

NTC TECHNICAL FEATURES

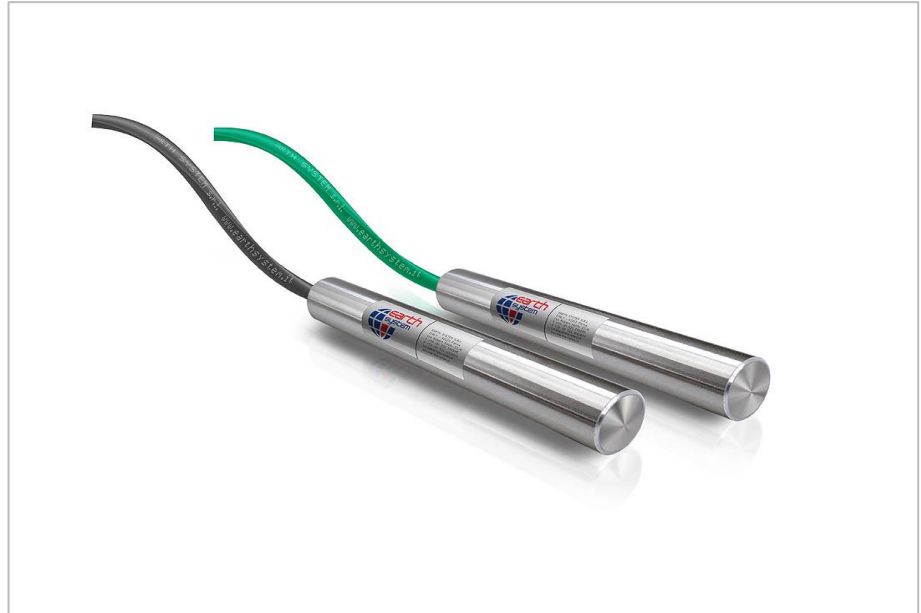
- ✓ Sensor type: 3kΩ 25°C thermistor;
- ✓ Operating temperature: from -55°C to +150°C;
- ✓ Accuracy: 0.5°C;
- ✓ Material: stainless steel.

CARATTERISTICHE TECNICHE PT100

- ✓ Type of sensor: PT 100 Classe A;
- ✓ Operating temperature: from -50°C to +250°C;
- ✓ Accuracy: 0,2°C;
- ✓ Material: stainless steel.



Outdoor thermometer



Temperature monitoring is done by two types of sensors: NTC thermistor or PT100 resistance thermometer. The sensitive part which detects temperature variations is placed inside a resin-coated stainless steel bulb. These sensors are widely used to monitor temperature in building materials, rocks, soil, liquids and free air.

These instruments measure temperature by correlating the electrical resistance of a material with the temperature. The difference between the two sensors is in the material they are made of: the thermistor is a semiconductor, the resistance thermometer is made of a metallic conductor such as platinum.

NTC (Negative Temperature Coefficient) is a sensor made with semiconductors consisting of metal oxides (iron, cobalt and nickel).

The sensor resistance of NTC thermistor decreases as the temperature increases, according to an exponentially decreasing curve.

PT100 (platinum resistance thermometer) is a sensor that measures the resistance of a platinum sensitive element. The principle is based on the variation of the resistive value of a metal as the temperature to which it is subjected varies. In its purest form, PT guarantees a linear resistance/temperature relationship and is therefore easily used in measurement systems. The most common type (100) has a resistance of 100 Ohm at 0 ° C and 138.4 Ohm at 100 ° C.

DIMENSIONAL FEATURES

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Submersible thermometer	bulb diameter	13 mm
	bulb length	81 mm
Thermometer for air	bulb diameter	24 mm
	bulb length	170 mm

