

TR 081 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K13.05en

DESCRIPTION AND APPLICATION

These 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 200 °C. The case material can be stainless steel DIN 1.4301 or DIN 1.4571. The type of lead-in cable used has silicone insulation and shielding. The diameter of the case is 8 mm and also enables the encasement of special temperature sensors – KTY, SMT 160, DS 18B20, TSIC etc. 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.

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

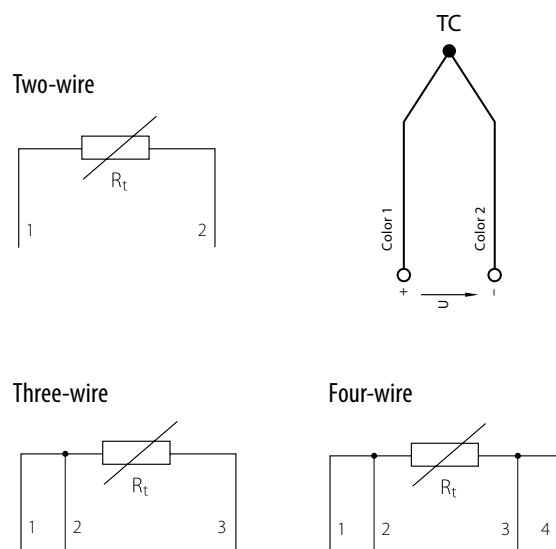
Sensor type	TR 081
Measuring range	-50 to 200 °C (can be limited by the type of cable, determine in documentation)
Type of sensing element	all types (Pt 100, Pt 1000, Ni 1000, Ni 10000, Ni 2226=T1, NTC, PTC, KTY, TSIC, DALLAS, TC K, TC J, TC T and so on)
Ingress protection	IP 67 in accordance with EN 60529, as amended
Case material	stainless steel DIN 1.4301, DIN 1.4571
Length of case L	60 to 200 mm (in 20 mm)
Diameter of case	8 ± 0.1 mm
Lead-in cable	shielded silicone 2 x 0.34 mm ² shielded silicone 4 x 0.22 mm ²
Wire resistance	0.11 Ω for 1 m of cable for 2-wire connection
Time response	$\tau_{0.5} < 7$ s (in flowing water at 0.4 m.s ⁻¹)

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



TEMPERATURE SENSORS WITH A CABLE

WIRING DIAGRAM



DIMENSIONAL DRAFT

