

RTD TEMPERATURE PROBE

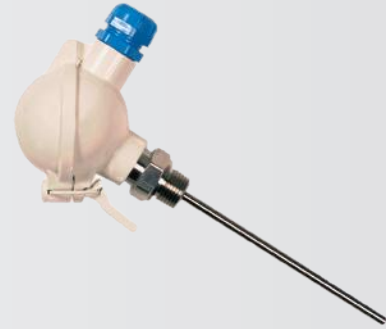
A measurement of great precision and great long-term stability

OPERATING PRINCIPLE

The measuring element is composed of coiled platinum wires, which resistance varies according to the temperature. The resistance / temperature correspondence is documented in standard IEC 60751.

GENERAL DATA⁽¹⁾

- Pt 100 or Pt 1000 probe (composed of a platinum resistance whose initial value is respectively 100 Ω or 1000 Ω at 0 °C)
- Standard: IEC 751



THERMOCOUPLE PROBE

Suitable for a wide range of temperature application (high temperatures)

OPERATING PRINCIPLE

A thermocouple is composed of two wires made of different metals or metal alloys welded at one point (hot weld = measuring junction). This junction is placed in the medium whose temperature is to be measured. The other end of the conductors are joined at a point called reference junction, which is compensated to simulate the 0 °C reference. The temperature difference between the two junctions creates an electromotive force that varies only with the temperature of the measuring junction and can therefore be used to measure its temperature.

GENERAL DATA⁽¹⁾

- Thermocouple type T, J, E, K, N, R, S or B
- Standard: IEC 584



TECHNICAL CHARACTERISTICS⁽¹⁾

	RTD temperature probe	Thermocouple
Measuring scale	From -200 °C to +600 °C	From -200 °C to +1600 °C
Protective tube	Stainless steel	Stainless steel (or other depending on the thermocouple type and temperature application)
Stem diameter	Up to 8 mm	Up to 8 mm
Stem useful length	Up to 1000 mm	Up to 1000 mm
Connection	Standard single element 3 or 4 wires or double element on request	Standard single element 2 wires or duplex on request
Protection rating	Up to IP68	Up to IP68
Electrical approval ⁽²⁾	ATEX explosion-proof or intrinsically safe on request	ATEX explosion-proof or intrinsically safe on request
Accuracy	Class A according to IEC 751/ NF EN 60751	Class 1 according to IEC 584 / NF EN 60584

⁽¹⁾ Only standard data are exposed on this page. Other designs are available on request.

⁽²⁾ For more details, see information on ATEX on page 81.