



Platinum Temperature Sensors

6PG – Product Series

Temperature Range: –200°C...+600°C

Platinum temperature sensor elements with wire connections

- Advantages:**
- Dramatically reduced hysteresis
 - Alternative product to wire-wound sensors
 - Huge temperature and tolerance range

Technical Data

Specification: DIN EN 60751

Temperature range: -200°C to +600°C

Temperature Coefficient: TCR = 3911 ppm/K

Tolerance Classes:

F 0.1 (Class Y)	-200°C to +500°C
F 0.15 (Class A)	-200°C to +600°C
F 0.3 (Class B)	-200°C to +600°C

Leads: Platinum wire connection ($\varnothing = 0.2$ mm)
Recommended connection technology: Soldering, Welding, Crimping

Lead Lengths: 7 mm

Note: Available in round housing



INNOVATIVE SENSOR TECHNOLOGY

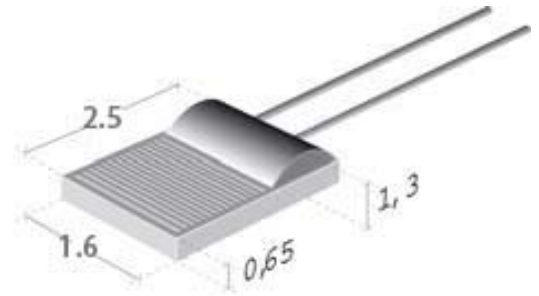
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6PG – Product Series

Temperature Range: $-200^{\circ}\text{C} \dots +600^{\circ}\text{C}$

6PG 216

Dimensions, LxW:	2.5 x 1.6 mm	
Nominal Resistance at 0°C (ohm):	50/100	
Self Heating (mK):	Water (v= 0 m/s)	$\Delta T_w = 2.8$ at 0°C
	Air (v= 0 m/s)	$\Delta T_a = 28$ at 0°C
Response Time (s):	Water (v= 0.4 m/s)	$T_{0.5} = 0.12$ $T_{0.63} = 0.18$ $T_{0.9} = 0.42$
	Air (v= 1 m/s)	$T_{0.5} = 4$ $T_{0.63} = 5.4$ $T_{0.9} = 11$
Measuring Current (mA):	50 Ω :	1.2
	100 Ω :	1



6PG 281

Dimensions, LxØ:	13.0 x 2.8 mm	
Nominal Resistance at 0°C (ohm):	50/100	
Self Heating (mK):	Water (v= 0 m/s)	$\Delta T_w = 1.7$ at 0°C
	Air (v= 0 m/s)	$\Delta T_a = 18$ at 0°C
Response Time (s):	Water (v= 0.4 m/s)	$T_{0.5} = 2.5$ $T_{0.63} = 4.5$ $T_{0.9} = 8$
	Air (v= 1 m/s)	$T_{0.5} = 10$ $T_{0.63} = 15$ $T_{0.9} = 28$
Measuring Current (mA):	50 Ω :	1.2
	100 Ω :	1
Note:	Round Housing	



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Order Example:

P	G	050.	281.	7	W.	A.	R
1	2	3	4	5	6	7	8

1. *Material Identification = Platinum temperature sensor*
2. *Characteristic Curve = 3911 ppm/K*
3. *Resistance Value in ohm = 50Ω / 0°C*
4. *Chip Dimension = 13.0 x 2.8 mm*
5. *Temperature Range = -200 °C to +600 °C*
6. *Extension = Wire Connections*
7. *Tolerance Class = DIN EN 60751 F 0.15 (former Class A)*
8. *Special = Round housing*



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