

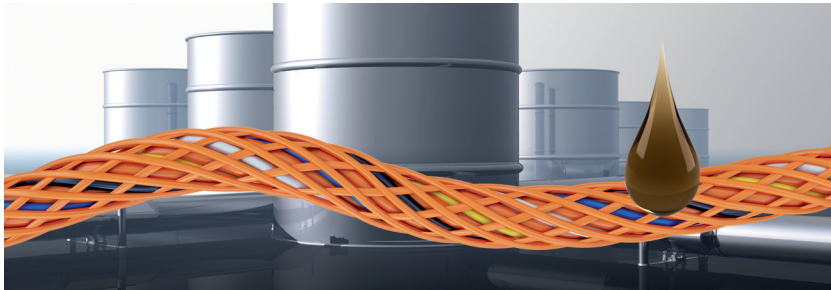


LIQUID LEAK DETECTION SYSTEMS
OIL & GAS DIVISION

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.

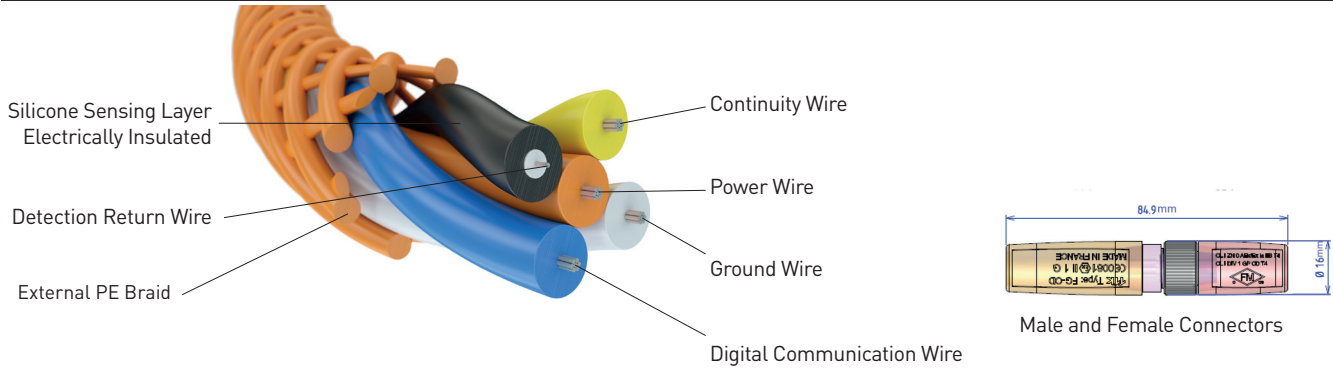
Note (*): depending on liquid composition and leak conditions

BENEFITS

Connectivity & System Capacity

| | |
|------------------------|--|
| Connectivity | 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 |
| System Capacity | 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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