

- ▶ 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

The TTK digital sense cable FG-ODC detects and locates liquid hydrocarbons and certain water-insoluble liquids and their vapors anywhere along its length. 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.

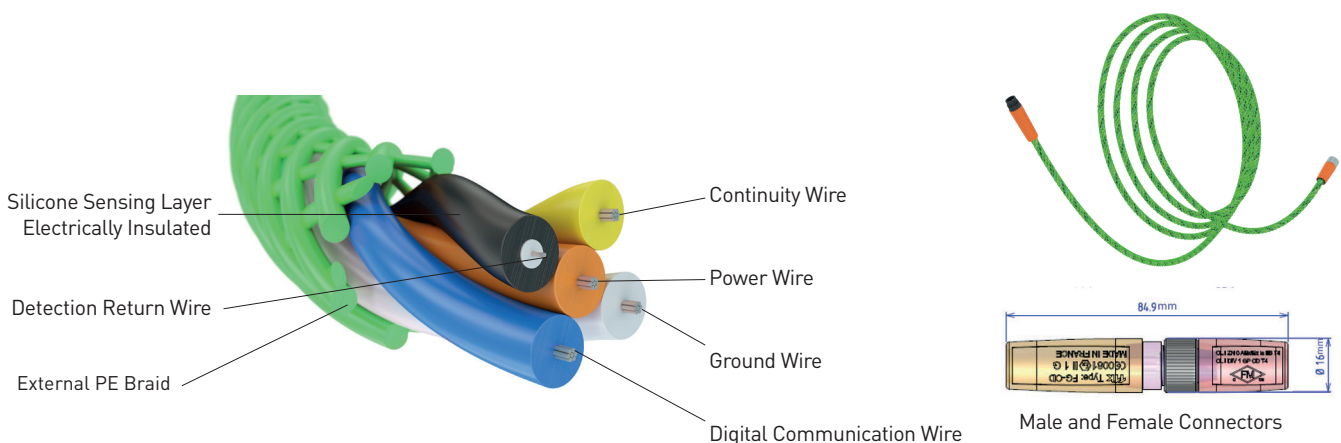
Thanks to its embedded microchip, each cable has independent digital addressing, enabling multiple leak detections on a panel output. It offers a fast response, is reusable after detection, and remains unaffected by water or inorganic contamination, making it ideal for humid environments.

Key Advantages

- Standard length (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").
- Reliable detection:
 - Sensitive to heavy oils and vapors.
 - Insensitive to water, inorganic pollutants and external loads (pressure).
- Can be reused, allowing leak detection tests under real conditions.
- 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.
- 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

Cable Structure



Male and Female Connectors

Technical Data

| | |
|---|---|
| Compatibility | Digital units: FG-NET*, FG-NET-LL, FG-ALS8-OD, FG-ALS4-OD, FG-A-OD Satellite devices: FG-BBOX*, FG-BBOX-LL Sense cables: Compatible with water and acids sense cables on the same panel output via an interface box. [*FG-DOD interface box required for connecting OD range cables/probes to non-OD range panels] |
| Reusability | Reusable, as long as the cable hasn't been damaged by prolonged immersion in liquid |
| Sense Cable Material & Nominal Diameter | PE, 10 mm |
| Sensor Wires Material & Nominal Diameter | PE, 2 mm |
| Sense Cable Weight (3, 7, 12 m) | 0.3 kg, 0.5 kg, 0.7 kg |
| Minimum Bend Radius | 1.97 in or 50 mm |
| Sense Cable Color | Green braid |
| Operating Temperature | -30° to 100°C |
| Maximum Pressure | 3 bar |
| Maximum Tensile Strength (Incl. Connection) | 40 kg |
| Connector Nominal Diameter | 16 mm |
| Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) | IP 68 |
| Explosive Area Classification | Ex ia IIB T4 Ga (ATEX "Zone 0") |
| Direct Burial Capacity | Possible |

Identification Codes

| | |
|---------------------|---|
| FG-ODC3 | Addressable Oil Sense Cable in 3 m with Connectors |
| FG-ODC7 | Addressable Oil Sense Cable in 7 m with Connectors |
| FG-ODC12 | Addressable Oil Sense Cable in 12 m with Connectors |
| Accessories: | |
| 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' (1, 3, 7, 15, 30 m) with Connectors |
| CF-OD50 | 50 Hold-down Clips with Adhesive for Oil Cables |
| ES-OD | 40 Tags for Oil Cable |

Certifications






TTK - Type: FG-OD
 CE 0081 Ex II 1 G
 Ex ia IIB T4 Ga
 LCIE 13 ATEX 3082 X
 LECEx LCIE 13.0072X

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