 15 m
DAG-HCS-TL-C-7	Modular Multiplexed Sensor cable for hydrocarbon fluids – up to 3 sections – length of 7 m
DAG-HCS-TL-C-3	Modular Multiplexed Sensor cable for hydrocarbon fluids – up to 3 sections – length of 3 m
DAG-HCS-ML-C-15	Modular Multiplexed Sensor cable for hydrocarbon fluids – up to 8 sections – length of 15 m
DAG-HCS-ML-C-7	Modular Multiplexed Sensor cable for hydrocarbon fluids – up to 8 sections – length of 7 m
DAG-HCS-ML-C-3	Modular Multiplexed Sensor cable for hydrocarbon fluids – up to 8 sections – length of 3 m
DAG-HCS-TL-L-xxx	Encapsulated Sensor cable for hydrocarbon fluids – please contact factory for details

## Manufacturer



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## Certifications



Valid only when used with the sensor modules approved by Dagman.

The Company endeavours to continuously improve and renew its products, for this reason the technical data and contents of this document may undergo variations without prior notice. For correct installation and use, the Company can guarantee only the data indicated in the instruction manual supplied with the products. Product and Company names and logos referenced may be either trademarks or registered trademarks of their respective companies. We reserve the right to make modifications and improvements.