innovative Sensor Technology
physical · chemical · biological

P0K1.308.2I.B.100

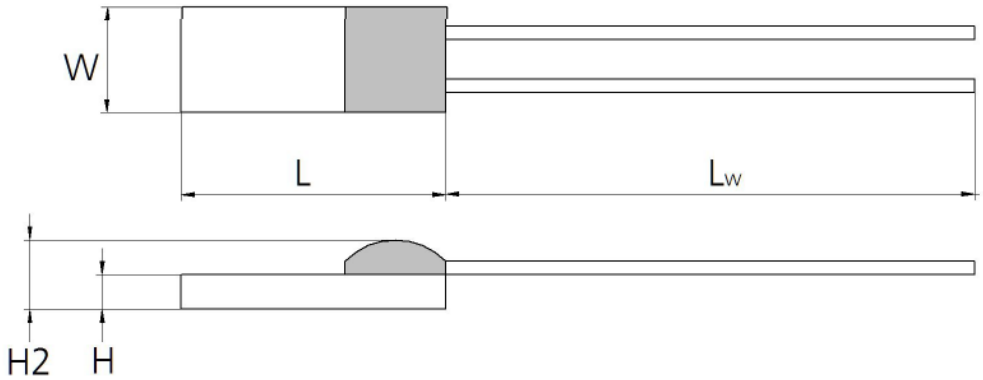
Platinum sensor with insulated wires

For low temperatures

Benefits & characteristics

- Excellent long-term stability
- Low self-heating
- Long isolated wires
- Stranded wires available
- Fast response time
- Metallized backside available
- Customer-specific sensor available upon request

Illustration [1)]



[1)] for actual size see dimensions in order information

Technical data

Operating temperature range:	-50 °C to +200 °C
Nominal resistance:*	100 Ω at 0 °C 500 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)	iST reference IEC 60751 F0.3 B
Connection:*	Cu/Ag wire, AWG34, PTFE insulated black
Alternative wire construction:*	Inverted wires Extended wires
Recommended applied current: *1)Self-heating must be considered*	1 mA at 100 Ω 0.5 mA at 500 Ω 0.3 mA at 1000 Ω

* Customer-specific alternatives available

Order Information 2I (Cu/Ag-wire, AWG34, PTFE-insulated black)

Nominal Resistance	Size	Dimensions (L x W x H / H2 in mm) L ±0.2 mm, W ±0.2 mm, H ±0.1 mm, H2 ±0.3 mm	Class*	Order code	Product name (secondary reference)	Wire length in mm	Special
100 Ω	308	3.0 x 0.8 x 0.6 mm	F0.3 (class B)	152469	P0K1.308.2I.B.100	100	

Additional Documents

Application Note	Document name: APT_E

Order Information

Platinum Sensor - Secondary reference

Material

P	=	Platinum

TCR

	=	Pt 3840 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	=	Customer-specific	L	=	Insulated 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.	2	W.	A.	010.	M

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