

1 Pt100 KN 1510, Ceramic Wire Wound PRTD

Temperature range -196 °C to +660 °C

The KN Series Ceramic Wire Wound PRTDs are suitable for general applications requiring temperature stability.

Applications: Industrial resistance thermometers, especially in chemical, power generation plants and analytical equipment.

Construction: A platinum coil is sealed inside a high purity aluminum oxide ceramic body. Lead wires are shear force resistant and assure proper connection to extension leads and cables.

Nominal Resistance R0	Tolerance	Order number
100 Ohm @ 0 °C	W0.3	32206913
	W0.15	32206914
	W0.1	32206915
	W0.03	32206433
	W0.03*	32206185

The measuring point is located at 8 mm from the end of the sensor body

Nominal Resistance

100 Ohm @ 0 °C

Temperature coefficient

TCR = 3850 ppm/K

Temperature Range

- W0.3 (Class B) = -196°C to +660°C
- W0.15(Class A) = -100°C to +450°C
- W0.1 (Class 1/3B) = -100°C to +350°C
- W0.03 (Class 1/10B) = -50°C to +300°C (lead length 8mm to 9mm)*
- W0.03 (Class 1/10B) = -50°C to +150°C

Response time

Water current (v= 0.4m/s):
 $t_{0.5} = 0.2s$
 $t_{0.9} = 0.3s$

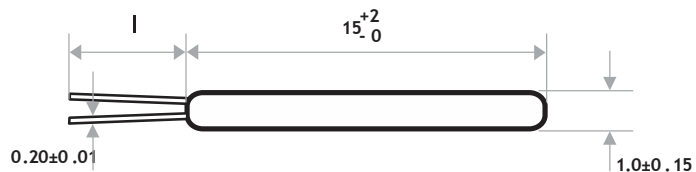
Air stream (v= 3m/s):
 $t_{0.5} = 3.0s$
 $t_{0.9} = 9.0s$

Self Heating

0.14 K/mW at 0°C

Dimensions in mm

$$L = 15_{-0}^{+2} \quad D = 1.0 \pm 0.15 \quad d = 0.20 \pm 0.01 \quad l = 9.5 \pm 0.5$$



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.

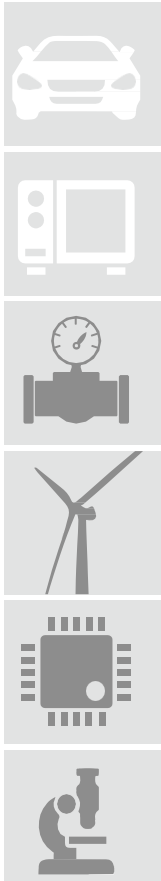
The information provided in this data sheet regarding measurement values (including, but not limited to, response time, long-term stability, vibration and shock resistance, insulation resistance and self-heating) are average values that have been obtained under laboratory conditions in tests of large 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

Web: www.heraeus-nexensos.com

Status: 04/2021



1 Pt100 KN 1510, Ceramic Wire Wound PRTD

Temperature range -196 °C to +660 °C

Measuring current

1mA

Tolerance Class

According to IEC 60751:2008

Other standards and narrower tolerances are available on request

Temperature Stability

Excellent long-term stability

Also available

Platinum gold alloy

Different temperature coefficients (3916 ppm/K – old JIS)

Extension leads

Leads

Palladium-gold alloy

Insulation resistance after assembly

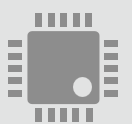
>100 MOhm @ 25 °C

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. For more information go to www.p65warnings.ca.gov.



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

Web: www.heraeus-nexensos.com

Status: 04/2021