

TG 3 AND TG 3A – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K01.05en

DESCRIPTION AND APPLICATION

These temperature sensors are designed for contact measurement of the temperature of gaseous and liquid or solid substances. The maximum temperature range of use is -50 to 200 °C for the TG 3 model, and -50 to 260 °C for the TG 3A model. The 3 mm diameter of the case ensures fast response to changes in temperature. The used type of lead-in cable has teflon insulation without shielding. The sensors are designed for universal use. The method of use must be chosen with regard to the temperature and chemical resistance of the case and lead-in cable. The sensors are also designed for use in a chemically non-aggressive environment.

ACCESSORIES

- screw with collet or cutting rings – if different lengths of stem immersion of the temperature sensor are set
- 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) or in an Accredited laboratory.

SPECIFICATIONS

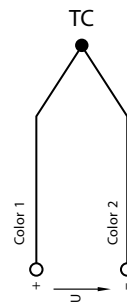
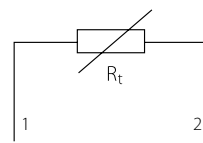
Sensor type	TG 3	TG 3A
Measuring range	-50 to 200 °C	-50 to 260 °C (300 °C short-term)
Type of sensing element	Pt, Ni, NTC, TC K, TC J, TC T	
Ingress protection	IP 67 in accordance with EN 60529, as amended	IP 64 in accordance with EN 60529, as amended
Case material	stainless steel DIN 1.4301	
Diameter of case	3 mm	
Length of case L	25 to 60 mm	
Lead-in cable	teflon unshielded 2 x 0.205 mm ² teflon shielded 2 x 0.14 mm ² teflon shielded 4 x 0.051 mm ²	
Wire resistance	0.16 Ω for 1 m of cable for 2-wire connection	
Time response	τ _{0.5} = up to 3 s, τ _{0.9} = up to 9 s	

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

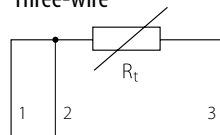


WIRING DIAGRAM

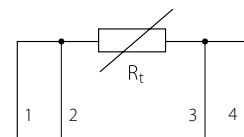
Two-wire



Three-wire



Four-wire



DIMENSIONAL DRAFT

