

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F



°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
30			0.000	0.007	0.015	0.022	0.030	0.037	0.045	0.052	0.060	30
40	0.060	0.067	0.075	0.082	0.090	0.097	0.105	0.112	0.120	0.128	0.135	40
50	0.135	0.143	0.150	0.158	0.165	0.173	0.181	0.188	0.196	0.204	0.211	50
60	0.211	0.219	0.226	0.234	0.242	0.249	0.257	0.265	0.273	0.280	0.288	60
70	0.288	0.296	0.303	0.311	0.319	0.327	0.334	0.342	0.350	0.358	0.366	70
80	0.366	0.373	0.381	0.389	0.397	0.405	0.412	0.420	0.428	0.436	0.444	80
90	0.444	0.452	0.459	0.467	0.475	0.483	0.491	0.499	0.507	0.515	0.523	90
100	0.523	0.531	0.539	0.546	0.554	0.562	0.570	0.578	0.586	0.594	0.602	100
110	0.602	0.610	0.618	0.626	0.634	0.642	0.650	0.658	0.666	0.675	0.683	110
120	0.683	0.691	0.699	0.707	0.715	0.723	0.731	0.739	0.747	0.755	0.764	120
130	0.764	0.772	0.780	0.788	0.796	0.804	0.812	0.821	0.829	0.837	0.845	130
140	0.845	0.853	0.862	0.870	0.878	0.886	0.894	0.903	0.911	0.919	0.927	140
150	0.927	0.936	0.944	0.952	0.960	0.969	0.977	0.985	0.994	1.002	1.010	150
160	1.010	1.019	1.027	1.035	1.044	1.052	1.060	1.069	1.077	1.085	1.094	160
170	1.094	1.102	1.111	1.119	1.127	1.136	1.144	1.153	1.161	1.169	1.178	170
180	1.178	1.186	1.195	1.203	1.212	1.220	1.229	1.237	1.246	1.254	1.263	180
190	1.263	1.271	1.280	1.288	1.297	1.305	1.314	1.322	1.331	1.339	1.348	190
200	1.348	1.357	1.365	1.374	1.382	1.391	1.399	1.408	1.417	1.425	1.434	200
210	1.434	1.443	1.451	1.460	1.468	1.477	1.486	1.494	1.503	1.512	1.520	210
220	1.520	1.529	1.538	1.546	1.555	1.564	1.573	1.581	1.590	1.599	1.607	220
230	1.607	1.616	1.625	1.634	1.642	1.651	1.660	1.669	1.678	1.686	1.695	230
240	1.695	1.704	1.713	1.721	1.730	1.739	1.748	1.757	1.766	1.774	1.783	240
250	1.783	1.792	1.801	1.810	1.819	1.828	1.836	1.845	1.854	1.863	1.872	250
260	1.872	1.881	1.890	1.899	1.908	1.917	1.925	1.934	1.943	1.952	1.961	260
270	1.961	1.970	1.979	1.988	1.997	2.006	2.015	2.024	2.033	2.042	2.051	270
280	2.051	2.060	2.069	2.078	2.087	2.096	2.105	2.114	2.123	2.132	2.141	280
290	2.141	2.150	2.159	2.168	2.177	2.187	2.196	2.205	2.214	2.223	2.232	290
300	2.232	2.241	2.250	2.259	2.268	2.278	2.287	2.296	2.305	2.314	2.323	300
310	2.323	2.332	2.342	2.351	2.360	2.369	2.378	2.387	2.397	2.406	2.415	310
320	2.415	2.424	2.433	2.443	2.452	2.461	2.470	2.480	2.489	2.498	2.507	320
330	2.507	2.517	2.526	2.535	2.544	2.554	2.563	2.572	2.581	2.591	2.600	330
340	2.600	2.609	2.619	2.628	2.637	2.647	2.656	2.665	2.674	2.684	2.693	340
350	2.693	2.703	2.712	2.721	2.731	2.740	2.749	2.759	2.768	2.777	2.787	350
360	2.787	2.796	2.806	2.815	2.824	2.834	2.843	2.853	2.862	2.871	2.881	360
370	2.881	2.890	2.900	2.909	2.919	2.928	2.938	2.947	2.956	2.966	2.975	370
380	2.975	2.985	2.994	3.004	3.013	3.023	3.032	3.042	3.051	3.061	3.070	380
390	3.070	3.080	3.089	3.099	3.108	3.118	3.127	3.137	3.147	3.156	3.166	390
400	3.166	3.175	3.185	3.194	3.204	3.213	3.223	3.233	3.242	3.252	3.261	400
410	3.261	3.271	3.281	3.290	3.300	3.309	3.319	3.329	3.338	3.348	3.358	410
