

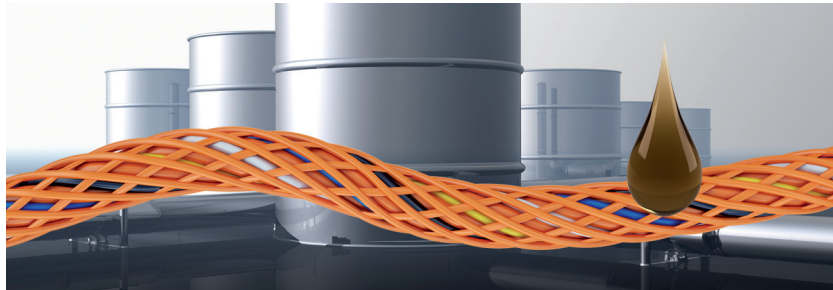


LIQUID LEAK DETECTION SYSTEMS  
OIL & GAS DIVISION

# 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 (9, 22, 39, 65 ft or 3, 7, 12, 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").
- Minimum bend radius for FG-OD sensing cable: 1.97" or 50mm.

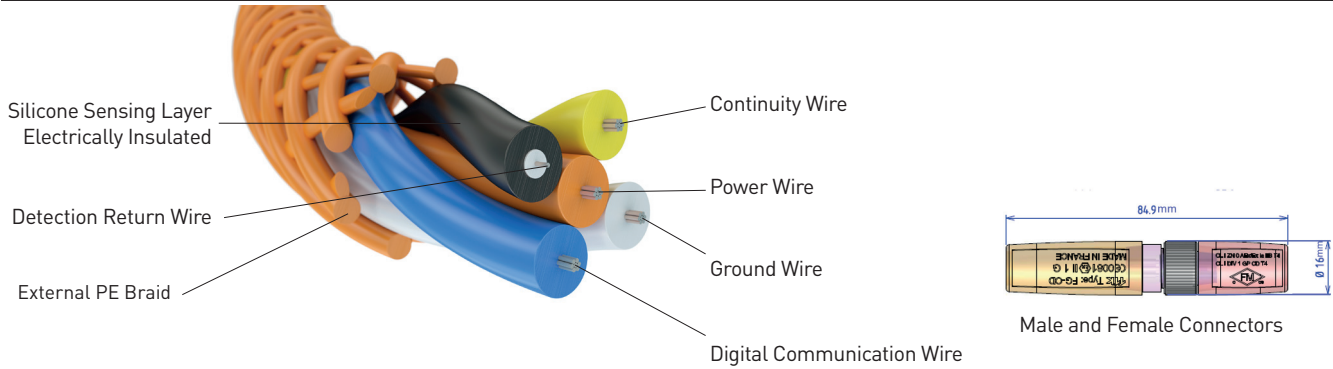
### BENEFITS

- 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

## 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, 65 ft (3, 7, 12, 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	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	0.047 lb/ft (70 g/m)
Min. bending radius	1.97" or 50mm
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-OD20	Addressable Oil Sensing Cable in 20m (65 ft) with Connectors
FG-OD12	Addressable Oil Sensing Cable in 12m (39 ft) with Connectors
FG-OD7	Addressable Oil Sensing Cable in 7m (22 ft) with Connectors
FG-OD3	Addressable Oil Sensing Cable in 3m (9 ft) 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 (65 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-OD Cable
OD-BUS 'N'	«TTK 8771» Neutral Cable 'N' (50m, 100m, 300m, 1000m [164, 328, 984, 3280 ft]) Random
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



**FG-OD sense cable has passed successfully the UL719 test for abrasion resistance of jacket on flat cable.**  
 This brochure has been carefully prepared to ensure technical accuracy but is only intended for promotional use. TTK cannot guarantee that the information contained herein contains no errors or omissions, and hence does not accept responsibility related to the use of its equipment. TTK maintain its obligations set forth in the Standard Terms and Conditions of Sale and will not, under any circumstances, assume liability for any incidental damages, indirect or consequential, arising from the sale, resale, use or misuse of this product. The purchaser(s) accept their responsibility as the sole judge(s) of the adaptability of the product for the intended use. FG-NET, FG-SYS and TOPSurveillance are trademarks of TTK S.A.S. © TTK 2024

- **TTK Headquarters** / 19 rue du Général Foy / 75008 Paris / France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / [www.ttk.fr](http://www.ttk.fr) / [ventes@ttk.fr](mailto:ventes@ttk.fr)
- **TTK Oil & Gas Division** / 19 rue du Général Foy / 75008 Paris / France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / [www.ttk.fr](http://www.ttk.fr)
- **TTK UK Ltd.** / 3 Luke Street / London EC2A 4PX / United Kingdom / T : 0207 729 6002 / F : 0207 729 6003 / [www.ttkuk.com](http://www.ttkuk.com) / [sales@ttkuk.com](mailto:sales@ttkuk.com)
- **TTK Pte Ltd.** / #10-08, Shenton House, 3 Shenton Way / Singapore 068805 / Tel.+65-6220.2068 / Mob: +65.9271.6191 / Fax: +65-6220.2026 / [www.ttk.sg](http://www.ttk.sg) / [sales@ttk.sg](mailto:sales@ttk.sg)
- **TTK Asia Ltd.** / 2107-2108 Kai Tak Commercial Building / 317 Des Voeux Road Central / Hongkong / Tel.+852.2858.7128 / Fax:+852.2858.8428 / [www.ttkasia.com](http://www.ttkasia.com) / [info@ttkasia.com](mailto:info@ttkasia.com)
- **TTK Middle East FZCO** / Building 6EA, Office 510 PO Box 54925 / Dubai Airport Free Zone / UAE / T: +971 4 70 17 553 / M: +971 50 259 66 29 / [www.ttkuk.com](http://www.ttkuk.com) / [cgalmitche@ttk.fr](mailto:cgalmitche@ttk.fr)
- **TTK Deutschland GmbH** / Berner Strasse 34 / 60437 Frankfurt / Deutschland / T : +49(0)69-95005630 / F : +49(0)69-95005640 / [www.ttk-gmbh.de](http://www.ttk-gmbh.de) / [vertrieb@ttk-gmbh.de](mailto:vertrieb@ttk-gmbh.de)
- **TTK North America Inc** / 1730 St. Laurent Boulevard, Suite 800 / Ottawa, ON K1G 5L1 / Canada / T : +1 613 566 5968 / [www.ttkcanada.com](http://www.ttkcanada.com) / [info@ttkcanada.com](mailto:info@ttkcanada.com)