

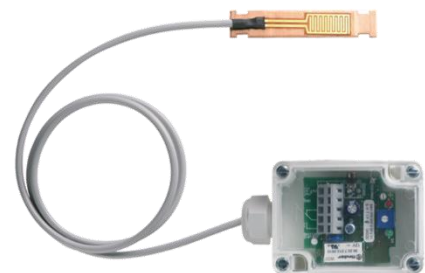
## Datasheet

Subject to technical alteration  
Issue date: 20.06.2016

WK01



WK01 ext



## Application

WK01 condensation sensor with LED signal has been designed to provide a switched output signal to prevent condensation on chilled surfaces such as chilled beams. WK01 ext. has a 2 m external sensor.

## Types Available

### Condensation sensor – 24 V

WK01 24 V  
WK01 ext. 24 V

## 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

## 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	humidity
Output switch contact	24 V Relay, change-over contact, isolated, max 24 V / 1 A (ohmic)
Power supply	15..24 V = ( $\pm 10\%$ ) or 24 V ~ ( $\pm 10\%$ )
Power consumption	typ. 0,8 W (24 V =)   1,6 VA (24 V ~)
Display	LED green - power supply OK, LED red - dew permeation
Enclosure	PA6, pure white
Protection	IP65 according to EN 60529
Cable entry	M20 for wire max. $\varnothing=8$ mm
Connection electrical	plug-in terminal, max. 1,5 mm <sup>2</sup>
Ambient condition	-20..+60 °C, max. 85% rH short term condensation
Weight	190 g
Delivery content	thermal contact fluid
Notes	WK01 ext. with external sensor (PVC, diameter 0,25 mm <sup>2</sup> , L=2 m)

## Mounting Advice

For detection of water condensation, the sensor must be mounted on the moistness point of the medium. Please ensure a good thermal contact to the measuring medium. A thermal connection between sensor und medium with heat conducting paste is necessary. Mounting effects by means of included cable ties (binders). Mounting can be made directly on a pipeline.

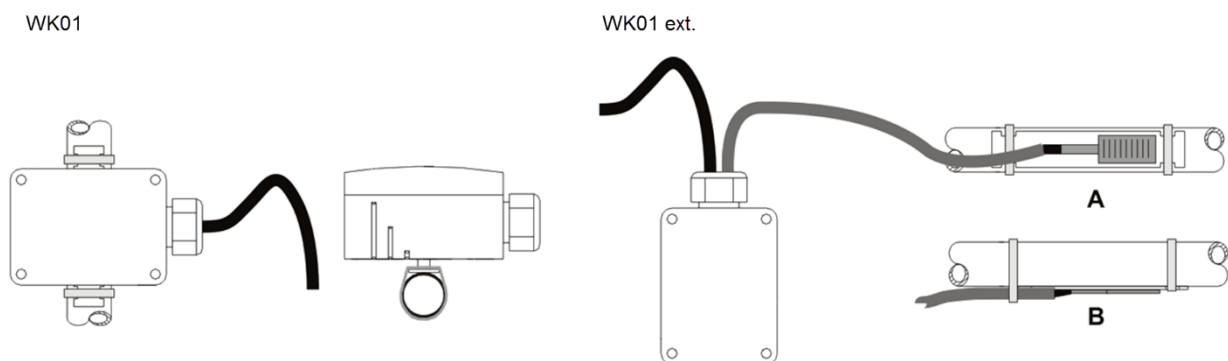
### Adjustment of break-over point:

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.