420	3.358	3.367	3.377	3.387	3.396	3.406	3.415	3.425	3.435	3.444	3.454	420
430	3.454	3.464	3.474	3.483	3.493	3.503	3.512	3.522	3.532	3.541	3.551	430
440	3.551	3.561	3.571	3.580	3.590	3.600	3.609	3.619	3.629	3.639	3.648	440
450	3.648	3.658	3.668	3.678	3.687	3.697	3.707	3.717	3.727	3.736	3.746	450
460	3.746	3.756	3.766	3.776	3.785	3.795	3.805	3.815	3.825	3.834	3.844	460
470	3.844	3.854	3.864	3.874	3.884	3.893	3.903	3.913	3.923	3.933	3.943	470
480	3.943	3.953	3.962	3.972	3.982	3.992	4.002	4.012	4.022	4.032	4.041	480
490	4.041	4.051	4.061	4.071	4.081	4.091	4.101	4.111	4.121	4.131	4.141	490
°F	0	1	2	3	4	5	6	7	8	9	10	°F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F

°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
500	4.141	4.151	4.160	4.170	4.180	4.190	4.200	4.210	4.220	4.230	4.240	500
510	4.240	4.250	4.260	4.270	4.280	4.290	4.300	4.310	4.320	4.330	4.340	510
520	4.340	4.350	4.360	4.370	4.380	4.390	4.400	4.410	4.420	4.430	4.440	520
530	4.440	4.450	4.460	4.470	4.480	4.490	4.500	4.510	4.520	4.530	4.540	530
540	4.540	4.550	4.561	4.571	4.581	4.591	4.601	4.611	4.621	4.631	4.641	540
550	4.641	4.651	4.661	4.671	4.682	4.692	4.702	4.712	4.722	4.732	4.742	550
560	4.742	4.752	4.762	4.773	4.783	4.793	4.803	4.813	4.823	4.833	4.844	560
570	4.844	4.854	4.864	4.874	4.884	4.894	4.904	4.915	4.925	4.935	4.945	570
580	4.945	4.955	4.965	4.976	4.986	4.996	5.006	5.016	5.027	5.037	5.047	580
590	5.047	5.057	5.067	5.078	5.088	5.098	5.108	5.119	5.129	5.139	5.149	590
600	5.149	5.159	5.170	5.180	5.190	5.200	5.211	5.221	5.231	5.241	5.252	600
610	5.252	5.262	5.272	5.282	5.293	5.303	5.313	5.323	5.334	5.344	5.354	610
620	5.354	5.365	5.375	5.385	5.395	5.406	5.416	5.426	5.437	5.447	5.457	620
630	5.457	5.468	5.478	5.488	5.499	5.509	5.519	5.529	5.540	5.550	5.560	630
640	5.560	5.571	5.581	5.591	5.602	5.612	5.623	5.633	5.643	5.654	5.664	640
650	5.664	5.674	5.685	5.695	5.705	5.716	5.726	5.736	5.747	5.757	5.768	650
660	5.768	5.778	5.788	5.799	5.809	5.820	5.830	5.840	5.851	5.861	5.871	660
670	5.871	5.882	5.892	5.903	5.913	5.924	5.934	5.944	5.955	5.965	5.976	670
680	5.976	5.986	5.996	6.007	6.017	6.028	6.038	6.049	6.059	6.070	6.080	680
690	6.080	6.090	6.101	6.111	6.122	6.132	6.143	6.153	6.164	6.174	6.185	690
700	6.185	6.195	6.205	6.216	6.226	6.237	6.247	6.258	6.268	6.279	6.289	700
710	6.289	6.300	6.310	6.321	6.331	6.342	6.352	6.363	6.373	6.384	6.394	710
720	6.394	6.405	6.415	6.426	6.436	6.447	6.457	6.468	6.478	6.489	6.499	720
730	6.499	6.510	6.520	6.531	6.541	6.552	6.563	6.573	6.584	6.594	6.605	730
740	6.605	6.615	6.626	6.636	6.647	6.657	6.668	6.679	6.689	6.700	6.710	740
750	6.710	6.721	6.731	6.742	6.752	6.763	6.774	6.784	6.795	6.805	6.816	750
760	6.816	6.826	6.837	6.848	6.858	6.869	6.879	6.890	6.901	6.911	6.922	760
770	6.922	6.932	6.943	6.954	6.964	6.975	6.985	6.996	7.007	7.017	7.028	770
780	7.028	7.038	7.049	7.060	7.070	7.081	7.091	7.102	7.113	7.123	7.134	780
790	7.134	7.145	7.155	7.166	7.176	7.187	7.198	7.208	7.219	7.230	7.240	790
800	7.240	7.251	7.262	7.272	7.283	7.293	7.304	7.315	7.325	7.336	7.347	800
