

# TG 12 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K29.04en

## DESCRIPTION AND APPLICATION

These 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 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

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

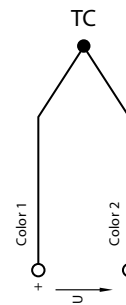
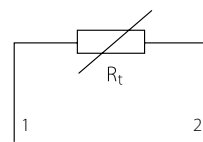
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|-------------------------|---|
| Sensor type             | TG 12   |
| Measuring range         | -50 to 200 °C   |
| Type of sensing element | Pt 100, Pt 500, Pt 1000, TCK, TC J                      |
| Ingress protection      | IP 67 in according with EN 60 529, as amended           |
| 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           | $\tau_{0.5} = 1.5$ s $\tau_{0.9} = 4.5$ s               |

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

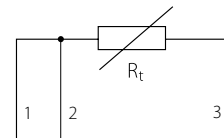


## WIRING DIAGRAM

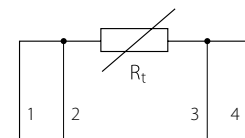
Two-wire



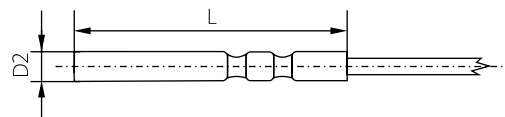
Three-wire



Four-wire



## DIMENSIONAL DRAFT



TEMPERATURE SENSORS WITH A CABLE