

# Sensor Technology

## KN Series



### KN Series Ceramic Wire Wound PRTD

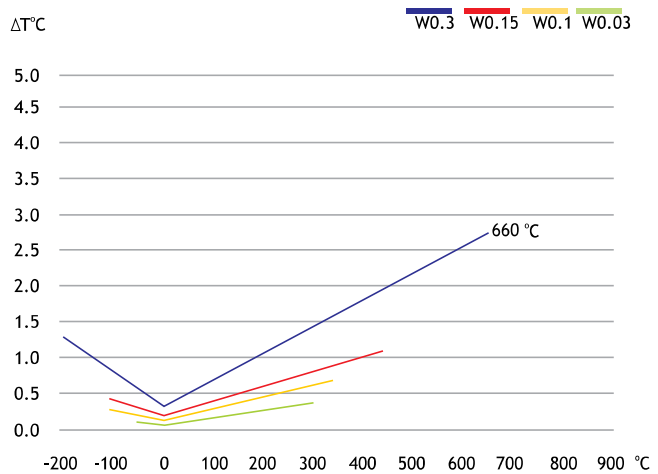
The KN Series Ceramic Wire Wound PRTDs are suitable for general applications requiring temperature stability and accuracy.

**Applications:** Industrial resistance thermometers, for industrial process like chemical, power generation plants and analytical equipment.

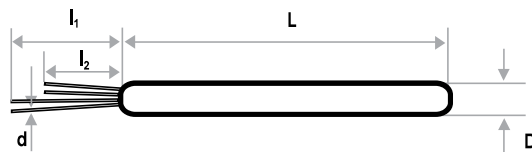
**Construction:** A platinum coil is sealed inside a high purity aluminum oxide ceramic body. Lead wires are shear force resistant and assure proper connection to extension leads and cables. Two separate coils can be embedded in one ceramic body.

On demand: In addition to the standard products, we are also producing on demand products. In order to offer the best solution to the market, we are able to design element sensors considering different diameters, lengths, classes and coefficients.

Class tolerance chart



# KN Series specifications 2 Pt Models ( Dual element )

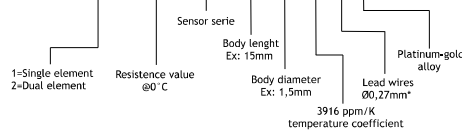


Product				Order No.	Dimensions in mm					Self Heating 0°C (K/mW)	Response time			
Description	Tolerance Class	Class	Temperature range (°C)		L	D	d	l <sub>1</sub>	l <sub>2</sub>		Water: V= 0.4m/s		Air: V= 3m/s	
										t <sub>0.5</sub>	t <sub>0.9</sub>	t <sub>0.5</sub>	t <sub>0.9</sub>	
2Pt100 KN 1017	W0.3	B	-196 ~+660	32.206.182	10 <sup>+2</sup> <sub>0</sub>	1.7±0.15	0.20±0.01	8.5±0.5	7.5±0.5	0.28	0.2	0.5	6.7	21.8
	W0.15	A	-100 ~+450	32.206.183				8.5±0.5	7.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.184				8.5±0.5	7.5±0.5					
2Pt100 KN 1517	W0.3	B	-196 ~+660	32.206.157	15 <sup>+2</sup> <sub>0</sub>	1.7±0.1	0.20±0.01	8.5±0.5	7.5±0.5	0.14	0.2	0.3	3.0	9.0
	W0.15	A	-100 ~+450	32.206.158				8.5±0.5	7.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.159				8.5±0.5	7.5±0.5					
2Pt100 KN 2517	W0.3	B	-196 ~+660	32.206.301	25 <sup>+2</sup> <sub>0</sub>	1.7±0.15	0.20±0.01	8.5±0.5	7.5±0.5	0.08	0.2	0.4	5.0	15.7
	W0.15	A	-100 ~+450	32.206.004				8.5±0.5	7.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.302				8.5±0.5	7.5±0.5					
2Pt100 KN 2517 G	W0.3	B	-196 ~+660	32.206.931	25 <sup>+2</sup> <sub>0</sub>	1.7±0.15	0.27±0.01	8.5±0.5	7.5±0.5	0.08	0.2	0.4	5.0	15.7
	W0.15	A	-100 ~+450	32.206.932				8.5±0.5	7.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.933				8.5±0.5	7.5±0.5					
2Pt100 KN 3026	W0.3	B	-196 ~+660	32.206.620	30 <sup>+2</sup> <sub>0</sub>	2.6±0.15	0.27±0.01	8.5±0.5	7.5±0.5	0.06	0.3	0.6	10.5	34.0
	W0.15	A	-100 ~+450	32.206.569				8.5±0.5	7.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.647				8.5±0.5	7.5±0.5					

Sensor Technology reserves the right to make changes without notice in the specifications of this products

## Technical Specification

**Description meaning:** Ex: 1Pt100 KN 1515 E G P



<b>Temperature range:</b>	W0.3 (Class B)	= -196 °C to +660 °C
	W0.15 (Class A)	= -100 °C to +450 °C
	W0.1 (Class 1/3 B)	= -100 °C to +350 °C
	W0.06 (Class 1/5 B)	= -50 °C to +300 °C
	W0.03L (Class 1/10 B)	= -50 °C to +150 °C
	W0.03 (Class 1/10 B)	= - 50 °C to +300 °C

**Temperature coefficient:** Tc = 3850 ppm/K

**Leads:** Palladium-gold alloy

**Length Leads:** 7,5 mm ± 0,5 mm

**Insulation resistance after assembly:** > 100 MOhm @ 25 °C

**Measuring current:** 1 mA

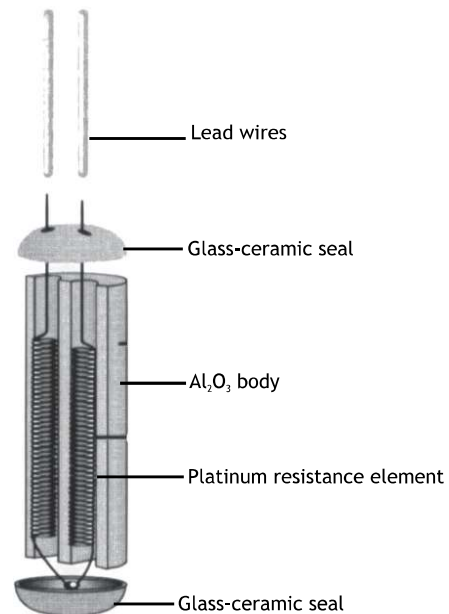
**Tolerance class:**

- According to IEC 60751:2008
- Other standards, narrower tolerances and other nominal resistances are available on request

**Temperature stability:** Excellent long-term stability

**Also available:**

- Platinum-gold alloy
- Different temperature coefficients On demand. (3916 ppm/K - old JIS)
- Extension leads



The measuring point is located at 6 mm from the end of the sensor body.

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