

FG-0D

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

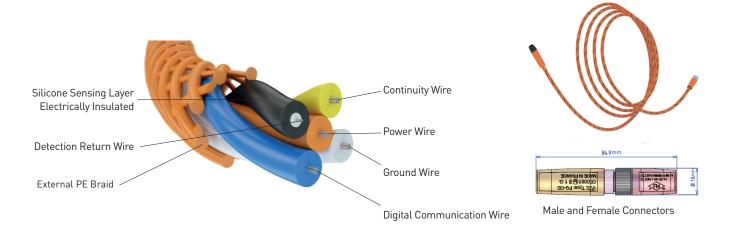
Description

The TTK digital sense cable FG-OD detects and locates liquid hydrocarbons and certain water-insoluble liquids anywhere along its length. Thanks to its embedded microchip, each cable has independent digital addressing, enabling multiple leak detections on a panel output. It offers a fast response, is reusable after detection, and remains unaffected by water or inorganic contamination, making it ideal for humid environments.

Key Advantages

- Standard length (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.
- Reliable detection:
 - Sensitive to liquid hydrocarbons.
 - Insensitive to water, inorganic pollutants and external loads (pressure).
- Can be reused, allowing leak detection tests under real conditions.
- 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.
- 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

Cable Structure



Satellite devices: FG-BB0X*, FG-BB0X-LL Sense cables: Compatible with water and acids sense cables on the same panel output via an interface box. (*FG-DOD interface box required for connecting OD range cables/probes to non-OD range panels) Reusability Reusable, as long as the cable hasn't been damaged by prolonged immersion in liquid Sense Cable Material & Nominal Diameter PE, 10 mm Sensor Wires Material & Nominal Diameter PE, 2 mm Sense Cable Weight (3, 7, 12, 20m) 0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg Minimum Bend Radius 50 mm		
Sense Cable Material & Nominal Diameter Sensor Wires Material & Nominal Diameter PE, 2 mm Sense Cable Weight (3, 7, 12, 20m) 0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg Minimum Bend Radius 50 mm Sense Cable Color Orange braid Operating Temperature -30° to 100°C Maximum Pressure Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga [ATEX "Zone 0"]	Compatibility	Satellite devices: FG-BBOX*, FG-BBOX-LL Sense cables: Compatible with water and acids sense cables on the same panel output via an interface box. [*FG-DOD interface box required for connecting OD range cables/probes to non-OD range
Sensor Wires Material & Nominal Diameter Sense Cable Weight (3, 7, 12, 20m) 0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg Minimum Bend Radius 50 mm Orange braid Operating Temperature -30° to 100°C Maximum Pressure Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) Explosive Area Classification PE, 2 mm 0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg Nak, 0.5 kg, 0.7 kg, 0.7 kg Nak, 0.5 kg, 0.7 kg, 0.7 kg Nak, 0.5 kg, 0.7 kg, 0.7 kg Nak, 0.5 kg, 0.7 k	Reusability	Reusable, as long as the cable hasn't been damaged by prolonged immersion in liquid
Sense Cable Weight (3, 7, 12, 20m) Minimum Bend Radius 50 mm Sense Cable Color Orange braid Operating Temperature -30° to 100°C Maximum Pressure Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/EN/IEC60529) Explosive Area Classification 0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg 0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg 80 mm Formation 100°C 40 kg	Sense Cable Material & Nominal Diameter	PE, 10 mm
Minimum Bend Radius 50 mm Sense Cable Color Orange braid Operating Temperature -30° to 100°C Maximum Pressure 3 bar Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Sensor Wires Material & Nominal Diameter	PE, 2 mm
Sense Cable Color Operating Temperature -30° to 100°C Maximum Pressure 3 bar Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Sense Cable Weight (3, 7, 12, 20m)	0.3 kg, 0.5 kg, 0.7 kg, 1.1 kg
Operating Temperature -30° to 100°C Maximum Pressure 3 bar Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Minimum Bend Radius	50 mm
Maximum Pressure 3 bar Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Sense Cable Color	Orange braid
Maximum Tensile Strength (Incl. Connection) 40 kg Connector Nominal Diameter Connector Ingress Protection (IP Rating - DIN/ EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Operating Temperature	-30° to 100°C
Connector Nominal Diameter 16 mm Connector Ingress Protection (IP Rating - DIN/ EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Maximum Pressure	3 bar
Connector Ingress Protection (IP Rating - DIN/ EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Maximum Tensile Strength (Incl. Connection)	40 kg
EN/IEC60529) Explosive Area Classification Ex ia IIB T4 Ga (ATEX "Zone 0")	Connector Nominal Diameter	16 mm
		IP 68
Direct Burial Capacity Possible	Explosive Area Classification	Ex ia IIB T4 Ga (ATEX "Zone 0")
	Direct Burial Capacity	Possible

Identification Codes

FG-0D3	Addressable Oil Sense Cable in 3 m with Connectors
FG-0D7	Addressable Oil Sense Cable in 7 m with Connectors
FG-0D12	Addressable Oil Sense Cable in 12 m with Connectors
FG-OD20	Addressable Oil Sense Cable in 20 m with Connectors
Accessories:	
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' (1, 3, 7, 15, 30 m) with Connectors
CF-0D50	50 Hold-down Clips with Adhesive for Oil Cables
ES-OD	40 Tags for Oil Cable

Certifications









TTK - Type: FG-0D CE 0081 🐼 II 1 G Ex ia IIB T4 Ga LCIE 13 ATEX 3082 X LECEx LCIE 13.0072X

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