810	7.347	7.357	7.368	7.379	7.389	7.400	7.411	7.421	7.432	7.443	7.453	810
820	7.453	7.464	7.475	7.485	7.496	7.507	7.517	7.528	7.539	7.549	7.560	820
830	7.560	7.571	7.581	7.592	7.603	7.613	7.624	7.635	7.646	7.656	7.667	830
840	7.667	7.678	7.688	7.699	7.710	7.720	7.731	7.742	7.753	7.763	7.774	840
850	7.774	7.785	7.795	7.806	7.817	7.827	7.838	7.849	7.860	7.870	7.881	850
860	7.881	7.892	7.903	7.913	7.924	7.935	7.945	7.956	7.967	7.978	7.988	860
870	7.988	7.999	8.010	8.020	8.031	8.042	8.053	8.063	8.074	8.085	8.096	870
880	8.096	8.106	8.117	8.128	8.139	8.149	8.160	8.171	8.182	8.192	8.203	880
890	8.203	8.214	8.225	8.235	8.246	8.257	8.268	8.278	8.289	8.300	8.311	890
900	8.311	8.321	8.332	8.343	8.354	8.364	8.375	8.386	8.397	8.408	8.418	900
910	8.418	8.429	8.440	8.451	8.461	8.472	8.483	8.494	8.504	8.515	8.526	910
920	8.526	8.537	8.548	8.558	8.569	8.580	8.591	8.602	8.612	8.623	8.634	920
930	8.634	8.645	8.655	8.666	8.677	8.688	8.699	8.709	8.720	8.731	8.742	930
940	8.742	8.753	8.763	8.774	8.785	8.796	8.807	8.817	8.828	8.839	8.850	940
950	8.850	8.861	8.871	8.882	8.893	8.904	8.915	8.925	8.936	8.947	8.958	950
960	8.958	8.969	8.979	8.990	9.001	9.012	9.023	9.034	9.044	9.055	9.066	960
970	9.066	9.077	9.088	9.098	9.109	9.120	9.131	9.142	9.153	9.163	9.174	970
980	9.174	9.185	9.196	9.207	9.217	9.228	9.239	9.250	9.261	9.272	9.282	980
990	9.282	9.293	9.304	9.315	9.326	9.337	9.347	9.358	9.369	9.380	9.391	990
°F	0	1	2	3	4	5	6	7	8	9	10	°F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F



°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
1000	9.391	9.402	9.412	9.423	9.434	9.445	9.456	9.467	9.477	9.488	9.499	1000
1010	9.499	9.510	9.521	9.532	9.542	9.553	9.564	9.575	9.586	9.597	9.607	1010
1020	9.607	9.618	9.629	9.640	9.651	9.662	9.672	9.683	9.694	9.705	9.716	1020
1030	9.716	9.727	9.738	9.748	9.759	9.770	9.781	9.792	9.803	9.814	9.824	1030
1040	9.824	9.835	9.846	9.857	9.868	9.879	9.889	9.900	9.911	9.922	9.933	1040
1050	9.933	9.944	9.955	9.965	9.976	9.987	9.998	10.009	10.020	10.031	10.041	1050
1060	10.041	10.052	10.063	10.074	10.085	10.096	10.107	10.117	10.128	10.139	10.150	1060
1070	10.150	10.161	10.172	10.183	10.193	10.204	10.215	10.226	10.237	10.248	10.259	1070
1080	10.259	10.269	10.280	10.291	10.302	10.313	10.324	10.335	10.345	10.356	10.367	1080
1090	10.367	10.378	10.389	10.400	10.411	10.421	10.432	10.443	10.454	10.465	10.476	1090
1100	10.476	10.487	10.497	10.508	10.519	10.530	10.541	10.552	10.563	10.574	10.584	1100
1110	10.584	10.595	10.606	10.617	10.628	10.639	10.650	10.660	10.671	10.682	10.693	1110
1120	10.693	10.704	10.715	10.726	10.736	10.747	10.758	10.769	10.780	10.791	10.802	1120
1130	10.802	10.813	10.823	10.834	10.845	10.856	10.867	10.878	10.889	10.899	10.910	1130
1140	10.910	10.921	10.932	10.943	10.954	10.965	10.975	10.986	10.997	11.008	11.019	1140
1150	11.019	11.030	11.041	11.051	11.062	11.073	11.084	11.095	11.106	11.117	11.128	1150
1160	11.128	11.138	11.149	11.160	11.171	11.182	11.193	11.204	11.214	11.225	11.236	1160
