

Testing and Reliability

Betatherm's range of HVAC and Refrigeration Probes have been tested extensively both by our customers and at our R&D headquarters in Galway, Ireland. We provide a broad menu of electrical, environmental and mechanical tests depending upon the customer's specific application and product requirements. These tests include:

Environmental

Freeze-Thaw
Thermal Shock: Liquid-to-liquid
Thermal Shock: Liquid-Air-liquid
Long Term Immersion
Low and High Temperature Storage
Autoclave (Pressure Cooker)

Mechanical

Pull Tests
Drop Tests
Bend Tests
Vibration

Electrical

Resistance
High Voltage

About Us

In April 2006 Betatherm Sensors and YSI Temperature (YSIT) were acquired by Measurement Specialties (MEAS).

Together both companies now form the MEAS Temperature Products Group where our combined synergies in high quality and customised NTC thermistor design make us leaders in markets such as medical, aerospace, HVACR and process control.

Measurement Specialties (MEAS) is a leading global designer and manufacturer of sensors and sensor-based systems. Measurement Specialties produces a wide variety of sensors that use advanced technologies to measure precise ranges of physical characteristics, including pressure transmitters, motion, force, displacement, angle, flow, and distance. The Company uses multiple advanced technologies, including piezoresistive applications, application specific integrated circuits (ASICs), micro-electromechanical systems (MEMS), piezopolymers, and strain gages to allow their position sensors to operate precisely and cost effectively. With offices in over 14 locations Measurement Specialties employs over 2100 people worldwide.

For enquires on any of our products please contact sales@betatherm.com

Measurement Specialties,
1000 Lucas Way
Hampton, VA 23666
+1 757 766 1500

Betatherm Ireland Limited,
Ballybrit Business Park,
Galway, Ireland.
+353 91 753238

measurement
SPECIALTIES

BT **BetaTHERM** Sensors
TEMPERATURE SOLUTIONS

www.betatherm.com
www.meas-spec.com

High Reliability Temperature Probes for HVAC and Refrigeration



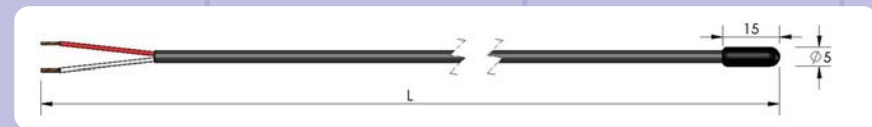
measurement
SPECIALTIES

BT **BetaTHERM** Sensors
TEMPERATURE SOLUTIONS

High Reliability HVAC and Refrigeration temperature Probes

Established in 1983 Betatherm Sensors is a recognised leader in the design and manufacture of high reliability and customised NTC thermistors. Working with leading companies in the areas of HVAC Controls, building management, swimming pools, saunas, refrigeration and under floor heating Betatherm offers the following range of probes:

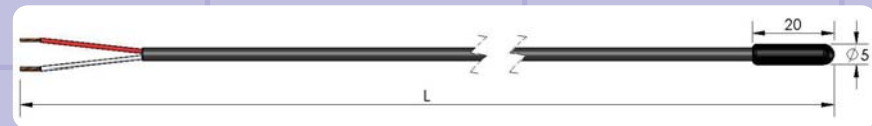
Single Insulated TPE Overmoulded Probe



The single insulated overmoulded probe combines the advantages of small size with reliability. With a probe head dimension of just 5mm x 15mm this probe is ideal for air sensing applications in either refrigeration or building management system environments.

IP67 Rating

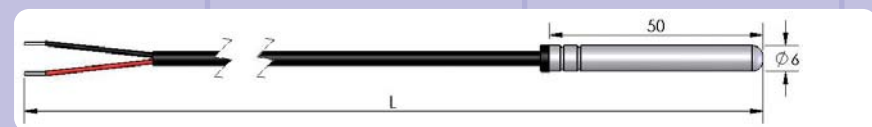
Double Insulated TPE Overmoulded Probe



The double insulated overmoulded probe provides additional mechanical robustness in the form of a second layer of TPE insulation. The probe head is also slightly larger with a dimension of 5mm x 20mm. Ideal for any type of HVAC or refrigeration environment.

IP 68 Rating

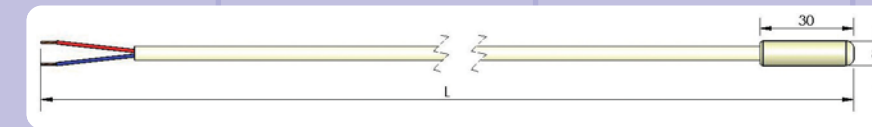
Double Insulated TPE Overmoulded Probe with Stainless Steel Housing



The Stainless Steel probe is the most robust of Betatherm's refrigeration probe family. Containing a fully overmoulded double insulated probe, the 50mm x 6mm stainless steel housing with double roll-crimp is an excellent solution for any harsh environment – eg. evaporator coil, freeze-thaw, long term water immersion, etc

IP 68 Rating

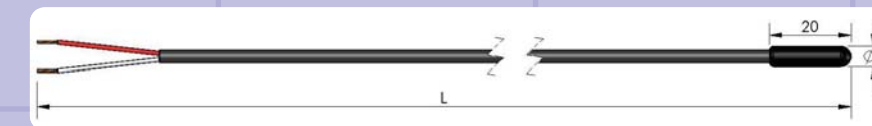
PVC Probe



Betatherm's PVC overmoulded probe is used extensively in refrigeration appliances. The standard offering consists of a 30mm x 8mm probe head, though small dimensions are also available on request.

IP 68 Rating

Underfloor Heating Probe



Similar to the 20mm x 5mm probe, the underfloor heating probe contains an additional or third layer of insulation. The cable also comes with a 50-shore-D hardness to allow for ease of installation.

IP 68 Rating

Electrical Characteristics

Betatherm can choose from a broad range of NTC components in the design of our high reliability HVAC and Refrigeration Probes. The following is a list of standard electrical values available for our NTC sensors.

Resistance @ +25°C	Tolerance @+25°C	Beta Value 25/85	Beta Tolerance
5,000Ω	± 1%	3550	± 2%
10,000Ω	± 1%	3270	± 2%
10,000Ω	± 1%	3435	± 2%
10,000Ω	± 1%	3550	± 2%
10,000Ω	± 1%	3700	± 2%
10,000Ω	± 1%	3950	± 2%
10,000Ω	± 1%	3960	± 2%
10,000Ω	± 1%	3975	± 2%
20,000Ω	± 1%	3960	± 2%
50,000Ω	± 1%	3950	± 2%
50,000Ω	± 1%	3960	± 2%
100,000Ω	± 1%	3975	± 2%
100,000Ω	± 1%	4300	± 2%
200,000Ω	± 1%	4000	± 2%

Custom NTC and RTD sensors are also available on request