



# 1000 °C Series

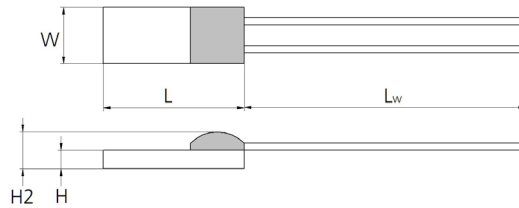
## Platinum sensor with wires

### For extremely high temperatures

#### Benefits & Characteristics

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

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



<sup>1)</sup> For actual size, see dimensions

#### Technical Data

Operating temperature range:	-70 °C to +1000 °C									
Nominal resistance:	200 Ω at 0 °C									
Characteristics curve:	3770 ppm/K									
Tolerance class (dependent on temperature range):	<table border="0"> <tr> <td>IST AG reference</td> <td>-40 ° to +300 °C</td> <td>+300 °C to +850 °C</td> </tr> <tr> <td></td> <td>K</td> <td>±3 K</td> </tr> <tr> <td></td> <td></td> <td>±1 %</td> </tr> </table>	IST AG reference	-40 ° to +300 °C	+300 °C to +850 °C		K	±3 K			±1 %
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	K	±3 K								
		±1 %								
Connection:	Pt-wire, 7 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 - 10K (Pt-wire, Ø 0.25 mm)

Size	Dimensions (L x W x H / H2; L <sub>w</sub> in mm)	Product description
<b>Nominal resistance: 200 Ω at 0 °C</b>		
420	3.85 x 1.9 x 0.45 /0.75; 7	P0K2.420.10K.K.007.D.S
Order code		104078
<i>Former order code</i>		<i>310.00445</i>

## Additional Documents

	Document name:
Application Note:	ATP_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

#### Connection

S = SIL    FK = flat wire customer-specific  
I = insulated wire    SW = perpendicular wire  
K = customer-specific    L = insulate stranded wire  
W = wire    E = enameled Cu-wire  
FW = flat 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    OK2.    420.    10    K.    K.    007.    D



Innovative Sensor Technology IST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland  
Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: info@ist-ag.com | www.ist-ag.com

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