

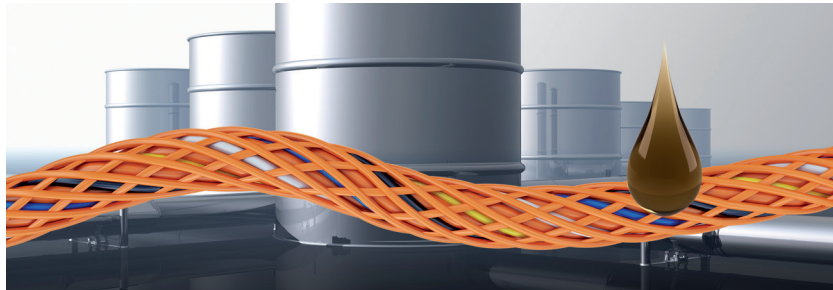


LIQUID LEAK DETECTION SYSTEMS  
OIL & GAS DIVISION

# FG-OD

## Addressable Oil Sense Cable

### Product Datasheet



- ▶ Intermediate Sensitivity
- ▶ Fast Response with Light and Middle Distillates
- ▶ Leak Location on Section Length
- ▶ Re-usable and Pre-connected Cable
- ▶ Suitable for Explosive Area Service
- ▶ Insensitive to Water and Inorganic Pollutants

## Description

- FG-OD is a digital sense cable for detection and location, along the entire length, of liquid hydrocarbons and liquid insoluble in water present on the cable.
- It allows multiple leak detection and location thanks to independent digital addressing, enabled by an embedded microchip in each FG-OD sense cable.
- Fast response.
- 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, 12m and 20m) sensor sections or long line section allowing optimised system architecture.
- Microprocessor embedded in each FG-OD 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").

### Reliable detection:

- Sensitive to liquid hydrocarbons.
- Insensitive to water, inorganic pollutants and external loads (pressure).
- Examples of detection time: **Gasoline: 3-6 minutes (\*)**, **Diesel Oil: 25-35 minutes (\*)**, **Jet Fuels: 10-20 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-OD sense cables and mixed with water or acids / bases sense cables at the same time.
- Easy to install and remove: standard FG-OD cables pre-connected with male / female connectors.

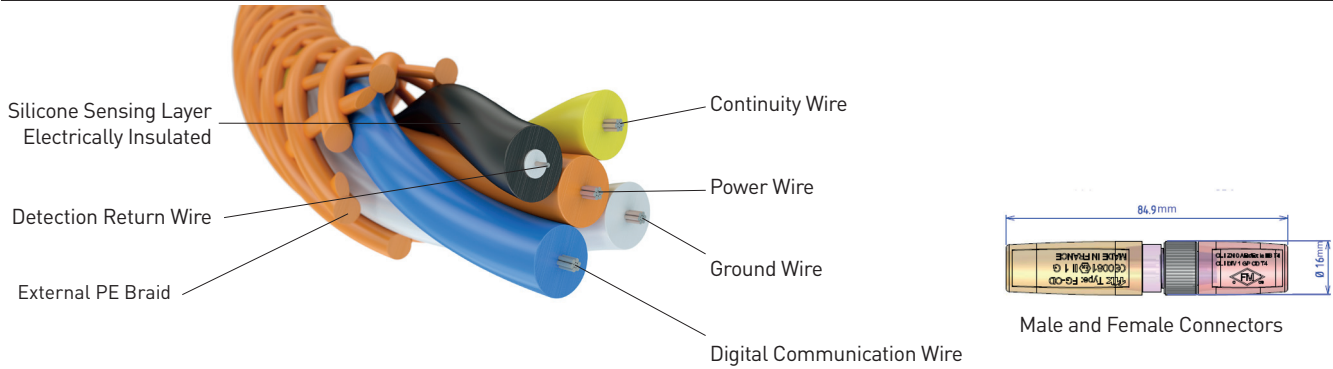
Note (\*): depending on liquid composition and leak conditions

### BENEFITS

## 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, 12m and 20m standard length per FG-OD sense cable Up to 59 x FG-OD 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-OD20	Addressable Oil Sensing Cable in 20m with Connectors
FG-OD12	Addressable Oil Sensing Cable in 12m with Connectors
FG-OD7	Addressable Oil Sensing Cable in 7m with Connectors
FG-OD3	Addressable Oil Sensing Cable in 3m with Connectors
FG-ODLxxyy/xxyy/xxyy	Pre-Assembled Addressable Oil Sensing Cable with connectors xx=length of sections, yy= number of sections i.e.: FG-ODL2004: Pre-assembled 4 lengths of cables FG-ODL : 4 sections of 20m
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-OD 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



**FG-OD sense cable has passed successfully the UL719 test for abrasion resistance of jacket on flat cable.**  
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