

MWF+ NTC

Average temperature sensor

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration
Issue date: 13/03/2023 • A123



» APPLICATION

Duct averaging temperature sensor in enclosure USE-S for measuring the average temperature in air ducts. The sensor detects the applied temperature value throughout the entire length (with NTC selectively). Mounting angles for uncomplicated duct mounting are included in delivery. A spring at the connection head reduces vibrations.

» TYPES AVAILABLE

Duct averaging sensor temperature – passive
MWF+ <Sensor> L<x> incl. installation kit

<x>: sensor rod length 3000/6000 mm
<sensor>: NTC10k (Pre)/NTC20k
MultiRange: Measuring ranges adjustable at the transducer

» 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 can be 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.

» GENERAL REMARKS CONCERNING TO SENSORS

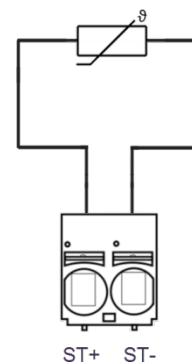
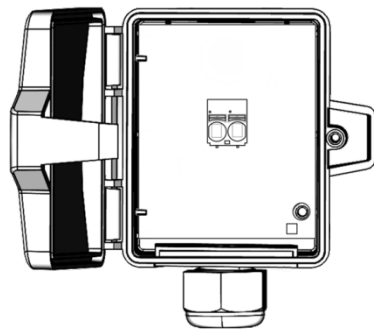
Especially with regard to passive sensors in 2-wire conductor versions, the wire resistance of the supply wire has to be considered. If necessary the wire resistance has to be compensated by the follow-up electronics. Due to self-heating, the wire current affects the measurement accuracy. So it should 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.

» TECHNICAL DATA

Measuring values	temperature
Measuring range temp	+32..+122 °F
Accuracy temperature	±0,2 K (typ. at 77 °F)
Sensor	punctual averaging, sensor rod as cable with 4 or 5 measuring points
Enclosure	enclosure USE-S, PC, pure white
Protection	IP65 according to EN60529
Cable entry	Flextherm M20, for wire max. Ø=0.18..0.35 in., removable
Connection electrical	removable plug-in terminal, max. 14AWG
Sensor rod	9ft, 19ft (optional)
Ambient condition	-22..+158 °F, max 85% rH, short term condensation
Delivery content	incl. installation set

