

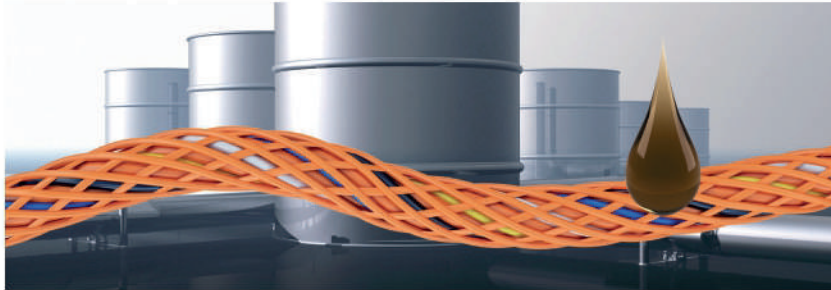


LIQUID LEAK DETECTION SYSTEMS
OIL & GAS DIVISION

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 (3 m, 7m, 12m and 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").

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.

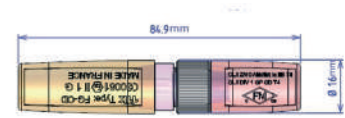
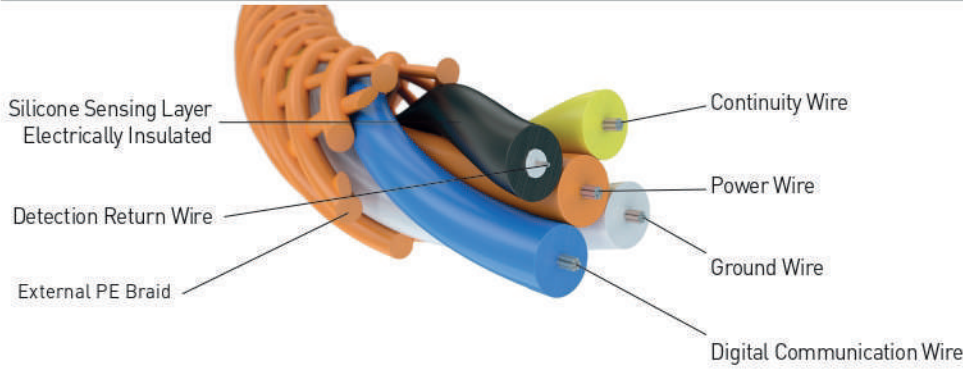
Note (*): depending on liquid composition and leak conditions

BENEFITS

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, 7m, 12m and 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



Male and Female Connectors

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
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

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/xyyy/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 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
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



FG-OD sense cable has passed successfully the UL719 test for abrasion resistance of jacket on flat cable.
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