FG-ACX
Acids and Water Sense Cable

TTK LIQUID LEAK DETECTION SYSTEMS
CHEMICAL DIVISION

Product Datasheet

► Compatible with Locating Systems
► Acids, Corrosive Chemical Liquids and Water Detection
► Pre-connected in Standard Lengths
► Unique Dust-Proof Feature Efficiently Preventing False Alarms

Description

The TTK sense cable FG-ACX detects the presence of acids, corrosive chemical liquids and water at any point along its length. The FG-ACX sense cable connects to TTK's analog alarms (FG-ALS8, FG-ALS4 & FG-A), to immediately respond to any leaks of liquids.The TTK Sense Cable FG-ACX is available in standard, pre-finished lengths of 3, 7 or 15 metres complete with connectors.

Features & Benefits

A RELIABLE SENSE CABLE
The FG-ACX sense cable performs the following functions:
■ Rapidly detects the leak of acids, corrosive chemical liquid and water along the entire length of the cable.
■ Detects leaks to the nearest metre when connected to the Locating Alarm Units: FG-ALS8 and FG-ALS4.
■ Detects leaks when connected to a Non-locating Alarm Unit: FG-A.
■ Detects any break or cut to the cable.
■ Ingenious design: four sensing wires of helical construction, compressed and connected on an extruded central core, efficiently **prevent false alarms triggered by dust and all kinds of conductive residue** from the environment that has accumulated on the cable surface.

A MODULAR SYSTEM
The FG-ACX cable ensures permanent protection in areas at risk. FG-ACX is available in standard and pre-finished lengths of 3, 7 or 15 metres. The sense cable is installed to provide the best possible protection in order to cover risks and limit the financial consequences of an undetected leak.

EASY INSTALLATION
The male and female connectors at the end of each length of FG-ACX cable give immediate and dependable connection.
Fixing clips are used to fasten the sense cables in the chosen areas.

A TOUGH AND STURDY DESIGN
Small in diameter, the FG-ACX sense cable is light, flexible and of an easily identifiable color. The FG-ACX sense cable is a non-absorbent design that **can be reused** after cleaning, reducing the maintenance costs.
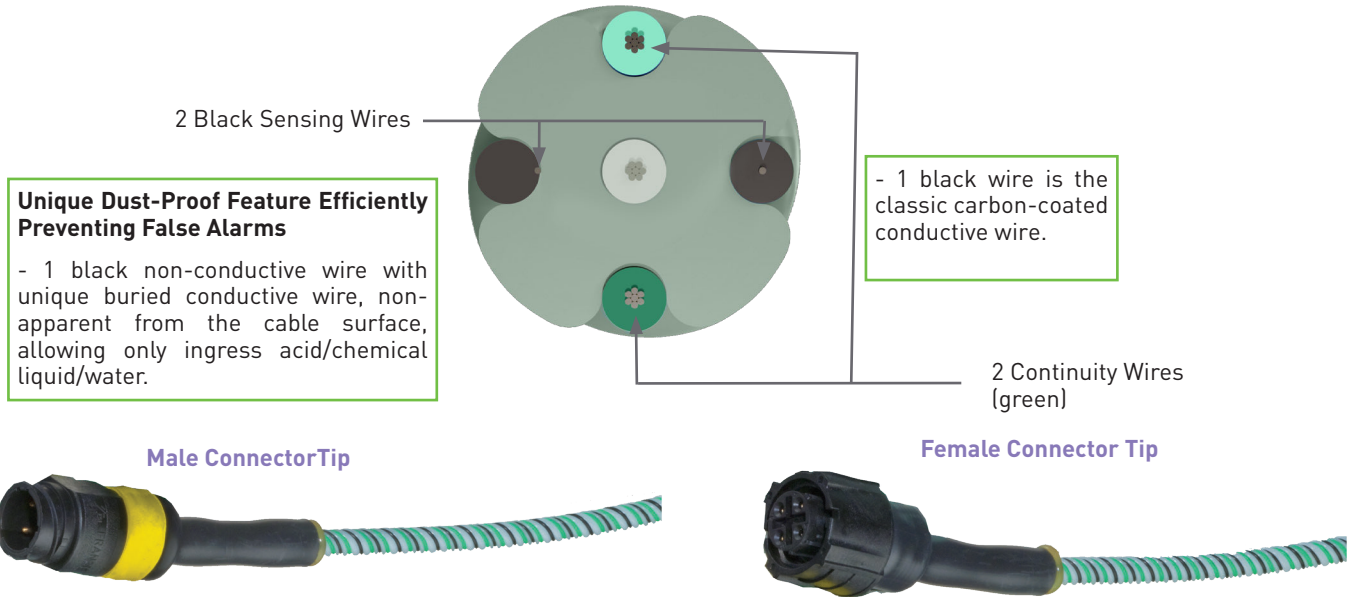
Technical Data

Compatibility	Alarm units: FG-ALS8, FG-ALS4; FG-A
Operating Temperature	-40° to 60°C
Minimum Bend Radius	20 mm
Weight	25g per metre (without connector)
Sense Cable Diameter & Material	7.5 mm, PVDF jacket
Four Sensor Wires Diameter & Material	1.2 mm, PE-based polymer
Core Material	PE-based polymer
Drying Time for Cable After Water Leak	10 seconds
FG-ACX Colour	Green and light grey

Product Diagram

FG-ACX Sense Cable Cutting View

2 Communication Wires and 2 Wires for Locating and Detection

2 Black Sensing Wires —

Unique Dust-Proof Feature Efficiently Preventing False Alarms

- 1 black non-conductive wire with unique buried conductive wire, non-apparent from the cable surface, allowing only ingress acid/chemical liquid/water.

- 1 black wire is the classic carbon-coated conductive wire.

2 Continuity Wires (green)

Male ConnectorTip

Female Connector Tip

Technical Information

In an aqueous environment, the resistance of the following products is as follows:

- A = The cable completely resists in the presence of the liquid considered.
- B = The cable resists, but undergoes a slow corrosion.
- C = The cable corrodes rapidly in the presence of the liquid considered.

In all cases where a leak is detected, it is advisable to identify the source of the leak and to repair the leak quickly. In most cases the contaminated FG-ACX cable can be washed and re-used.

This list is not exhaustive, for other chemicals, specific concentrations or temperatures please consult with your TTK representative.

Acetic acid	A	Hydrofluoric acid	A	Sea water	A
Ammonium hydroxide	B	Liquid Chlorine	A	Silver nitrate	A
Carbonic acid	A	Nitric acid	A	Sodium hydroxide	B
Caustic soda	A	Peracetic acid	B	Sodium hypochlorite	A
Formic acid	A	Phosphoric acid (95%)	A	Sodium sulfate	A
Glucose	A	Potassium hydroxide	B	Sulfuric acid	A
Hydrochloric acid	B	Salicylic acid	A		

Identification Codes

FG-ACX3	Analog Acids Sense Cable in 3m with Connectors
FG-ACX7	Analog Acids Sense Cable in 7m with Connectors
FG-ACX15	Analog Acids Sense Cable in 15m with Connectors
Accessories:	
FG-CLC	Leader Cable in 3.5m
FG-TMX	End Termination
CF-EC100	100 Hold-down Clips with Adhesive
ES-EC	40 Signal Tags

Certification

CE

FG-ACX sense cable is compliant to NFPA 262 (known also as UL910). NFPA: National Fire Protection Association
All TTK sense cables are designed as a part of the leak detection system and were used for the approval certification for TTK monitoring panels.
- **FG-NET and FG-SYS are UL Listed.**
- **FG-NET system is certified FM7745.**