

TR 030 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K18.05en

DESCRIPTION AND APPLICATION

These temperature sensors are designed to measure the temperature of gaseous, liquid or solid substances. The maximum temperature range of use of the sensors is -50 to 200 °C. The resistance signal of the temperature sensor is led by a pair of cables with teflon insulation, whereby ensuring the minimization of heat transfer and thus achieving higher accuracy of measurement even at shallow immersion depths. The diameter of the case enables quick response to changes in temperature. 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.

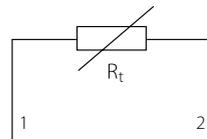
DECLARATION, CERTIFICATES, CALIBRATION

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.

WIRING DIAGRAM

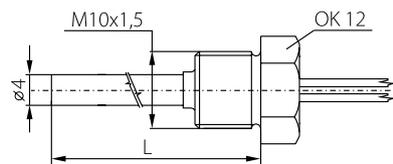
Two-wire



SPECIFICATIONS

Sensor type	TR 030
Measuring range	-50 to 200 °C (can be limited by the type of cable, determine in documentation)
Type of sensing element	P, Ni, NTC
Ingress protection	IP 52 in accordance with EN 60529, as amended
Thread/OK	M 10 x 1.5/OK 12
Case material	stainless steel DIN 1.4301
Diameter of case	4 mm
Length of case L	20 to 60 mm
Lead-in cable	2 x LT 0.07 mm ² with teflon insulation
Wire resistance	0.51 Ω for 1 m of cable
Time response	$\tau_{0.5} < 5$ s (in flowing water at 0,2 m.s ⁻¹)

DIMENSIONAL DRAFT



MODIFICATION AND CUSTOMIZATION

- 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)