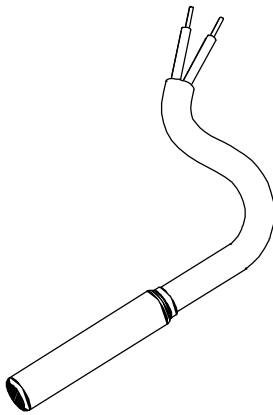


# TEMPERATURE PROBE TYPE PT1000



## APPLICATION

These temperature probes are suitable to be used as room and external probes on heating systems, particularly on plants working with high temperatures like, for example, systems using solar collectors.

This probe is useful above all in systems, in which high accuracy, stability and high temperature range are needed.

## FEATURES

Operating temperature	-40°C ÷ +250°C
Sensor	PT1000 thermoresistor
Resistance value at 0°C	1k Ω
α coefficient	0.00385 °K <sup>-1</sup>
Insulation voltage	500 Vac for 1 second

The sensor is placed in a stainless steel cylindrical body and connected to a bipolar cable enabling to achieve a resistance value which is directly proportional to the measured temperature and can be calculated through the following formula:

$$R_T = R_0 (1 + \alpha T)$$

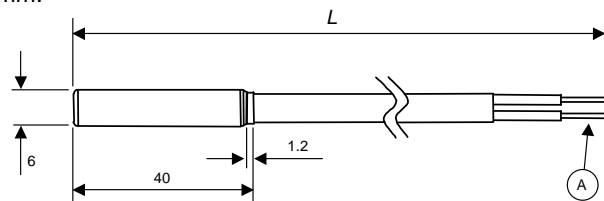
where  $R_0$  is the resistance value at 0°C (1kΩ) and  $T$  is the measured temperature, always expressed in Celsius degrees.

Example: calculation of the resistance value of a probe at a temperature of 60°C:

$$R_{60} = 1k(1 + 0.00385 * 60) = 1231\Omega$$

## OVERALL DIMENSIONS

The following figure shows the probe overall dimensions in mm.

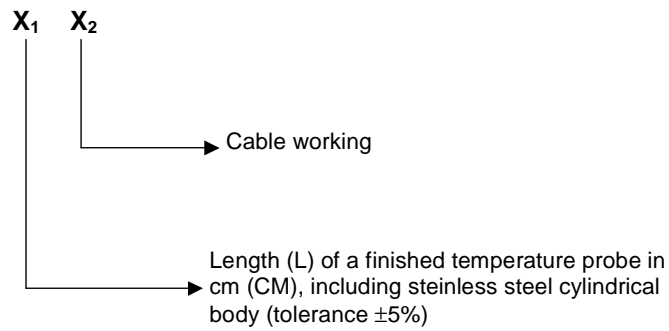


L = length on customer's request.

A = cable finishing for cable connection on customer's request.

## PART REFERENCES

### SONDA TEMP. PT1000



Example:

▪ **SONDA TEMP.PT1000 CM100 W**

<b>SONDA TEMP.PT1000</b>	Temperature probe PT1000
<b>CM100</b>	Cable length 100 cm including stainless steel cylindrical body
<b>W</b>	Cayman cable terminals

**ATTENTION -> Company Brahma S.p.A. declines any responsibility for any damage resulting from the Customer's interfering with the device**

**BRAHMA S.p.A.**

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