FG-DLC

Point Sensor for Liquid Cooling

Product Datasheet

- ► 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.

Features & Benefits

FEATURES

- Specifically developed for liquid cooling technique using conductive coolant fluids (as Ethylene glycol/Propylene glycol coolants, water/glycol mixtures) in data center applications.
- Pre-equipped with a standard length (0.5m, 1m and 2m) 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.
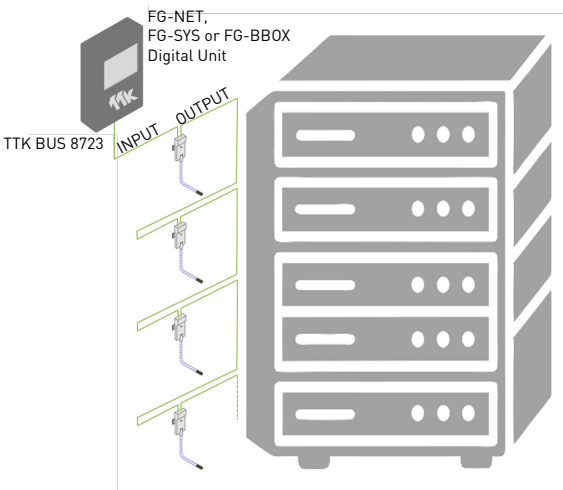- Two fixing eyelets on the sides.

BENEFITS

- 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-sensitivitiy 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, bunded 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.

Technical Data

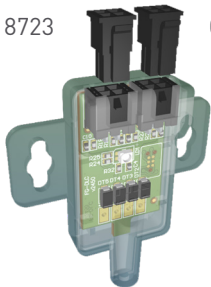|	
Compatibility	Digital units: FG-SYS, FG-NET, FG-BBOX
Enclosure	Polyamide (PA) UL94 V0
Operating Temperature	-40° to 60°C
Color	Translucent for the box and purple for the sense cable
Sense Cable Diameter	4 mm
Dimensions (W,H,D)	27mm x 59mm x 16mm without eyelets 56mm x 59mm x 16mm with eyelets

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.
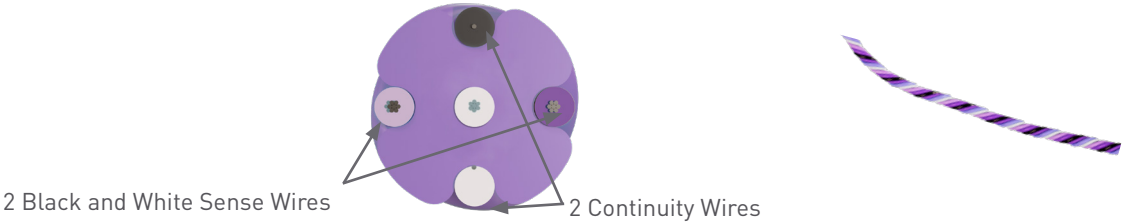

FG-NET, FG-SYS or FG-BBOX Digital Unit

TTK BUS 8723   INPUT   OUTPUT

Product Information

INPUT TTK BUS 8723   OUTPUT TTK BUS 8723

Four Wires Sense Cable:

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 0.5M Preconnected to a Digital Diversion Device
FG-DLC1	Length of Sense Cable in 1M Preconnected to a Digital Diversion Device
FG-DLC2	Length of Sense Cable in 2M Preconnected to a Digital Diversion Device
FG-NET F	Digital Touchscreen Leak Detection Panel (Wall Mounted)
FG-SYS F	Digital Locating Leak Detection Panel (Wall Mounted)
FG-BBOX F	FG-NET's Satellite Device - 2 Circuits Black Box (Wall Mounted)

Certification

CE

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.**