

TOLERANCE CLASS	TEMPERATURE RANGE [°C]		TOLERANCE VALUE <sup>A)</sup>
	FOR WIRE WOUND RESISTORS	FOR THIN FILM RESISTORS	
<b>AA</b>	-50 ÷ +250	0 ÷ +150	± (0.1+0.0017 t )
<b>A</b>	-100 ÷ +450	-30 ÷ +300	± (0.15+0.002 t )
<b>B</b>	-196 ÷ +660	-50 ÷ +500	± (0.3+0.005 t )
<b>C</b>	-196 ÷ +660	-50 ÷ +600	± (0.6+0.01 t )

a) |t| = temperature in °C no matter what unit (absolute value)

Special tolerance classes and special operating ranges:

Tolerances and operating ranges different than the above-listed should be agreed between the manufacturer and a customer.

Special tolerance classes are made as a multiples or parts of the values of class B tolerance.

Special tolerance class without the specification and an operating range is not allowed.

The manufacturer and the user can establish tolerances, for thermometers and pyrometers, out of the range from the table.

Special tolerance class may also be defined by limited or extended temperature ranges, for example: from -196 °C to 850 °C or from -200 °C to 660 °C

**TAB. I TOLERANCES FOR THERMOCOUPLES / REFERENCE - EN 60584 -1**

TYPE	CLASS 1		CLASS 2		CLASS 3	
	OPERATING RANGE °C	TOLERANCE °C	OPERATING RANGE °C	TOLERANCE °C	OPERATING RANGE °C	TOLERANCE °C
<b>T</b> <b>Cu-CuNi</b>	from -40 to +125 from +125 to +350	± 0,5 ± 0,004/t/	from -40 to +133 from +133 to +350	±1 ± 0,0075/t/	from -67 to +40 from -200 to -67	±1 ± 0,015/t/
<b>E</b> <b>NiCr-CuNi</b>	from -40 to +375 from +375 to +800	± 1,5 ± 0,004/t/	from -40 to +333 from +333 to +900	±2,5 ± 0,0075/t/	from -167 to +40 from -200 to -167	±2,5 ± 0,015/t/
<b>J</b> <b>Fe-CuNi</b>	from -40 to +375 from +375 to +750	± 1,5 ± 0,004/t/	from -40 to +333 from +333 to +750	±2,5 ± 0,0075/t/		
<b>K</b> <b>NiCr-Ni</b>	from -40 to +375 from +375 to +1000	± 1,5 ± 0,004/t/	from -40 to +333 from +333 to +1200	±2,5 ± 0,0075/t/	from -167 to +40 from -200 to -167	±2,5 ± 0,015/t/
<b>N</b> <b>NiCrSi-NiSi</b>	from -40 to +375 from +375 to +1000	± 1,5 ± 0,004/t/	from -40 to +333 from +333 to +1200	±2,5 ± 0,0075/t/		
<b>R</b> <b>PtRh13-Pt</b> <b>S</b> <b>PtRh10-Pt</b>	from 0 to +1100 from +1100 to +1600	± 1 ±(1+0,003)(t-1100)	from 0 to +600 from +600 to +1600	±1,5 ± 0,0025/t/		
<b>B</b> <b>PtRh30-PtRh6</b>			from +600 to +1700	± 0,0025/t/	from +600 to +800 from +800 to +1700	±4 ± 0,005/t/