

# LS02+ ext.

Leakage Sensor

**thermokon**<sup>®</sup>  
HOME OF SENSOR TECHNOLOGY

## Datasheet

Subject to technical alteration  
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### » APPLICATION

Leakage sensor for the detection of (weakly) electrically conductive liquids. (e.g. water leaks under air conditioners, pipe bursts, otherwise conductive liquids). With an electrolytic alternating voltage measurement, the leakage sensor measures point-like via 2 electrodes. For connection to controller and display systems. The device contains sensor and evaluation electronics with relay contact and signalling LED.

### » TYPES AVAILABLE

#### Leakage sensor

- LS02+ ext.

### » 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



#### Declaration of conformity

The declaration of conformity of the products are found on our website <https://www.thermokon.de/>

### » NOTES ON DISPOSAL



As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

## » TECHNICAL DATA

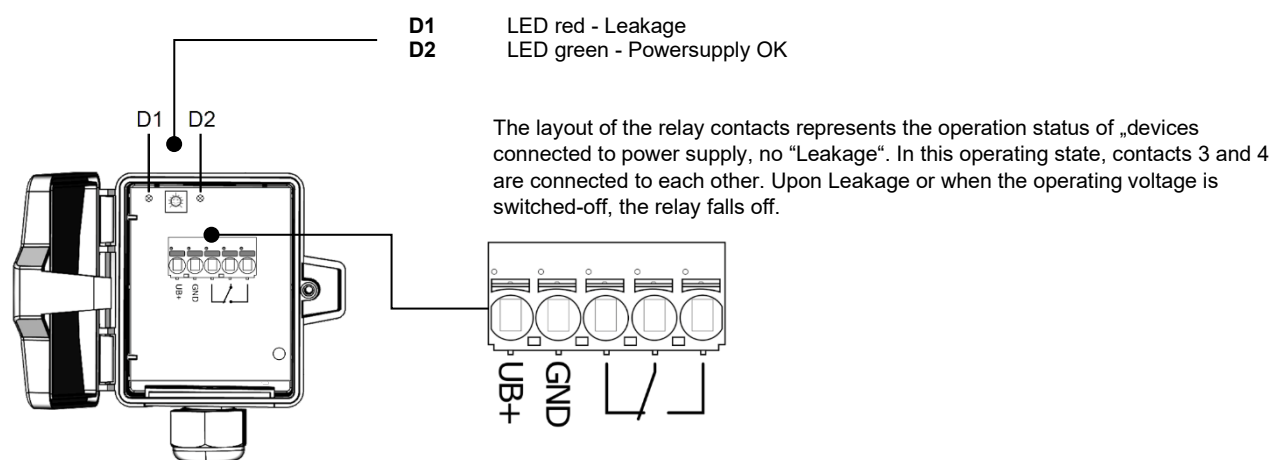
Measuring values	leakage
Output switch contact	changeover contact, 24 V: max. 24 V / 1,0 A (resistive, floating)
Power supply	15..24 V = (±10%) or 24 V ~ (±10%) SELV
Power consumption	typ. 0,8 W (24 V =)   1,6 VA (24 V ~)
Display	LED green – power supply OK, LED red – Leakage
Enclosure	enclosure USE-S, 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
Switching threshold conductivity	ca. 1 µS
Ambient condition	-4..+140 °F, max 85% rH, short term condensation
++Notes	with external sensor (PVC, diameter 0,25 mm²   AWG24, L=5 m   16.4 ft.)

