

Thermometers



Applications

A temperature sensor is often necessary to evaluate thermal cycles on a structure or on a group of sensors.

OTR makes available temperature sensors of two different technologies: platinum resistance thermometers PT100 and NTC thermistors.

Features

The temperature probes are constituted by a body of stainless steel or cylindrical nickel plated brass. Inside the housing is placed a thermo-platinum resistance PT100 or an NTC sensor. The sensor is embedded and sealed using resin to transmit thermal variation. The value of the electrical resistance of the sensor is related to temperature variation. The PT100 technology guarantee high stability, repeatability and precision.

Uses

- Checking and compensating thermal effects of instrumentation
- To monitor during construction the thermal gradient of concrete structures
- Temperature monitoring during construction of infrastructure where it is used the method of freezing
- Environmental monitoring

OTR srl
Organizzazione Tecnici Riuniti

Via Btg. Susa, 36 – 29122 Piacenza
Tel: +39 0523 594290 – Fax: +39 0523 607512
info@otr-geo.it – www.otr-geo.it – P.IVA/CF 00894610153



Technical Specifications



Code	OTEMP0PT100	OTEMP0NTC3K
Description	Platinum resistance thermometer (PT100)	Thermistor
Type of sensor	RTD 100 Ω	NTC3K
Range	From - 50°C to +80°	From - 50°C to +80°
Resolution	0.1°C	0.1°C
Accuracy	+/-0.1°C	+/-1°C
Diameter sheath	12 mm	12 mm
Length	80 mm	80 mm
Material	Stainless steel or nickel plated brass	Stainless steel or nickel plated brass
Cables	Code OCABLE00000 2x2x0.25 pur, shielded 5 mm	

Accessories

Portable Readout Unit

Code O001800000 Portable readout unit
Code OGEO000000 Geotester Datalogger

4-20 mA converter card for PT100 (Code OTEMP420MA0)



- Circuit Dimension 40 x 75 mm
- Input sensor PT100 3 wires
- Signal output 4-20 mA 2 wires
- Trimmer of sensitivity
- Input 12-24 Vdc
- dischargers transzorber on each line
- Ring for grounding
- Output standard 4-20 mA a +/- 100°C

The board is housed in tin box with IP65 cable glands.

Accessories

Water Level Indicator with thermometer (Code OFRETEM0050)



- Cable length available 50,100,150,200 m
- Sensor diameter 12 mm
- Battery power 9V
- Cylindrical cable with kevlar core (Ø 4mm)
- Numbered graduations every cm. Protected serigraphy.
- Resolution 0.1 °C
- Range -5°- +65 °C
- Accuracy ±1 °C