TM 8 – TEMPERATURE SENSORS WITH A CABLE WITH HIGHER MECHANICAL RESISTANCE

K39.01en

DESCRIPTION AND APPLICATION

These temperature sensors are designed to measure the temperature of gaseous or solid substances. The maximum temperature range of use of the sensors is 0 to 200 °C, 250 °C short-term. Used type of lead-in cable has glass fibre insulation and metal braiding, the sensors are not resistant to the penetration of moisture inside the case and are intended for use in dry conditions. Cable with metal braiding ensures higher mechanical resistance of 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

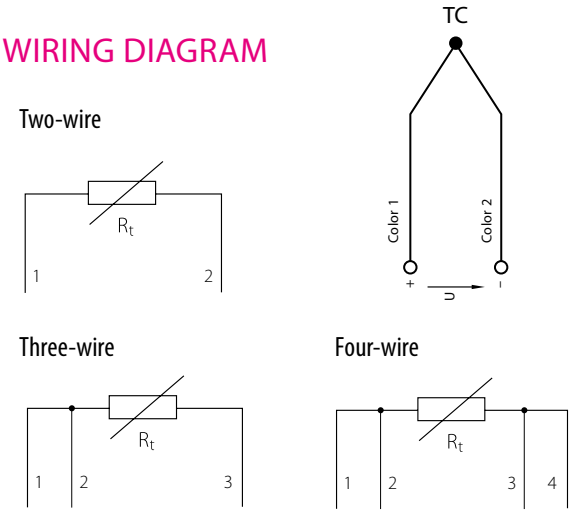
- connectors
- screw with collet or cutting rings – if different lengths of stem immersion of temperature sensor are set

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, as amended) or in an Accredited laboratory.

WIRING DIAGRAM

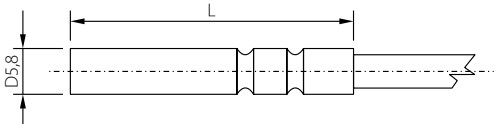


SPECIFICATIONS

Sensore type	TM 8
Measuring range	-50 to 200 °C, 250 °C short-term (can be limited by the sensing element, 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 50 in accordance with EN 60529, as amended
Case material	40, 50, 60 mm – stainless steel DIN 1.4571 other lengths – stainless steel DIN 1.4301
Case length L	40 to 200 mm (in 20 mm)
Case diameter	5.8 mm
Lead-in cable	with glass fibre insulation and metal braiding 2 x 0.22 mm^2 with glass fibre insulation and metal braiding 4 x 0.22 mm^2
Wire resistance	0.161 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.

DIMENSIONAL DRAFT



MODIFICATION AND CUSTOMIZATION

- possibility to encase two sensing elements
- variable stem design in the area - L length
- 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
- possibility of encasing non-standard temperature sensors (DALLAS, TSic, KTY, SMT, etc.)

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