

Reference Probes - Semi Standards
Thermocouples



- Wide Temperature Ranges
- Noble Metal & Type N for best life, stability and reproducibility
- Can be supplied with UKAS calibration

These thermocouples are suitable for use as references in Isotech Dry Blocks and for use with temperature indicators. Details of our laboratory grade Standard Thermocouples with separate cold junctions can be found in our publication *"Solutions for Primary and Secondary Laboratories"*.

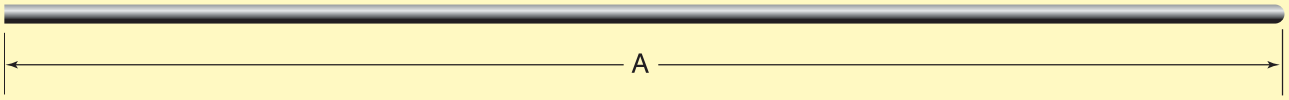
These semi standards are lower cost and suitable for a variety of industrial applications.

The 935-14-91 is constructed from Platinum and Platinum Rhodium alloys and can be used to 1300°C. Recommended for the Pegasus 1200 and general purpose applications. It has 1M of compensating cable terminated with a miniature thermocouple plug. The 935-14-88 is similar to the 14-91 but is made entirely from precious metals, with platinum wires all the way to the miniature plug.

There is a range of high quality mineral insulated metal sheathed (MIMS) Type N thermocouples. These devices are lower cost than the noble metal types and can be bent to a desired shape if required. They are suitable for use in Isotech Dry Blocks and for general purpose measurement and calibration applications.

The system accuracy or uncertainty will depend on the application and what instrument they are used with. The table shows the uncertainties that we can offer with optional UKAS calibration from our accredited laboratory.

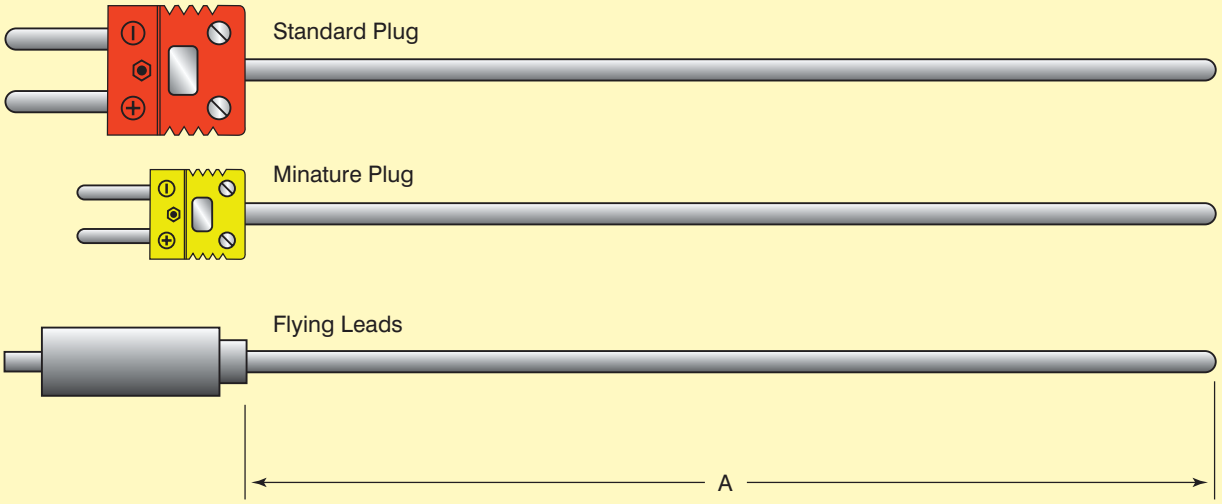
http://www.isotech.co.uk



■ **Noble** Metal Thermocouples

Platinum wire for best performance, ceramic sheath construction. Carry case included.

Model	Diameter	Length (A)	Range	Application	Type
935-14-91/R	5mm	300mm	0 to 1300°C	Pegasus, General Purpose	R
935-14-91/S	5mm	300mm	0 to 1300°C	General Purpose	S
Termination: 1M extension cable to miniature plug					
935-14-88/R	5mm	300mm	0 to 1300°C	Working industrial standard	R
935-14-88/S	5mm	300mm	0 to 1300°C		S
Termination: 1M platinum cable to miniature plug					



■ **Type N** Thermocouples

Recommended base metal thermocouple, low cost metal sheathed.

Model	Diameter	Length(A)	Termination	Range	Application	Type
935-14-63	3mm	300mm	1M Cable Miniature Plug	0 to 1200°C	Gemini 700 Jupiter 650	N
935-14-64	3mm	300mm	Miniature Plug	0 to 1200°C	General Purpose	N
935-14-65	3mm	300mm	Standard Plug	0 to 1200°C	General Purpose	N
935-14-66	3mm	500mm	1M Cable Miniature Plug	0 to 1200°C	General Purpose	N
935-14-67	3mm	500mm	Miniature Plug	0 to 1200°C	General Purpose	N
935-14-68	3mm	500mm	Standard Plug	0 to 1200°C	General Purpose	N

Isotech UKAS Calibration Uncertainties (*k*=2)

Item	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	0.5K
		0°C to 50°C	0.45K
		50°C to 660°C	0.4K
		660°C to 1100°C	0.7K
		Above 1100°C to 1300°C	1.7K
2	Other Thermocouples	-196°C	0.3K
		-80°C to 300°C	0.25K
		Above 232°C to 420°C	0.3K
		Above 420°C to 660°C	0.4K
		Above 660°C to 1100°C	0.8K
		Above 1100°C to 1300°C	2.2K

UKAS CALIBRATION 0175

The latest schedule can be found on the Isotech website or at www.ukas.org.

UKAS CALIBRATION 0175

UKAS Calibration available for these systems - *International Traceability - Best Practice*



Model	Refer to Chart
Temperature Range	Refer to Chart
Calibration	A UKAS Calibration Certificate can be provided at extra cost
Dimensions	Refer to Chart

How to Order
Please Specify Model Type (for example 935-14-65)
Please state whether UKAS Certification is required