

Sensor Technology

K Series



K Series Ceramic Wire Wound PRTD

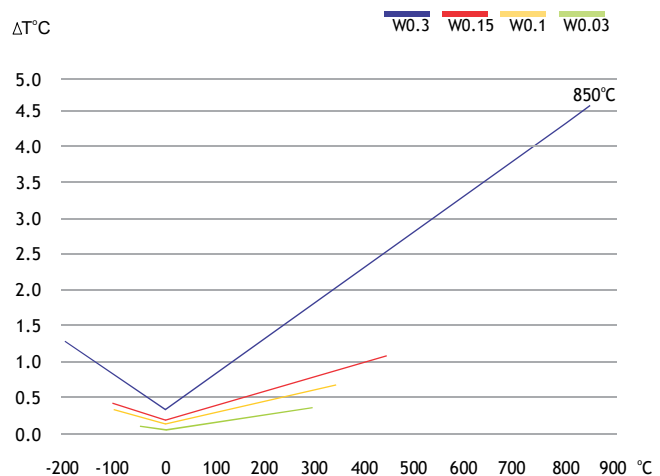
The K Series Ceramic Wire Wound PRTDs are suitable for resistance thermometers requiring extremely temperature stability over 800°C, accuracy and high temperature shock resistance.

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.

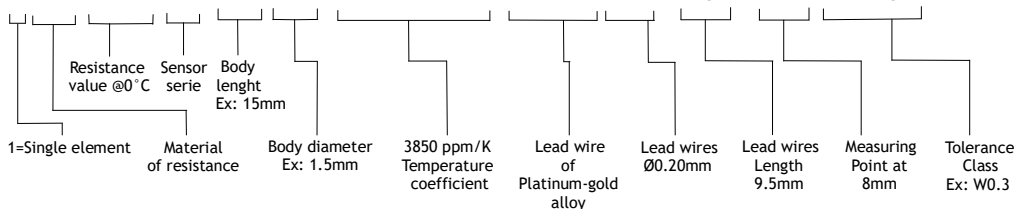
On demand: In addition to the standard products, we are also producing on demand products. In order to offer the best solution to the market, we are able to design element sensors considering different diameters, lengths, classes and coefficients.

Class tolerance chart



1 Pt Types (Single element) K Series specifications

1Pt100 K 1515 TC3850 PtAu20-9.5 M8W0.3



1Pt Types

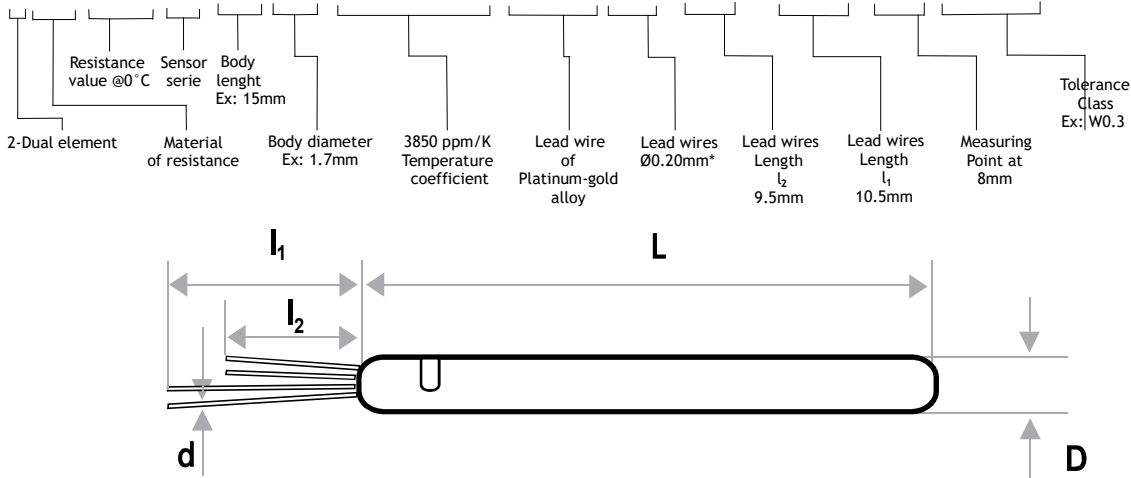
Product					Dimensions in mm				Self Heating	Response time			
Description	Tolerance Class	Class	Temperature range (°C)	Order No.	L	D	d	l	0 °C (K/mW)	Water: V= 0.4m/s		Air: V= 3m/s	
										t _{0.5}	t _{0.9}	t _{0.5}	t _{0.9}
1Pt100 K 1515	W0.3	B	-196 ~+850	32.206.280	15 ⁺² ₀	1.5±0.15	0.20±0.01	9.5±0.5	0.08	0.2	0.4	5.0	15.7
	W0.15	A	-100 ~+450	32.206.281				9.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.282				9.5±0.5					
1Pt100 K 2515	W0.3	B	-196 ~+850	32.206.105	25 ⁺² ₀	1.5±0.15	0.20±0.01	9.5±0.5	0.08	0.2	0.4	5.7	17.0
	W0.15	A	-100 ~+450	32.206.109				9.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.152				9.5±0.5					

