YAGEO
NEXENSOS

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 [Ω]	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 s
                                        $t_{0.9}$ = 32.0 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 °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
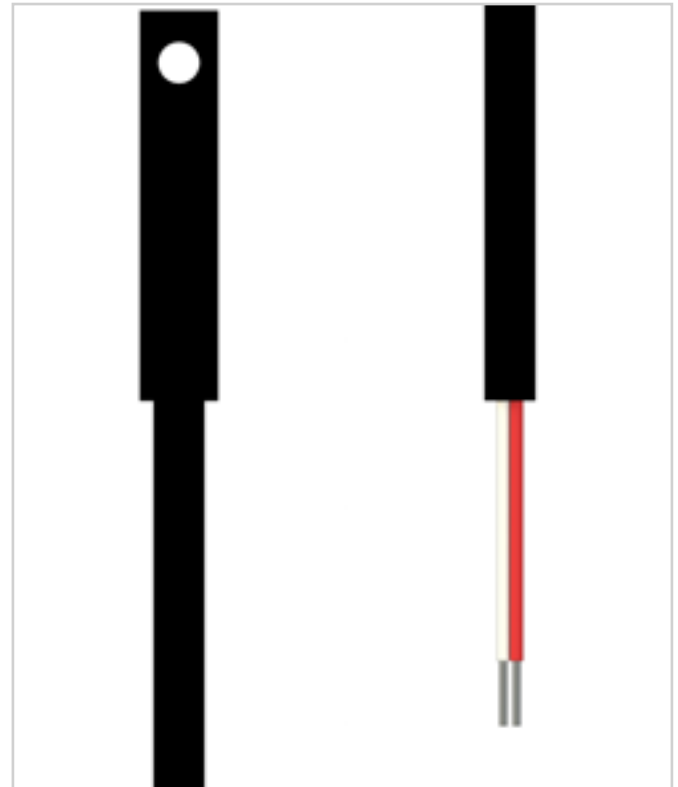Welding, Crimping, Brazing, Soft Soldering, Clamping

Image for illustration purposes only

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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 Ω (0.08 Ω/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

Dimensions and Tolerances in mm

Housing

Pt-measuring resistor encapsulated
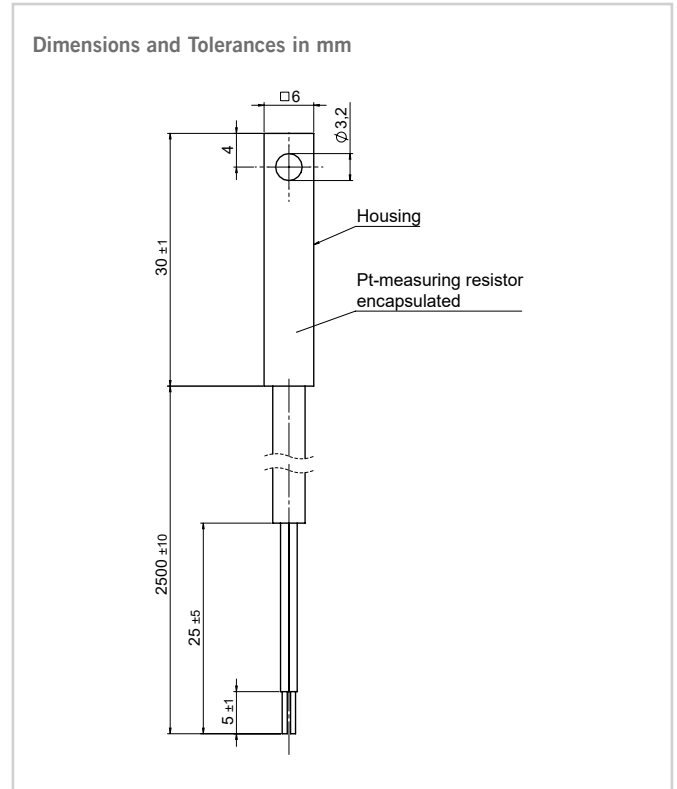
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Resistance vs. Temperature Table

RoHS compliant

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