

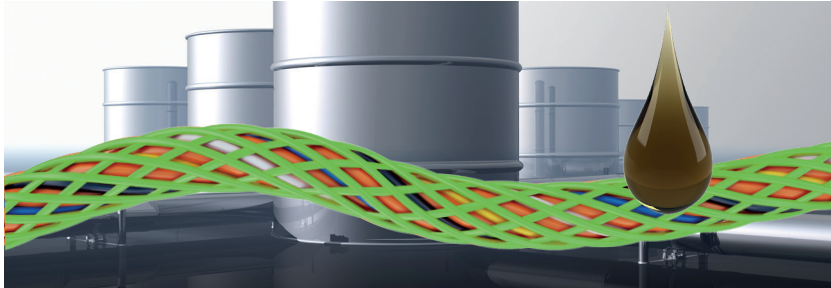


LIQUID LEAK DETECTION SYSTEMS  
OIL & GAS DIVISION

# FG-ODC

## High Sensitivity Addressable Oil Sense Cable

### Product Datasheet



- ▶ 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 (9, 22, 39 ft or 3, 7 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

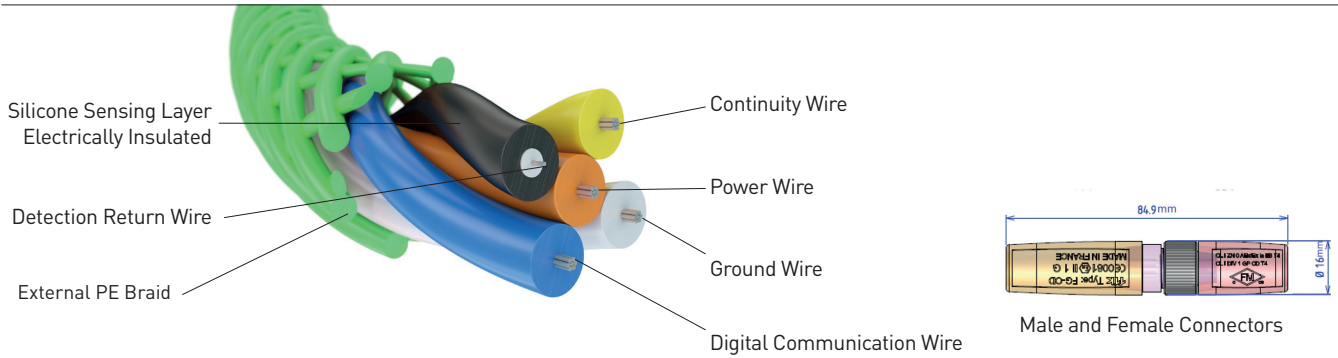
- Reliable detection:
  - Sensitive to heavy oils and vapors.
  - Insensitive to water, inorganic pollutants and external loads (pressure).
- High sensitivity: examples of detection time: **gasoline at 1-2 minutes (\*), jet fuel at 4-10 minutes (\*), diesel at 7-12 minutes (\*), WTI: 20-35 minutes (\*), 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>	9, 22, 39 ft (3, 7 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	0.39 in (10 mm)
Connector nominal diameter	0.63 in (16 mm)
Embedded (Long Line) connection nominal diameter	0.63 in (16 mm)
Cable nominal weight (without connectors)	0.047 lb/ft (70 g/m)
Min. bending radius	1.57 in (40 mm)
Max. Pressure	3 bar
Min. Max. working temperature	-22° ≤ Tamb ≤ 212°F (-30° ≤ Tamb ≤ +100°C)
Reusable	Yes
Direct burial	Possible
Maximum tensile strength (incl. connection)	88 lb (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 (39 ft) with Connectors
FG-ODC7	Addressable Oil Sensing Cable in 7m (22 ft) with Connectors
FG-ODC3	Addressable Oil Sensing Cable in 3m (9 ft) 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 (39 ft)
Accessories:	
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) (98, 49, 22, 10, 3 ft) 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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