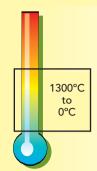


# **Semi-Standard**

### Thermocouples



Semi-standard thermocouples without cold junction.

This range is based on our popular standard thermocouples. We receive many requests for different sizes, length and thermocouple materials. From our experience in calibration Isotech have been able to select those thermocouple combinations and sizes which give the best and most stable results.

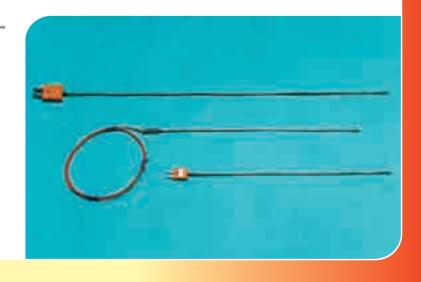
Below is an extract from Isotech's UKAS schedule that shows the laboratory's best capability to calibrate thermocouples. The uncertainty of a particular thermocouple will depend on factors including how it is calibrated. System uncertainties will also vary with which indicator and calibration bath that the sensor is used with. Most of the products shown here include system uncertainty graphs; please contact Isotech for details of any combination not shown. There is also a range of laboratory grade and standard thermocouples, Databooks 1 and 2.

These semi-standards do not have a cold-junction. This feature is usually incorporated in the indicator to which the semi-standard is connected. We offer the type N, R or S semi-standards either with 1 meter leads, with standard plug or miniature plug.

ltem	Measured Quantity Instrument or Gauge	Temperature Range	(k=2) Best measurement capability expressed as an uncertainty (±)
1	Temperature Platinum Thermocouples	-50°C to 0°C 0°C to 50°C 50°C to 660°C 660°C to 1100°C Above 1100°C to 1300°C	0.5K 0.45K 0.4K 0.7K 1.7K
2	Other Thermocouples	-196°C -80°C to 300°C Above 232°C to 420°C Above 420°C to 660°C Above 660°C to 1100°C Above 1100°C to 1300°C	0.3K 0.25K 0.3K 0.4K 0.8K 2.2K
3	Compensating and Extension cable	-25°C to 200°C	1K

#### **Key Features**

- Type N and Noble metal thermocouples give the best long life, stability and reproducibility.
- No Hysteresis.
- Wide temperature range.
- Ideal for all Industrial applications.
- Minimum uncertainties in many of our Industrial products.
- Can be supplied with UKAS Calibration.

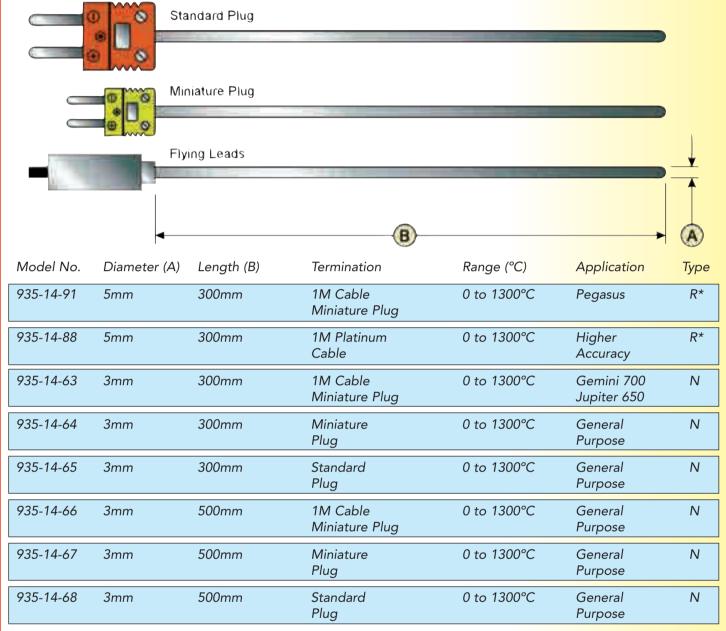


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# **Semi-Standard**

# Thermocouples



<sup>\*</sup> Type S available to special order

Model No.	Refer to Chart	
Temperature Range	ature Refer to Chart ange	
Calibration	ibration A UKAS Calibration Certificate can be provided at extra cost	
Overall dimensions	Refer to Chart	
How to Order	Please Specify Model Type (for example 935-14-65) Please state whether UKAS Certification is required	

For independent use (without Dry Block Calibrator) please refer to Databook 5 for Calibration ranges and uncertainties