

- ▶ High Sensitivity
- ▶ Very Fast Response with Light and Middle Distillates
- ▶ Sensitive to Heavy Oils and Hydrocarbon Vapors
- ▶ Leak Location on Section Length
- ▶ Re-usable and Pre-connected Cable
- ▶ Suitable for Explosive Area Service
- ▶ Insensitive to Water and Inorganic Pollutants

## Description

- FG-ODC is a digital sense cable for detection and location, along the entire length, of liquid hydrocarbons and liquid insoluble in water and their vapors.
- It allows multiple leak detection and location thanks to independent digital addressing, enabled by an embedded microchip in each FG-ODC sense cable.
- The sensor element is optimized for very fast response with light to middle distillates, and is sensitive to heavy oils such as conventional crude oils, dilbit / synbit, as well as to hydrocarbon vapors.
- Re-usable after leak detection.
- Can be installed in humid environment, as it is insensitive to water and inorganic contamination.

## Features & Benefits

### FEATURES

- Standard length (3 m, 7m and 12m) sensor sections or long line section allowing optimised system architecture.
- Microcontroller embedded in each FG-ODC sense cable allowing independent digital transmission to the alarm unit.
- Standard length sense cable provided with built-in plug-socket connector.
- Long line provided with built-in intermediate embedded connections (for each section), plus connector at extremities on demand.
- Structure of the sense cable comprising a silicon sensing wire, a continuity wire, a communication wire (proprietary bus) and the power supply wires. Protective external PE braid built on the cable.
- Intrinsically safe - can be used in classified areas: Ex ia IIB T4 Ga (IECEx "Zone 0").

### BENEFITS

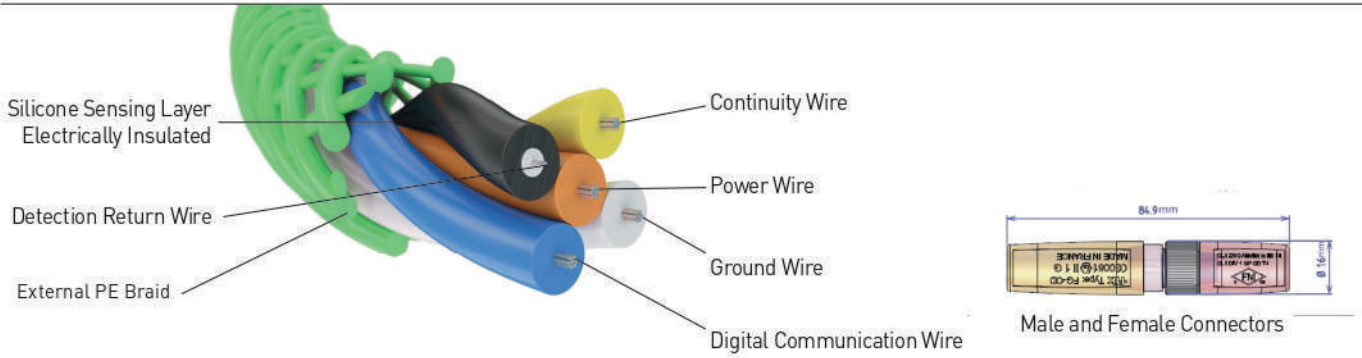
- Reliable detection:
  - Sensitive to heavy oils and vapors.
  - Insensitive to water, inorganic pollutants and external loads (pressure).
- High sensitivity: examples of detection time: **gasoline at 1-2 minutes (\*)**, **jet fuel at 4-10 minutes (\*)**, **diesel at 7-12 minutes (\*)**, **WTI: 20-35 minutes (\*)**, **Dilbit: 30-45 minutes (\*)**.
- Detects and locates hydrocarbon leaks on the section length.
- Can be reused, allowing leak detection tests under real conditions.
- The same unit FG-NET can be connected to FG-ODC sense cables and mixed with water or acids / bases sense cables at the same time.
- Easy to install and remove: standard FG-ODC cables pre-connected with male / female connectors.

Note (\*): depending on liquid composition and leak conditions

## Connectivity & System Capacity

<b>Connectivity</b>	Digital units: FG-NET, FG-NET-LL, FG-ALS8-OD, FG-ALS4-OD, FG-A-OD, FG-STAD Satellite devices: FG-BBOX, FG-BBOX-LL Compatible with sector or linear water or acids / bases sense cables
<b>System Capacity</b>	3m, 7m and 12m standard length per FG-ODC sense cable Up to 59 x FG-ODC sense cables per digital unit circuit - depending on overall circuit length 3 circuits per FG-NET, 2 circuits per FG-BBOX

# Cable Structure



# Technical Data

Cable nominal diameter	10 mm
Connector nominal diameter	16 mm
Embedded (Long Line) connection nominal diameter	16 mm
Cable nominal weight (without connectors)	7 kg / 100m
Min. bending radius	100mm
Max. Pressure	3 bar
Min. Max. working temperature	-30°C ≤ Tamb ≤ +100°C
Reusable	Yes
Direct burial	Possible
Maximum tensile strength (incl. connection)	40 kg
Expected life span (at working conditions)	>10 years
Explosive area classification	Ex ia IIB T4 Ga (ATEX "Zone 0")
Connector protection index classification (DIN/EN/IEC60529)	IP 68

# Identification Codes

FG-ODC12	Addressable Oil Sensing Cable in 12m with Connectors
FG-ODC7	Addressable Oil Sensing Cable in 7m with Connectors
FG-ODC3	Addressable Oil Sensing Cable in 3m with Connectors
FG-ODCLxxyy/xyyy/xyyy	Pre-Assembled Addressable Oil Sensing Cable with connectors xx =length of sections, yy = number of sections <b>i.e.:</b> FG-ODCL1204: Pre-assembled 4 lengths of cables FG-ODCL : 4 sections of 12m
<b>Accessories:</b>	
FG-DOD KIT	Kit including FG-DOD interface box + FG-CLOD leader cable + FG-TMOD end plug
FG-CLOD	Leader Cable, on 'OD Bus 8771'
FG-TMOD	Digital End Plug on 'OD Bus 8771' for FG-ODR Cable
FG-NOD 'N'	'OD Bus 8771' Neutral Cable 'N' (30, 15, 7, 3, 1m) With Connectors
ES-OD	40 Tags for Oil Cable
CF-OD50	50 Hold-down Clips with adhesive for Oil Cables

# Certificates



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