

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

Description

The TTK sense cable FG-ACS detects the presence of water, acid and corrosive chemical liquids at any point along its length. The FG-ACS sense cable connects to TTK's locating units (FG-NET, FG-SYS, FG-ALS8 & FG-ALS4) or non-locating units (FG-A), to respond immediately in the event of any leaks of acid and corrosive chemical liquids.

Features & Benefits

A RELIABLE SENSE CABLE

The FG-ACS sense cable performs the following functions:

- Rapidly detects the leak of water, acid and corrosive chemical liquids along the length of the cable.
- Detects leaks the nearest metre when connected to the Locating Alarm Unit: FG-NET, FG-SYS, FG-ALS8 or FG-ALS4.
- Detects any break or cut to the cable.
- Non-absorbant design allowing it can be **can be reused** after cleaning, reducing the maintenance costs.
- Ingenious design: four sensing wires of helical construction, compressed and connected on an extruded central core, **efficiently prevent false alarms** that have been triggered by **dust and all kinds of conductive residue** from the environment that has accumulated on the cable surface.

A MODULAR SYSTEM

The FG-ACS cable ensures permanent protection in areas at risk. FG-ACS is available in standard and pre-finished lengths of 9, 22 and 49

ft (3, 7, 15 m). The sense cable is installed to provide the best possible protection in order to cover risks and limit the financial consequences of an undetected acid leak.

EASY INSTALLATION

A spliced junction with a length of 11.48 ft (3.5 m) of TTK 8723 bus jumper cable and an end termination at each length of FG-ACS sense cable give immediate connection to the unit or to the sector diversion box.

Special fixing clips are used to fasten the sense cables in the chosen areas. A set of neutral jumper cables and pre-finished connection accessories gives continuity to each circuit with the sector diversion box FG-DTCS.

A TOUGH AND STURDY DESIGN

Small in diameter, the FG-ACS sense cable is light, flexible and of an easily identifiable color. The FG-AC sense cable is a non-absorbent design that **can be reused** after cleaning, reducing the maintenance costs.

Technical Data

Compatibility	Locating units: FG-SYS, FG-NET, FG-BBOX (via Diversion Box: FG-DTCS), FG-ALS8, FG-ALS4 Non-locating unit: FG-A
Operating Temperature	-40° to 185°F [-40° to 85°C]
Minimum Bend Radius	790 mils (20 mm)
Weight	0.27 oz/ft (25g/m)
Sense Cable Diameter & Material	295 mils (7.5 mm) with PVDF jacket
Four Sensor Wires Diameter & Material	47 mils (1.2 mm) with PVDF jacket
Core Material	PVDF cable
Liquid Quantity To Active Alarm	1.97" - 3.94" (50-100 mm) on the sense cable
FG-ACS Color	Green

Product Diagram

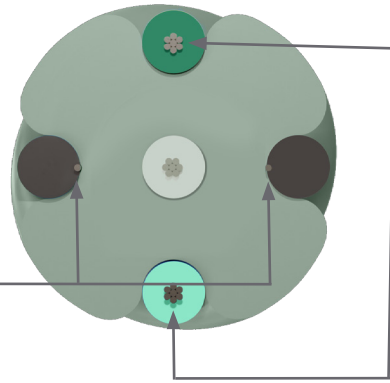
FG-ACS sense cable in section with its four sensing wires

2 Communication Wires and 2 Wires for Locating and Detection

Unique Dust-Proof Feature Efficiently Preventing False Alarms

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

2 Black Sensing Wires



2 Continuity Wires (green)



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-ACS 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-ACS15	Sector acid sense cable in 15m (49 ft) length
FG-ACS7	Sector acid sense cable in 7m (22 ft) length
FG-ACS3	Sector acid sense cable in 3m (9 ft) length
Accessories:	
FG-DTCS	Addressable box
CF-EC100	100 hold-down clips with cold adhesive glue
ES-EC	40 signal tags

Certificate



FG-ACS sense cable is compliant with NFPA 262 (known also as UL910). NFPA: National Fire Protection Association
 All TTK sensing cables are designed as a part of the leak detection system thus included in the approval certification for TTK monitoring panels.

- FG-NET and FG-SYS systems meet the requirements of all European Standards in EN 50081 and EN 50082 EMC.
- FG-NET and FG-SYS systems meet the TÜV requirements, according to IEC 61010-1/A2.
- FG-NET and FG-SYS systems are UL Listed.

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