1170	11.236	11.247	11.258	11.269	11.280	11.290	11.301	11.312	11.323	11.334	11.345	1170
1180	11.345	11.356	11.366	11.377	11.388	11.399	11.410	11.421	11.432	11.442	11.453	1180
1190	11.453	11.464	11.475	11.486	11.497	11.508	11.518	11.529	11.540	11.551	11.562	1190
1200	11.562	11.573	11.584	11.594	11.605	11.616	11.627	11.638	11.649	11.659	11.670	1200
1210	11.670	11.681	11.692	11.703	11.714	11.725	11.735	11.746	11.757	11.768	11.779	1210
1220	11.779	11.790	11.801	11.811	11.822	11.833	11.844	11.855	11.866	11.876	11.887	1220
1230	11.887	11.898	11.909	11.920	11.931	11.942	11.952	11.963	11.974	11.985	11.996	1230
1240	11.996	12.007	12.017	12.028	12.039	12.050	12.061	12.072	12.082	12.093	12.104	1240
1250	12.104	12.115	12.126	12.137	12.147	12.158	12.169	12.180	12.191	12.202	12.212	1250
1260	12.212	12.223	12.234	12.245	12.256	12.267	12.277	12.288	12.299	12.310	12.321	1260
1270	12.321	12.332	12.342	12.353	12.364	12.375	12.386	12.397	12.407	12.418	12.429	1270
1280	12.429	12.440	12.451	12.461	12.472	12.483	12.494	12.505	12.516	12.526	12.537	1280
1290	12.537	12.548	12.559	12.570	12.580	12.591	12.602	12.613	12.624	12.635	12.645	1290
1300	12.645	12.656	12.667	12.678	12.689	12.699	12.710	12.721	12.732	12.743	12.753	1300
1310	12.753	12.764	12.775	12.786	12.797	12.807	12.818	12.829	12.840	12.851	12.861	1310
1320	12.861	12.872	12.883	12.894	12.905	12.915	12.926	12.937	12.948	12.959	12.969	1320
1330	12.969	12.980	12.991	13.002	13.013	13.023	13.034	13.045	13.056	13.067	13.077	1330
1340	13.077	13.088	13.099	13.110	13.120	13.131	13.142	13.153	13.164	13.174	13.185	1340
1350	13.185	13.196	13.207	13.217	13.228	13.239	13.250	13.261	13.271	13.282	13.293	1350
1360	13.293	13.304	13.314	13.325	13.336	13.347	13.358	13.368	13.379	13.390	13.401	1360
1370	13.401	13.411	13.422	13.433	13.444	13.454	13.465	13.476	13.487	13.497	13.508	1370
1380	13.508	13.519	13.530	13.540	13.551	13.562	13.573	13.583	13.594	13.605	13.616	1380
1390	13.616	13.626	13.637	13.648	13.659	13.669	13.680	13.691	13.702	13.712	13.723	1390
1400	13.723	13.734	13.745	13.755	13.766	13.777	13.788	13.798	13.809	13.820	13.831	1400
1410	13.831	13.841	13.852	13.863	13.873	13.884	13.895	13.906	13.916	13.927	13.938	1410
1420	13.938	13.949	13.959	13.970	13.981	13.991	14.002	14.013	14.024	14.034	14.045	1420
1430	14.045	14.056	14.066	14.077	14.088	14.099	14.109	14.120	14.131	14.141	14.152	1430
1440	14.152	14.163	14.174	14.184	14.195	14.206	14.216	14.227	14.238	14.248	14.259	1440
1450	14.259	14.270	14.281	14.291	14.302	14.313	14.323	14.334	14.345	14.355	14.366	1450
1460	14.366	14.377	14.387	14.398	14.409	14.419	14.430	14.441	14.451	14.462	14.473	1460
1470	14.473	14.484	14.494	14.505	14.516	14.526	14.537	14.548	14.558	14.569	14.580	1470
1480	14.580	14.590	14.601	14.612	14.622	14.633	14.644	14.654	14.665	14.676	14.686	1480
1490	14.686	14.697	14.707	14.718	14.729	14.739	14.750	14.761	14.771	14.782	14.793	1490
°F	0	1	2	3	4	5	6	7	8	9	10	°F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F

°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