» CONNECTION PLAN

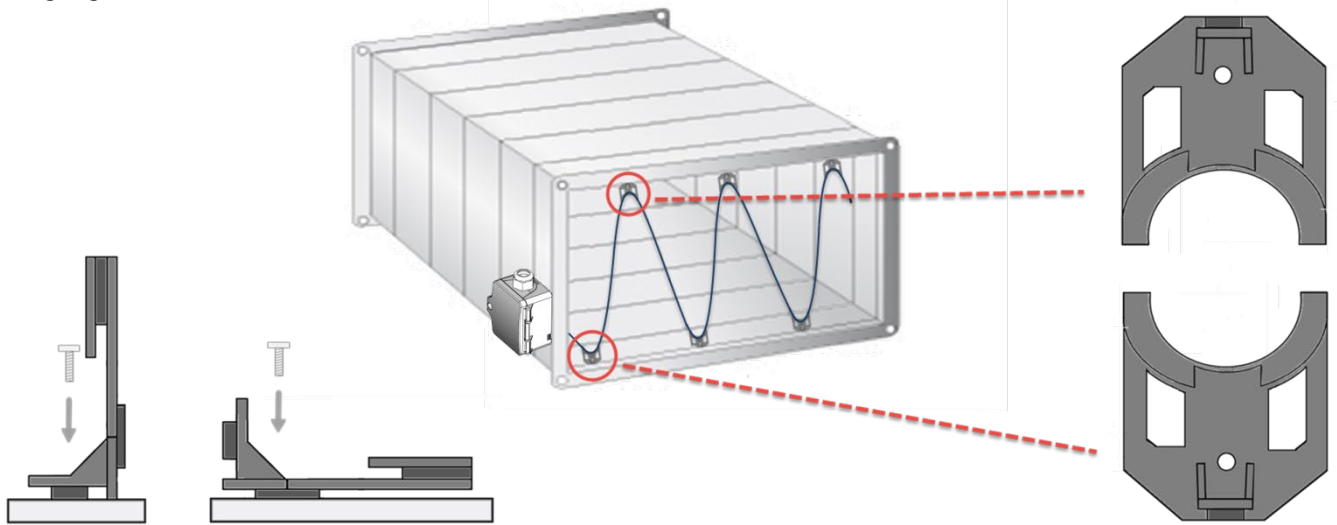


» MOUNTING ADVICES

Model MWF can either be mounted directly on the ventilation duct by means of a mounting flange or by screws. By means of the mounting brackets included the sensor rod is braced to the ventilation duct.

Note: Please pay attention to the sensor rod while mounting and protect it from mechanical damage!

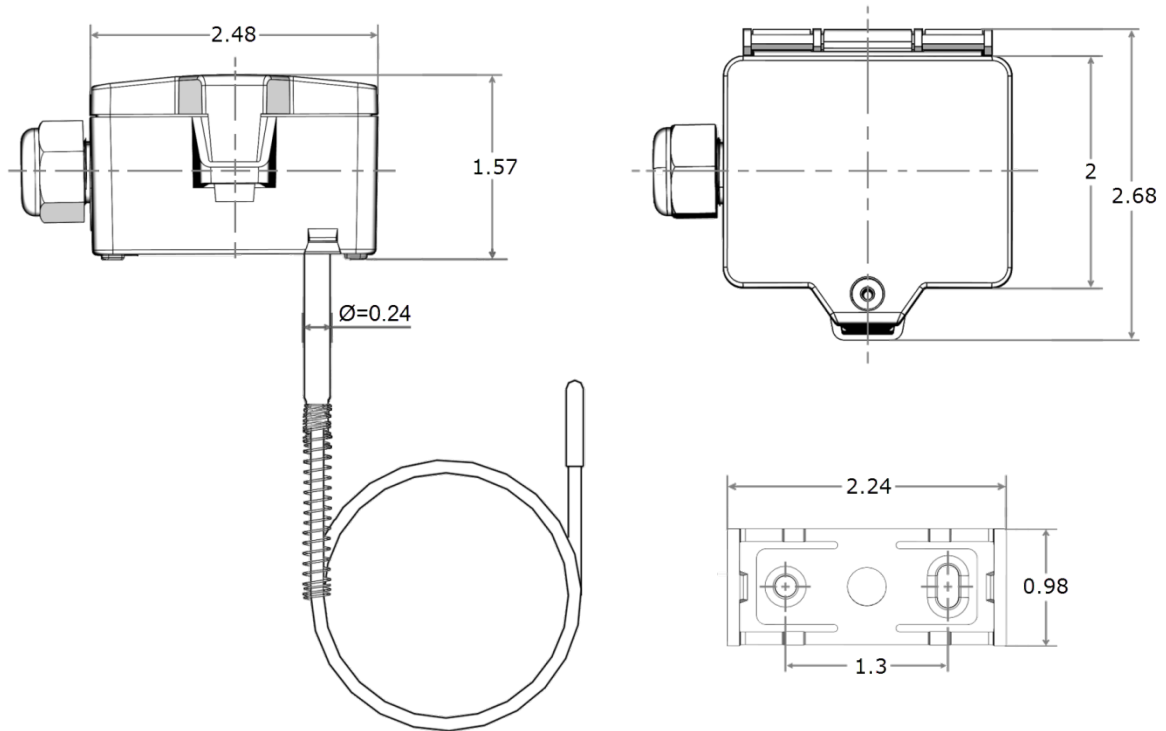
Mounting angle:



Vertical mounting

Horizontal mounting

» DIMENSIONS (IN.)



» ACCESSORIES (INCLUDED IN DELIVERY)

Mounting base USE-S

Item No. 667722

Sensor rod mounting angle set

Item No. 679466

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 Ø=0.28 in. (for 2 wire; PU 10 pieces)

Item No. 641333