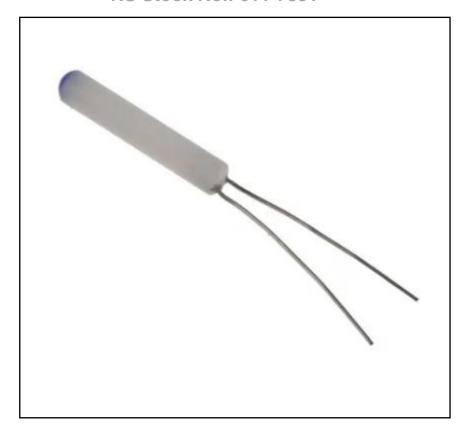


#### **FEATURES**

- Long-term stability
- High accuracy
- Wide temperature measurement range of -200°C to 650°C
- 2 lead wires
- Cylindrical shape ideal for insertion into housing or sheath

# RS PRO PT100 Sensor, -200°C min +650°C max, 8mm Probe Length x 1.5mm Probe Diameter

RS Stock No.: 611-7851



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

# Platinum Resistance Temperature Sensors



#### **Product Description**

From RS Pro a high-quality and reliable Pt100 PRT (Platinum Resistance Thermometer) or RTD (Resistance Temperature Detector) wire wound platinum sensing element. The cylindrical shape of this wire wound element makes it ideal for housing within a protective metal tube or sheath. This wire wound Pt100 sensor is designed for optimum performance and stability and provides an accurate and reliable temperature measurement for a wide range of applications.

#### **General Specifications**

Sensor Type	PT100
Probe Material	Platinum
Accuracy	Class B
Response Time	0.4s
Construction	Wire-Wound, 10mm tails
Tolerance	Class B, In accordance with IEC 60751 W0.15 (Class A) -100°C to +450°C W0.3 (Class B) -196°C to +660°C
Applications	These wire wound temperature sensor elements are suitable for use in a wide range of applications and industries: Automotive industry, Chemical industry, Micro-electronics, Air conditioning and refrigeration, Air, gas and liquid temperature measurement, Food processing, Laboratories

#### **Electrical Specifications**

Ice point resistance	100Ω		
Fundamental interval (0°C to 100°C	38.5Ω (nominal)		
Self-heating	<0.5°C/mW		
Measuring current	1mA		



#### **Mechanical Specifications**

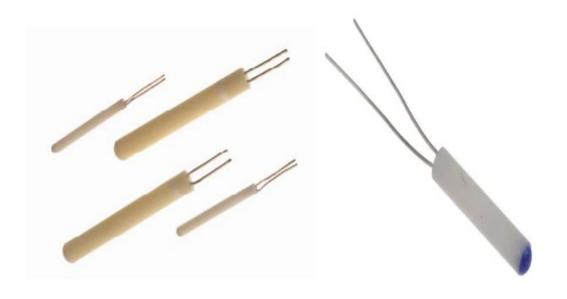
Probe Length	8mm
Probe Diameter	1.5mm
Termination Type	Solder
Process Connection	Probe

#### **Operation Environment Specifications**

Minimum Temperature Sensed	-200°C
Maximum Temperature Sensed	650°C

### **Approvals**

Compliance/Certifications	IEC 60751



# Platinum Resistance Temperature Sensors



# Single element:

Resistance	<b>Tolerance Class</b>	Diameter ('D')	Length ('L')	Allied code	RS order code		
Pt100	Class B	1.5mm	8mm	70646153	611-7851		
Pt100	Class A	1.5mm	8mm	70646155	611-7873		
Pt100	Class B	0.9mm	15mm		174-1654		
Pt100	Class A	0.9mm	15mm		174-1656		
Pt100	Class B	1.5mm	15mm	70646154	611-7867		
Pt100	Class A	1.5mm	15mm	70646151	611-7839		
Pt100	Class B	1.5mm	25mm		174-1655		
Pt100	Class A	1.5mm	25mm		174-1657		
Pt100	Class B	2.8mm	15mm	70646150	611-7823		
Pt100	Class A	2.8mm	15mm	70646152	611-7845		
Pt100	Class B	2.8mm	25mm	70646147	611-7794		
Pt100	Class A	2.8mm	25mm	70646149	611-7817		
Dual element:							
Pt100 (x2)	Class A	1.5mm	15mm	70643873	397-1595		
Pt100 (x2)	Class B	1.5mm	15mm		174-1658		
Pt100 (x2)	Class A	2.8mm	15mm		174-1660		
Pt100 (x2)	Class B	2.8mm	25mm		174-1659		
Pt100 (x2)	Class A	2.8mm	25mm		174-1661		

