

## TEMPERATURE SENSORS WITH A CABLE AND METAL CASE


**DESCRIPTION AND APPLICATION**

These resistance temperature sensors are designed for contact measurement of the temperature of gaseous and liquid or solid substances. The maximum temperature range is -50 to 200 °C. The 2 mm diameter of the case ensures fast response to changes in temperature. Used type of lead-in cable used has teflon insulation without shielding. 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.

The sensors are also designed for use in a chemically non-aggressive environment.

**ACCESSORIES**

– connectors

**DECLARATION, CERTIFICATES, CALIBRATION**

**EU Declaration on Conformity** – in accordance with Act. 22/1997 Col. on technical requirements on products as amended.

**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.



TEMPERATURE SENSORS WITH A CABLE

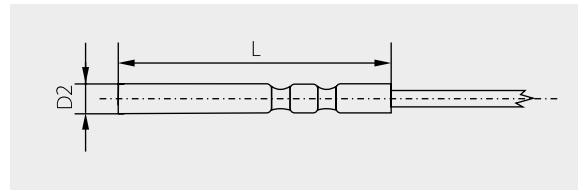
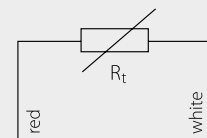
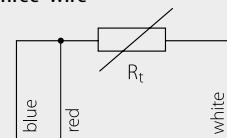
**SPECIFICATIONS**

Sensor type	TG 12
Measuring range	-50 to 200 °C
Type of sensing element	Pt 100, Pt 500, Pt 1000
Ingress protection	IP 67 in according with EN 60 529
Case material	stainless steel DIN 1.4301
Diameter of the case	2 mm
Length of case L	25 to 60 mm
Lead-in cable	teflon unshielded 4 x 0,02 mm <sup>2</sup> (4 x AWG 34)
Wire resistance	0,765 Ω for 1 m of 1 m wire
Time response	$\tau_{0,5} = 1,5\text{ s}$ $\tau_{0,9} = 4,5\text{ s}$

**SENSOR INSTALLATION AND SERVICING**

1. Installation of the sensor in the measured place.
2. Connection of the wires of the lead-in cable according to the wiring diagram.  
Lead-in cable is not shielded.

After installing and connecting to the electrical measuring equipment, the sensor is ready for use. The sensor does not require any special servicing or maintenance. The work position is adjustable. Installation must be carried with regard to the small wire diameter. Prevent the mechanical stress on cables and wires.

**DIMENSIONAL DRAFT**

**WIRING DIAGRAM**
**Two-wire**

**Three-wire**

**Four-wire**
