FG-EC
Digital Water and Base Sense Cable

TTK LIQUID LEAK DETECTION SYSTEMS
CONSTRUCTION DIVISION

Product Datasheet

▶ Digital Pin-Point Leak Location
▶ Embedded Microprocessor
▶ LED Status Indicator
▶ Detects Water and Base Liquids
▶ Made in Low Smoke Zero Halogen Material
▶ Pre-connected in Standard Lengths

Description

The TTK digital sense cable FG-EC detects and pin-points the location of water and base liquid leaks at any point along its length.

The FG-EC sense cable is designed for FG-SYS, FG-NET or FG-BBOX digital units to respond intelligently in the event of any liquid leaks.

Each FG-EC sense cable is made with special **Low Smoke Zero Halogen materials**, emitting limited smoke and no halogen when exposed to high sources of heat.

Features & Benefits

FEATURES

- Available in standard and pre-connected lengths of 9, 22 and 49 ft (3, 7 and 15 m). They can be interconnected to provide an expandble network of leak detection.
- The cable contains an embedded microprocessor, it intelligently monitors the cable status, it provides continuous real-time communication to the TTK digital units.
- Each cable has a high visibility LED to provide quick green/red identification of the cable status:
  - Green LED: normal status, no alarm raised;
  - Red LED: leak detection on the cable;
  - LED off: cablebreak on this or any upstream cable.
- Small diameter, light, flexible and in an easily identifiable light blue color.
- Ingenious design: four conducted wires of helical construction, compressed and connected on an extruded central core, insensitive to dust and metal particles contamination, preventing false alarms.

- Fixing clips available to fasten the sense cables.
- A set of TTK BUS 8723 jumper cables and connection accessories gives continuity to each circuit.
- Minimum bend radius for FG-EC sensing cable: 1.38'' or 35mm.
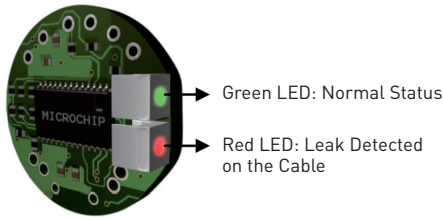
BENEFITS

- Detects and pin-points the location of a water/base leak to the nearest foot along the length of the cable.
- Detects and localizes cablebreak on the cable.
- Manufactured with the low smoke zero halogen (LSZH or LS0H) materials, FG-EC cable emits, when burned, a less optically dense smoke that releases at a lower rate than a non-LSZH cable.
- Short drying time.
- The FG-EC sense cable is a non-absorbent design that can be reused after leaks, reducing the maintenance costs.
- Easy installation with pre-finished male and female connectors.
- Flexible design: in both liner and sector mode (via FG-DTC box).
- The typical applications are data centers, trading floors, high value and mission critical infrastructure.
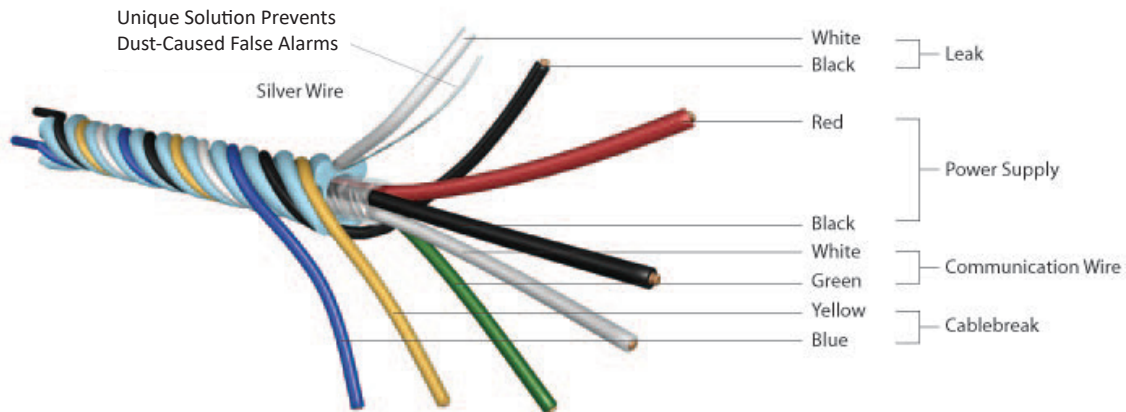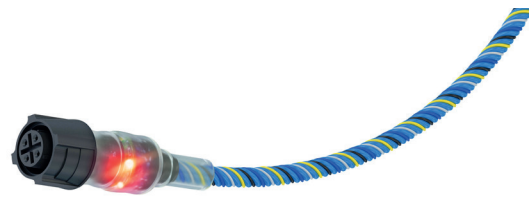
Technical Data

