

Contact measurement

Accuracy

Select the sensor with the accuracy required for your application from the diagram or table.

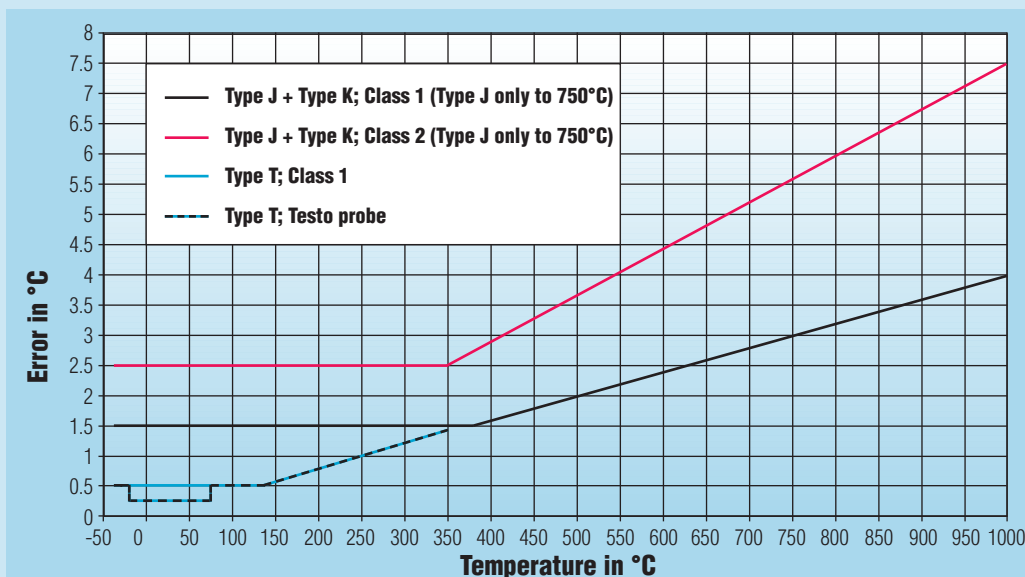
Accuracy specifications				
Sensor	Temperature range	Class	Maximum tolerances	
			Fixed value	Referred to temperature
Thermocouple Type K (NiCr-Ni)	-40 to +1200 °C	2	±2.5 °C	±0.0075 x t
	-40 to +1000 °C	1	±1.5 °C	±0.004 x t
Type T	-40 to +350 °C	1	±0.5 °C	±0.001 x t
Type J	-40 to +750 °C	1	±1.5 °C	±0.004 x t
Pt100	-100 to +200 °C	B	± (0.3 + 0.005 • t)	
	-200 to +600 °C	A	± (0.15 + 0.002 • t)	
NTC (Standard)	-50 to -25.1 °C	–	±0.4 °C	
	-25 to +74.9 °C		±0.2 °C	
	+75 to +150 °C		±0.5 % of reading	
NTC (High temp.)	-30 to -20.1 °C	–	±1 °C	
	-20 to 0 °C		±0.6 °C	
	+0.1 to +75 °C	– °C	±0.5 °C	
	+75.1 to +275 °C		±0.5 °C ±0.5 % of reading	

t = Measured temperature

Data for thermocouples to EN 60584-1 (formerly IEC 584-1). Two values are given. One fixed value in °C and one formula.

The larger value always applies. Data for Pt100 to EN 60751 (formerly IEC 751).

There is no standardization for NTC sensors.



High accuracy also with thermocouples

Testo uses specially selected material for Type T thermocouples in the range -20 to 70 °C to achieve a high accuracy level of ±0.2 °C in this range.