



LIQUID LEAK DETECTION SYSTEMS
CONSTRUCTION DIVISION

FG-ECP

Addressable Water Point Sensor

Product Datasheet



- ▶ Compatible with Digital Systems
- ▶ Detects and Locates Leaks
- ▶ IP67 Protection Marking

Description

The FG-ECP is a digital point sensor for water leak detection. It is designed to be used with TTK digital units FG-SYS, FG-NET or FG-BBOX to give instant detection of liquid leaks.

In the event of liquid leak or cable break on the FG-ECP, the connected digital unit will respond as follows:

- An audible alarm is triggered and a relay is activated.
- The location of the leak (address of the FG-ECP) and details of the fault (the type of fault: leak or cable break) are displayed on the screen.
- Event report is sent to the BMS via MODBUS /JBUS protocol.

Key Advantages

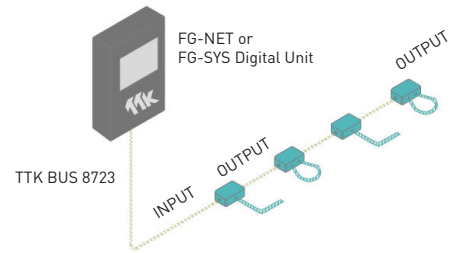
- Available in four models: three equipped with a sense cable (U-shaped, L-shaped, or with customizable length) and one model without cable, equipped with two stainless steel probes (FG-ECP-M) to adapt to different environments.
- The digital communication is made with a length of TTK bus 8723 connected to various FG-ECP and the digital unit.
- PG7 glands on the box sides make jumper cabling quick and easy.
- The LED on the front face of the box indicates the box's status in real time:
 - Blinking green: normal, no alarm.
 - Blinking red: leak detected on the box.
 - No LED light: cablebreak detected on the box or loss of communication.
- The FG-ECP detects and locates rapidly a liquid leak that comes in contact with it.
- The FG-ECP detects any break or cut to the cable (for models equipped with a cable).
- The sense cable FG-ECS used in the affected models has a non-absorbent structure. It resets automatically within a few seconds after the leak has been eliminated.
- The FG-ECP is small and light. It is ideally suited for environments as plantrooms, bundled areas, drip trays, etc.
- The FG-ECP ensures permanent protection in areas at risk of water leakage.
- A simple bi-annual test is all that is required.

Technical Data

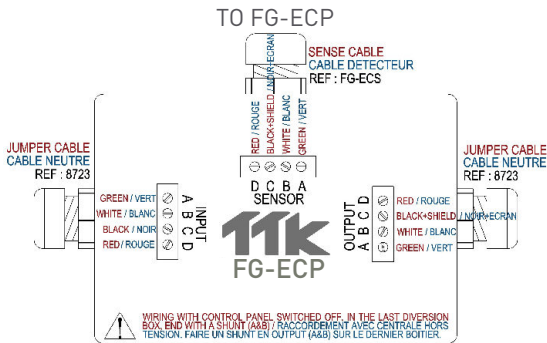
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| Compatibility | Digital units: FG-SYS; FG-NET; FG-BBOX |
| Reusability | Reusable, as long as the cable hasn't been damaged by prolonged immersion in liquid |
| Drying Time for Cable After Leak | Less than 10 seconds |
| Sense Cable Nominal Diameter | 0.32 in (± 0.02 in) [8 mm (± 0.5 mm)] |
| Stainless Steel Probe Diameter (FG-ECP-M Model) | Ø0.79 in (Ø20mm) |
| Sense Cable Color | Dark blue |
| Operating Temperature | 5°F à 131°F [-15°C to +55°C] (Note: The sense cable itself is rated for temperatures up to 185°F [85°C].) |
| Ingress Protection | IP 67 |
| Enclosure Type | ABS Polylac 707 (a natural ABS), UL94HB |
| Dimensions (W,H,D) | 4.13''W x 2.95''H x 2.17''D [105mmW x 75mmH x 55mmD] |

Connection Schematic

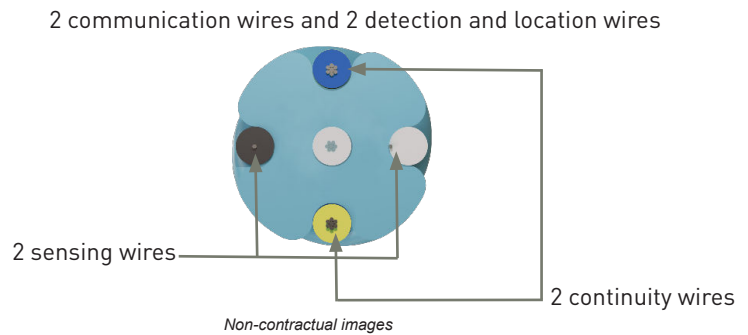
- The four models can be mixed in one circuit of a digital unit.
- FG-ECP can also be installed in the same circuit with digital water / acids sense cables.
- Maximum: 40 FG-ECP (40 addresses) connected to one circuit of the digital unit.
- In the schematic, INPUT corresponds to the TTK BUS 8723 cable coming from the digital unit; OUTPUT corresponds to the TTK BUS 8723 cable leaving towards the following FG-ECP.
- On the last FG-ECP point sensor, a shunt (A&B) on the OUTPUT side must be made.



Product Information



FG-ECS Sense Cable Cutting View



Product Diagram



FG-ECP in U-shape



FG-ECP in L-shape



FG-ECP Customized Version
Attention: Sense cable is to be ordered separtated. The sensor length and jumper length are to be precised when ordering.



FG-ECP with stainless steel probes

Identification Codes

| | |
|----------------------------------|--|
| FG-ECP-U | Addressable Point Sensor in U-shape for Water Detection |
| FG-ECP-L | Addressable Point Sensor in L-shape for Water Detection |
| FG-ECP-M | Addressable Point Sensor Stainless Stell Probes for Water Detection |
| FG-ECP Customized Version | Including 2 Following Elements: <ul style="list-style-type: none"> • FG-ECP: Enclosure • FG-ECS Sense Cable: at a Specified Length |

Certification



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.

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