

OF14 passive | OF14+ passive

Contact Temperature sensor

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

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» APPLICATION

Cable sensor for temperature measurement in gaseous media of heating, cooling or air-conditioning systems (e.g. fresh air/ exhaust air ducts). Designed for locking onto control and display systems. The model OF14 is specially designed for measuring temperature on glass facades.

» TYPES AVAILABLE

Contact sensors -35...+70 °C – passive

- OF14 passive (with Sensor according to customer's need)

Contact sensors -35...+70 °C – passive optional with connection housing (Enclosure USE-S)

- OF14+ passive (with Sensor according to customer's need)

» 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/of14>

» 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

» GENERAL REMARKS CONCERNING SENSORS

Especially with regard to passive sensors in 2-wire conductor versions, the wire resistance of the supply wire has to be considered. If necessary the wire resistance has to be compensated by the follow-up electronics. Due to self-heating, the wire current affects the measurement accuracy, so it should not exceed 1 mA.

When using lengthy connection wires (depending on the cross section used) the measuring result might be falsified due to a voltage drop at the common GND-wire (caused by the voltage current and the line resistance). In this case, 2 GND-wires must be wired to the sensor - one for supply voltage and one for the measuring current.

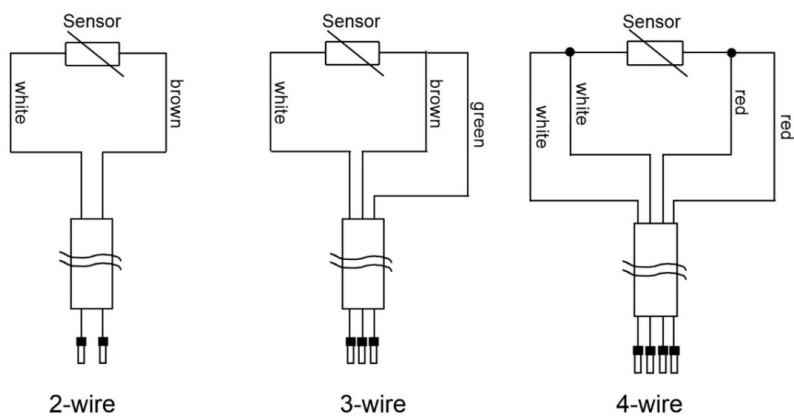
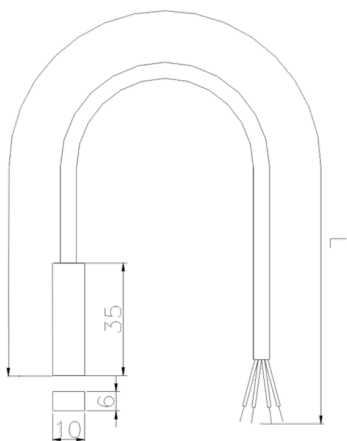
Sensing devices with a transducer should always be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage ($\pm 0,2$ V). When switching the supply voltage on/off, onsite power surges must be avoided.

» TECHNICAL DATA

Measuring values	temperature
Output passive	PT100 PT100 1/3 DIN PT1000 PT1000 1/3 DIN Ni1000 Ni1000TK5000, NTC10k NTC 10k Precon NTC5k NTC20k NTC1,8k
Measuring range temp	-35..+70 °C
Operating temperature range	max. permissible operating temperature -35..+70 °C
Accuracy temperature	depending on used sensor
Sensor	2-wire (standard), 3-wire or 4-wire
Enclosure (optional)	OF14+ passive USE-S housing, PC, pure white, IP65 according to DIN EN 60529, cable entry Flextherm M20 for cable with $\varnothing=4.5..9$ mm
Protection	IP65 according to EN 60529
Connection electrical	connection wire PVC, $\varnothing=25$ mm, 1 m (standard), 2 m, 4 m, 6 m, for other lengths please request
Pocket	aluminium, dimensions: 35x10x6 mm
Ambient condition	max. 85% rH, short term condensation
Mounting	surface mounting with adhesive strip (included)
Notes	other sensors and cable lengths on request

» MOUNTING ADVICES

The OF14 sensor is e.g. glued on the inside of windows to detect the internal pane temperature and to regulate the climate so that no condensation occurs. For use on flat surfaces, the acrylic adhesive is applied to the sensor surface (double-sided adhesive tape with protective foil).

» **CONNECTION PLAN**» **DIMENSIONS (MM)**

Connection housing USE-S optional (Type OF14+ passive)

