

TR 129 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K17.05en



DESCRIPTION AND APPLICATION

These resistance temperature sensors are designed to measure the temperature of gaseous or liquid substances. The maximum temperature range of use of the sensors is -50 to 250 °C. The lead-in cable is a type with silicone insulation and shielding. The production technology and diameter of the case enable quick response to changes in temperature even up to a temperature of 250 °C. 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

- 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 129
Measuring range	-50 to 250 °C (can be limited by the type of cable, determine in documentation)
Type of sensing element	Pt, Ni, NTC, TCx
Ingress protection	IP 67 in accordance with EN 60529, as amended
Thread/OK	according to customer
Case material	stainless steel DIN 1.4301
Diameter of case	4 mm
Length of case L	100 to 300 mm
Lead-in cable*)	shielded silicone 2 x 0.22 mm ² shielded silicone 4 x 0.22 mm ²
Wire resistance	0.16 Ω for 1 m of cable for 2-wire connection
Time response	$\tau_{0.5} < 5$ s (in flowing water at 0.2 m.s ⁻¹)

*) The lead-in cable is in length of 50 cm protected with stainless steel armoured hose with 8 mm in diameter.

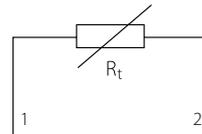
MODIFICATION AND CUSTOMIZATION

- possibility to encase two sensing elements
- variable stem design in the area – L length, case material
- accuracy class A (with the exception of sensors Ni 10000/5000, Ni 10000/6180, T1 = Ni 2226, thermistor NTC 20 kΩ)
- possibility of three or four-wire connection

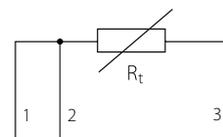


WIRING DIAGRAM

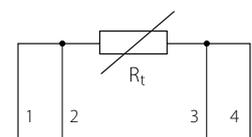
Two-wire



Three-wire



Four-wire



DIMENSIONAL DRAFT

