



PG series Platinum sensor with wires

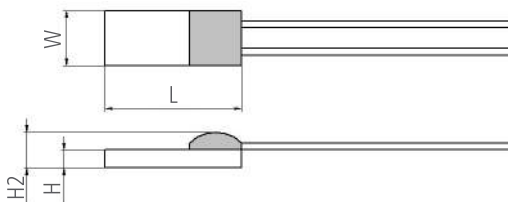
For applications with GOST-coefficient 3911 ppm/K



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

Illustration¹⁾



1) For actual size, see Dimensions

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 AG 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: ¹⁾	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		

¹⁾ Self-heating must be considered



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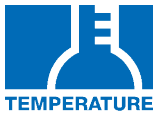
* Customer specific alternatives available

Order Information - 4K (Pt/Ni-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: 50 Ω at 0 °C				
216	2.5 x 1.5 x 0.65 / 1.1	Upon request	PG050.216.4K.A.010	PG050.216.4K.B.010
	Order code		010.02541	010.02542
Nominal resistance: 100 Ω at 0 °C				
216	2.5 x 1.5 x 0.65 / 1.1	PG0K1.216.4K.Y.010	PG0K1.216.4K.A.010	PG0K1.216.4K.B.010
	Order code	010.02723	010.02544	010.02545
Nominal resistance: 500 Ω at 0 °C				
216	2.5 x 1.5 x 0.65 / 1.1	Upon request	Upon request	PG0K5.216.4K.B.010
	Order code			010.02589

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: 50 Ω at 0 °C				
216	2.5 x 1.5 x 0.65 / 1.1	Upon request	Upon request	PG050.216.7W.B.007
	Order code			010.02761
Nominal resistance: 100 Ω at 0 °C				
216	2.5 x 1.5 x 0.65 / 1.1	PG0K1.216.7W.Y.007	PG0K1.216.7W.A.007	PG0K1.216.7W.B.007
	Order code	010.02762	010.02547	010.02548
Nominal resistance: 500 Ω at 0 °C				
216	2.5 x 1.5 x 0.65 / 1.1	PG0K5.216.7W.Y.007	PG0K5.216.7W.A.007	PG0K5.216.7W.B.007
	Order code	010.02570	010.02572	010.02573



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Order Information - R (in round ceramic housing, Pt/Ni-wire, Ø 0.2 mm)



Size	Dimensions (Ø x L in mm)	F0.1 (class Y)	F0.15 (class A)	F0.3 (class B)
Nominal resistance: 100 Ω at 0 °C				
281	2.8 x 13	Upon request	PG0K1.281.4K.A.006.R	PG0K1.281.4K.B.006.R
Order code			310.00447	310.00264

Order Information - R (in round ceramic housing, Pt-wire, Ø 0.2 mm)

Size	Dimensions (Ø x L in mm)	F0.1 (class Y)	F0.15 (class A)	F0.3 (class B)
Nominal resistance: 100 Ω at 0 °C				
281	2.8 x 13	PG0K1.281.7W.Y.004.R	PG0K1.281.7W.A.004.R	PG0K1.281.7W.B.004.R
Order code		310.00270	310.00269	310.00268

Additional Documents

Application note:	Document name: ATP_E
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Order Information

Platinum Sensor

Secondary reference



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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



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