

# Temperature Sensor Data Sheet


## PT100 series RTD Temperature Sensor

### Introduction

- Principle: PT100 series thermal resistance temperature sensor develops based on the principle that RTD changes with temperature, and presenting a certain functional relation.
- Application: Usually PT100 series RTD Temperature Sensors are matched with temperature transmitter, display instrument and computer to directly measure the temperature of liquid, gas and solid surface ranging from -200°C ~ 500°C during the production process.

### Features:

- ◆ Anti vibration, good stability, high accuracy
- ◆ High anti-pressure ability
- ◆ Graduation: PT100、PT1000 optional
- ◆ Explosion-proof grade: Exia II CT4(intrinsic safety type)

Case Type	Model	Graduation	Measuring Range (°C)	Accuracy Class	Tolerance (Δ°C)	Output Mode	Thermowell Material
	WZP	PT20	-200 ~ +500	1/3DIN	$\pm (0.10+0.0017 t )$	two-wire system/ three wire system	Stainless steel
				A level	$\pm (0.15+0.0002 t )$		
				B level	$\pm (0.30+0.0005 t )$		
				2B level	$\pm (0.60+0.0010 t )$		
		PT100		1/3DIN	$\pm (0.10+0.0017 t )$		
				A level	$\pm (0.15+0.002 t )$		
				B level	$\pm (0.30+0.005 t )$		
				2B level	$\pm (0.60+0.0010 t )$		
		PT500		1/3DIN	$\pm (0.10+0.0017 t )$		
				A level	$\pm (0.15+0.002 t )$		
				B level	$\pm (0.30+0.005 t )$		
				2B level	$\pm (0.60+0.0010 t )$		
PT1000	1/3DIN	$\pm (0.10+0.0017 t )$					
	A level	$\pm (0.15+0.002 t )$					
	B level	$\pm (0.30+0.005 t )$					
	2B level	$\pm (0.60+0.0010 t )$					



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Resistance characteristic table			
Standard Resistance	100	500	1000
TRC10-6K	3581 conform to IEC751		
T (°C)	R(Ω)		
-50	80.31	401.53	803.07
0	100.00	500.00	1000.00
50	119.40	596.98	1193.95
100	138.51	692.50	1385.00
150	157.33	786.57	1573.15
200	175.86	879.20	1758.40
250	194.10	970.37	1940.74
300	212.05	1060.09	2120.19
350	229.72	1148.37	2296.73
400	247.09	1235.19	2470.38
450	264.18	1320.56	2641.12
500	280.98	1404.48	2808.96
550	297.49	1496.95	2973.16
600	313.71	1567.97	3135.94
650	329.64	1647.54	3295.08

