LS02+ flex

Leakage Sensor

thermokon®
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
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Valid from production date 25001

Please note the production date on the product label on the device

18169
IP38
CE

» APPLICATION

Leakage sensor for detecting (weakly) electrically conductive liquids (e.g. water leaks under air conditioning units, burst pipes) along the entire sensor line.With a length of up to 98 ft., larger areas can also be covered. The cable is laid in a spiral around the respective pipe or in a meandering pattern on surfaces or in collection containers. Due to the insulation between the twisted sensor cables, the sensor element can also be used on electrically conductive materials.

» TYPES AVAILABLE

Leakage sensor
- LS02+ flex 2 m (6.6 ft.)
- LS02+ flex 5 m (16.4 ft.)

Other lengths on request, up to 30 m (98 ft.) possible

» SECURITY ADVICE – CAUTION

⚠️ The installation and assembly of electrical equipment should only be performed by authorized personnel.
The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with
Local laws, health & safety regulations, technical standards and regulations
Condition of the device at the time of installation, to ensure safe installation
This data sheet and installation manual

» PRODUCT TESTING AND CERTIFICATION

CE

Declaration of conformity
The declaration of conformity of the products are available on our website
https://www.thermokon.de/direct/en-gb/categories/ls02plus-flex
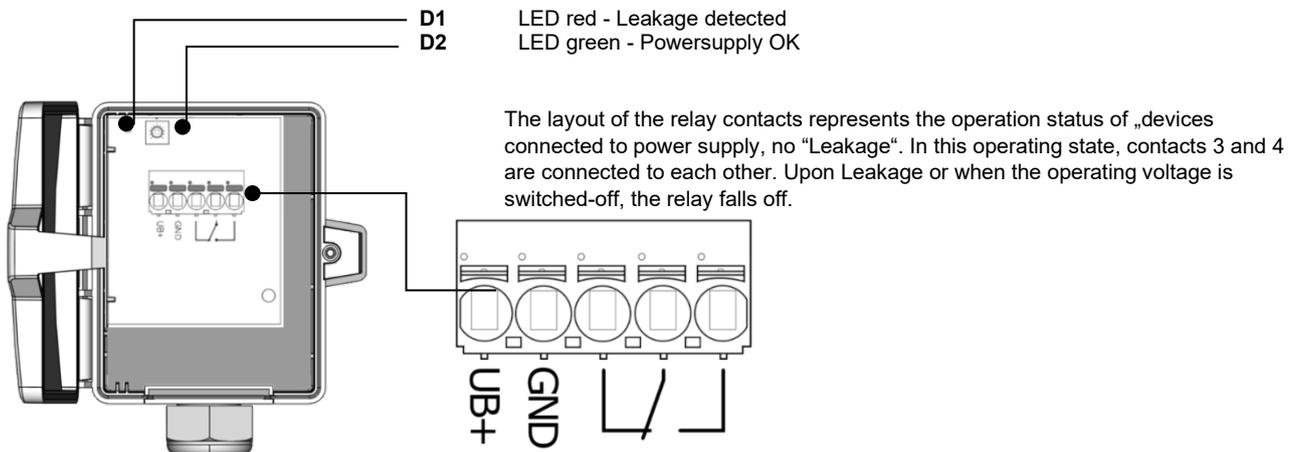
» NOTES ON DISPOSAL

The crossed-out wheelie bin symbol indicates that the product or removable batteries must not be disposed of with household or commercial waste. Within the EU, you are legally obliged to dispose of the product separately and appropriately in accordance with the national laws of your country. Alternatively, please contact your supplier or Thermokon Sensortechnik GmbH. Further information can be found at: www.thermokon.com

»TECHNICAL DATA

Measuring values	leakage
Output switch contact	changeover contact, 24 V: max. 24 V / 1,0 A (resistive, floating)
Power supply	15..24 V = (±10%) or 24 V ~ (±10%) SELV
Power consumption	typ. 0,8 W (24 V =) | 1,6 VA (24 V ~)
Display	LED green – power supply OK, LED red – Leakage
Enclosure	enclosure USE-M, PC, pure white, cover PC, transparent, with removable cable entry
Protection	IP65 according to EN 60529
Cable entry	Flextherm M20, for wire max. Ø=0.18..0.35 in., removable
Connection electrical	removable plug-in terminal, max. 14AWG
Sensor rod	PVC, L=6.6 | 16.4 ft., other lengths on request (max. 98 ft.)
Switching threshold conductivity	ca. 1 µS
Ambient condition	-4..+140 °F, max 85% rH, short term condensation

»CONNECTION PLAN

The power supply must not be interrupted. If the leakage protection is not permanently supplied with power, a possible leakage cannot be detected.

D1   LED red - Leakage detected
D2   LED green - Powersupply OK

The layout of the relay contacts represents the operation status of „devices connected to power supply, no "Leakage". In this operating state, contacts 3 and 4 are connected to each other. Upon Leakage or when the operating voltage is switched-off, the relay falls off.
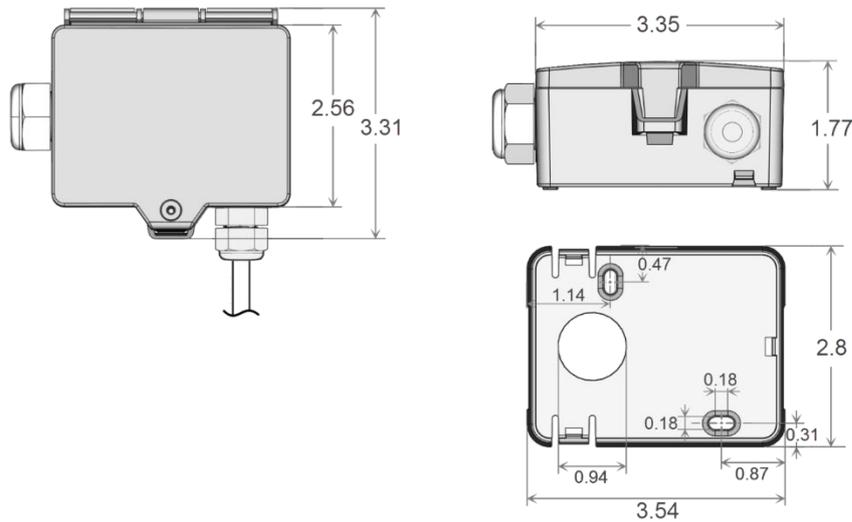
UB+   GND   L/

» MOUNTING AND INSTALLATION

The sensor cables can be fixed to a surface with the self-adhesive holders (see accessories). Make sure that the surface to be glued is dry and free of dirt.

» MAINTENANCE/INSPECTION

▶ Carry out a functional check at least once a year. In this case, immerse the end of the sensor rod in a container of water and check the switching process of the relay.

▶ If heavily soiled, disassemble and clean the sensor housing and sensor rod.

▶ After a leakage, the sensor must also be tested again for function.

» DIMENSIONS (IN.)

» ACCESSORIES (INCLUDED IN DELIVERY)

Holder for sensor cable, self-adhesive

Mounting base enclosure USE pure white	Item No. 616430
Mounting kit universal	Item No. 698511
• Cover screw + screw cover• 2 Rawlplugs • 2 Screws (countersunk head) • 2 Screws (rounded head)	

» ACCESSORIES (OPTIONAL)

Sealing insert M20 USE white, 2x Ø=0.28 in. (for 2 wire; PU 10 pieces)   Item No. 641333