

1 Pt100 KN 3026, 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 R ₀	Tolerance	Order number
100 Ohm @ 0 °C	W0.3	32206520
	W0.15	32206544
	W0.1	32206557
	W0.03	32206082

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

Nominal Resistance

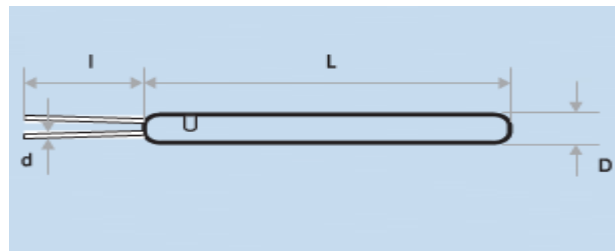
100 Ohm @ 0 °C

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



Response time

- Water current (v= 0.4m/s): t_{0.5} = 0.3s
t_{0.9} = 0.6s
- Air stream (v= 3m/s): t_{0.5} = 10.5s
t_{0.9} = 34.0s

Self Heating

0.04 K/mW at 0°C

Temperature Stability

- W0.3 = 0.3°C
- W0.15 = 0.15°C
- W0.1 = 0.1 °C

Dimensions

$$L = 30_{-0}^{+3} \quad D = 2.6 \pm 0.15 \quad d = 0.27 \pm 0.01 \quad l = 10.0 \pm 0.5 \quad (\text{See Remark})$$



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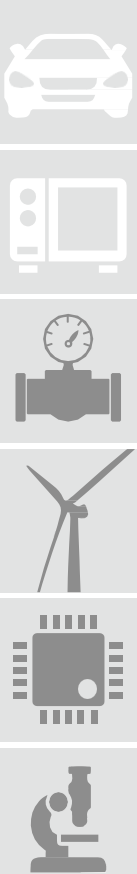
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Web: www.heraeus-nexensos.com

Status: 04/2019



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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

1000 hours at the upper temperature limit

Also available

Platinum-gold alloy

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

Extension leads

Two separated coils can be embedded in one ceramic body

Leads

Palladium-gold alloy

Insulation resistance after assembly

>100 MOhm @ 25 °C

Vibration test


Frequency range of 10 Hz to 500 Hz with force acceleration of 20 m/seg² to 30 m/seg².

The maximum shift at 0°C is 0.1°C.

Remark

Class	Working Temperature	Lead Length (l)
W0.03 (1/10 DIN)	<=150°C 150°C to 300°C	10 mm 8 to 9 mm

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.



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