

TEMPERATURE PROBE TYPE ST08



APPLICATION

These temperature probes are suitable to be used as room and external probes in room temperature adjustment systems and appliances such as:

- Hot air generators

FEATURES

Operating temperature	-30°C ÷ +150°C +200°C per 60 secondi
Sensor	NTC thermistor
Resistance value at 80°C (R ₈₀)	1650Ω ± 3%
β coefficient (25°C – 85°C) (*)	3530°K ±2%
Isolation voltage	1850 Vac per 1 secondo

(*) Possible versions with different NTC upon request.

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

$$R_T = R_{80} \exp\left[\beta\left(\frac{1}{T} - \frac{1}{T_{80}}\right)\right]$$

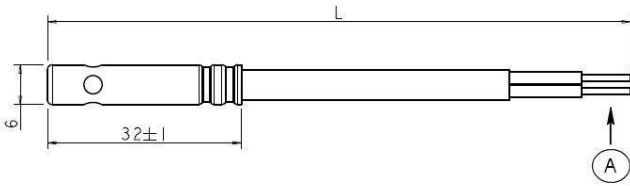
where R₈₀ is the resistance value at 80°C, T₈₀ corresponds to (273,15+80)°K e T and T is the measured temperature, always expressed in Kelvin degrees.

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

$$R_{60} = 1650 \exp\left[3530\left(\frac{1}{(60+273.15)} - \frac{1}{(80+273.15)}\right)\right] = 3007\Omega$$

OVERALL DIMENSIONS

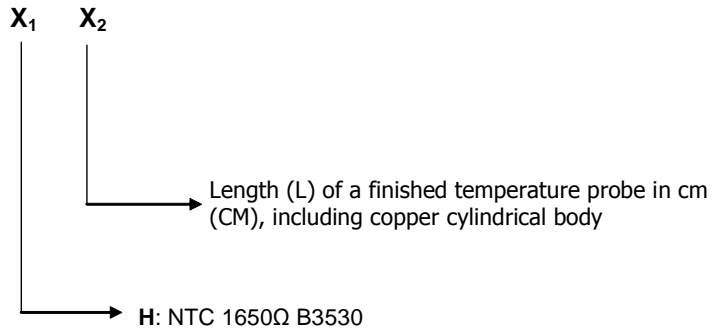
The following figure shows the probe overall dimensions in mm.



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

PART REFERENCES

SONDA TEMP. ST08



Example:

- **SONDA TEMP.ST08 H CM77**

SONDA TEMP.ST08 Temperature probe type ST08
H With 1650W NTC having B3530
CM77 Cable length 77 cm including copper cylindrical body

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

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