## » USE ENCLOSURE WITH UV AND WEATHER RESISTANCE

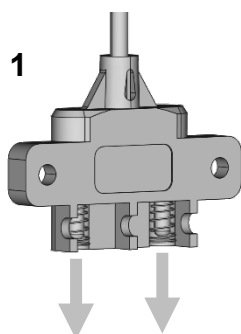
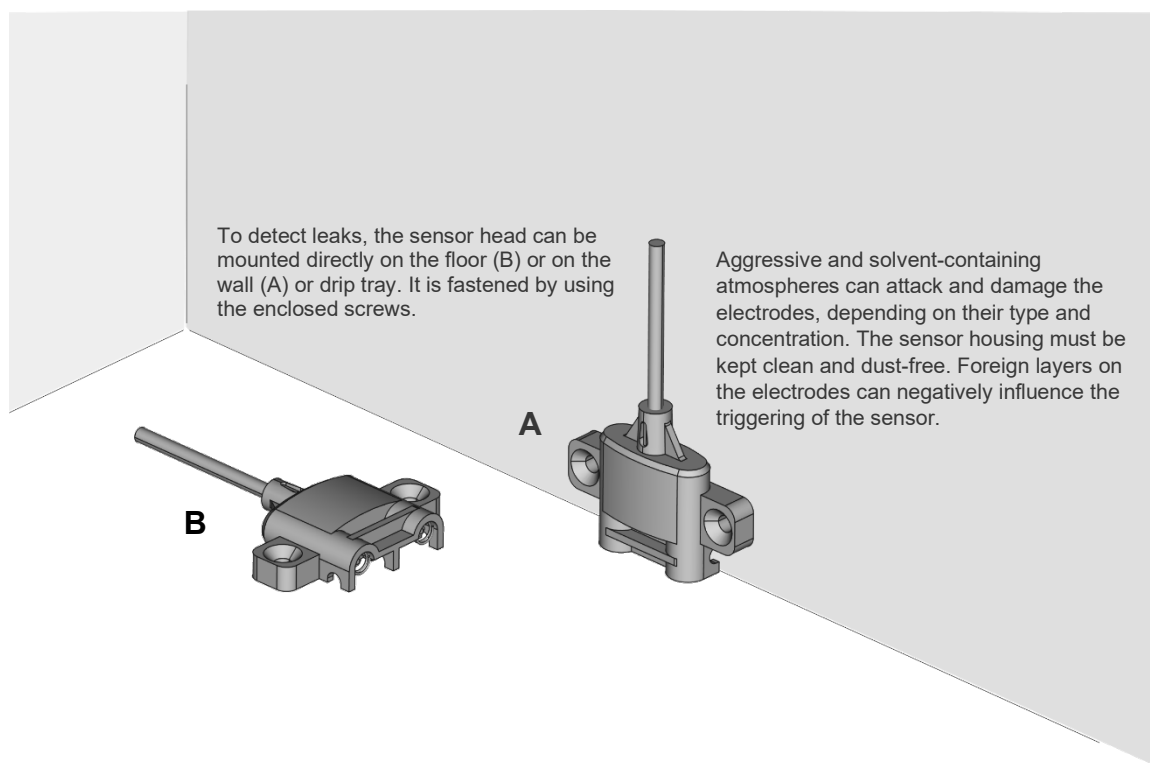
After some time, outdoor mounted plastics can lose their color and quality. Therefore, all USE housings are made of special white polycarbonate (PC). The light-stable colorants and additives are used to achieve optimum protection of the polymer while maintaining color stability. The titanium dioxide used is specially developed for polycarbonate and offers excellent UV protection through the reflection of the entire light spectrum including the UV component by 340 nm. This effectively counteracts the otherwise occurring photochemical polymer degradation. The colors stay full for a long time without fading. The material is also resistant to cold and frost.

## » CONNECTION PLAN

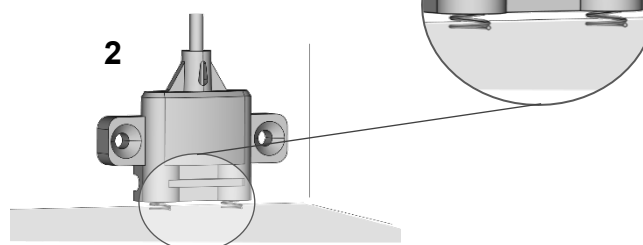
The power supply must not be interrupted. If the leakage protection is not permanently supplied with power, a possible leakage cannot be detected.



