



TEMPERATURE



FLOW



HUMIDITY



CONDUCTIVITY

750 °C series

Platinum sensor with wires

For very high temperatures

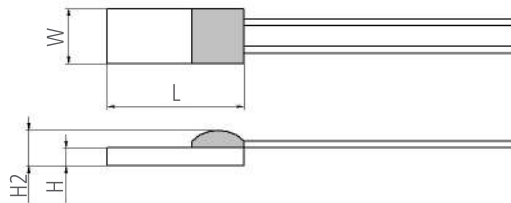


INNOVATIVE SENSOR TECHNOLOGY

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

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	
	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: ¹⁾ <i>¹⁾Self-heating must be considered</i>	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



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Order Information - 7W (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	P0K1.516.7W.A.007	P0K1.516.7W.B.007
Order code			010.00644	010.00643
520	5 x 2 x 0.65 / 1.3	Upon request	P0K1.520.7W.A.010	P0K1.520.7W.B.010
Order code			010.00107	010.00106
102	10 x 2 x 0.65 / 1.3	P0K1.308.7W.Y.007	P0K1.102.7W.A.010	P0K1.102.7W.B.010
Order code		010.01037	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				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				310.00158
232	2.3 x 2 x 0.65 / 1.3	Upon request	P1K0.232.7W.A.010	P1K0.232.7W.B.010
Order code			010.01791	010.00239
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		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			010.00953	010.00283
102	10 x 2 x 0.65 / 1.3	Upon request	Upon request	P1K0.102.7W.B.010
Order code				010.00319

Additional Documents

	Document name:
Application note:	ATP_E



Order Information

Platinum Sensor

Secondary reference



INNOVATIVE SENSOR TECHNOLOGY

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 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 = 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



INNOVATIVE SENSOR TECHNOLOGY

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