

Sensor Technology K Series



K Series Ceramic Wire Wound PRTD

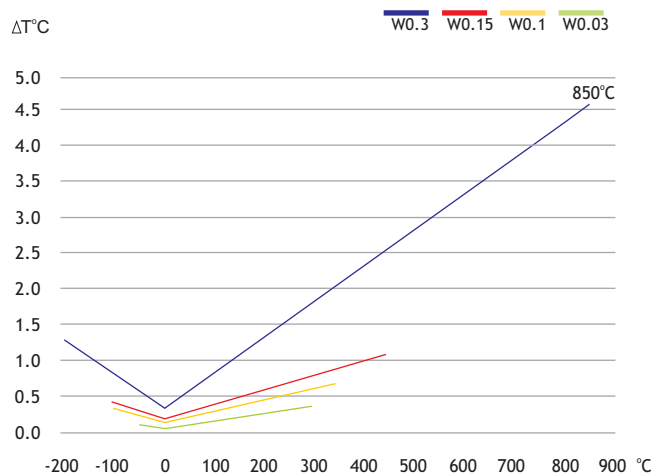
The K Series Ceramic Wire Wound PRTDs are suitable for resistance thermometers requiring extremely temperature stability over 800°C, accuracy and high temperature shock resistance.

Applications: Chemical and power generation plants, analytical equipment and for applications requiring extremely high temperature stability as well as high temperature shock resistance.

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



K Series specifications

1 Pt Types (Single element)



1Pt Types

Description	Product			Order No.	Dimensions in mm				Self Heating 0°C (K/mW)	Response time			
	Tolerance Class	Class	Temperature range (°C)		L	D	d	l		Water: V= 0.4m/s		Air: V= 3m/s	
1PT100 K 1515	W0.3	B	-196 ~+850	32.206.280	15^{+2}_{-0}	1.5 ± 0.15	0.20 ± 0.01	7.5 ± 0.5	0.08	0.2	0.4	5.0	15.7
	W0.15	A	-100 ~+450	32.206.281				7.5 ± 0.5					
	W0.1	1/3	-100 ~+350	32.206.282				7.5 ± 0.5					
1PT100 K 2515	W0.1	1/3	-100 ~+350	32.206.152	25^{+2}_{-0}	1.5 ± 0.15	0.20 ± 0.01	7.5 ± 0.5	0.08	0.2	0.4	5.0	15.7
	W0.15	A	-100 ~+450	32.206.109				7.5 ± 0.5					
	W0.3	B	-196 ~+850	32.206.105				7.5 ± 0.5					

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

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

K Series specifications 2 Pt Types (Dual element)



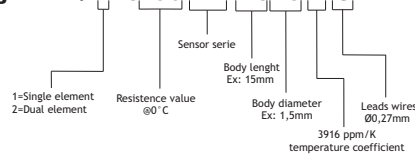
2Pt Types														
Description	Product			Order No.	Dimensions in mm					Self Heating	Response time			
	Tolerance Class	Class	Temperature range (°C)		L	D	d	l1	l2	0° C (K/mW)	Water: V= 0.4m/s t 0.5 t 0.9		Air: V= 3m/s t 0.5 t 0.9	
2PT100 K 2517 E	W0.15	A	-100~+450	32.206.141	25 ⁺² ₋₀	1.7 ± 0.15	0.20 ± 0.01	8.5 ± 0.5	7.5 ± 0.5	0.06	0.2	0.4	6.1	19
	W0.3	B	-196~+850	32.206.140										
2PT100 K 2517	W0.15	A	-100~+450	32.206.150	25 ⁺² ₋₀	1.7 ± 0.15	0.20 ± 0.01	8.5 ± 0.5	7.5 ± 0.5	0.06	0.2	0.4	6.1	19

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Technical Specification

Description meaning: Ex: 1Pt100 K 1515 E G



1=Single element
2=Dual element

Resistance value @0°C

Sensor serie

Body length
Ex: 15mm

Body diameter
Ex: 1,5mm

Leads wires
Ø0,27mm

3916 ppm/K
temperature coefficient

Temperature range:

W0.3 (Class B)	= -196 °C to +850 °C
W0.15 (Class A)	= -100 °C to +450 °C
W0.1 (Class 1/3 B)	= -100 °C to +350 °C

Temperature coefficient:

Tc = 3850 ppm/K

Leads:

Platinum-gold alloy

Insulation resistance after assembly:

> 100 MOhm @ 25 °C

Measuring current:

1 mA

Tolerance class:

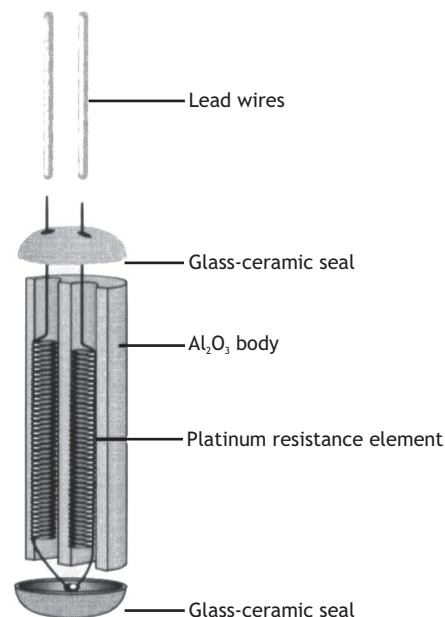
- According to IEC 60751:2008
- Other standards, narrower tolerances and other nominal resistances are available on request

Temperature stability:

Excellent long-term stability

Also available:

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



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