

Pt Temperature Sensor for Oven Applications based on DIN EN 60751

Temperature range -40 °C to +500 °C, temporary up to +550 °C

- Flanged housing for easy mounting
- Standard design widely used in cooking ovens
- Pt1000 available with 3850 ppm/K or 3750 ppm/K TCR
- High maximum operating temperature +500 °C continuous, temporary up to +550 °C

The Pt RTD is completely encapsulated in a stainless steel housing with an integral mounting flange, and terminated with fiberglass insulated connection wires. The flanged housing enables easy mounting in a variety of applications, such as home ovens, HVAC, industrial equipment, industrial ovens, and commercial food service equipment. The rugged stainless steel housing is resistant to a wide variety of industrial chemicals.

Nominal Resistance R ₀ [Ω]	Tolerance Class	Order Number
Pt100	F 0.3 (B)	5117591
Pt1000	F 0.3 (B)	5117592 / 5117593

Temperature Range of Tolerance Class

Tolerance Class F 0.3 (B) -40 °C to +500 °C
Characteristics based on DIN EN 60751.

Temperature Coefficient

TCR = 3850 ppm/K (5117591, 5117592)
TCR = 3750 ppm/K (5117593)

Connection Wire

Fiberglass insulated, 2x 0.22 mm² (24 AWG)
Pt 100: 3 wire connection (one wire marked to indicate polarity)
Pt1000: 2 wire connection

Internal Conductor Resistance

0.03 Ω/ft (0.098 Ω/m) for each conductor

Housing

Stainless steel, 300 series

Applications

- Oven temperature
- HVAC
- General purpose temperature sensing



Image for illustration purposes only

Pt Temperature Sensor for Oven Applications based on DIN EN 60751

Temperature range -40 °C to +500 °C, temporary up to +550 °C

Features

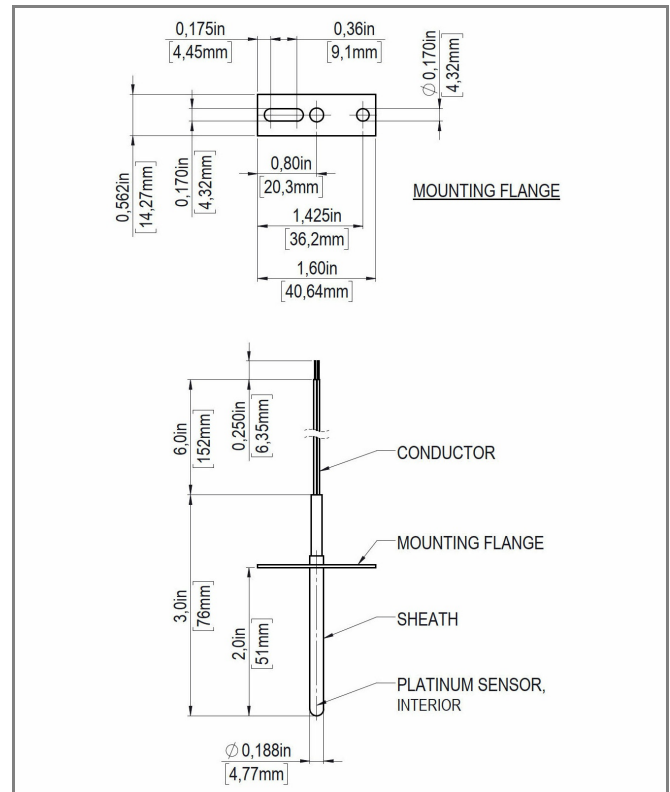
- Flanged housing allows for easy mounting
- Standard design widely used in cooking ovens
- Available in Pt100 or Pt1000 resistance values
- Pt1000 available in TCR 3850 ppm/K or TCR 3750 ppm/K
- +550 °C maximum operating temperature (short time)

Options

- Wire length
- Resistance Value
- Connectors

Resistance vs Temperature Table

Reference table @ www.heraeus.us/technical-information



The information provided in this data sheet describes certain technical characteristics of the product, but shall not be qualified or construed as quality guarantees whatsoever. Furthermore, the information provided in this data sheet does not constitute a warranty, implied or express, whatsoever, including but not limited to warranties of merchantability, fitness for a particular purpose, or use. 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 customer's intended use; in this respect Heraeus cannot assume any liability. The sale of any products of Heraeus is exclusively subject to the Terms and Conditions of Sale of Heraeus in their current version at the time of purchase, which is available under www.heraeus.com/gtc or may be furnished upon request. This data sheet is subject to changes without prior notice.

Heraeus Nexensos USA, a division of Heraeus Epurio LLC, 770 Township Line Road, Suite 300, Yardley, Pennsylvania, USA 19067

Heraeus Nexensos USA, a division of Heraeus Epurio LLC, USA
Web: www.heraeus-nexensos.com
Contact: nexensos.america@heraeus.com

Document: 20003959412 | Part 001 | Version 00 | Status: 09/2021

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Heraeus:

[35110020](#) [35110021](#) [35110022](#) [5117591](#) [5117592](#) [5117593](#)