

LS02+ ext.

Leakage Sensor

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
Issue date: 10/23/2024 • A140



» 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 available on our website
<https://www.thermokon.de/direct/en-gb/categories/ls02plus-ext>

» NOTES ON DISPOSAL



The crossed-out wheeled 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

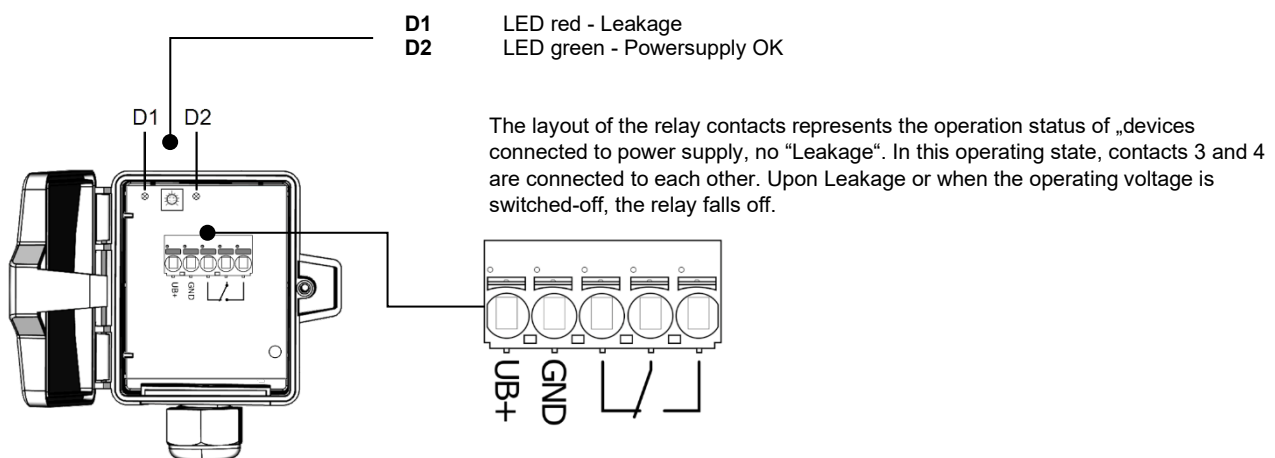
Measuring values	leakage
Output switch contact	changeover contact, 24 V: max. 24 V / 1,0 A (resistive, floating)
Power supply	15..24 V = ($\pm 10\%$) or 24 V ~ ($\pm 10\%$) SELV
Power consumption	typ. 0,8 W (24 V =) 1,6 VA (24 V ~)
Display	LED green – power supply OK, LED red – Leakage
Enclosure	enclosure 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. $\varnothing=0.18..0.35$ in., removable
Connection electrical	removable plug-in terminal, max. 14AWG
Switching threshold conductivity	ca. 1 μ S
Ambient condition	-4..+140 °F, max 85% rH, short term condensation
++Notes	with external sensor (PVC, diameter 0,25 mm ² AWG24, L=5 m 16.4 ft.)

» USE ENCLOSURE WITH UV AND WEATHER RESISTANCE

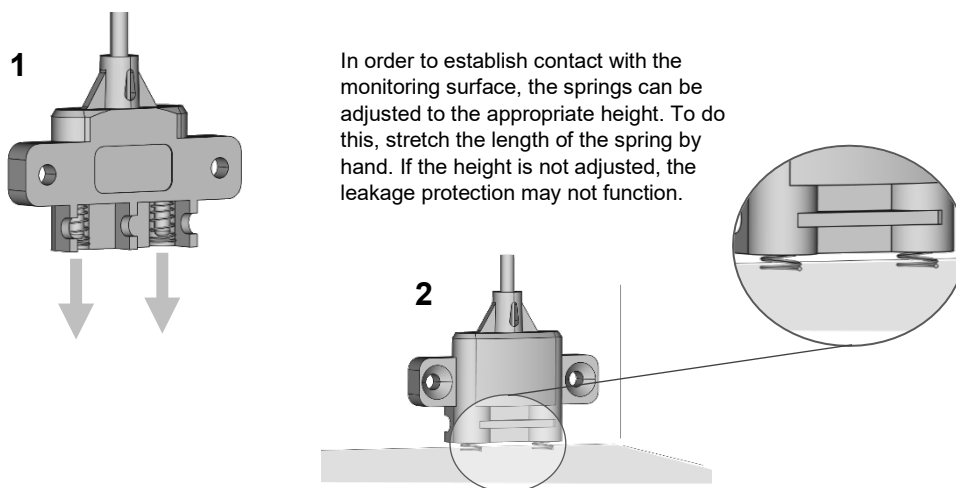
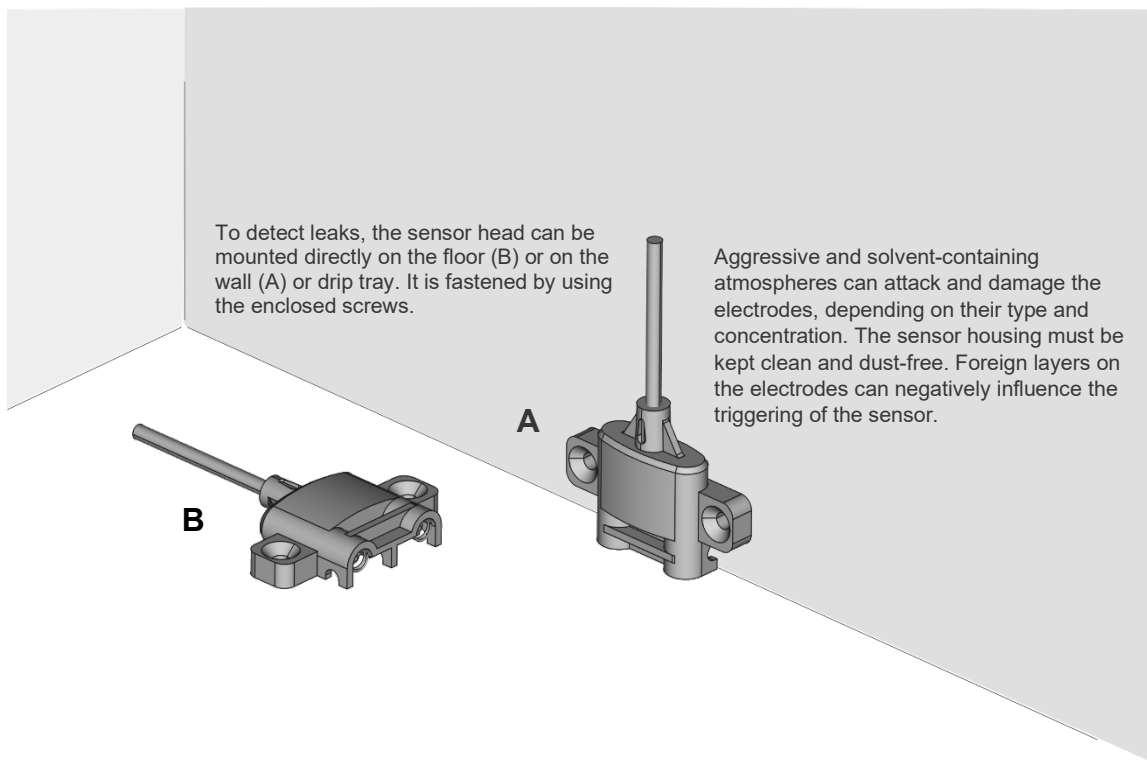
After some time, outdoor mounted plastics can lose their color and quality. Therefore, all USE housings are made of special white polycarbonate (PC). The light-stable colorants and additives are used to achieve optimum protection of the polymer while maintaining color stability. The titanium dioxide 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.



