



# 1000 °C Series



## Platinum sensor with wires

For extremely high temperatures

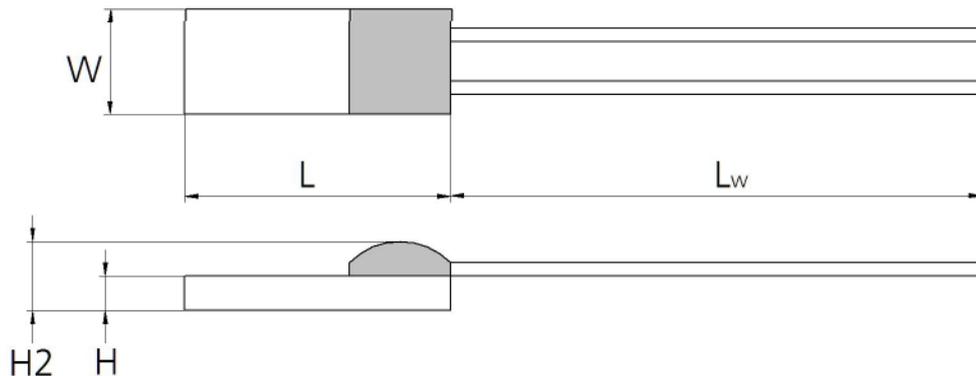


### Benefits & characteristics



- Excellent long-term stability
- 3770 ppm/K characteristics curve
- Low self-heating
- Small dimensions
- Vibration resistant
- Simple interchangeability
- Fast response time

### Illustration <sup>1)</sup>



Dimension tolerances:  $W \pm 0.2 \text{ mm}$ ,  $L \pm 0.2 \text{ mm}$ ,  $H \pm 0.1 \text{ mm}$ ,  $H2 \pm 0.3 \text{ mm}$ ,  
 $L_w \text{ (up to 30 mm)} \pm 1 \text{ mm}$

<sup>1)</sup> for actual size see dimensions in order information



## Technical Data



Operating temperature range: -70 °C to +1000 °C



Characteristics curve:\* 3770 ppm/K



Tolerance class: *	IST AG reference	-40 °C to +300 °C	+300 °C to 850 °C
(dependent on temperature range)	K	±3 K	±1 %



Connection:\* Pt-wire, 4 x 0.25 (L x Ø in mm) (solderable, weldable, crimpable)



Recommended applied current:<sup>1)</sup> Max. 2.8 mA at 850 °C

<sup>1)</sup> Self-heating must be considered



Other alternatives: Substrate thickness

## 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
<b>10K (Pt-wire, Ø 0.25 mm)</b>							
200 Ω	420	3.85 x 1.9 x 0.45 / 0.75	Customer-specific	156880	P0K2.420.10K.K.004.D.S	4	

## Additional Documents

Application Note

Document name: APT\_E



## Order Information

### Platinum Sensor - Secondary reference



#### Material

P = Platinum

#### TCR

= Pt 3770 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 $\Omega$ 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 enamelled 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 0K2. 420. 10 K. K. 004. D.S



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