

FG-ODR

Low Sensitivity Addressable Oil Sense Cable

Product Datasheet





- ► Low Sensitivity
- ► Suitable for volatile liquids in confined environments
- ► Suitable for weakly polluted environments.
- ► Leak Location on Section Length
- ▶ Re-usable and Pre-connected Cable
- ► Suitable for Explosive Area Service
- ► Insensitive to Water and Inorganic Pollutants

Description

- FG-ODR 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.
- The FG-ODR cable is suitable for using with volatile liquids in confined environments and weakly polluted environments.
- It allows multiple leak detection and location thanks to independent digital addressing, enabled by an embedded microchip in each FG-ODR sense cable.
- 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 and 65 ft or 3, 7, 12 and 20m) sensor sections or long line section allowing optimised system architecture.
- Microprocessor embedded in each FG-ODR 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").

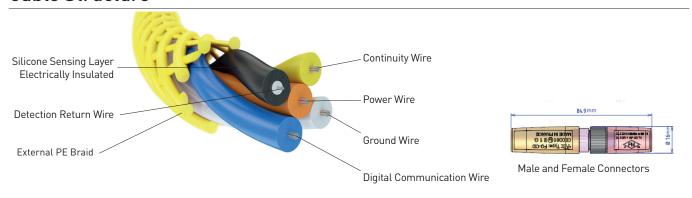
BENEFITS

- Reliable detection:
 - Sensitive to volatile liquid hydrocarbons.
 - Insensitive to water, inorganic pollutants and external loads (pressure).
- Examples of detection time: Gasoline: 20-30 minutes (*), Jet Fuels: 2-4 hours (*), Diesel Oil: 3-6 hours (*).
- 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-ODR sense cables and mixed with water or acids / bases sense cables at the same time.
- Easy to install and remove: standard FG-ODR 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	9, 22, 39 and 65 ft (3, 7, 12 and 20m) standard length per FG-ODR sense cable Up to 59 x FG-ODR sense cables per digital unit circuit - depending on overall circuit length 3 circuits per FG-NET, 2 circuits per FG-BBOX



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 (without connectors)	0.047 lb/ft (70 g/m)
Min. bending radius	1.57 in (40 mm)
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-0DR20	Addressable Oil Sensing Cable in 20m (65 ft) with Connectors
FG-0DR12	Addressable Oil Sensing Cable in 12m (39 ft) with Connectors
FG-0DR7	Addressable Oil Sensing Cable in 7m (22 ft) with Connectors
FG-0DR3	Addressable Oil Sensing Cable in 3m (9 ft) with Connectors
FG-0DRLxxyy/xxyy/xxyy	Pre-Assembled Addressable Oil Sensing Cable with connectors
	xx =length of sections, yy = number of sections
	i.e.: FG-ODRL2004: Pre-assembled 4 lengths of cables FG-ODRL : 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-ODR Cable
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-0D50	50 Hold-down Clips with adhesive for Oil Cables

Certificates









TTK - Type: FG-0D CE 0081 ऒ 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 raising 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 / 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
- 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 / salesſāttk.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