

## FEATURES

- Long-term stability
- High accuracy
- Wide temperature measurement range of -200 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, 15mm Probe Length x 2.8mm Probe Diameter

RS Stock No.: 611-7845



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.

## 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

<b>Sensor Type</b>	PT100
<b>Probe Material</b>	Platinum
<b>Accuracy</b>	Class A
<b>Response Time</b>	0.4s
<b>Construction</b>	Wire-Wound, 10mm tails
<b>Tolerance</b>	Class A, In accordance with IEC 60751 W0.15 (Class A) -100°C to 450°C W0.3 (Class B) -196°C to 660°C
<b>Applications</b>	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

<b>Ice point resistance</b>	100Ω
<b>Fundamental interval (0°C to 100°C)</b>	38.5Ω (nominal)
<b>Self-heating</b>	0.02 to 0.3°C/mW
<b>Stability</b>	Optimum
<b>Measuring current</b>	1mA

## Mechanical Specifications

Probe Length	15mm
Probe Diameter	2.8mm
Termination Type	Solder
Process Connection	Probe
Sheath	Metal

## Operation Environment Specifications

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

## Approvals

Compliance/Certifications	IEC60751
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## Single element:

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

## Dual element:

Pt100 (x2)	Class A	1.5mm	15mm	70643873	<b>397-1595</b>
Pt100 (x2)	Class B	1.5mm	15mm		<b>174-1658</b>
Pt100 (x2)	Class A	2.8mm	15mm		<b>174-1660</b>
Pt100 (x2)	Class B	2.8mm	25mm		<b>174-1659</b>
Pt100 (x2)	Class A	2.8mm	25mm		<b>174-1661</b>

