



1600

Thermocouple standards for Primary laboratory, 0°C to 1600°C



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## Description

The range of 1600 thermocouple standards are the result of many years development. The type R and S standards will cover the range from 0°C to 1600°C. The measuring assembly comprises a 7 mm x 300 mm or 600 mm gas tight 99.7% recrystallized alumina sheath inside which is a 2.5 mm diameter twin bore tube holding the thermocouple. The inner 2.5 mm assembly is removable since some calibration laboratories will only accept fine bore tubed thermocouples and some applications require fine bore tubing. The covered noble metal thermocouple wire connects the measuring sheath to the reference sheath which is a 4.5 mm x 250 mm stainless steel sheath suitable for referencing in a 0°C reference system. Two thermo electrically free multistrand copper wires (teflon coated) connect the thermocouple to the voltage measuring device. The thermocouple material is continuous from the hot or measuring junction to the cold, or referencing junction.

#### Key features:

- Type R and type S
- Gas tight assembly
- Premium grade wire



# **Specifications**

### General specifications

Temperature range	0 to 1600°C					
Response time	5 minutes					
Hot junction dimensions	TYPE R & S STANDARD THERMOCOUPLE    CODE					
Cold junction	250 mm x 4.5 mm					
Copper extension wires	2000 mm					
Immersion	100 mm min.					
Case dimensions (H x W x D)	65 x 710 x 165 mm					
Gross weight	900 g					
Feature	Removeable inner assembly					

#### Models

Reference	Туре	Temperature range	Cold junction dimensions	Hot junction dimensions (L1)	Connecting cable (L2)	Material
1600 R/300	R	0°C to 1600°C	250 mm long x 4.5 mm diameter	300 mm long x 7 mm diameter	1450 mm	Platinum vs Platinum 13% Rhodium
1600 S/300	S	0°C to 1600°C	250 mm long x 4.5 mm diameter	300 mm long x 7 mm diameter	1450 mm	Platinum vs Platinum 10% Rhodium
1600 R/600	R	0°C to 1600°C	250 mm long x 4.5 mm diameter	600 mm long x 7 mm diameter	1150 mm	Platinum vs Platinum 13% Rhodium
1600 S/600	S	0°C to	250 mm long	600 mm long	1150 mm	Platinum vs



1600°C	x 4.5 mm	x 7 mm	Platinum
	diameter	diameter	10%
			Rhodium



## Models and accessories

1600 Thermocouple Standards, Primary laboratory, 0°C to 1600°C Delivered in standard with:

• UKAS 4-point certification up to 1100°C

**Models with cold junction:** 1600/R/300/CJ Type R - Length:

300 mm 1600/R/600/CJ Type R - Length: 600 mm

1600/S/300/CJ Type S- Length: 300 mm 1600/S/600/CJ Type S

- Length: 600 mm

#### Models without cold junction:

1600/R/300/NCJ Type R - Length: 300 mm 1600/R/600/NCJ Type R

- Length: 600 mm 1600/S/300/NCJ Type S- Length: 300 mm

1600/S/600/NCJ Type S - Length: 600 mm

#### Certification:

UKAS UKAS certification up to 1300°C NPL NPL certification up to 1600°C