



DESCRIPTION AND APPLICATION

These resistance sensors are designed for contact measurement of the temperature of gaseous and liquid or solid substances. The maximum temperature range of use is $-50\text{ }^{\circ}\text{C}$ to $260\text{ }^{\circ}\text{C}$ for the TR 024 model with a Teflon cable, and $-50\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$ for the TR 024A model with a silicone cable. The diameter of the case ensures fast response to changes in temperature. The type of lead-in cable used has silicone insulation and 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.

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.



SPECIFICATIONS

Sensor type	TR 024	TR 024A
Measuring range	-50 to $250\text{ }^{\circ}\text{C}$	-50 to $200\text{ }^{\circ}\text{C}$
Type of sensing element	Pt, Ni	
Ingress protection	IP 64 in accordance with EN 60 529	IP 67 in accordance with EN 60 529
Case material	stainless steel DIN 1.4301	
Diameter of case	4 mm	
Length of case L	35 to 60 mm (in 10 mm)	
Lead-in cable	teflon shield. $2 \times 0.14\text{ mm}^2$ teflon shield. $4 \times 0.14\text{ mm}^2$	silicone shield $2 \times 0.14\text{ mm}^2$
Wire resistance	$0.254\ \Omega$ for 1 m of cable for 2-wire connection	$0.16\ \Omega$ for 1 m of cable for 2-wire connection
Time response	$t_{0.5} < 5\text{ s}$ in flowing water at $0.4\text{ m}\cdot\text{s}^{-1}$	

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. The shielding of the lead-in cable is not connected to the outer sleeve of the sensor or temperature sensor.

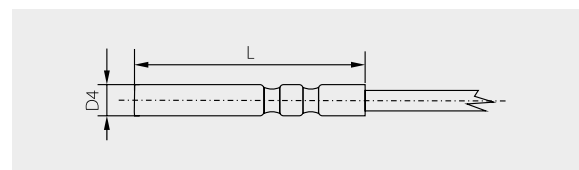
After installing and connecting to the electrical measuring equipment, the sensor is ready for use. The sensor does not require any special servicing or maintenance. The work position is adjustable.

MODIFICATION AND CUSTOMISATION

FOR MANUFACTURED STANDARD SENSORS, THE FOLLOWING PARAMETERS CAN BE MODIFIED:

- variable stem design in the area – L length, case material
- accuracy class A (with the exception of sensors Ni 10000/5000, Ni 10000/6180, T1 = Ni 2226, thermistor NTC 20 k Ω)
- possibility of three or four-wire connection for TR 024 variant

DIMENSIONAL DRAFT



WIRING DIAGRAM

