

Platinum Temperature Sensor for oven applications according to DIN EN 60751

The Pt-RTD is completely encapsulated in a stainless-steel housing with an integral mounting flange and connected with fiber optic reinforced leads. The dimensionally stable protective housing allows for easy installation thanks to the integrated flange and the prefabricated bores. Preferred applications for temperature measurement are in gaseous media, heating and air conditioning technology as well as for monitoring furnace temperatures at elevated temperatures. The housing material is resistant to oils, organic and inorganic bases and alkalis (medium concentration) and protects the sensor from mechanical damage.

| Nominal Resistance R_0 | Tolerance | Order Number |
|--------------------------|------------------------|------------------|
| 100 Ohm at 0 °C | TC3850 F 0.3 (Class B) | 5117591 (3 wire) |
| 1000 Ohm at 0 °C | TC3850 F 0.3 (Class B) | 5117592 (2 wire) |
| 1000 Ohm at 0 °C | TC3750 F 0.3 (Class B) | 5117593 (2 wire) |

Temperature coefficient

TCR = 3580 ppm/K or 3750 ppm/K

Connection wire

Fiberglass-insulated, 2 x 0.22 mm² (24AWG)

Pt100: 3 wire connection

(one wire marked to indicate polarity)

Pt1000: 2 wire connection

Internal conductor resistance

0.030 Ω/ft. (0.098 Ω/m) for each conductor

Housing

Stainless steel, 300 series

Application

- Oven temperature
- Heating, ventilating, and air conditioning
- General purpose temperature sensing

Features

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

Options

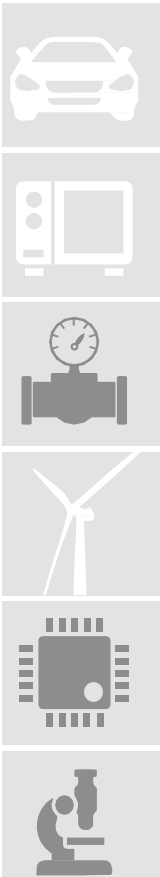
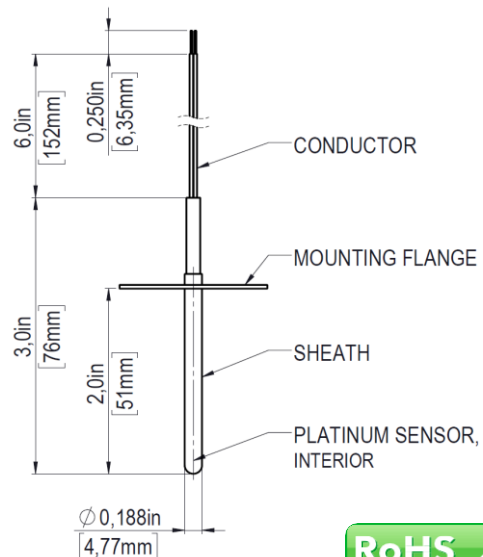
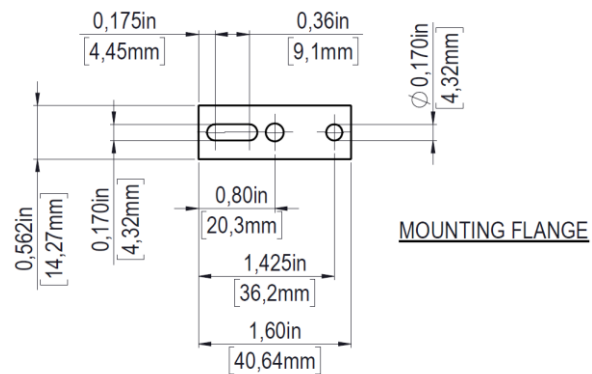
Wire length

Resistance value

Connectors

Resistance vs Temperature Table

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



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

Web: www.heraeus-nexensos.com