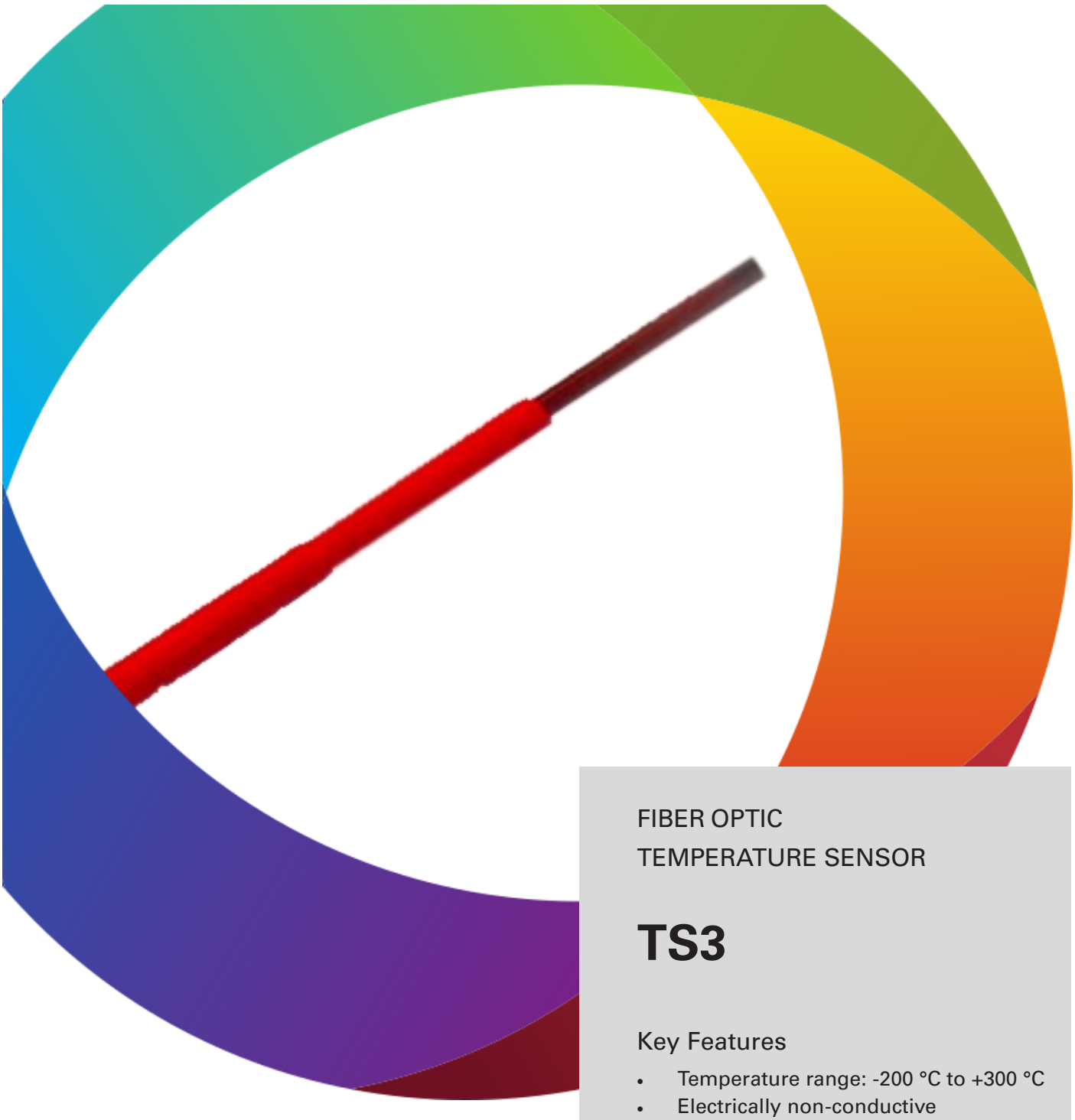


FIBER OPTIC
TEMPERATURE SENSOR

TS3

Key Features

- Temperature range: -200 °C to +300 °C
- Electrically non-conductive
- Immunity to RFI, EMI, NMR and micro-wave radiation
- Resistance to high temperatures
- High accuracy
- Stable and repeatable measurements
- GaAs-based temperature sensor

