



750 °C Series



Platinum sensor with wires



For very high temperatures

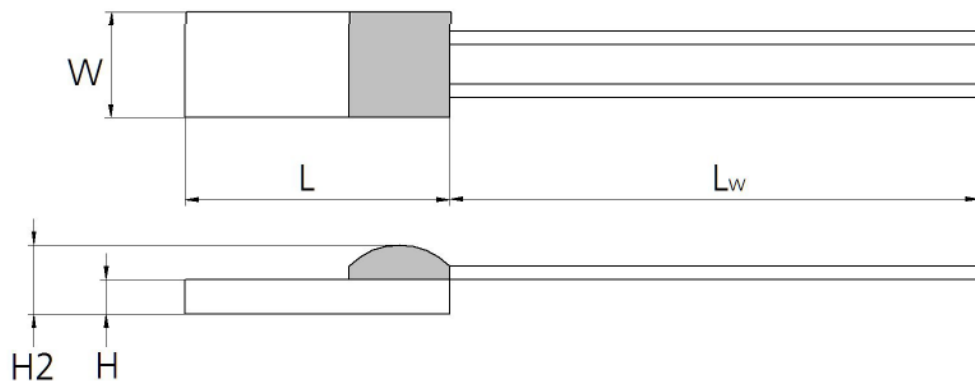


Benefits & characteristics

- Excellent long-term stability
- Low self-heating
- Fast response time
- Vibration and temperature shock resistant
- Simple interchangeability
- Customer-specific sensor available upon request



Illustration ¹⁾



¹⁾ for actual size see dimensions in order information



Technical Data

Operating temperature range:	-200 °C to +750 °C	
Nominal resistance:*	100 Ω at 0 °C	
	500 Ω at 0 °C	
	1000 Ω at 0 °C	
Characteristics curve:*	3850 ppm/K	
Long-term stability:	< 0.04 % at 1000 h at maximal operating temperature	
Tolerance class: *	iST reference	
(dependent on temperature range)	IEC 60751 F0.15	A
	IEC 60751 F0.3	B
	IEC 60751 F0.6	C
	IEC 60751 F0.1	Y
Connection:*	Pt-wire, Ø 0.2 mm (solderable, weldable, crimpable, brazeable)	
Recommended applied current: ³⁾	1 mA at 100 Ω	
	0.5 mA at 500 Ω	
	0.3 mA at 1000 Ω	
3) Self-heating must be considered		
Other alternatives:*	Grouped and paired	
	Substrate thickness	

* Customer-specific alternatives available



Order Information

Nominal Resistance at 0 °C	Size	Dimensions (L x W x H / H2 in mm) L ±0.2, W ±0.2, H ±0.1, H2 ±0.3 mm	Class*	Order code	Product name (secondary reference)	Wire length in mm	Special
7W (Pt-wire, Ø 0.2 mm)							
1000 Ω	216	2.5 x 1.6 x 0.65 / 1.1	F0.1 (class Y)	On request	P1K0.216.7W.Y.010	10	
1000 Ω	216	2.5 x 1.6 x 0.65 / 1.1	F0.15 (class A)	On request	P1K0.216.7W.A.010	10	
1000 Ω	216	2.5 x 1.6 x 0.65 / 1.1	F0.3 (class B)	104051	P1K0.216.7W.B.010	10	
100 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.1 (class Y)	On request	P0K1.516.7W.Y.007	7	
100 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.15 (class A)	100425	P0K1.516.7W.A.007	7	
100 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.3 (class B)	100424	P0K1.516.7W.B.007	7	
500 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.1 (class Y)	On request	P0K5.516.7W.Y.007	7	
500 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.15 (class A)	On request	P0K5.516.7W.A.007	7	
500 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.3 (class B)	On request	P0K5.516.7W.B.007	7	
1000 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.1 (class Y)	100726	P1K0.516.7W.Y.010	10	
1000 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.15 (class A)	100572	P1K0.516.7W.A.010	10	
1000 Ω	516	5 x 1.6 x 0.65 / 1.1	F0.3 (class B)	100571	P1K0.516.7W.B.010	10	
1000 Ω	520	5 x 2 x 0.65 / 1.1	F0.1 (class Y)	On request	P1K0.520.7W.Y.010	10	
1000 Ω	520	5 x 2 x 0.65 / 1.1	F0.15 (class A)	100512	P1K0.520.7W.A.010	10	
1000 Ω	520	5 x 2 x 0.65 / 1.1	F0.3 (class B)	100288	P1K0.520.7W.B.010	10	
100 Ω	102	10 x 2 x 0.65 / 1.1	F0.1 (class Y)	On request	P0K1.102.7W.Y.010	10	
100 Ω	102	10 x 2 x 0.65 / 1.1	F0.15 (class A)	150013	P0K1.102.7W.A.010	10	
100 Ω	102	10 x 2 x 0.65 / 1.1	F0.3 (class B)	100203	P0K1.102.7W.B.010	10	
1000 Ω	102	10 x 2 x 0.65 / 1.1	F0.1 (class Y)	On request	P1K0.102.7W.Y.010	10	
1000 Ω	102	10 x 2 x 0.65 / 1.1	F0.15 (class A)	On request	P1K0.102.7W.A.010	10	
1000 Ω	102	10 x 2 x 0.65 / 1.1	F0.3 (class B)	On request	P1K0.102.7W.B.010	10	

Additional Documents

Application Note

Document name: APT_E



Order Information

Platinum Sensor - Secondary reference



Material

P = Platinum

TCR

= Pt 3850 ppm/K G = Pt 3911 ppm/K
U = Pt 3750 ppm/K W = Pt 3850 ppm/K (extended operating temperature range in class A)

Resistance in Ω at 0°C

Size in mm

Operating temperature range

1	=	-50 °C to + 150 °C	6	=	-200°C to + 600 °C
2	=	-50 °C to + 200 °C	7	=	-200 °C to + 750 °C
3	=	-200 °C to + 300 °C	8	=	-200 °C to + 850 °C
4	=	-200 °C to + 400 °C	10	=	-70 °C to + 1000 °C

Connections

S	=	SIL	FK	=	Flat wire customer specific
I	=	Insulated wire	SW	=	Perpendicular wire
K	=	Extended wire	L	=	Insulated stranded wire
W	=	Wire	E	=	Enameled Cu-wire
FW	=	Flat wire	SE	=	Perpendicular enameled Cu-wire

Tolerance class

A	=	IEC 60751 F0.15	K	=	Customer-specific
B	=	IEC 60751 F0.3	P	=	Pair
C	=	IEC 60751 F0.6	G	=	Group
Y	=	IEC 60751 F0.1			

Wire length in mm

Special

T	=	Substrate thickness 0.25 mm	M	=	Metallized backside
D	=	Substrate thickness 0.38 mm	U	=	Inverted welding
R	=	Round housing	S	=	Special
W	=	Sintered powder			

P 0K1. 516. 7 W. A. 010.



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