Innovative Sensor Technology
physical. chemical. biological.

850 °C Series

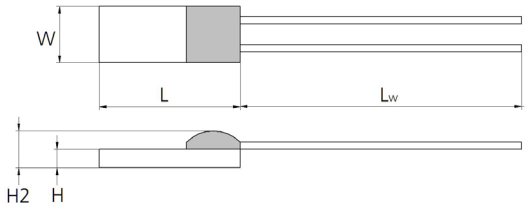
Platinum sensor with wires

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)]



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

1) 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
	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:[1)] *[1)] Self-heating must be considered*	Max. 1 mA	
Other alternatives:*	Substrate thickness	

* Customer-specific alternatives available

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

Size	Dimensions (L x W x H / H2; L_W in mm)	F0.1 (class Y)	F0.15 (class A)	F0.3 (class B)
Nominal resistance: 100 Ω at 0 °C				
516	5.0 x 1.6 x 0.65 / 1.0; 7.0	Upon request	Upon request	P0K1.516.8W.B.007
Order code				010.01901
102	10.0 x 2.0 x 0.65 / 1.0; 10.0	Upon request	Upon request	P0K1.102.8W.B.010
Order code				010.00158
Nominal resistance: 200 Ω at 0 °C				
420	3.85 x 1.9 x 0.65 / 1.0; 7.0	Upon request	Upon request	P0K2.420.8W.B.007
Order code				010.02797
Nominal resistance: 1000 Ω at 0 °C				
516	5.0 x 1.6 x 0.65 / 1.0; 7.0	Upon request	Upon request	P1K0.516.8W.B.007
Order code				010.02003

Additional Documents

	Document name:
Application Note:	ATP_E

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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

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 0K1. 232. 8 W. B. 010. T

ISO 9001 RoHS

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