

## Thermocouples / Temperature sensors type K / Type Pt100

A variety of thermocouples are available, each suitable for different measuring applications. You can choose, from the list below, one or several temperature sensors which are compatible with our thermometers.

Common specifications for all sensors:

- Type-K (NiCr-Ni)
- Type-I according to DIN/ IEC 584 ( $\pm 1.5^\circ\text{C}$  or  $0.004 \times \text{It}$ )
- ABS plastic handle (110 mm long,  $90^\circ\text{C}$  max.)
- Stainless steel sensor tube
- 1000 mm long cable, sometimes spiral form
- Miniature connector



Model No.	Description	Image	T 90	min T max T
TF-110A	Sensor with high surface temperature probe heater with $90^\circ$ angle, L = 130mm, A = 50mm, $\varnothing$ 8mm		2 s	-200 °C 900 °C
TF-101	Sensor with high surface temperature and a spring at the end, L = 130mm, $\varnothing$ 3mm		5 s	-200 °C 450 °C
TF-509	Self-adhesive temperature sensor made of fibreglass 50 x 25 x 2mm		2 s	-10 °C 250 °C
TF-513	Magnetic sensor heater 5 x 5 x 2mm, insulated wire PTFE		2 s	-50 °C 200 °C
TF-104A	Fold-away sensor with resistance to high temperature suitable for gases, liquids, furnaces, etc. L = 300mm, $\varnothing$ 3mm		12 s	-200 °C 1100 °C
TF-106	Probe with pointer for liquids, gum, L = 130mm, $\varnothing$ 3mm		6 s	-200 °C 600 °C
TF-119	Switch sensor for hard or frozen materials or with external cable L = 130mm, $\varnothing$ 6mm		18 s	-180 °C 200 °C
TF-108	Operating temperature sensor suitable for gas and air, L = 130mm, $\varnothing$ 6mm		2 s	-50 °C 600 °C
TF-120	Thermal sensor (made of fibreglass) suitable for air and liquids, L = 1000mm, $\varnothing$ 2 x 1mm		1 s	-50 °C 480 °C
TF-121	Thermal sensor for high temperatures (with ceramic insulation), for air and liquids, L = 1000mm, $\varnothing$ 2 x 0.8mm		1 s	-50 °C 1430 °C
TF-520	Thermocouple stem extension for type-K miniature connectors, L = 10m		/	-50 °C 85 °C
TF-550	Plug adaptor (male)		/	/
TF-551	Plug adaptor (female)		/	/



## PCE-T317

High precision thermometer with 1 channel for sensors type PT100

You can connect resistance sensors to the PCE-T317 thermocouple thermometer. The PT100 sensor has a resistance of 100 Ohms at  $0.0^\circ\text{C}$ . The thermometer offers you the possibility to calculate maximum value, minimum value and average value over a measurement period of 9.7 hours. Pressing the "MEM" button allows you to store up to 97 values in the internal memory, so that you can analyse the data at your convenience.

- Accurate to within  $\pm 0.05\%$
- Large  $3\frac{1}{2}$  digit LCD
- Alarm indicator
- Max, min and average value
- Data Hold function
- Memory for 97 readings (manual storage and recall)
- Backlight
- Selectable units
- Auto shut-off to save battery life
- PT100 Thermocouple for air and liquid included up to  $+600^\circ\text{C}$ , dimensions:  $\varnothing$  3.2mm x 155mm



### Technical specifications

Measurement range	-190 to $790^\circ\text{C}$ (depending on the sensor)
Resolution	$0.1^\circ\text{C}$
Accuracy	$\pm 0.05\%$ of reading, $+0.5^\circ\text{C}$ (more deviation of the sensor)
Thermocouple inputs	1
Timed measurement interval	every 1.5 second
Internal storage	97 readings (manual)
Auto shut-off	turns off after 30 min to save battery life
Display	display LCD with 3 $1/2$ pos
Power	6 x AAA batteries (1.5 V) for 55 hours of operation
Operating conditions	$0$ to $50^\circ\text{C}$ , $< 80\%$ r.h.
Dimensions	150 x 72 x 35mm
Weight	235 g (including battery)

### Contents

Thermometer, PT100 sensor (maximum  $600^\circ\text{C}$ ) with cable and pin, 6 batteries and user's manual

Model No.	Description
PCE-T317	Thermometer with 1 channel

### Optional Accessories

CAL-T1	ISO Calibration
PT-385	replacement sensor for the PCE-T317