Compatibility	Digital units: FG-SYS; FG-NET; FG-BBOX Diversion box: FG-DTC
Operating Temperature	-40° to 140°F (-40° to 60°C)
Minimum Bend Radius	0.79 in (20 mm)
Maximum Length of Digital Sense Cable per Unit	Up to 120 lengths of FG-EC, connected to 3 circuits
Connector Type	FCI-Clipper
Weight	0.0168 lb/ft (25 g/m)
Min. bending radius	1.38'' (35mm)
Breaking Strengh for Sense Cable	Minimum 165.35 lb (75 kg)
Sense Cable Diameter	0.3 in (7.5 mm) with jacket
Four Sensor Wires Diameter	0.05 in (1.2 mm) with jacket
FG-EC Color	Light blue

Product Diagram

Embedded Microprocessor in Female Connector:

→ Green LED: Normal Status

→ Red LED: Leak Detected on the Cable

MICROCHIP

Female Connector with Addressable Electronic Module:

Unique Solution Prevents Dust-Caused False Alarms

Silver Wire

Color	Function
White / Black	Leak
Red / Black	Power Supply
White / Green	Communication Wire
Yellow / Blue	Cablebreak

Identification Codes

FG-EC15	Addressable Water Sensing Cable in 15m (49 ft) In Low Smoke Zero Halogen Material
FG-EC7	Addressable Water Sensing Cable in 7m (22 ft) In Low Smoke Zero Halogen Material
FG-EC3	Addressable Water Sensing Cable in 3m (9 ft) In Low Smoke Zero Halogen Material
Accessories	
FG-NC(x)	'TTK Bus 8723' Neutral Cable X in (m) With Connectors
FG-TMC	Digital End Plug for FG-EC/AC Cables
FG-CLC	Leader Cable 137.8 in (3.5 m), on 'TTK Bus 8723'
FG-DTC	Diversion Box for 'TTK Bus 8723'
FG-DTCS	Addressable Box for one Water or Acids Cable, on 'TTK Bus 8723' (Sector Mode)
CF-EC100	100 Hold-down Clips with adhesive for Water & Acids Cables
ES-EC	40 Tags for Water & Acids Cables

Certificates

FG-EC meets the Low Smoke Zero Halogen requiremnt, test performed by LCIE. Test report N° 92634-584827Cr2009/07/20.
FG-EC of as a part of FG-NET system, meets the requirements of FM. Original Approval Job Identification:PR456641.
FG-EC of as a part of FG-SYS system, meets the requirements of all European Standards in EN 50081 and EN 50082 EMC.
FG-SYS system meets the TÛV requirements, according to IEC 61010-1/A2.

- **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 UK Ltd.** / 3 Luke Street / London EC2A 4PX / United Kingdom / T : +44 207 729 6002 / F : +44 207 729 6003 / **www.ttkuk.com** / **sales@ttkuk.com**
- **TTK Pte Ltd.** / #09-05, Shenton House, 3 Shenton Way / Singapore 068805 / T: +65.6220.2068 / M: +65.9271.6191 / F: +65-6220.2026 / **www.ttk.sg** / **info@ttk.sg**
- **TTK Asia Ltd.** / 2107-2108 Kai Tak Commercial Building / 317 Des Voeux Road Central / Hongkong / T: +852.2858.7128 / F: +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**