Applications

- Microwave and RF environments
- NMR analytical chemistry applications
- Food cooking and conditioning in microwave, Food pasteurization
- Microwave assistes chemistry
- Pharmaceutical drying of powders, herbs and granulated mixtures

WEIDMANN

FIBER OPTIC
TEMPERATURE SENSOR

TS3

TECHNICAL SPECIFICATION

Name of sensor	TS3
Measurement range *1	-200 °C to +300 °C
Inertia	Up to 12 K/s
Accuracy *2	+/- 0.2 K
Fiber Ø	200 um
Sensor standard lengths	2m up to 20m
Connector type	ST with metallic ferrule (-40 to 85 °C)
Signal conditioner	Compatible with all Weidmann fiber optic thermometers

DESCRIPTION

The fiber optic temperature probe TS3 stands for expanded flexibility with usual Weidmann quality and is the best choice for application in RFI, EMI, NMR and microwave environments.

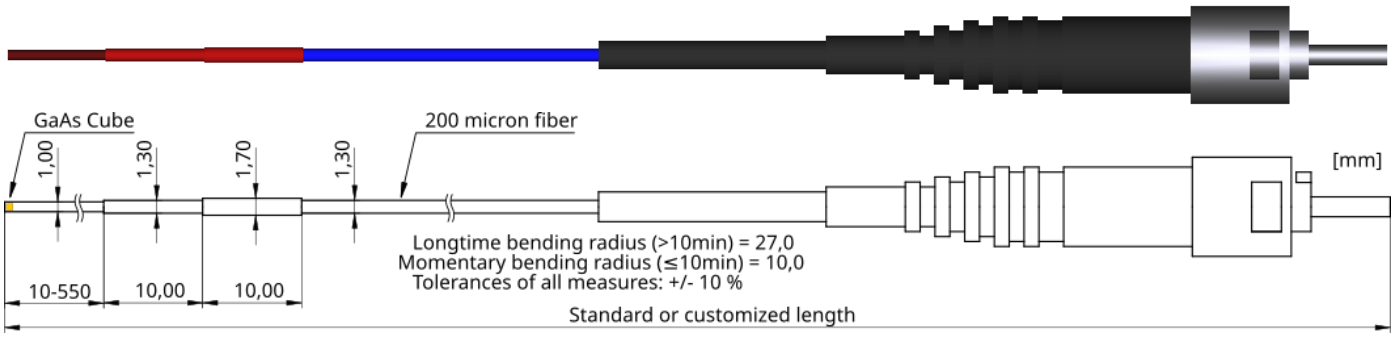
The fiber optic sensor TS3 allows exact temperature measurements within a range of -200 °C to +300 °C at an accuracy*2 of +/- 0.2 K. The jacket of the TS3 temperature probe consists completely of PTFE and ensures immunity to RFI, EMI, NMR and microwave radiation.

Unlike the fiber optic sensor TS2, the TS3 comes with the possibility of a customizable length of the probe tip from 10 mm to 550 mm. Thanks to its fast response time of < 2 s and a tip diameter of 1.0 mm the TS3 temperature probe is small enough to fit in even the thinnest openings inside a measurement environment to deliver reliable data in real time.

All fiber optical temperature sensors can be connected to the fiber optic temperature measurement devices (FOTEMP), delivers accurate and complete reliable, stable and repeatable values. Starting at a light wave length of 850 nm GaAs (gallium arsenide) becomes optical translucent. Since the position of the band gap is temperature dependent, it shifts about 0.4 nm/K. Beyond that, Weidmann provides suitable extensions in different lengths without influencing the accuracy of the measurement result.

We are always anxious to adjust our offer to your special needs. In case of any further questions about individual measurement problems, lengths of sensors or connector types, please contact us.

DIMENSION



*1 *Long-term temperature range -200 °C up to +260 °C, short-term temperature range +260 °C up to +300 °C*

*2 *Statement only possible with analysis unit. See data sheet of the measurement device for information about technical data.*

DISCLAIMER – PLEASE READ CAREFULLY
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