

SENSITHERM S.r.l.

Rev. 00
Spec. tabella01

Tolerances and calibration of
Thermocouple & Thermoresistance Pt. 100ohm

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Approv.

Type	Class	Temperature range	Value °C
T	1	- 40°C to + 350°C	+/- 0,5
	2	- 40°C to + 350°C	+/- 1
E	1	- 40°C to + 800°C	+/- 1,5
	2	- 40°C to + 900°C	+/- 2,5
J	1	- 40°C to + 750°C	+/- 1,5
	2	- 40°C to + 750°C	+/- 2,5
K	1	- 40°C to + 1.000°C	+/- 1,5
N	2	- 40°C to + 1.200°C	+/- 2,5
R	1	0°C to + 1.600°C	+/- 1,0
S	2	0°C to + 1.600°C	+/- 1,5
B	2	+600°C to + 1.700°C	+/- 1,5
	3	+600°C to + 1.700°C	+/- 4

IEC 584-2 Tolerances

This table gives you information about the maximum allowable tolerances of thermocouples.

SENSITHERM S.r.l. is able to supply thermocouples in Class 1 or 2.

Colour codes for thermocouple extension cables

SENSITHERM S.r.l. is able to produce instrumentation, control cables and extension cables for thermocouples, insulated with PVC, XLPE and as the following kind of insulation material :

Insulation Material	min. T °C	max. T °C
PVC	-40	+80
Polietilene	-40	+70
Teflon FEP (*)	-80	+205
Teflon PTFE (*)	-80	+260
Silicone	-55	+180
Fibra di Vetro	-70	+250

(*) Du Pont trademark

Thermocouple	Internat. IEC 584-3	ANSI MC 96.1	DIN 43710-4
T Copper Constantan			
J Iron Constantan			
R Copper			
S Copper Nickel			
N Nickel chrom.silic. Nickel silicium			
K Nickel cromium Nickel aluminium			
K KCB copper/costant. KCA iron/costant.			
E Nickel cromium Constantan			

Class	Range	Tolerance
A	-200 / + 650°C	0,15 + 0,002 (t)
B	-200 / + 850°C	0,3 + 0,005 (t)

(t) Misuring temperature

Platinum thermoresistance in acc. to DIN 751

SENSITHERM S.r.l. can produce different type of RTD with different value of accuracy as Pt. 100ohm class A or B, or Pt. 1000ohm the choice depend on the kind of process.