

**Product overview**

The leakage sensor is designed for monitoring occurrence of water pipe bursts and other water ingress in rooms and protect buildings, fixtures and equipments. Suitable for locking on to control and display systems. The device includes sensor and evaluation electronics with pilot LED and relay contact.


**Types available**

Type code	Type	Description
EXT-TN-1071375	LS02	Leakage sensor with relay output

**Technical data**

Standards	CE conformity	- 2004/108/EG Electromagnetic compatibility - 2001/95/EG Product safety
	EN conformity	- EN60730-1:2002 EMC - EN60730-1:2002 Product safety
General data	Power supply	DC 15-24V(±10%) or AC 24V(±10%)
	Power consumption	Typical 0.8W / 1.6VA
	Cable entry	Single entry, M16 for cable max. D=8mm
	Clamps	Pluggable terminal max. 1.5mm <sup>2</sup>
	Ambient temperature	-35...70°C
	Transport	-35...70°C / max 85% RH, non-condensing
	Switching output	Relay with change-over contact, floating, load max. 24V/1A (ohmic)
	Contact material	Stainless steel 1.4305
	Enclosure	Polyamide, colour white
	Protection	IP65 according to EN60529
Weight	150g	

**Security advice** 

The installation and assembly of electrical equipment may only be performed by a skilled electrician. The modules must not be used with equipment that supports, directly or indirectly, human health or life or with applications that can result in danger for people or animals.

**Mounting advice**

Model LS02 rests on its four contact feet. The detector electrodes are insulated at the lower end so that a background condensation is not detected.

The insulation can be varied in its height (2...4mm) enabling an easy adaption to local conditions.

With normal water, the measuring element is maintenance free. Aggressive and solvent based liquids can damage the sensor or result in faulty measurements depending on nature and concentration. Contamination of the sensor electrodes also ends in faulty measurements.

**Adjustment of break-over point**

According to local conditions, the threshold value (break-over point) must be adapted, accordingly. The adaption is made by means of the trimming potentiometer within the housing.

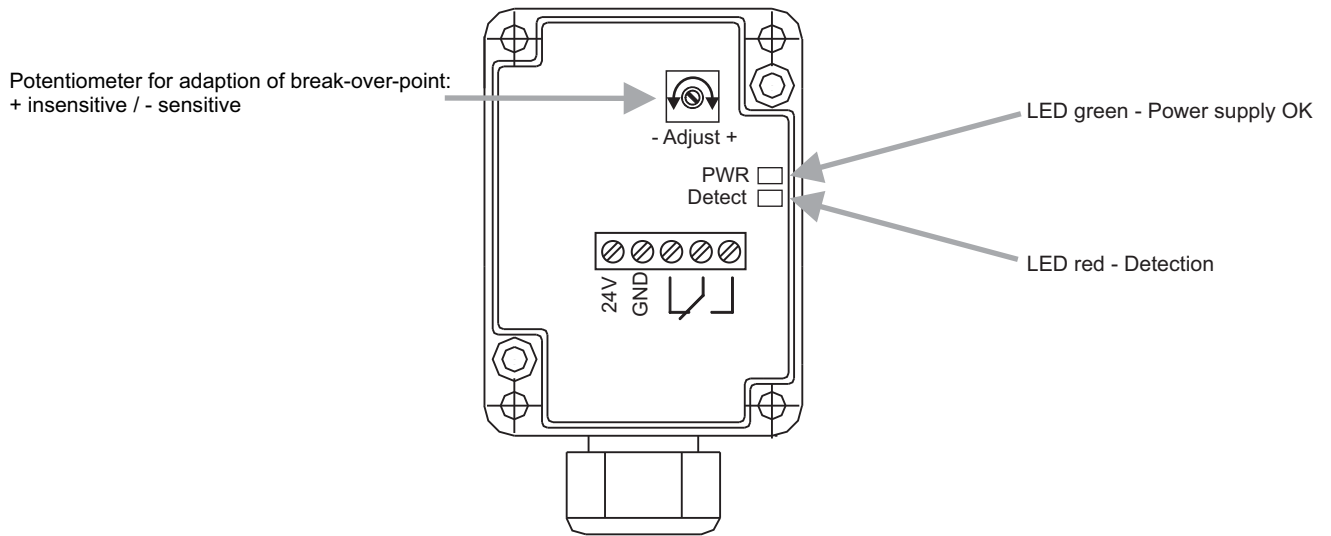
**Electrical connection**

The devices are constructed for the operation of protective low voltage (SELV). For the electrical connection, the technical data of the corresponding device is valid.

**Function**

The integrated measuring element is continuously measuring the conductivity of the sensor circuit via four electrodes. If the conductivity is getting too high (e.g. due to water ingresses) the alarm relay is switched (relay contact open) and the red LED indicates water alarm. With power failure the relay contact is also open. In the normal mode the relay is switched on (relay contact mode). The green LED shows the operation.

**Terminal connection plan**



**Notice:**

The layout of the relay contacts represents the operation status of "devices connected to power supply, no dew permeation". In this operation status, the relay is picked up. Upon dew permeation or when the operating voltage is switched off, the relay falls off.

**Dimensions (mm)**