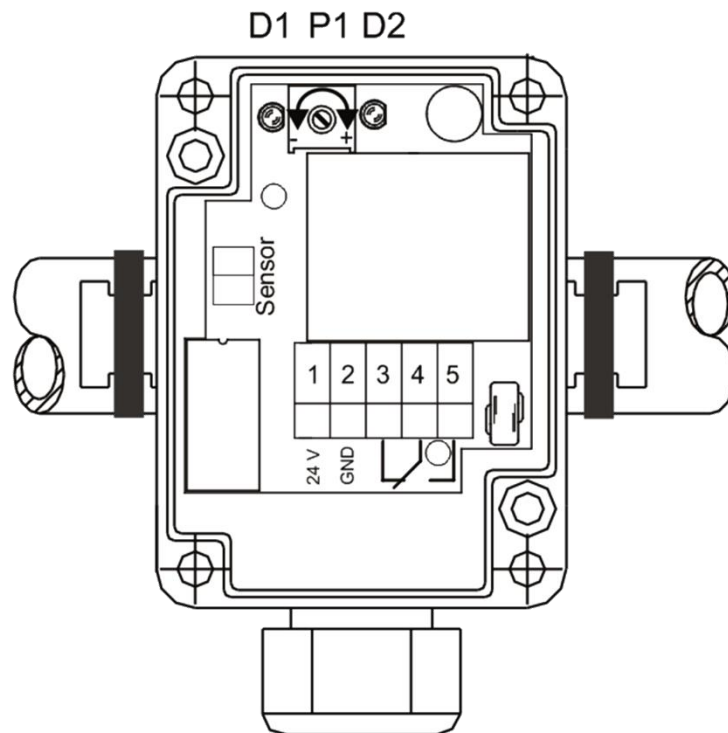
### Note WK01 ext.

Note the mounting side of the copper strip (see the figure A).

Because of the danger of settling dust, the sensor should be mounted on the lower side of the tube (see the figure B).



## Connection Plan



D1	LED red – dew permeation
D2	LED green – power supply OK
P1	Potentiometer for adaption of break-over-point + = more sensible - = less sensible

1	24 V IN
2	GND
3	NC
4	24 V IN
5	NO

### Note:

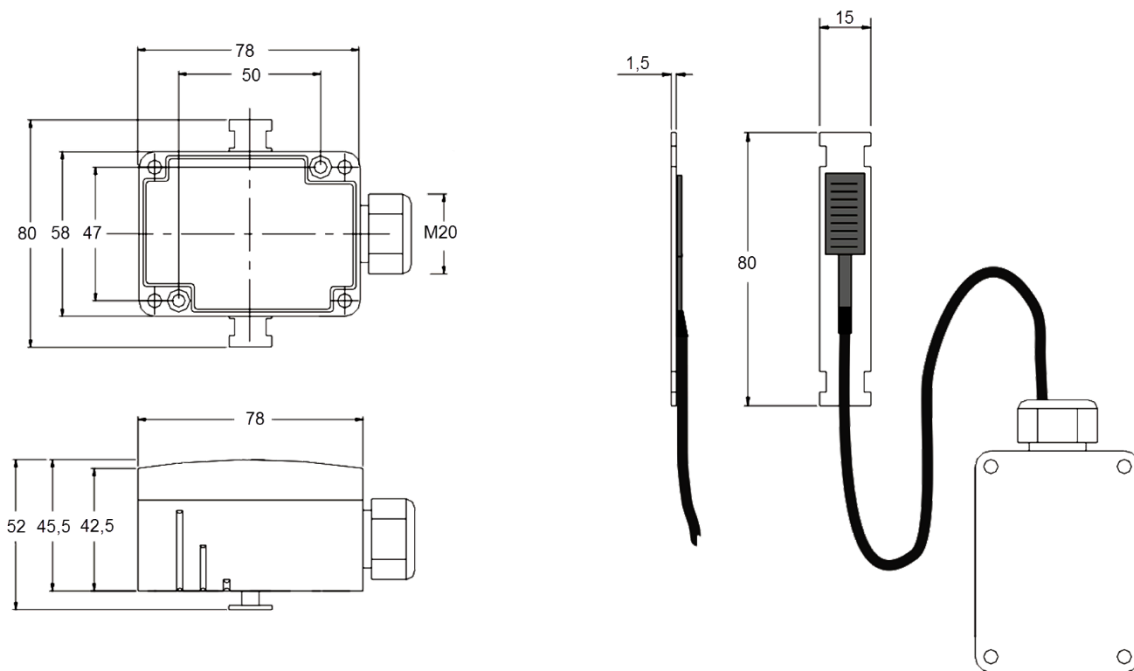
The layout of the relay contacts represents the operation status of „devices connected to power supply, no dew permeation“. In this operation status, the relay is picked-up. Upon dew permeation or when the operating voltage is switched-off, the relay falls off.

## Maintenance



The sensor surface may be damaged by an aggressive and solvent-contaminated ambient. Always keep the sensor clean and free of dust and dirt. A dirt film may affect the sensor's switching characteristic.

## Dimensions (mm)



## Accessories (optional)

Syringe Thermal Contact Fluid

Item No. 102308