



850 °C Series



Platinum sensor with wires



For very high temperatures



Benefits & characteristics



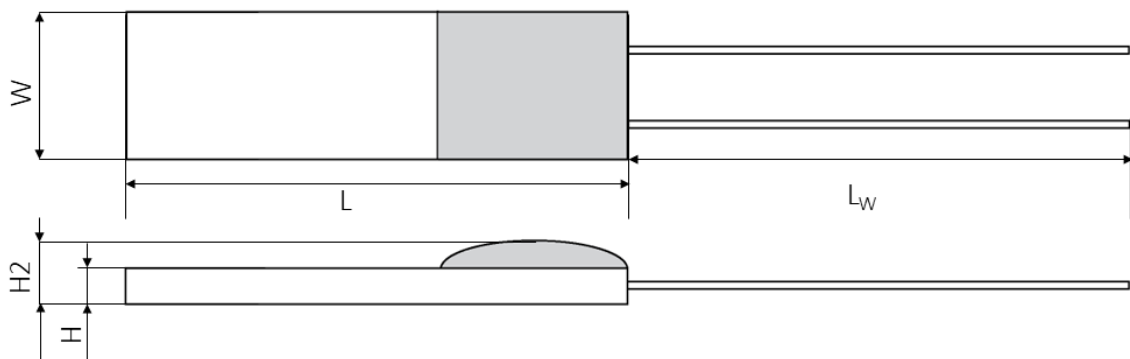
- Excellent long-term stability
- Low self-heating
- Fast response time



- Vibration and temperature shock resistant
- Simple interchangeability
- Customer-specific sensor available upon request



Illustration ¹⁾



¹⁾ for actual size see dimensions in order information

H = Substrate Height

H2 = Height

W = Width

L = Length

L_w = Wire length

Dimension tolerances:

W ±0.2 mm, L ±0.2 mm, H ±0.1 mm, H2 ±0.3 mm,

L_w (up to 30 mm) ±1 mm



Technical Data



Operating temperature range: -200 °C to +850 °C

Nominal resistance:*

100 Ω at 0 °C



200 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: Max. 1 mA (self-heating must be considered)

Other alternatives:*

Substrate thickness

* Customer-specific alternatives available



Order Information



Nominal Resistance	Size	Dimensions (L x W x H / H2 in mm)	Class*	Order code	Product name (secondary reference)	Wire length in mm	Special
8W (Pt-wire, Ø 0.2 mm)							
200 Ω	420	3.85 x 1.9 x 0.65 / 1.0	IEC 60751 F0.15	On request	P0K2.420.8W.A.007	7	
200 Ω	420	3.85 x 1.9 x 0.65 / 1.0	IEC 60751 F0.3	155150	P0K2.420.8W.B.007	7	
200 Ω	420	3.85 x 1.9 x 0.65 / 1.0	IEC 60751 F0.6	On request	P0K2.420.8W.C.007	7	
1000 Ω	420	3.85 x 1.9 x 1.0 / 1.0	IEC 60751 F0.15	On request	P1K0.420.8W.A.007	7	
1000 Ω	420	3.85 x 1.9 x 1.0 / 1.0	IEC 60751 F0.3	155151	P1K0.420.8W.B.007	7	
1000 Ω	420	3.85 x 1.9 x 1.0 / 1.0	IEC 60751 F0.6	On request	P1K0.420.8W.C.007	7	
100 Ω	516	5.0 x 1.6 x 0.65 / 1.0	IEC 60751 F0.15	On request	P0K1.516.8W.A.007	7	
100 Ω	516	5.0 x 1.6 x 0.65 / 1.0	IEC 60751 F0.3	100813	P0K1.516.8W.B.007	7	
100 Ω	516	5.0 x 1.6 x 0.65 / 1.0	IEC 60751 F0.6	On request	P0K1.516.8W.C.007	7	
1000 Ω	516	5.0 x 1.6 x 0.65 / 1.0	IEC 60751 F0.15	On request	P1K0.516.8W.A.007	7	
1000 Ω	516	5.0 x 1.6 x 0.65 / 1.0	IEC 60751 F0.3	100862	P1K0.516.8W.B.007	7	
1000 Ω	516	5.0 x 1.6 x 0.65 / 1.0	IEC 60751 F0.6	On request	P1K0.516.8W.C.007	7	
100 Ω	102	10.0 x 2.0 x 0.65 / 1.0	IEC 60751 F0.15	On request	P0K1.102.8W.A.010	10	
100 Ω	102	10.0 x 2.0 x 0.65 / 1.0	IEC 60751 F0.3	100205	P0K1.102.8W.B.010	10	
100 Ω	102	10.0 x 2.0 x 0.65 / 1.0	IEC 60751 F0.6	On request	P0K1.102.8W.C.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 OK1. 232. 8 W. B. 010. T



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