

# S x061/250

## -30 TO 250 °C, STICK-IN TEMPERATURE PROBE



### DESCRIPTION AND APPLICATION

These resistance temperature probe **S x061/250** are designed for the measurement of temperature of loose materials and solid substances, consistency of which is such so the metal tip cannot be damaged. They can be used also for measuring liquid and gaseous substances. The temperature range for the use of the probe is -30°C to 250 °C. The sensors consist of a metal tip (stainless steel DIN 1.4301), a handle and a lead-in cable. Material composition of the probe conforms to the requirements of Decree 38/2001 Coll. as amended. The design allows easy cleaning, thanks to which the temperature probe can be used in the food industry. The resistance sensing element is located in the tip of the stainless steel case. The probes are intended for operation in chemically non-aggressive environment.

### DECLARATION, CERTIFICATION, CALIBRATION

**EU Declaration of Conformity** – in accordance with Act 22/1997 Coll. 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.

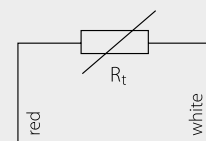


### SPECIFICATIONS

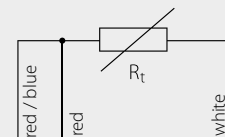
Probe type	S x061/250
Measuring range	-30 to 250 °C
Type of sensing element	all types
Ingress protection	IP 68 (1 bar) in accordance with EN 60 529
Material of the probe tip	stainless steel DIN 1.4301
Diameter of the probe tip	4 mm (4.5 mm – two sensing elements)
Length of the probe tip	125 mm
Material of the handle	teflon
Temperature resistance of the handle	up to 250 °C
Lead-in cable	teflon shielded 2 x 0.14 mm <sup>2</sup> teflon shielded 4 x 0.14 mm <sup>2</sup>
Wire resistance	0.3 Ω for 1 m of the cable for 2-wire connection

### WIRING DIAGRAM

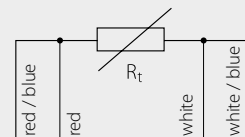
#### Two-wire



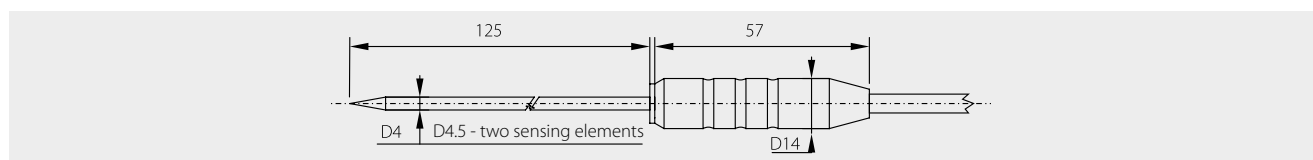
#### Three-wire



#### Four-wire



### DIMENSIONAL DRAFT



### SENSOR INSTALLATION AND SERVICING

Connect the temperature probe to a measuring device according to the wiring diagram. The input of the measuring device must be compatible with the sensor chosen by a customer. Various types of connectors may be used for connection (e.g. CINCH, ELKA, etc.).

Shielding of the lead-in cable is not electrically connected to the outer sensor case or to the temperature sensing element.

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

**The sensors cannot be used for any purpose other than temperature measurement; when handling them, appropriate precautions must be taken to avoid injury caused by the metal tip.**