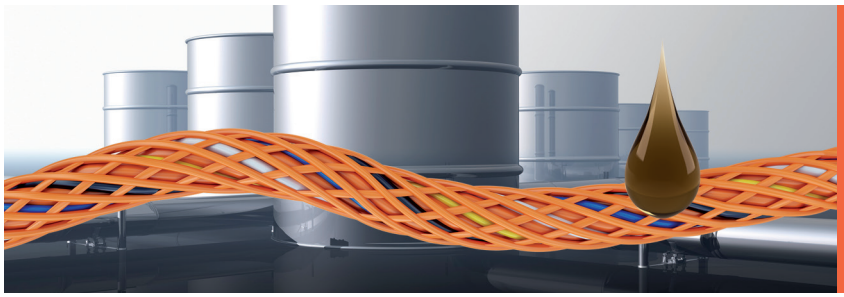
LIQUID LEAK DETECTION SYSTEMS
OIL & GAS DIVISION

FG-OD

Liquid Hydrocarbon and Non-Conductive Solvent Sense Cable

Product Datasheet



- Fast Response
- Leak Location on Section Length
- Re-usable and Pre-connected Cable
- Fully Addressable System
- Suitable for Explosive Area Service
- Insensitive to Water and Pollutions

Description

- Digital sense cable for detection and location, along the entire length, of liquid hydrocarbons and non-conductive solvents possibly present on the cable.
- 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.
- Designed to be connected to FG-NET, FG-NET-LL, FG-BBOX, FG-BBOX-LL and FG-ALS4-OD alarm units.

Features & Benefits

FEATURES

- Standard length (3 m, 7m, 12m and 20m) sense cable or long line (3m, 7m, 12m, ..., 20m) section allowing optimised system architecture.
- Microprocessor embedded in each FG-OD sense cable allowing independent digital transmission to the alarm unit. Leak location on section length.
- 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.
- Protective external PE braid built on the cable.
- Can be cleaned.
- Can be used in hazardous areas with explosive atmosphere - downstream Zener Barrier: Ex ia IIB T4 Ga (ATEX "Zone 0").

BENEFITS

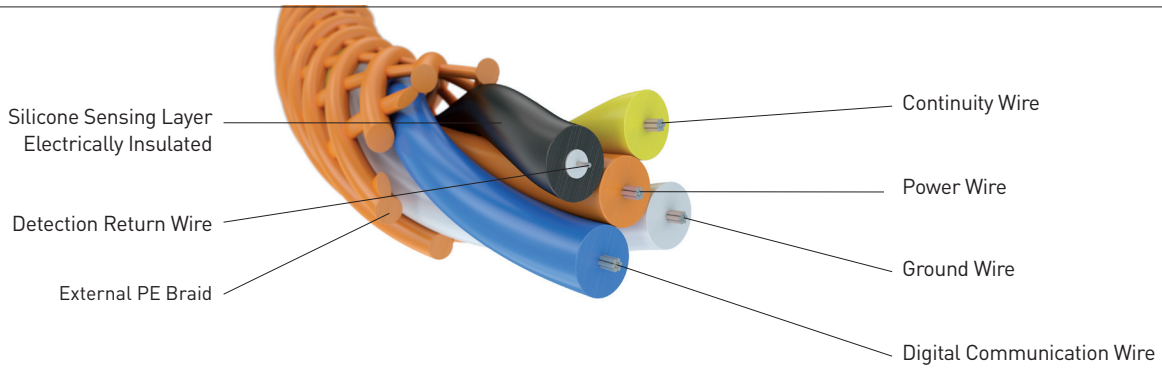
- Detects and locates hydrocarbon leaks on the section.
- Quick detection times: typical values: Gasoline: 3-6 minutes (*), Diesel Oil: 15-30 minutes (*), Jet Fuels : 10-20 minutes (*).
- Reliable detection: insensitive to water, small pollution, dirt, external loads (pressure).
- Can be reused, allowing 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

Connectivity	Digital unit: FG-NET, FG-NET-LL Alarm panel: FG-ALS4-OD 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 40 x FG-OD sense cables per digital unit circuit 10 x FG-OD sense cables per FG-DOD interfacing box 3 circuits per FG-NET, 2 circuits per FG-BBOX **Long Line application:** 3m, 7m, 12m,..., 20m per FG-OD section 59 x FG-OD sense cables per digital unit circuit

Cable Structure



Technical Data

Cable nominal diameter	9.5 mm
Connector nominal diameter	12.6 mm
Embedded (Long Line) connection nominal diameter	12.2mm
Cable nominal weight (without connectors)	7 kg / 100m
Min. bending radius	200mm
Max. Pressure	5 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 (>10 weeks at 5 bar)

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	Bus Interface, for Integration of FG-OD Cables
FG-DEx	Diversion Box for 'OD Bus 8771'
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

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

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 2015

- **TTK Headquarters** / 4 rue du Chemin Vert, 92110 Clichy, France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / **www.ttk.fr** / **ventes@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** / H1730 St. Laurent Boulevard, Suite 800, Ottawa, ON K1G 5L1, Canada / T : +1 613 566 5968 / **www.ttkcanada.com** / **sbalatchev@ttkcanada.com**