Yuanben is dedicated to manufacture a line of high precision Platinum resistor temperature sensors, which are made of imported Platinum film or wire-wound.

Yuanben can manufacture various TSP temperature sensors with different platinum film (Grad A/B) and wire-wound platinum resistor, stainless steel housing and mounting method as per client's request.
For special request, please contact our Technical Dept.(such as standard Pt200/Pt300 /Pt500)

2、Features and Applications

Features：
1. wide measuring range, good resistance interchangeability and stability, high degree of accuracy and precision, good linearity, fast response, excellent shock resistance and high temperature resistance；
2. Various temperature dividing and diverse installation method, simple and beautiful appearance ；
3. Stainless steel sealing, good performance of shock resistance, stretch resistance, damp proof and water proof.。
Applications：
It can be widely used in many fields in the industry and in household equipment for temperature measurements, such as home appliances (ovens, refrigerators, air-conditioner) cars (engine, car interior), processing industries (plastic, food, chemical, car, electronics industries), domestic and industrial heating facilities.

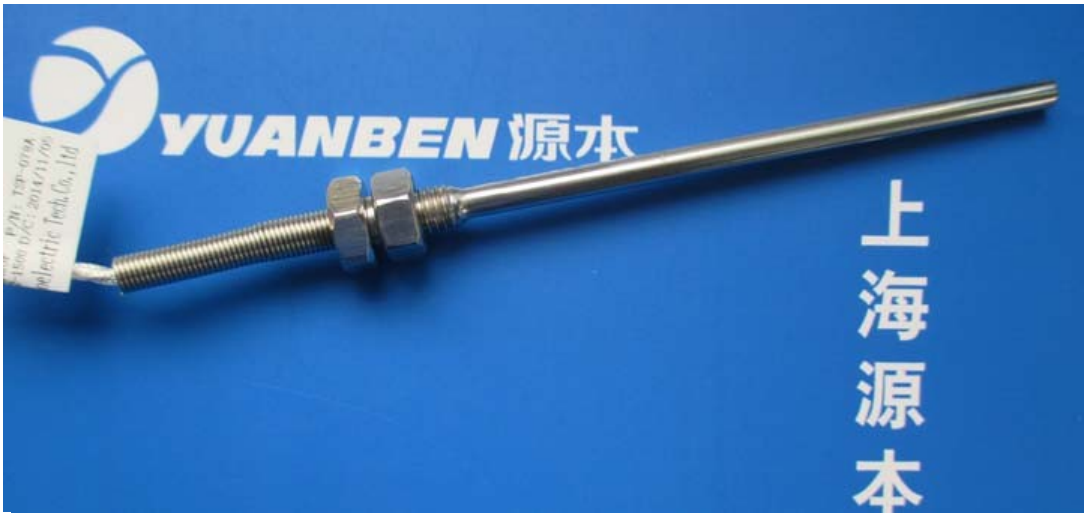
3、Technical Parameters

Pt 1000/ Pt 100 Temperature Sensor parameter

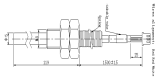
Item	Pt 100 Technical Parameter
Value of Resistance（0℃）	100Ω
Testing Temp. Range	-30℃一 250℃
Testing Temp. Range	Grade A, or Grade B（see attached table 1）
Operating Current	2mA max, for min. self heating 0.3℃,1mA recommended
Thermal Time Constant	<5 S（ 20mm Outer Dia.）
Linearity	±0.1 at 30℃~125℃full range or ±2.0 at 55℃~300℃ full range
Basic Resistance and Interchangeability R0±ΔR0	100 ± 1Ω @ 0℃ or100±2Ω@0℃
Self Heating	Typical<15mw/℃ 20mm Outer Dia.
Stability	Better than 0.25℃/Y, for fixed ambient , 0.05℃/Y
Long-term Stability	R0 drifting≤ 0.04％(500℃， After 1000H)
Anti-vibration Grade	>40g (10—2000Hz)
Shock Resistance Grade	At 500℃, 100g accelerated speed (8 5mS after wave)
Testing Current	0.3- max. 1mA

Insulation Resistance >100MΩ，at 20℃ >2MΩ, >50MΩ/50VDC at 25 ℃

4、Product Photograph



5、Product Dimension



6、Product Dimension

TSP-078A platinum resistance temperature sensors use three –wire as the lead wire to reduce the additional error caused by the wire resistance. Please pay attention the wire colors when mounting the sensor.

Table 1 PT100 Grade A/B platinum film resistance accuracy and grade

Accuracy	Allowable deviation (℃)	Allowable resistance value deviation (Ω) at 0℃
Grade A	±(0.15+0.002|t|)	±0.06Ω
Grade B	±(0.3+0.005|t|)	± 0.12Ω