

## 1Pt100 KN3026, Ceramic Wire Wound Pt RTD according to IEC 60751

Temperature range -196 °C to +660 °C

- High measurement stability
- Tight tolerances available over wide operating temperature ranges
- Low self-heating
- Not recommended for high shock or vibraton applications

The KN Series Ceramic Wire Wound Pt RTDs are suitable for general applications requiring temperature stability, and high accuracy over very wide operating temperature ranges. Typical application areas are, Energy & Power generation, Oil & Gas and PetroChemistry and special industrial applications.

| Nominal Resistance R <sub>0</sub> [Ω] | Tolerance Class      | Order Number        | Packaging       |
|---------------------------------------|----------------------|---------------------|-----------------|
| Pt100                                 | W0.03 / Class 1/10 B | 32206082 / 32206436 | Slide Blister / |
|                                       | W0.1 / Class 1/3 B   | 32206557            | Slide Blister   |
|                                       | W0.15 / Class A      | 32206544            | Slide Blister   |
|                                       | W0.3 / Class B       | 32206520            | Slide Blister   |

The measuring point for the nominal resistance is 8 mm from the end of the sensor body.

### Temperature and Tolerance Range

|                                |                    |
|--------------------------------|--------------------|
| Tolerance Class W0.03 / 1/10 B | -50 °C to +300 °C  |
| Tolerance Class W0.1 / 1/3 B   | -100 °C to +350 °C |
| Tolerance Class W0.15 / A      | -100 °C to +450 °C |
| Tolerance Class W0.3 / B       | -196 °C to +660 °C |

32206436:  
Tolerance Class W0.03L / 1/10 B -50 °C to +150 °C

32206082:  
LL: 8.5 ±0.5 mm

### Temperature Coefficient

TCR = 3850 ppm/K

### Response Time

|                     |               |
|---------------------|---------------|
| Water (v = 0.4m/s): | t0.5 = 0.3 s  |
|                     | t0.9 = 0.6 s  |
| Air (v = 0.3m/s):   | t0.5 = 10.5 s |
|                     | t0.9 = 34 s   |

### Measuring Current

1 mA

### Long-Term Stability

1000 hours at the upper temperature limit

### Self-Heating

0.04 K/mW at 0 °C

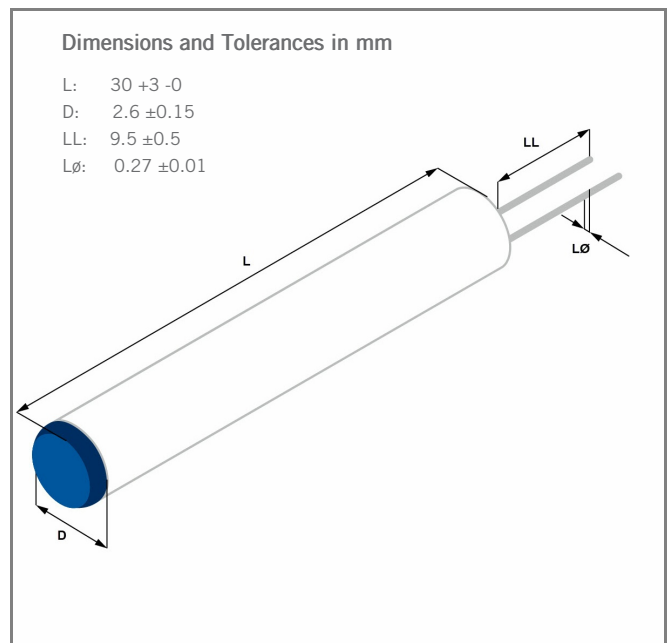


Image for illustration purposes only  
Color, shape and forming of fixation drop may vary

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### Insulation Resistance After Assembly

Housed sensors achieve typically values >3 GΩ (at room temperature)

### Lead Type

Palladium-gold alloy

### Note

Available on request:

- Other standards and narrower tolerances
- Platinum-gold alloy
- Different temperature coefficients (3916 ppm/K - old JIS)
- Extension leads
- Two separated coils can be embedded in one ceramic body

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor

These ceramic wire wound products are manufactured for Heraeus Nexensos by Sensor Technology Ltda.

### California Proposition 65



## WARNING

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 and cadmium and/or cadmium compounds, which is known to the State of California to cause cancer.

For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)



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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](http://www.heraeus.com/gtc) or may be furnished upon request. This data sheet is subject to changes without prior notice.

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