The measuring point is located at 8 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)

2Pt100 K 1517 TC3850 PtAu20-9.5-10.5 M8W0.3



2Pt Types

Product					Dimensions in mm					Self Heating	Response time			
Description	Tolerance Class	Class	Temperature range (°C)	Order No.	L	D	d	l ₁	l ₂	0 °C (K/mW)	Water: V= 0.4m/s		Air: V= 3m/s	
2Pt100 K 1517	W0.3	B	-196 ~+850	32.206.204	15 ⁺² ₀	1.7±0.15	0.20±0.01	10.5±0.5	9.5±0.5					
	W0.15	A	-100 ~+450	32.206.206				10.5±0.5	9.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.207				10.5±0.5	9.5±0.5					
2Pt100 K 2517	W0.3	B	-196 ~+850	32.206.205	25 ⁺² ₀	1.7±0.15	0.20±0.01	10.5±0.5	9.5±0.5	0.06	0.2	0.4	6.1	19
	W0.15	A	-100 ~+450	32.206.150				10.5±0.5	9.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.162				10.5±0.5	9.5±0.5					
2Pt100 K 2517 E "E" means TC3916	W0.3	B	-196 ~+850	32.206.140	25 ⁺² ₀	1.7±0.15	0.20±0.01	10.5±0.5	9.5±0.5	0.06	0.2	0.4	6.1	19
	W0.15	A	-100 ~+450	32.206.141				10.5±0.5	9.5±0.5					
	W0.1	1/3	-100 ~+350	32.206.142				10.5±0.5	9.5±0.5					

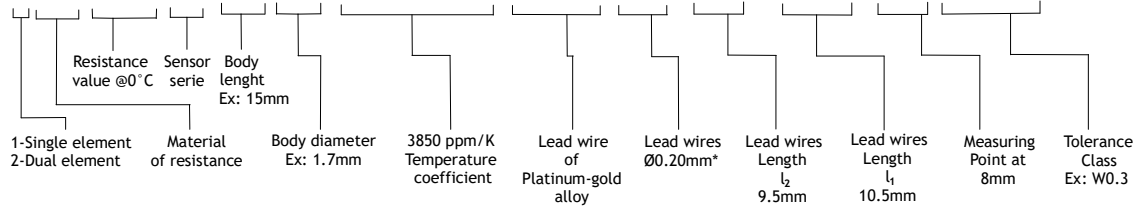
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Technical Specification

Description meaning:

2Pt100 K 1517 TC3850 PtAu20-9.5-10.5 M8W0.3



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 and TC3916 (on demand)

Leads: Platinum-gold alloy

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

Measuring current: 1 mA

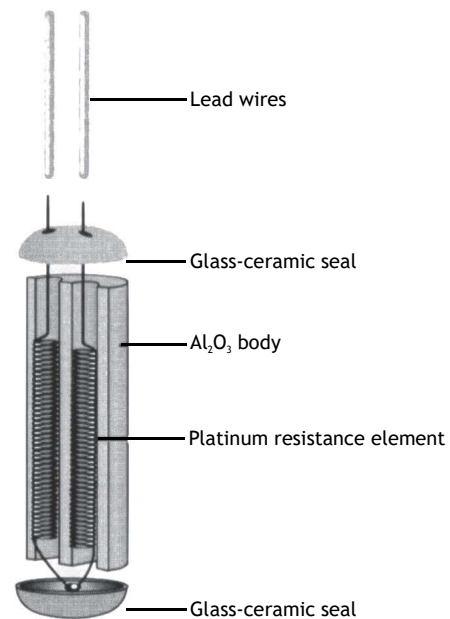
Tolerance class:

- 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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