## » MOUNTING ADVICE



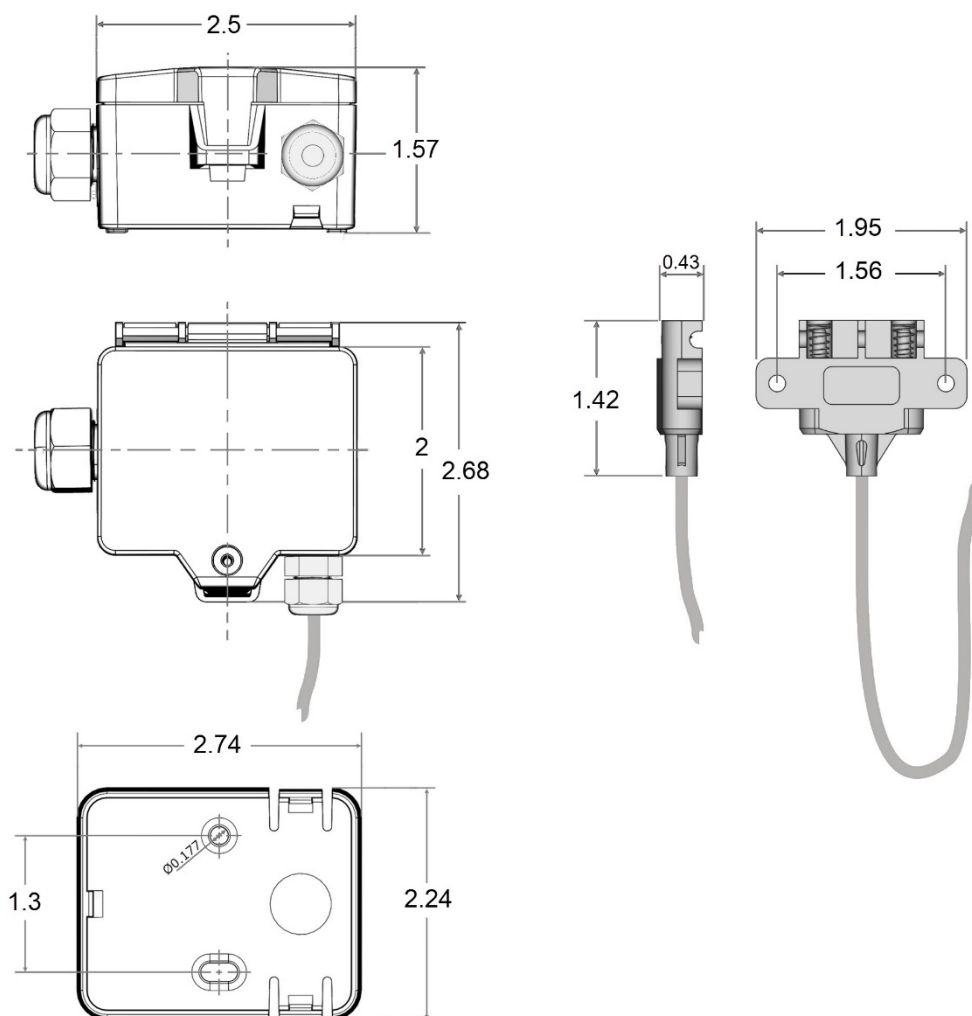
In order to establish contact with the monitoring surface, the springs can be adjusted to the appropriate height. To do this, stretch the length of the spring by hand. If the height is not adjusted, the leakage protection may not function.



## » MAINTENANCE/INSPECTION

- Carry out a functional check at least once a year. Short-circuit the sensor electrodes and check the switching process of the relay.
- If heavily soiled, disassemble and clean the sensor housing.
- After a leakage, the sensor must also be tested again for function.

## » DIMENSIONS (IN.)



## » ACCESSORIES (INCLUDED IN DELIVERY)

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  $\varnothing=0.28$  in. (for 2 wire; PU 10 pieces)

Item No. 641333