

TR 050A AND TM 050A – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K11.05en



DESCRIPTION AND APPLICATION

These temperature sensors are designed to measure the temperature of gaseous or solid substances. The maximum temperature range of use of the sensors is 0 to 350 °C, 400 °C short-term. Used type of lead-in cable with glass fibre insulation and metal braiding, the sensors are not resistant to the penetration of moisture inside the case and are intended for use in dry conditions. Cable with metal braiding ensures higher mechanical resistance of the sensor. 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

- 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	TR 050A	TM 050A
Measuring range	0 to 350 °C (400 °C in a short-term)	0 to 300 °C (350 °C in a short-term)
Type of sensing element	Pt 100, Pt 500, Pt 1000, TC K, TC J	
Ingress protection	IP 50 in accordance with EN 60529, as amended	
Case material	stainless steel DIN 1.4301, DIN 1.4404	
Length of case L	40, 60, 100 and 200 mm	
Diameter of case	6 + 0.1 mm	
Lead-in cable	with glass fibre insulation and metal braid	
	2 x 0.35 mm ² 4 x 0.35 mm ²	2 x 0.22 mm ² 4 x 0.22 mm ²
Wire resistance	0.11 Ω	0.161 Ω
	for 1 m of cable for 2-wire connection	

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

MODIFICATION AND CUSTOMIZATION

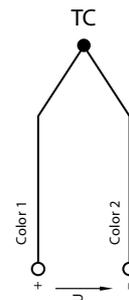
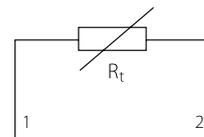
- variable stem design in the area – L length, case material
- accuracy class A in the range of -50°C to 250°C
- possibility of three or four-wire connection



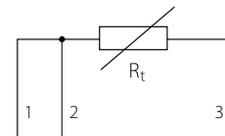
TEMPERATURE SENSORS WITH A CABLE

WIRING DIAGRAM

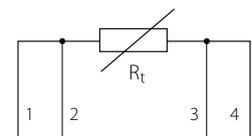
Two-wire



Three-wire



Four-wire



DIMENSIONAL DRAFT

