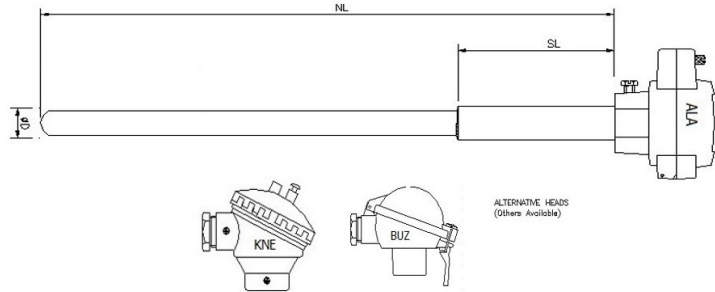


## Rare Metal Thermocouples RMT STYLE (UK Manufactured)



Labfacility are the UK's leading manufacturer of Temperature Sensors, Thermocouple Connectors and associated Temperature Instrumentation and stockings of Thermocouple Cables. The Company has been trading since 1971 and is ISO9001 accredited.

**Rare metal thermocouple R , S and B assemblies. Rare metal thermocouples are made from conductors containing platinum and rhodium alloys and are suited for measuring high temperatures up to 1700°C.**

This product has to be ordered through our 'Custom Build' system. Click below to submit your requirements for a quotation.

**Application Notes:**

High temperature platinum temperature sensor  
Designed specifically for your application / environment  
Will withstand tough industrial use

**Overview**

**Type**

Rare Metal Thermocouple Temp Sensor to High Temp

**Temp Range**

0 to 1700°C

**Common Sensor Types**

R, S, B

**Common Sheath Size (mm)**

6.0, 8.0, 10.0, 12.0, 13.0, 15.0, 17.0, 20.0, 25.0, 28.0

**Common Element Diameters (mm)**

0.35, 0.45, 0.5

**Shank Material**

310SS, 466SS, INCONEL 600

**Head Options**

ALA, KNE (IP65), BUZ

## Thermocouple Type R and Type S Technical Details

### Thermocouple Type B Technical Details

Type R and S thermocouples are the most popular rare metal thermocouple types. They are very similar in conductor construction. The main difference is that Type R is more popular in the UK whereas Type S is more popular in Europe. As the cost of Platinum and Rhodium is high in comparison to base metal thermocouples, Type R & Type S wire can be recovered and recycled from failed thermocouples. The negative leg on a Type R or S thermocouple is pure platinum and the positive leg is platinum / rhodium. Type B has a very high maximum temperature. For short periods it can be used to measure temperatures up to 1850°C, with up to 1700°C being measured under continuous operation. One quirk of Type B thermocouples is that its output doesn't change between 0 and 42°C meaning that it is unsuitable for measuring temperatures near this range. We recommend Type B thermocouples are only used for measuring above 200°C.

### Detailed Specifications

## Specifications

<b>Product Code</b>	XE-RMT-STYLE
<b>Sensor Type</b>	Rare Metal Thermocouple Temperature Sensor to High Temperature
<b>Max. Temperature</b>	1700°C
<b>Min. Temperature</b>	0°C
<b>Common Sensor Types</b>	R, S, B
<b>Common Sheath Size</b>	6.0, 8.0, 10.0, 12.0, 13.0, 15.0, 17.0, 20.0, 25.0, 28.0 (mm)
<b>Common Element Diameters</b>	0.35mm, 0.45mm, 0.5mm
<b>Head Options</b>	ALA, KNE (IP65), BUZ
<b>Shank Material</b>	310SS, 466 SS & Inconel 600
<b>Thermocouple Type R Continuous Temp Range</b>	0 to 1600°C

<b>Thermocouple Type R Short-Term Temp Range</b>	-50 to 1700°C
<b>Thermocouple Type R Material</b>	Platinum/Rhodium (+ LEG) / Platinum (- LEG)
<b>Thermocouple Type S Continuous Temp Range</b>	0 to 1600°C
<b>Thermocouple Type S Short-Term Temp Range</b>	-50 to 1750°C
<b>Thermocouple Type S Material</b>	Platinum/Rhodium (+ LEG) / Platinum (- LEG)
<b>Thermocouple Type R /S Tolerance Class 1</b>	0 to 1100°C (+/- 1°C)
<b>Thermocouple Type R /S Class 2 Tolerance</b>	0 to 600°C (+/- 1.5°C)
<b>Thermocouple Type B Continuous Temp Range</b>	200 to 1700°C
<b>Thermocouple Type B Short-Term Temp Range</b>	0 to 1850°C
<b>Thermocouple Type B Material</b>	Platinum / Rhodium
<b>Thermocouple Type B Tolerance Class 1</b>	none available
<b>Thermocouple Type B Class 2 Tolerance</b>	600 to 1700°C (+/- 0.0025°C)