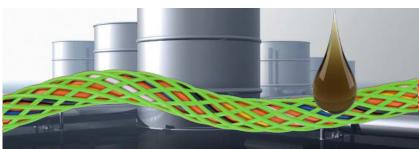


# FG-ODC+

# 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
- ► 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.
- Can be installed in humid environment, as it is insensitive to water and inorganic contamination.

## Features & Benefits

#### **FEATURES**

- Standard length (3 m) 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.
- 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: Diesel at 3-5 minutes
   (\*), Gasoline: less than 1 minute (\*).
- 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

# 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 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

Silicone Sensing Layer Electrically Insulated

**Detection Return Wire** 

External PE Braid

## **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
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

Continuity Wire

Power Wire

**Ground Wire** 

## **Identification Codes**

FG-ODC+ 3	Addressable Oil Sensing Cable in 3m with Connectors
FG-ODC+ Lxxyy/xxyy/xxyy	Pre-Assembled Addressable Oil Sensing Cable with connectors
	xx =length of sections, yy = number of sections
	i.e.: FG-0DC+L0304: Pre-assembled 4 lengths of cables FG-0DC+L : 4 sections of 3 m
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) 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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- 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 / ventes@ttk.fr
- TTK Oil & Gas Division / 19 rue du Général Foy / 75008 Paris / France / T:+33.1.30.51.79.84 / F:+33.1.55.90.62.15 / www.ttk.fr / rrisi@ttk.fr
- TTK UK Ltd. / 3 Luke Street / London EC2A 4PX / United Kingdom / T:0207 729 6002 / F:0207 729 6003 / www.ttkuk.com / sales@ttkuk.com
- TTK Pte Ltd. / #09-05, Shenton House, 3 Shenton Way / Singapore 068805 / Tel.+65-6220.2068 / Mob: +65.9271.6191 / Fax. +65-6220.2026 / www.ttk.sg / 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 / 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 / cgalmiche@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 /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 / info@ttkcanada.com
- Thomas Sales & Marketing Inc. TTK Master Distributor For USA / 7200 W 66th St / Bedford Park, IL 60638 / The United States / T: +1 630-518-4724 / www.ttkusa.com / dmolk@ttkusa.com