

## W-EYK, Insert Platinum Temperature Sensor with stainless-steel housing according to DIN EN 60751 Temperature range -40 °C to +500 °C

The Pt- RTD element is completely moulded in stainless steel housing. The dimensionally stable protective tube allows easy mounting in the according holes. Preferred applications for temperature measurement would be in gaseous media and in heating and air conditioning at elevated temperatures. In a temperature range between 0 °C and 100 °C, the sensor is suitable for particularly accurate measurements. 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	F 0.1 (Class 1/3 B)	30 500 109
1000 Ohm at 0 °C	F 0.1 (Class 1/3 B)	31 500 989

### Temperature range and coefficient

Tolerance class F 0.3 (B): -40 °C to +500 °C  
 Tolerance class F 0.10 (1/3B): 0 °C to +100 °C  
 TCR = 3850 ppm/K

### Connection wire

Fiberglass-insulated twisted pair Ni-wire  
 2 x 0.5 mm (24AWG), 300 mm long

### Internal conductor resistance

0.04 Ω/ft. (0.48 Ω/m) for each conductor

### Housing

Closed end tube, stainless steel 1.4571 (316Ti)

### Application

- Heating, ventilating, and air-conditioning
- Data logging
- Laboratory instrumentation
- Oven temperature
- Hi-temp temperature sensing

### Features

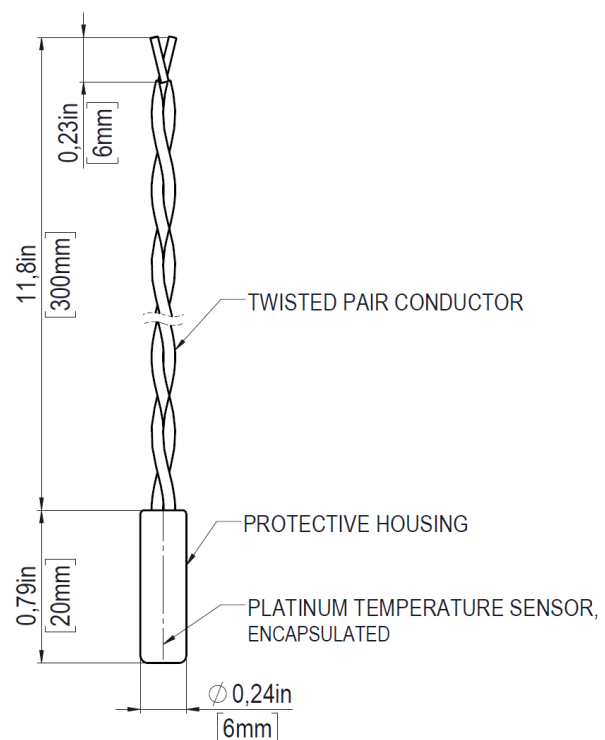
- Corrosion-resistant stainless-steel protective housing
- High-temperature fiberglass-insulated connection wires
- Widely used for a variety of temperature-sensing applications
- Available in Pt100 or Pt1000 resistance values
- +500 °C maximum operating temperature

### Options

Wire length  
 Resistance value  
 Connectors

### Resistance vs Temperature Table

Reference table @ [www.heraeus.com/technical-information](http://www.heraeus.com/technical-information)



### California Proposition 65

**WARNING:**  
 This product can expose you to chemicals including lead oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm, and including cobalt oxide, nickel and cobalt, which are known to the State of California to cause cancer. For more information go to

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)