



# 850 °C series

## Platinum sensor with wires

### For very high temperatures



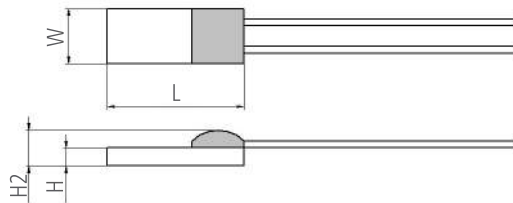
INNOVATIVE SENSOR TECHNOLOGY



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



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

#### 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 (dependent on temperature range):*	Innovative Sensor Technology IST AG reference	
	DIN EN 60751 F0.15	A
	DIN EN 60751 F0.3	B
	DIN EN 60751 F0.6	C
	DIN EN 60751 F0.1	Y
Connection:*	Pt-wire, Ø 0.2 mm (solderable, weldable, crimpable, brazeable)	
Recommended applied current: <sup>1)</sup>	Max. 1 mA	
<sup>1)</sup> Self-heating must be considered		
Other alternatives:*	Substrate thickness	

\* Customer specific alternatives available



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#### Order Information - 8W (Pt-wire, Ø 0.2 mm)

Size	Dimensions (L x W x H / H2 in mm)	F0.1 (class Y)	F0.15 (class A)	F0.3 (class B)
Nominal resistance: 100 Ω at 0 °C				
516	5 x 1.6 x 0.65 / 1.3	Upon request	Upon request	P0K1.516.8W.B.007
Order code				010.01901
102	10 x 2 x 0.65 / 1.3	Upon request	Upon request	P0K1.102.8K.B.007
Order code				010.02303
Nominal resistance: 200 Ω at 0 °C				
420	3.85 x 1.9 x 0.65 / 1.05	Upon request	Upon request	P0K2.420.8W.B.007
Order code				010.02797
Nominal resistance: 1000 Ω at 0 °C				
516	5 x 1.6 x 0.65 / 1.3	Upon request	Upon request	P1K0.516.8W.B.007
Order code				010.02003

#### Additional Documents

Application note:	Document name: ATP_E
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# Order Information

## Platinum Sensor

### Secondary reference



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#### Material

P = Platin

#### 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 $\Omega$ 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 = DIN EN 60751 F0.15	K = customer specific
B = DIN EN 60751 F0.3	P = pair
C = DIN EN 60751 F0.6	G = group
Y = DIN EN 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. 6    W.    A. 010. U



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