

Thermocouple Temperature Ranges

Type	Materials	Range (°C)	Range (°F)	Common Applications
K	Chromel / Alumel	-200 to +1260°C	-328 to +2300°F	General purpose, oxidizing atmospheres
J	Iron / Constantan	-40 to +750°C	-40 to +1382°F	Vacuum, reducing atmospheres, plastics
T	Copper / Constantan	-200 to +350°C	-328 to +662°F	Food, cryogenics, moisture present
E	Chromel / Constantan	-200 to +900°C	-328 to +1652°F	Highest EMF output, oxidizing
N	Nicrosil / Nisil	-270 to +1300°C	-454 to +2372°F	High temp, stable alternative to K
R	Platinum / Rhodium-13%	0 to +1450°C	+32 to +2642°F	High temp, reference standards
S	Platinum / Rhodium-10%	0 to +1450°C	+32 to +2642°F	High temp, biotech, pharma
B	Platinum / Rhodium-30%	+600 to +1700°C	+1112 to +3092°F	Extremely high temp, glass industry