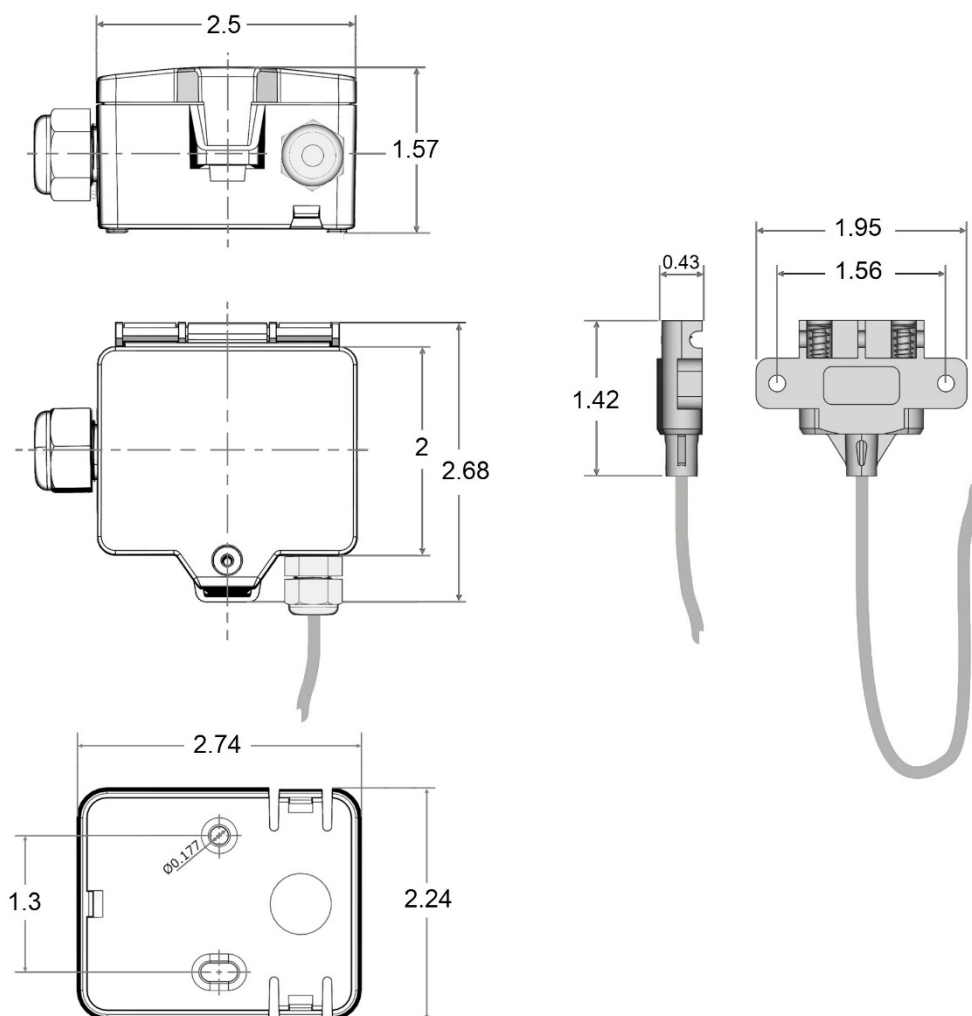
» **MOUNTING ADVICE**



» **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

Mounting kit universal

• Cover screw + screw cover • 2 Rawlplugs • 2 Screws (countersunk head) • 2 Screws (rounded head)

Item No. 616430

Item No. 698511

» ACCESSORIES (OPTIONAL)

Sealing insert M20 USE white, 2x $\varnothing=0.28$ in. (for 2 wire; PU 10 pieces)

Item No. 641333