

W-SZK, Pt Surface Temperature Sensor according to DIN EN 60751

Temperature range -20 °C to +110 °C

- Platinum sensor enclosed in PPE plastic housing
- Easy mounting via thru hole on housing
- Abrasion-resistant jacketed cable
- Versatile, easy to use design
- Largely resistant to greases, organic and inorganic bases and alkalis (medium concentration)

The Pt- RTD element is fully enclosed in a molded polypropylene housing, integrated thru-hole allows for easy mounting via a screw, rivet, etc. and is particularly suitable for surface measurements. Preferred applications include temperature measurement in gaseous media as well as in heating and air conditioning technology.

Nominal Resistance (Element) $R_0[\Omega]$	Tolerance Class (Element)	Order Number	Packaging
Pt 100	F 0.3 (B)	31600393	Plastic bag
Pt 1000	F 0.3 (B)	30504002	Plastic bag

Temperature Range of Tolerance Class

Tolerance Class F 0.3 (B) -20 °C to +110 °C

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Water (v = 0.4 m/s) $t_{0.5} = 11.5 \text{ s}$ $t_{0.9} = 32.0 \text{ s}$

Measuring Current

Pt100 Ω : 0.3 bis 1 mA Pt1000 Ω : 0.1 bis 0.3 mA (self-heating has to be considered)

Long-Term Stability (Sensor Element)

The drift of the resistance value at 0 $^{\circ}$ C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.

Typical drift of R(0 °C) is 0.04 % after 1000 hours at +500 °C.

Self-Heating (Sensor Element)

0.4 K/mW bei 0 °C

Connection Technology

Welding, Crimping, Brazing, Soft Soldering, Clamping

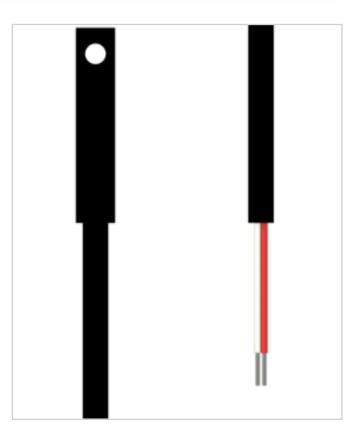


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YAGEO Nexensos GmbH, Germany Web: www.yageo-nexensos.com Contact: nexensos.america@yageo.com Document: 20003959432 Part 001 Version 02 | Status: 03/2023



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Housing

Molded fiber - reinforced polypropylene

Color: Black

Connection Cable

PVC jacket, PVC primary insulation 2 x 0.22 mm² (AWG24), total length 2 x 2514 mm

Color: Black

Conductor Resistance

 $0.4 \Omega (0.08 \Omega/m)$

Applications

- HVAC
- Data Logging
- General purpose temperature sensing

Properties

- Rugged molded polypropylene housing
- Abrasion-resistant jacketed cable
- Versatile, multi purpose design
- Available in Pt100 or Pt1000 resistance values
- +110 °C maximum operating temperature

Customer-Specific Adaptions can be implemented in **High Volume for the following Properties:**

- Extension Length
- Sensor Element: Type and Resistance
- Connectors

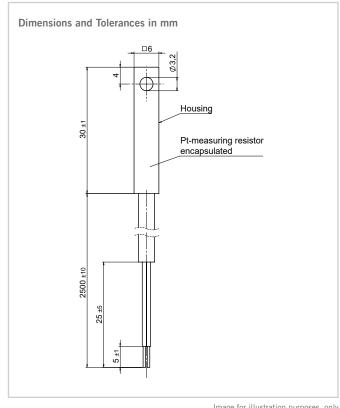


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Resistance vs. Temperature Table





The information provided in this data sheet describes certain technical characteristics of the product, but shall not be qualified or construed as quality guarantee (Beschaffenheitsgarantie) in the meaning of sections 443 and 444 German Civil Code. The information provided in this data sheet regarding measurement values (including, but not limited to, response time, long-term stability, vibration and shock resistance, insulation resistance and self-heating) are average values that have been obtained under laboratory conditions in tests of large numbers of the product. Product results or measurements achieved by customer or any other person in any production, test, or other environment may vary depending on the specific conditions of use. The customer is solely responsible to determine whether the product is suited for the customer's intended use; in this respect YAGEO Nexensos cannot assume any liability. The sale of any products by YAGEO Nexensos is exclusively subject to the General Terms of Sale and Delivery of YAGEO Nexensos in their current version at the time of purchase, which is available under www.yageo-nexensos.com/tc or may be furnished upon request. This data sheet is subject to changes without prior notice.

YAGEO Nexensos GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany

YAGEO Nexensos GmbH, Germany Web: www.yageo-nexensos.com Contact: nexensos.america@yageo.com