

## Platinum Temperature Sensor with ceramic housing (high-temp.) according to DIN EN 60751 Temperature range -40 °C to +500 °C

The Pt-RTD is completely encapsulated in a ceramic housing. The dimensionally stable protective tube allows easy mounting in according holes. Preferred applications for the temperature measurement are high temperature requirements in gaseous media and in heating and air conditioning as well as in electrical insulated or non-metallic required sensor body's.

Nominal Resistance $R_0$	Tolerance	Order Number
100 Ohm at 0 °C	F 0.3 (Class B)	5117586 (3 wire)
1000 Ohm at 0 °C	F 0.3 (Class B)	5117587 (2 wire)

### Temperature coefficient

TCR = 3850 ppm/K

### Connection wire

Fiberglass insulated, 2 x 0.22 mm<sup>2</sup> (24AWG)

Pt100: 3 wire connection

(one wire marked to indicate polarity)

Pt1000: 2 wire connection

### Internal conductor resistance

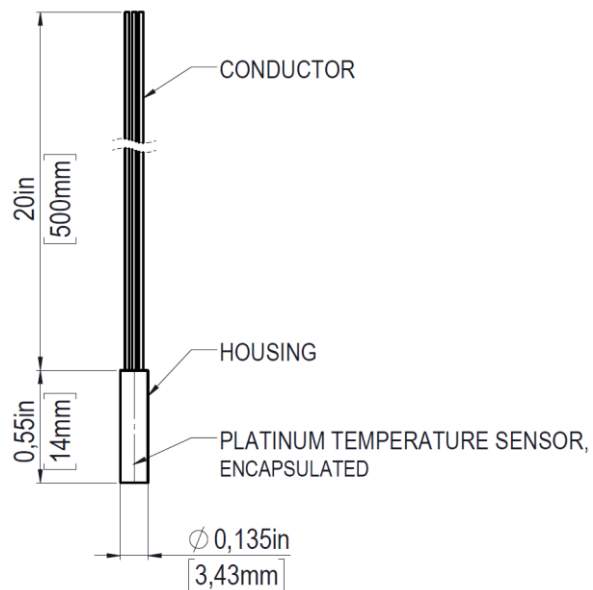
0.030 Ω/ft. (0.098 Ω/m) for each conductor

### Housing

Aluminum Oxide ceramic

### Application

- Temperature probe assembly
- Heating, ventilating, and air conditioning
- Laboratory instrumentation
- Laboratory ovens & furnaces
- Applications requiring an electrically insulating or non-metallic sensor body



### Features

- Alumina ceramic housing provides excellent electrical isolation
- Small diameter (0.135", 3.43mm) allows insertion into metal housings with OD of 0.156"(3.96mm) and larger
- Widely used for a variety of temperature-sensing applications
- Available in Pt100 or Pt1000 resistance values
- +500 °C maximum operating temperature

### Options

Wire length

Resistance value

Connectors

### Resistance vs Temperature Table

Reference table @ [www.heraeus.com/technical-information](http://www.heraeus.com/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 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 Heraeus cannot assume any liability. The sale of any products by Heraeus is exclusively subject to the General Terms of Sale and Delivery of Heraeus in their current version at the time of purchase, which is available under [www.heraeus.com/gtc](http://www.heraeus.com/gtc) or may be furnished upon request. This data sheet is subject to changes without prior notice. Heraeus Nexensos GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany  
Web: [www.heraeus-nexensos.com](http://www.heraeus-nexensos.com)