



750 °C Series

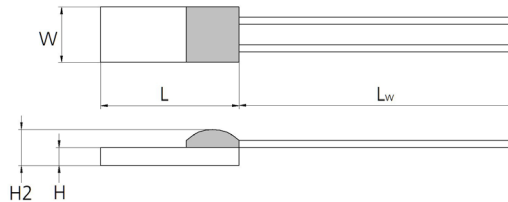
Platinum sensor with wires

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

Illustration¹⁾



1) For actual size, see dimensions

Technical Data

Operating temperature range:	-200 °C to +750 °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 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 mA at 100 Ω	
	0.5 mA at 500 Ω	
	0.3 mA at 1000 Ω	
Other alternatives:*	Grouped and paired	
	Substrate thickness	

* Customer-specific alternatives available



Order Information - 7W (Pt-wire, Ø 0.2 mm)

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	F0.1 (class Y)	F0.15 (class A)	F0.3 (class B)
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Nominal resistance: 100 Ω at 0 °C

516	5 x 1.6 x 0.65 / 1.3	Upon request	P0K1.516.7W.A.007	P0K1.516.7W.B.007
Order code			100425	100424
Former order code			010.00644	010.00643
102	10 x 2 x 0.65 / 1.3	Upon request	P0K1.102.7W.A.010	P0K1.102.7W.B.010
Order code			150013	100203
Former order code			010.00156	010.00155

Nominal resistance: 500 Ω at 0 °C

516	5 x 1.6 x 0.65 / 1.3	Upon request	Upon request	P0K5.516.7W.B.007
Order code				Upon request
Former order code				010.01660

Nominal resistance: 1000 Ω at 0 °C

216	2.5 x 1.6 x 0.65 / 1.3	Upon request	Upon request	P1K0.216.7W.B.010
Order code				104051
Former order code				310.00158
516	5 x 1.6 x 0.65 / 1.3	P1K0.516.7W.Y.010	P1K0.516.7W.A.010	P1K0.516.7W.B.010
Order code		100726	100572	100571
Former order code		010.01683	010.01073	010.01072
520	5 x 2 x 0.65 / 1.3	Upon request	P1K0.520.7W.A.010	P1K0.520.7W.B.010
Order code			100512	100288
Former order code			010.00953	010.00283
102	10 x 2 x 0.65 / 1.3	Upon request	Upon request	P1K0.102.7W.B.010
Order code				Upon request
Former order code				010.00319

Additional Documents

Application Note:	Document name:
	ATP_E



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 OK1. 516. 7 W. A. 007. U



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