TR 092.0 – TEMPERATURE SENSORS WITH A CABLE AND METAL CASE

K30.04en

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. The 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 nonaggressive 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.

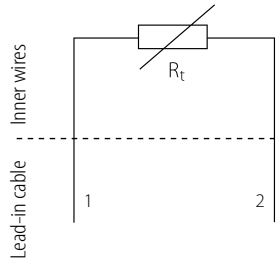
SPECIFICATIONS

Sensor type	TR 092.0
Measuring range	-50 to 200 °C
Type of sensing element	Pt 100, Pt 500, Pt 1000, TC K, TC J
Ingress protection	IP 67 in accordance with EN 60529, as amended
Case material	stainless steel DIN 1.4301
Diameter of case	2 mm
Length of case L	20 to 100 mm
Lead-in cable	silicone shielded 2 x 0.34 mm^2 silicone shielded 4 x 0.22 mm^2
Wire resistance	0.16 Ω for 1 m of cable for 2-wire connection
Time response	$\tau_{0.5} = 1.8$ s $\tau_{0.9} = 5.5$ s

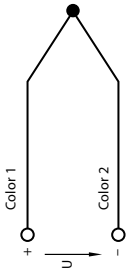
Note: Certain technical specifications of thermocouple sensors (lead wires, IP rating, etc.) may differ with different types.

WIRING DIAGRAM

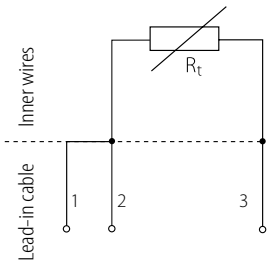
Two-wire



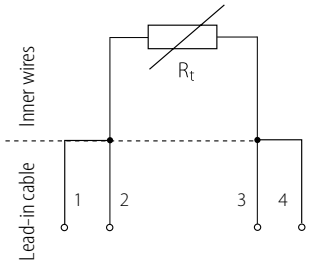
TC



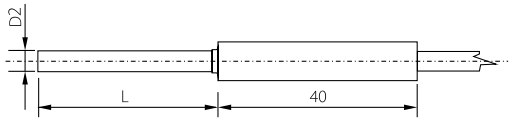
Three-wire



Four-wire



DIMENSIONAL DRAFT



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