



- ▶ 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 :

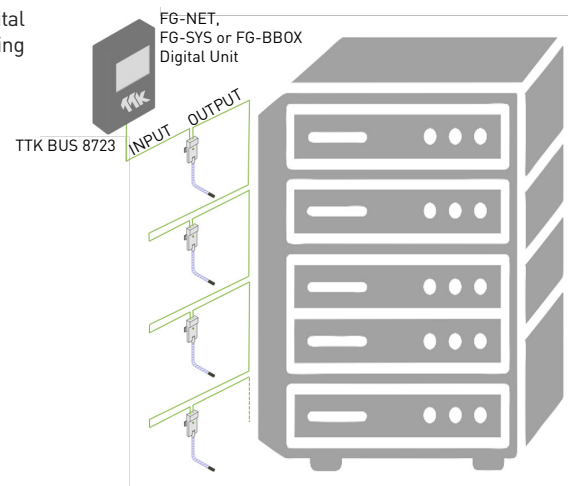
- An audible alarm is triggered and a relay is activated.
- The details of the fault (the type of fault: leak or cable break) and the address of the FG-DLC are displayed on the screen.
- Event report is sent to the BMS via MODBUS /JBUS protocol.

Key Advantages

- Specifically developed for liquid cooling technique using conductive coolant fluids in data center applications.
- Pre-equipped with a standard length (0.5 m, 1 m and 2 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

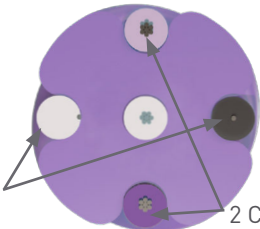
Compatibility	Digital units: FG-SYS, FG-NET, FG-BBOX
Reusability	Reusable, as long as the cable hasn't been damaged by prolonged immersion in liquid
Sense Cable Material & Nominal Diameter	LSZH based on PE, 4 mm
Sensor Wires Diameter & Material	PE, 1.2 mm
Core Material	LSZH based on PE
Minimum Bend Radius	10 mm
Color	Box: Translucent, sense cable: purple
Operating Temperature	-15°C to +55°C
Ingress Protection	IP 40
Enclosure Type	Polyamide (PA) UL94 V0
Dimensions (W,H,D)	27mm x 59mm x 16mm without eyelets 56mm x 59mm x 16mm with eyelets

Product Information

Four Wires Sense Cable:

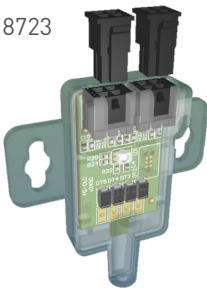
2 Return Wires and 2 Wires for Leak Detection

2 Black and White Sense Wires



2 Continuity Wires

INPUT TTK BUS 8723



OUTPUT TTK BUS 8723

Identification Codes

FG-DLC0.5	Length of Sense Cable in 0.5 m Preconnected to a Digital Diversion Device
FG-DLC1	Length of Sense Cable in 1 m Preconnected to a Digital Diversion Device
FG-DLC2	Length of Sense Cable in 2 m Preconnected to a Digital Diversion Device
FG-DLC3	Length of Sense Cable in 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	1m Bus between Two Sense Cables for Liquid Cooling
FG-NCL3	3m Bus between Two Sense Cables for Liquid Cooling
FG-NCL7	7m Bus between Two Sense Cables for Liquid Cooling
FG-NCL-F	1m Jumper Cable with Female Connector
FG-NCL-M	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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- 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 / cgalliche@ttk.fr
- 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