



PG Series



Platinum sensor with wires



For applications with GOST-coefficient 3911 ppm/K



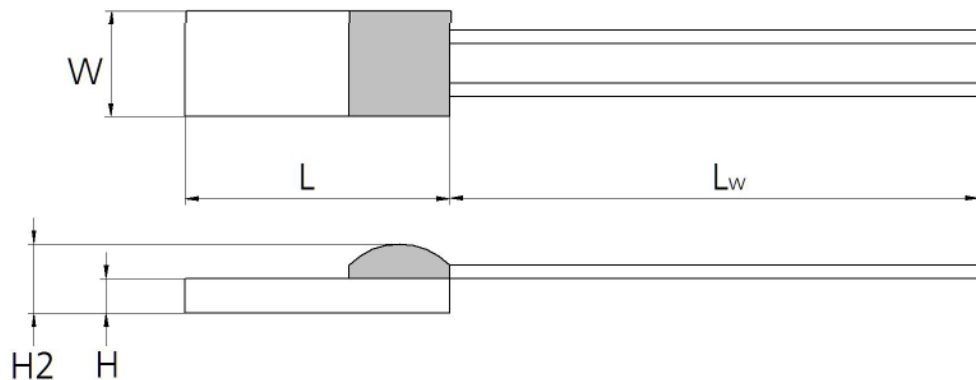
Benefits & characteristics



- Capable of measuring in class A up to +600 °C
- Short-term applicable up to +750 °C
- Very low hysteresis
- Very stable characteristics curve
- GOST norm compatible (3911 ppm/K characteristics curve)
- Available with same dimensions as a wire-wound sensor
- Customer-specific sensor available upon request



Illustration ¹⁾



¹⁾ for actual size see dimensions in order information



Technical data

Operating temperature range:	-200 °C to +600 °C		
Nominal resistance:*	50 Ω at 0 °C		
	100 Ω at 0 °C		
	500 Ω at 0 °C		
	1000 Ω at 0 °C		
Characteristics curve:	3911 ppm/K		
Long-term stability:	< 0.04 % at 1000 h at maximal operating temperature		
Tolerance class: *	iST reference		
	GOST 8.625-2006 F0.15	A	-200 °C to +600 °C
	GOST 8.625-2006 F0.3	B	-200 °C to +600 °C
	GOST 8.625-2006 F0.6	C	-200 °C to +600 °C
	GOST 8.625-2006 F0.1	Y	-200 °C to +500 °C
Connection:*	Pt wire, Ø 0.2 mm (solderable, weldable, crimpable)		
	-200 °C to +600 °C		
	Pt/Ni clad wire, Ø 0.2 mm (solderable, weldable, crimpable)		
	-200 °C to +400 °C		
Alternative wire construction:*	Inverted wires		
Recommended applied current: <i>1)Self-heating must be considered</i>	0.2 mA at 100 Ω		
	0.09 mA at 500 Ω		
	0.06 mA at 1000 Ω		
Other alternatives:*	Housed in round ceramics (for dry environments only)		
	Grouped and paired		

* Customer-specific alternatives available



Order Information

Nominal Resistance	Size	Dimensions (L x W x H / H2 in mm) L \pm 0.2 mm, W \pm 0.2 mm, H \pm 0.1 mm, H2 \pm 0.3 mm	Class*	Order code	Product name (secondary reference)	Wire length in mm	Special
4K (Pt/Ni-wire, Ø 0.2 mm)							
50 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.1 (class Y)	On request	PG050.216.4K.Y.010	10	
50 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.15 (class A)	101120	PG050.216.4K.A.010	10	
50 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.3 (class B)	101121	PG050.216.4K.B.010	10	
100 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.1 (class Y)	101230	PG0K1.216.4K.Y.010	10	
100 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.15 (class A)	101122	PG0K1.216.4K.A.010	10	
100 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.3 (class B)	101123	PG0K1.216.4K.B.010	10	
500 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.1 (class Y)	On request	PG0K5.216.4K.Y.010	10	
500 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.15 (class A)	On request	PG0K5.216.4K.A.010	10	
500 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.3 (class B)	101149	PG0K5.216.4K.B.010	10	

7W (Pt-wire, Ø 0.2 mm)

50 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.1 (class Y)	On request	PG050.216.7W.Y.007	7	
50 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.15 (class A)	On request	PG050.216.7W.A.007	7	
50 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.3 (class B)	101255	PG050.216.7W.B.007	7	
100 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.1 (class Y)	101256	PG0K1.216.7W.Y.007	7	
100 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.15 (class A)	101125	PG0K1.216.7W.A.007	7	
100 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.3 (class B)	101126	PG0K1.216.7W.B.007	7	
500 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.1 (class Y)	101137	PG0K5.216.7W.Y.007	7	
500 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.15 (class A)	On request	PG0K5.216.7W.A.007	7	
500 Ω	216	2.4 x 1.4 x 0.45 / 0.8	F0.3 (class B)	On request	PG0K5.216.7W.B.007	7	



Nominal Resistance	Size	Dimensions (\varnothing x L in mm) $\varnothing \pm 0.2$ mm, L ± 1 mm	Class*	Order code	Product name (secondary reference)	Wire length in mm	Special
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R (in round ceramic housing, Pt/Ni-wire, \varnothing 0.2 mm)

100 Ω	281	2.8 x 13	F0.1 (class Y)	On request	PG0K1.281.4K.Y.006.R	6	
100 Ω	281	2.8 x 13	F0.15 (class A)	On request	PG0K1.281.4K.A.006.R	6	
100 Ω	281	2.8 x 13	F0.3 (class B)	On request	PG0K1.281.4K.B.006.R	6	

R (in round ceramic housing, Pt-wire, \varnothing 0.2 mm)

100 Ω	281	2.8 x 13	F0.1 (class Y)	On request	PG0K1.281.7W.Y.004.R	4	
100 Ω	281	2.8 x 13	F0.15 (class A)	104065	PG0K1.281.7W.A.004.R	4	
100 Ω	281	2.8 x 13	F0.3 (class B)	104064	PG0K1.281.7W.B.004.R	4	

Additional Documents

Application Note

Document name: APT_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

Connections

S = SIL	FK = Flat wire customer specific
I = Insulated wire	SW = Perpendicular wire
K = Extended wire	L = Insulated stranded wire
W = Wire	E = Enameled Cu-wire
FW = Flat wire	SE = Perpendicular enameled Cu-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 G 0K1. 281. 7 W. B. 004. R



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