



# TG 5 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

## DESCRIPTION AND APPLICATION

These temperature sensors are designed for measuring the surface temperature of pipes with a smooth surface. The maximum temperature range of use is  $-50$  to  $200$  °C, and must not be exceeded even for a brief period. The structure of the sensors enables fast response to changes in temperature, in particular when silicone grease or thermally conductive paste is applied between measured surface and the sensor. Temperature sensors meet ingress protection IP 65 in accordance with EN 60529, as amended.

The sensors are designed for use in a chemically non-aggressive environment. The method of use must be chosen with regard to the temperature and chemical resistance of the case and lead-in cable.

## ACCESSORIES

- thermal conductive paste up to  $200$  °C, 5 g
- connectors

## DECLARATION, CERTIFICATES, CALIBRATION

Manufacturer provides **EU Declaration of Conformity**.

**Calibration** – The final metrological inspection – comparison with standards or working instruments – is carried out for all the products. Continuity of the standards and working measuring instruments is ensured within the meaning of the Section 5 of Act no.505/1990 on metrology. The manufacturer offers a possibility to supply the sensors calibrated in SENSIT s.r.o.'s laboratory (according to requirements of the EN ISO/IEC 17025 standard, as amended) or in an Accredited laboratory.

## SPECIFICATIONS

Sensore type	TG 5
Measuring range	$-50$ to $200$ °C (can be limited by the sensing element, determine in documentation)
Type of sensing element	Pt, Ni, NTC, TC K, TC J, TC T
Ingress protection	IP 67 in accordance with EN 60529, as amended
Case material	brass
Case length L	35 mm
Case diameter	6 mm
Dimension of contact sheet	20 x 32 x R12
Lead-in cable	Silicon unshielded 2 x 0.34 mm <sup>2</sup>
Wire resistance	0.105 $\Omega$ for 1 m of cable for 2-wire connection
Time response	$\tau_{0.5} < 15$ s (on flat surface without paste)
Recommendation	Use thermal conductive paste for installation

Note: Certain technical specifications of thermocouple sensors (lead wires, IP rating, etc.) may differ with different types.

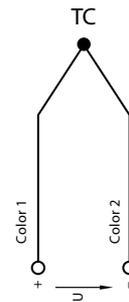
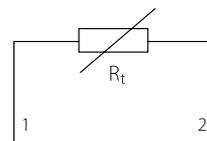
## MODIFICATION AND CUSTOMIZATION

- variable stem design in the area - L length
- accuracy class A (with the exception of sensors Ni 10000/5000, Ni 10000/6180, T1 = Ni 2226, thermistor NTC 20 k $\Omega$ )



## WIRING DIAGRAM

Two-wire



## DIMENSIONAL DRAFT

