

TR 158 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K24.05en

DESCRIPTION AND APPLICATION

These temperature sensors are designed to measure the surface temperature of ferromagnetic objects. The maximum temperature range of use of the sensors is -30 °C to 150 °C. In order to mount the sensor correctly, the measured surface must have a minimum diameter of 28 mm. The structure of the sensor ensures quick response to changes in temperature, in particular if silicone grease or thermally conductive paste is applied between the measured surface and 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

- thermal conductive paste up to 200 °C, 5g
- 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 158
Measuring range	-30 °C to 150 °C
Type of sensing element	Pt, Ni, NTC, TC K, TC J
Ingress protection	IP 67 in accordance with EN 60529
Holding force of sensor	20 N
Measuring surface pressure	3 N
Case material	nickel plated steel 11373/alloy
Diameter of case	∅ 26 x 13 mm
Lead-in cable shielded silicone	2 x 0.34 mm ²
shielded silicone	2 x 0.22 mm ²
Standard cable length	2, 5, 10 m
Wire resistance	0.11 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.

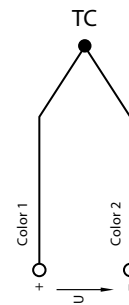
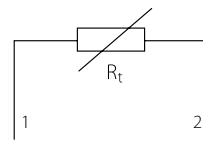
MODIFICATION AND CUSTOMIZATION

- 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

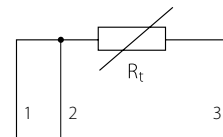


WIRING DIAGRAM

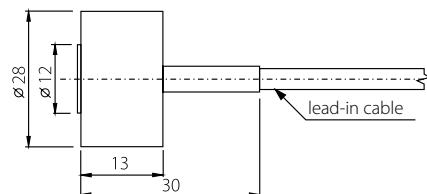
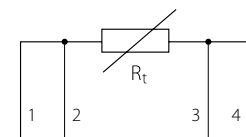
Two-wire



Three-wire



Four-wire



TEMPERATURE SENSORS WITH A CABLE