

Thermocouple Curves – Types E, K, and T

Type E Chromel vs. Constantan		Type K Chromel vs. Alumel		Type T Copper vs. Constantan	
Temp (K)	V _{TC} (mV)	Temp (K)	V _{TC} (mV)	Temp (K)	V _{TC} (mV)
3.0	-9.8355	3.0	-6.4582	3.0	-6.2584
5.6	-9.8298	6.0	-6.4551	6.5	-6.2523
9.0	-9.8182	10.0	-6.4486	11.0	-6.2401
13.5	-9.7956	14.5	-6.4376	16.5	-6.2184
19.0	-9.7570	19.5	-6.4205	22.0	-6.1888
25.0	-9.7013	25.0	-6.3951	29.0	-6.1404
32.0	-9.6204	32.0	-6.3529	38.0	-6.0615
40.0	-9.5071	40.0	-6.2913	48.0	-5.9535
50.0	-9.3366	48.0	-6.2149	60.0	-5.7995
60.0	-9.1345	58.0	-6.1022	75.0	-5.5753
70.0	-8.9030	65.0	-6.0099	90.0	-5.3204
80.0	-8.6475	75.0	-5.8634	105.0	-5.0337
90.0	-8.3673	85.0	-5.6989	120.0	-4.7194
105.0	-7.9064	95.0	-5.5156	135.0	-4.3767
120.0	-7.3943	105.0	-5.3166	155.0	-3.8781
135.0	-6.8386	120.0	-4.9881	175.0	-3.3278
150.0	-6.2400	135.0	-4.6240	195.0	-2.7342
170.0	-5.3831	150.0	-4.2267	220.0	-1.9295
190.0	-4.4564	165.0	-3.7994	245.0	-1.0586
210.0	-3.4702	185.0	-3.1866	270.0	-0.1254
235.0	-2.1605	205.0	-2.5259	300.0	+1.0616
260.0	-0.7666	230.0	-1.6463	330.0	+2.3247
290.0	+0.9948	260.0	-0.5186	360.0	+3.6639
320.0	+2.8428	295.0	+0.8688	395.0	+5.3095
350.0	+4.7704	350.0	+3.1298	430.0	+7.0419
385.0	+7.1149	395.0	+4.9999	470.0	+9.1113
420.0	+9.5570	460.0	+7.6164	510.0	+11.2758
460.0	+12.4425	510.0	+9.6125	555.0	+13.8053
475.0	+13.5573	575.0	+12.2790	575.0	+14.9685

Thermocouple Wire Guide

Part number	Positive (+)	Negative (-)	Type	Size (AWG)
9006-001	Chromel	Au/Fe	-	30
9006-002	Chromel	Au/Fe	-	36
9006-003	Purple	Red	E	30
9006-004	Purple	Red	E	36
9006-005	Yellow	Red	K	30
9006-006	Yellow	Red	K	36
9006-007	Purple	Red	T	30
9006-008	Purple	Red	T	36
9006-009	Yellow	Red	K	24
9006-010	Yellow	Red	K, Shielded	24