



- ▶ Designed for Liquid Cooling Applications
- ▶ High-sensitivity and Flexible Sense Cable
- ▶ High-visibility LED with Real Time Status
- ▶ Pre-equipped Sense Cable for Easy Setup
- ▶ Tight Space Friendly and Lightweight

## Description

The FG-DLC is a **point sensor designed to detect leaks of conductive coolant liquids**. It is pre-equipped with a specified length of sense cable and connects seamlessly to TTK digital units such as the FG-SYS or FG-NET, providing instant leak detection.

In the event of liquid leak on the sense cable connected on the FG-DLC, the device will blink red, and the connected digital unit will respond as follows :

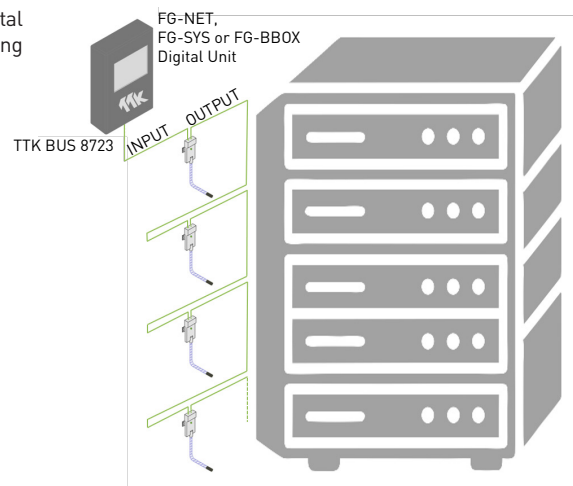
- An audible alarm is triggered and a relay is activated.
- The details of the fault (the type of fault: leak or cable break) and the address of the FG-DLC are displayed on the screen.
- Event report is sent to the BMS via MODBUS /JBUS protocol.

## Key Advantages

- Specifically developed for liquid cooling technique using conductive coolant fluids in data center applications.
- Pre-equipped with a standard length (1.5 ft, 3.25 ft, 6.5 ft, 9.85 ft or 0.5 m, 1 m, 2 m and 3 m) of sense cable for easy setup.
- Up to 40 FG-DLC can be connected to one circuit of a digital unit.
- High visibility LED to provide quick identification of the 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.
- Two fixing eyelets on the sides.
- The FG-DLC detects rapidly a liquid leak that comes in contact with it.
- The FG-DLC detects any break or cut to the cable.
- High-sensitivity and enhanced durability sense cable.
- The FG-DLC is tight space friendly, its compact design is ideal for confined spaces like server racks in data centers, drip trays, banded areas, and more.
- Flexible and lightweight sense cable, designed for easy handling and adaptation to various installation environments.
- A simple bi-annual test is all that is required.

## Connection Schematic

- Maximum: 40 FG-DLC (40 addresses) connected to one circuit of a 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-DLC.



# Technical Data

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
Sense Cable Material & Nominal Diameter	PE, 0.15 in (4 mm)
Sensor Wires Diameter & Material	PVDF, 0.05 in (1.2 mm)
Core Material	PE
Minimum Bend Radius	0.40 in (10 mm)
Color	Box: Translucent, sense cable: purple
Operating Temperature	5°F à 131°F (-15°C to 55°C)
Ingress Protection	IP 40
Enclosure Type	Polyamide (PA) UL94 V0
Dimensions (W,H,D)	1.06'' x 2.32'' x 0.63'' (27mm x 59mm x 16mm) without eyelets 2.2'' x 2.32'' x 0.63'' (56mm x 59mm x 16mm) with eyelets

# Product Information

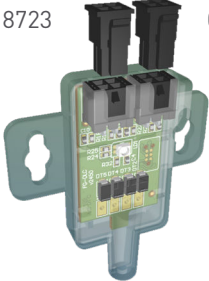
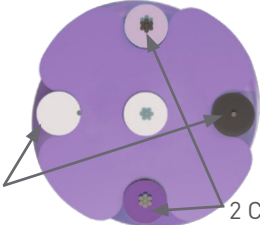
## Four Wires Sense Cable:

INPUT TTK BUS 8723      OUTPUT TTK BUS 8723

2 Return Wires and 2 Wires for Leak Detection

2 Black and White Sense Wires

2 Continuity Wires



# Identification Codes

FG-DLC0.5	Length of Sense Cable in 1.5 ft (0.5 m) Preconnected to a Digital Diversion Device
FG-DLC1	Length of Sense Cable in 3.25 ft (1 m) Preconnected to a Digital Diversion Device
FG-DLC2	Length of Sense Cable in 6.5 ft (2 m) Preconnected to a Digital Diversion Device
FG-DLC3	Length of Sense Cable in 9.85 ft (3 m) Preconnected to a Digital Diversion Device
FG-NC0.5	Jumper Cable 0.5 m with Connectors
FG-NCL KIT	Jumper Cable Kit
FG-NCL1	3.25 ft (1m) Bus between Two Sense Cables for Liquid Cooling
FG-NCL3	9.85 ft (3m) Bus between Two Sense Cables for Liquid Cooling
FG-NCL7	23 ft (7m) Bus between Two Sense Cables for Liquid Cooling
FG-NCL-F	3.25 ft (1m) Jumper Cable with Female Connector
FG-NCL-M	3.25 ft (1m) Jumper Cable with Male Connector
FG-TLC	End Plug

# 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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