

Sensor Technology

KG Series (glass coat)



KG Series Ceramic Wire Wound PRTD

The KG Series Ceramic Wire Wound PRTDs is suitable for general applications requiring temperature stability.

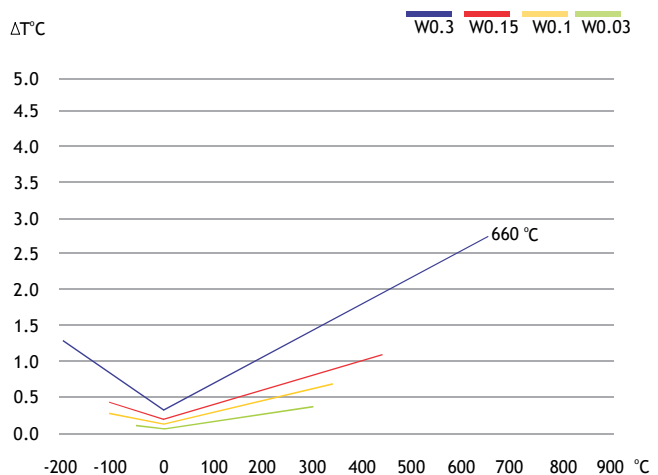
Main applications requiring temperature stability: $\Delta T^{\circ}\text{C}$

Industrial resistance thermometers, especially chemical, power generation plants, and analytical equipment.

Construction: A platinum coil is sealed inside a high purity aluminum oxide ceramic body, with a thin glass coat applied throughout its entirety, ensuring a smooth finish and insulation against compounds that may harm the sensor. Lead wires are shear force resistant and assure proper connection to extension leads and cables. An interesting feature of this type of tight construction is that they can be directly exposed to moisture and acidic or alkaline liquid elements without suffering damage."

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.

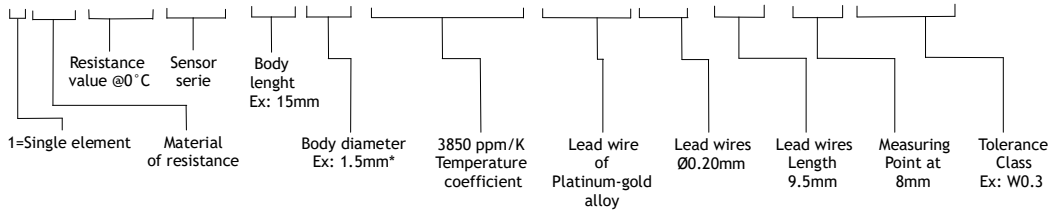
Class tolerance chart



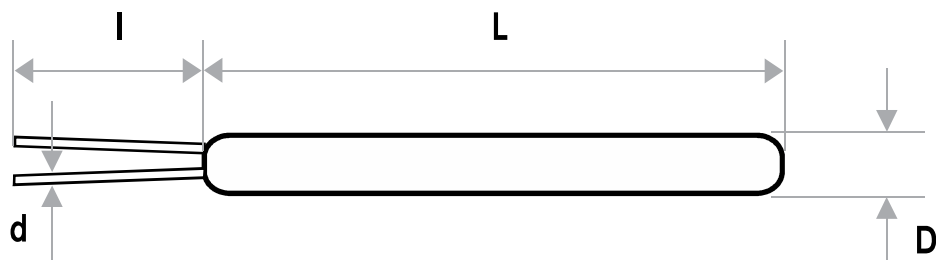
KG Series specifications

1 Pt Types (Single element)

1Pt100 KG 1515 TC3850 PdAu20-9.5 M8W0.3



* Diameter of sensor body without glass coat. For diameter with coat see table below



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	
1Pt100 KG 1515	W0.3	B	-196 ~+600	32.206.961	15 ⁺³ ₀	1.9±0.3	0.20±0.01	9.5±0.5	0.08	t _{0.5}	t _{0.9}	t _{0.5}	t _{0.9}
	W0.15	A	-100 ~+450	32.206.962						0.2	0.4	5.0	15.7
	W0.1	1/3	-100 ~+350	32.206.963									

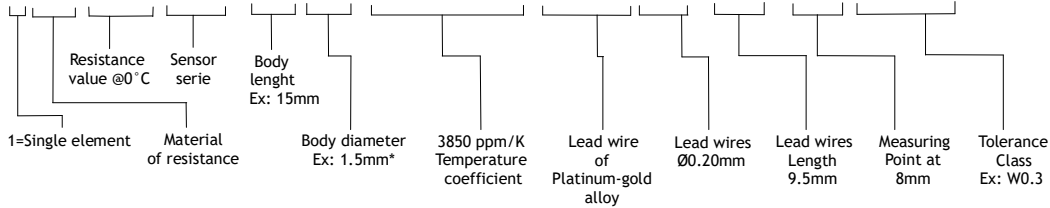
The measuring point is located at 8 mm from the end of the sensor body.

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

Technical Specification

Description meaning:

1Pt100 KG 1515 TC3850 PdAu20-9.5 M8W0.3



* Diameter of sensor body without glass coat. For diameter with coat see table on page 2.



Temperature range:	W0.3 (Class B)	= -196°C to +600°C
	W0.15 (Class A)	= -100°C to +450°C
	W0.1 (Class 1/3 B)	= -100°C to +350°C

Glass coat cover: Thickness 0.35mm max.

Temperature coefficient: $T_c = 3850 \text{ ppm/K}$

Leads: Palladium gold alloy

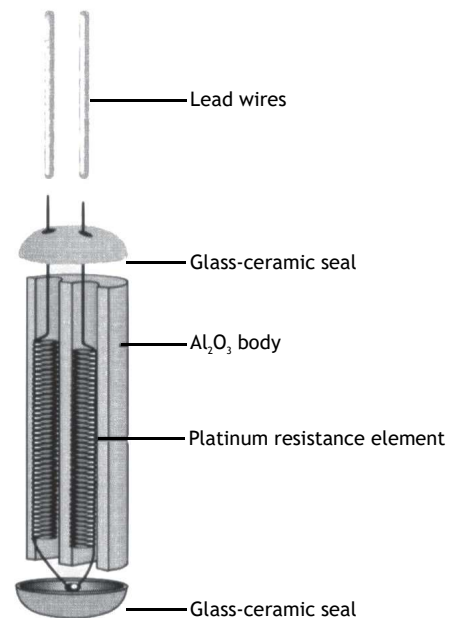
Insulation resistance after assembly: $> 100 \text{ MOhm @ } 25^\circ\text{C}$

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 8 mm from the end of the sensor body.

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