








NTC Temperature probes

- Wide choice of probe styles
- Measurement range -40°C up to 125°C
- Resistance values from 2.2 - 100 kΩ
- Excellent thermal conductivity for faster response times

Product Series	Characteristics	Thermistor type	Nominal resistance at +25°C Ω	Resistance tolerance from 0..70°C °C	Beta value 25/85 K / Tolerance %	Dissipation constant in still air mW/°C	Operating temperature range °C	Epoxy thermal conductivity W/(m.K)
ETP-PP	 Plamar probe, PTFE Ø4 mm							
ETP-TP	 Brass probe Ø5 mm							
ETP-RT	 SMT ring terminal probe for M4, M5, M6 or M8 stud size (others on request)	NTC 10K3A1B (others available on request)	10,000	+/- 0.2	3976 / +/- 0.5	2	-40 to +125	1.7
ETP-SP	 Hex bolt Probe - M4, M5, M6 or M8							
ETP-OP-150	 Miniature design, Ø5.3 mm and 15 mm length. Insulated and encapsulated with Thermoplastic Elastomer							



RTD Temperature probes



- Ring and bolt probe styles
- Measurement range -40°C up to 250°C
- PT100 and PT1000 available
- Excellent thermal conductivity for faster response times

Product Series	Characteristics	Sensing element	Accuracy °C	Operating temperature range °C	Epoxy thermal conductivity W/(m.K)
ETP-RT-PT	 SMT ring terminal probe for M4, M5, M6 or M8 stud size (others on request)	PT100 class B and A PT1000 class B and A	Class B ± (0.3 K + 0.005 x t)	-40 to +250	1.7
ETP-SP-PT	 Hex bolt Probe - M6, M7 or M8, 12 mm length	PT1000B available on request)	Class A ± (0.15 K + 0.002 x t)		

Temperature probes with M10 mounting


- Choice of NTC thermistor or PT element
- Cost-effective standard models
- Fast response time
- Wide environmental temperature range

Product Series	Characteristics	Thermistor type	Accuracy +/- K at 25 °C	Tolerance % at °C	Beta value 25/85 K / Tolerance %	Dissipation constant in still air mW/°C	Operating temperature range °C	Response time in still water t90 s
ETP-AM-SP-IMC	 Ø4 mm probe, M10 mounting, 4-pin IMC connector - with mating connector / connector + lead UL compliant, 316 stainless steel housing, IP67 sealed	NTC GAG10K3435A1	0.3 K at +25	+/- 1 at 25	3435 / +/- 2	2	-40°... +180°C, short term 230°C	7
ETP-AM-SP-100	 Ø4 mm probe, M10 mounting, 4-pin IMC connector - with 1 metre lead, 316 stainless steel housing, IP67 sealed							

Product Series	Characteristics	Sensing element	Accuracy °C	Operating temperature range °C	Response time in still water t90 s
ETP-AM-SP-IMC-PT	 Ø4 mm probe, M10 mounting, 4-pin IMC connector - with mating connector / connector + lead UL compliant, 316 stainless steel housing, IP67 sealed	PT100B or PT1000A,	± (0.3 K + 0,005 x t) - ± (0.15 K + 0,002 x t)	-55°...+180 °C short term 230 °C	7
ETP-AM-SP-100-PT	 Ø4 mm probe, M10 mounting, 4-pin IMC connector - with 1 metre lead, 316 stainless steel housing, IP67 sealed				

ETP21 temperature transducer

- Long life and high performance
- Light weight stainless steel design
- Low cost temperature measurement

Product Series	Characteristics	Output signal	Accuracy at RT %	Operating temperature range °C	Process connections
ETP21	 For liquid and gas temperature measurement. Signal conditioning into standard analogue signals is included.	4..20 mA 0..5 V 0.5...4.5 V ratiometric	< +/-0.5	0..80°C or -40..+150°C	G1/4A-E M10x1 Bird cage with M10x1

ERTD temperature sensor

- Temperature range -70°C to +500°C
- PT100 and PT1000 in addition to a full range of nominal resistance values at 0°C types available
- Tolerance Classes A, B, 2B available
- Small package size - typically 2.3 x 2.0 x 1.1 mm
- Higher and lower temperature ranges available

Product Series	Characteristics	Element type ⁽¹⁾	Tolerance class / Temperature range ⁽²⁾ °C	Temperature coefficient ppm/K	Long-term stability
ERTD	Thin Film Platinum elements are durable and designed for applications where long term stability, interchangeability and accuracy over a large temperature range are important	PT100	Class B: -70 to +500	3850	Max. R0-drift 0.04% after 1000 h at 500 °C
		PT1000	Class A: -50 to +300	3750 on request	

1 - Full range of nominal resistance values at 0°C types available
2 - Continuous operation (temporary use to 550°C possible)

Other tolerances, values of resistance and wire lengths are available on request.

EGT exhaust gas temperature sensor

- Robust, proven design
- Large selection of customised probes
- Cost effective

Product Series	Characteristics	Sensor type ¹	Accuracy %	Temperature range °C	Probe length mm
EGT	Range of premium quality Type K sensors, rich in pedigree for motorsports	Type K thermocouple	± 0,75	-100 to 1300	114

Customized materials and probe designs are available on request.

Custom temperature probes

Dependent on the customer application/requirement, it is possible to design and supply customised temperature probes for NTC / RTD temperature measurement with the following features:

- Bespoke housings with differing materials
- Any NTC between 2.2KOhm through to 1MOhm
- RTDs, PT100 and PT1000 in class A and class B
- Different leads, insulation material, extension lengths.
- Leads can be terminated with optional connectors (Deutsch, Molex, JST etc.)

