

# 1 Pt100 KN 1510 E, 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	32206681
	W0.15	32206682
	W0.1	32206683

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

### Nominal Resistance

100 Ohm @ 0 °C

### Temperature coefficient

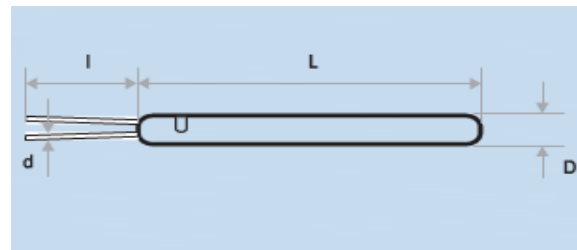
TCR = 3916 ppm/K

### 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



### 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

$L = 15_{-0}^{+2}$     $D = 1.0 \pm 0.15$     $d = 0.20 \pm 0.01$     $l = 10.0 \pm 0.5$



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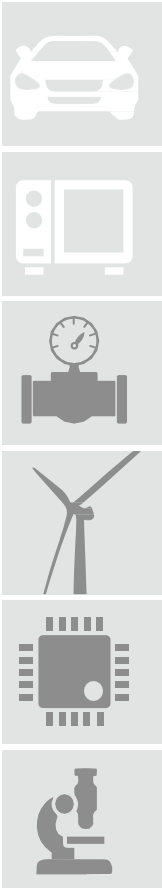
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Status: 04/2019



# 1 Pt100 KN 1510 E, Ceramic Wire Wound PRTD

Temperature range -196 °C to +660 °C

## Measuring current

1mA

## Tolerance Class

According to old JIS

Other standards and narrower tolerances are available on request

## Temperature Stability

Excellent long-term stability

## Also available

Platinum-gold alloy

Different temperature coefficients (3850 ppm/K - IEC 60751:2008)

Extension leads

## Leads

Palladium-gold alloy

## Insulation resistance after assembly

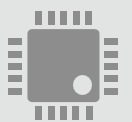
>100 MOhm @ 25 °C

## 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](http://www.p65warnings.ca.gov).



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