

## 1 Pt100 KN 3045

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.



### Models

Description	Tolerance IEC 60751	Order No.	Dimensions mm				Self Heating 0°C (K/mW)	Response time			
			L	D	d	l		Water current V=0.4m/s		Air stream V=3m/s	
							t <sub>0.5</sub>	t <sub>0.9</sub>	t <sub>0.5</sub>	t <sub>0.9</sub>	
1Pt100 KN 3045	W0.3	32.206.530	30 <sup>+3</sup> <sub>-0</sub>	4.5±0.15	0.27±0.01	10.0±0.5	0.01	0.4	1.4	26.0	90.0
	W0.15	32.206.533									
	W0.1	32.206.548									

### Technical Specification

<b>Nominal resistance:</b>	100 Ohm @ 0 °C	<b>Measuring current:</b>	1 mA
<b>Temperature range:</b>	W0.3 (Class B) = -196 to +660 °C W0.15 (Class A) = -196 to +600 °C (Heraeus exceeds IEC 60751: -100 to +450 °C) W0.1 (Class 1/3 B) = -100 to +350 °C	<b>Tolerance class:</b>	- According to IEC 60751:2008 - Other standards and narrower tolerances are available on request
<b>Temperature coefficient:</b>	T <sub>c</sub> = 3850 ppm/K	<b>Temperature stability:</b>	Excellent long-term stability
<b>Leads:</b>	Palladium-gold alloy	<b>Also available:</b>	- Platinum-gold alloy - Different temperature coefficients (3916 ppm/K - old JIS) - Extension leads - Two separated coils can be embedded in one ceramic body
<b>Insulation resistance after assembly:</b>	> 100 MOhm @ 25 °C		

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

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