TG 50 – RIGHT-ANGLE TEMPERATURE SENSORS

P03.02en

DESCRIPTION AND APPLICATION

These right-angle, threaded temperature sensorsTG 50 are designed to measure surface temperature of solid substances. Due to temperature sensor design, the cable is led out at right angle to measuring part of the sensor and it enables to measure temperature just below the surface. To fasten the temperature sensor into a point to be measured, the thread is used. Maximum temperature range of sensor use is -50 to 350 °C (400 °C for a short period). The range for each design variant is reduced with a type of the temperature sensing element and the supply cable. The temperature sensors meet ingress protection from IP 50 to IP 67 according to the EN 60529 standard, as amended depending on the lead-in cable variant. The rectangular temperature sensors are intended for operation in chemically non-aggressive environment

ACCESSORIES

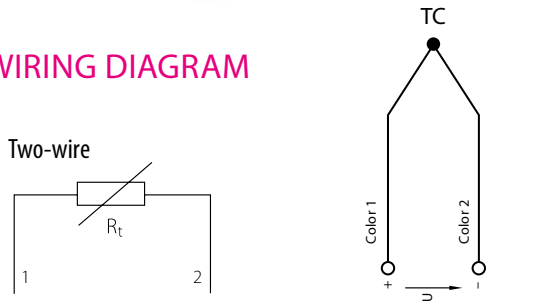
- connectors

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

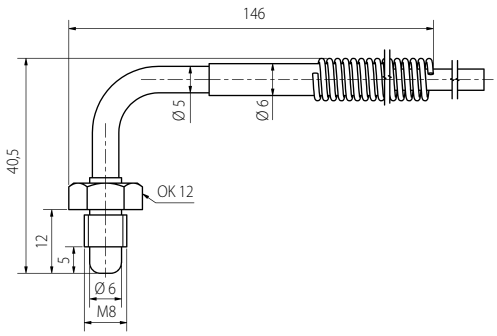


SPECIFICATIONS

Sensor type	TG 50
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)
Case material	stainless steel DIN 1.4301
Diameter of the case - measuring part	6 mm
Length of the case L - measuring part	15 to 200 mm
Case dimension	according to the dimensional draft
Thread / OK	M10 x 1 / OK 12
Lead-in cable variations/ temperature range (can be limited by type of sensing element - specified in documentation)	PVC shielded -30 to 80 °C PVC unshielded - 40 to 105 °C silicone shielded -50 to 200 °C teflon shielded -50 to 250 °C with fiberglass 0 to 400 °C (with metal braiding)
Ingress protection	IP 50 to IP 67 according to the cable type - in accordance with EN 60529, as amended
Insulation resistance	200 MΩ at 500 V DC, 25 ± 3 °C
Maximum permissible static pull on the lead-in cable	1 kg

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

DIMENSIONAL DRAFT



MODIFICATION AND CUSTOMIZATION

- variable stem design – length L, diameter, case material, case ending
- possibility to encase two sensing elements
- accuracy class A (with the exception of sensors Ni 10000/5000, Ni 10000/6180, T1 = Ni 226, thermistor NTC 20kΩ)
- encapsulation of other types of sensing elements (DALLAS, KTY, TSiC, SMT, etc.)

SENSIT s.r.o., Skolni 2610, 756 61 Roznov pod Radhostem, Czech Republic
T +420 571 625 571 **F** +420 571 625 572 **E** obchod@sensit.cz