TEMPERATURE

Platinum Temperature Sensors

PW – 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 (Class A up to 600°C)**

Technical Data

Specification:	DIN EN 60751
Temperature range:	-200°C to +600°C
Temperature Coefficient:	TCR = 3850 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 1/5 F 0.3 (Class K) -100°C to +300°C 1/10 F 0.3 (Class K) -50°C to +125°C
Leads:	Platinum wire connection (Ø = 0.2 mm) Recommended connection technology: Soldering, Welding, Crimping
Lead Lengths:	7 mm
Note:	Available in round housing

RoHS

IST
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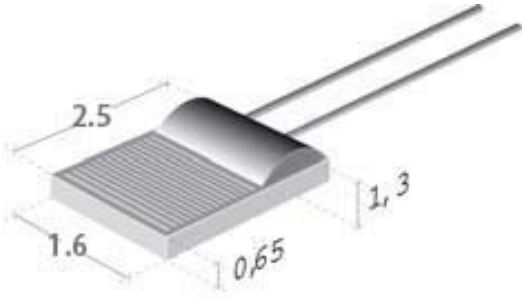
Platinum Temperature Sensors

PW – Product Series — Temperature Range: –200°C...+600°C

PW 216

Dimensions, LxW:	2.5 x 1.6 mm	
Nominal Resistance at 0°C (ohm):	100/500/1000	
Self Heating (mK):	Water (v= 0 m/s)	ΔT_w = 2.8 at 0°C
	Air (v= 0 m/s)	ΔT_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):	100 Ω: 1 500 Ω: 0.5 1000 Ω: 0.3	



PW 281

Dimensions, LxØ:	13.0 x 2.8 mm	
Nominal Resistance at 0°C (ohm):	100/500/1000	
Self Heating (mK):	Water (v= 0 m/s)	ΔT_w = 1.7 at 0°C
	Air (v= 0 m/s)	ΔT_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):	100 Ω: 1 500 Ω: 0.5 1000 Ω: 0.3	
Note:	Round housing	

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PW – Product Series

Temperature Range: –200°C...+600°C

PW 1613

Dimensions, LxØ:	13.0 x 1.6 mm
Nominal Resistance at 0°C (ohm):	100
Measuring Current (mA):	100 Ω: 1
Note:	Round housing

Order Example:

P	***W***	***1K0.***	***281.***	***7***	***W.***	***A.***	***007.***	***R***
1	*2*	*3*	*3*	*4*	*5*	*6*	*7*	*8*

1. *Material Identification = Platinum temperature sensor*
2. *Resistance Value in ohm = 1000Ω / 0°C*
3. *Chip Dimension = 13.0 x 2.8 mm*
4. *Temperature Range = -200°C to +600°C*
5. *Extension = Wire Connections*
6. *Tolerance Class = DIN EN 60751 F 0.15 (former Class A)*
7. *Connection length = 7 mm*
8. *Special = Round housing*

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