

## Noble Metal Master Thermocouple

### Wide Temperature Range

Thermocouple offer a wide temperature range from 0°C to 1500°C

### Accuracy

Special Class (0.6 °C or 0.1 % of temperature whichever is greater)

### Calibration

It is recommended to calibrate this Thermocouple annually over the full temperature range.

## TTC

Highly accurate reference sensors for laboratory use



Tempsens offers special Reference thermocouples for high temperatures upto 1500°C for highly accurate temperature measurement. These Thermocouples are offered in platinum / Rhodium (type R, S or B) elements with a high purity Alumina insulations and sheath materials.

Thermocouples employing platinum in combination with platinum-rhodium alloys have been found to be the most reproducible of all the various types. They are resistant to oxidation in air and, because of their high melting points, can be used at very high temperatures. The best-known member of this group is the Type S (Pt10Rh/Pt) or Type R (Pt13Rh/Pt). It was long considered more accurate and has probably been studied more than any other thermocouple.

The performance of Type R or Type S thermocouple depends strongly on the annealing process, materials used, and other construction techniques.

### Ordering Code

| Model  | Dia*     | Length*  | Extension cable length* |
|--------|----------|----------|-------------------------|
| TTC(X) | (X.X) mm | (XXX) mm | (XX) Mtr.               |
| R<br>S | 6.0      | 450      | 1.5                     |

Example : TTCS-6.0-450-1.5

\* Can be provided as per customer requirement

### Specifications

|                   |   |               |
|-------------------|---|---------------|
| Make              | Tempsens  |               |
| No. of Element    | Simplex   |               |
| Temperature Range | 0 to 1500 °C  |               |
| Sheath Material   | Alumina ( 99.7 % pure Al <sub>2</sub> O <sub>3</sub> )                    |               |
| Sheath length     | 450 mm  |               |
| Extension Cable   | 1.5 mtr. Long Teflon insulated cable with male/female miniature connector |               |
| Sheath Dia        | 06 mm   |               |
| Handle Dimension  | 15 mm (OD) X 100 mm( L)   |               |
| Calibration       | at 5 points at Tempsens NABL Accredited Lab                               |               |
| Accuracy          | Special Class (0.6 °C or 0.1 % of temperature whichever is greater)       |               |
| Model             | TTCS  | TTCR          |
| Type              | S(Pt10%Rh/Pt)   | R(Pt13%Rh/Pt) |