1500	14.793	14.803	14.814	14.825	14.835	14.846	14.857	14.867	14.878	14.888	14.899	1500
1510	14.899	14.910	14.920	14.931	14.942	14.952	14.963	14.974	14.984	14.995	15.005	1510
1520	15.005	15.016	15.027	15.037	15.048	15.058	15.069	15.080	15.090	15.101	15.112	1520
1530	15.112	15.122	15.133	15.143	15.154	15.165	15.175	15.186	15.196	15.207	15.218	1530
1540	15.218	15.228	15.239	15.249	15.260	15.271	15.281	15.292	15.302	15.313	15.324	1540
1550	15.324	15.334	15.345	15.355	15.366	15.377	15.387	15.398	15.408	15.419	15.429	1550
1560	15.429	15.440	15.451	15.461	15.472	15.482	15.493	15.503	15.514	15.525	15.535	1560
1570	15.535	15.546	15.556	15.567	15.577	15.588	15.599	15.609	15.620	15.630	15.641	1570
1580	15.641	15.651	15.662	15.672	15.683	15.694	15.704	15.715	15.725	15.736	15.746	1580
1590	15.746	15.757	15.767	15.778	15.788	15.799	15.809	15.820	15.831	15.841	15.852	1590
1600	15.852	15.862	15.873	15.883	15.894	15.904	15.915	15.925	15.936	15.946	15.957	1600
1610	15.957	15.967	15.978	15.988	15.999	16.009	16.020	16.030	16.041	16.051	16.062	1610
1620	16.062	16.072	16.083	16.093	16.104	16.114	16.125	16.135	16.146	16.156	16.167	1620
1630	16.167	16.177	16.188	16.198	16.209	16.219	16.230	16.240	16.251	16.261	16.272	1630
1640	16.272	16.282	16.293	16.303	16.314	16.324	16.335	16.345	16.356	16.366	16.376	1640
1650	16.376	16.387	16.397	16.408	16.418	16.429	16.439	16.450	16.460	16.471	16.481	1650
1660	16.481	16.491	16.502	16.512	16.523	16.533	16.544	16.554	16.565	16.575	16.585	1660
1670	16.585	16.596	16.606	16.617	16.627	16.638	16.648	16.659	16.669	16.679	16.690	1670
1680	16.690	16.700	16.711	16.721	16.731	16.742	16.752	16.763	16.773	16.784	16.794	1680
1690	16.794	16.804	16.815	16.825	16.836	16.846	16.856	16.867	16.877	16.888	16.898	1690
1700	16.898	16.908	16.919	16.929	16.940	16.950	16.960	16.971	16.981	16.991	17.002	1700
1710	17.002	17.012	17.023	17.033	17.043	17.054	17.064	17.074	17.085	17.095	17.106	1710
1720	17.106	17.116	17.126	17.137	17.147	17.157	17.168	17.178	17.188	17.199	17.209	1720
1730	17.209	17.220	17.230	17.240	17.251	17.261	17.271	17.282	17.292	17.302	17.313	1730
1740	17.313	17.323	17.333	17.344	17.354	17.364	17.375	17.385	17.395	17.406	17.416	1740
1750	17.416	17.426	17.437	17.447	17.457	17.468	17.478	17.488	17.499	17.509	17.519	1750
1760	17.519	17.529	17.540	17.550	17.560	17.571	17.581	17.591	17.602	17.612	17.622	1760
1770	17.622	17.632	17.643	17.653	17.663	17.674	17.684	17.694	17.704	17.715	17.725	1770
1780	17.725	17.735	17.746	17.756	17.766	17.776	17.787	17.797	17.807	17.817	17.828	1780
1790	17.828	17.838	17.848	17.858	17.869	17.879	17.889	17.899	17.910	17.920	17.930	1790
1800	17.930	17.940	17.951	17.961	17.971	17.981	17.992	18.002	18.012	18.022	18.033	1800
1810	18.033	18.043	18.053	18.063	18.074	18.084	18.094	18.104	18.114	18.125	18.135	1810
1820	18.135	18.145	18.155	18.166	18.176	18.186	18.196	18.206	18.217	18.227	18.237	1820
1830	18.237	18.247	18.257	18.268	18.278	18.288	18.298	18.308	18.319	18.329	18.339	1830
1840	18.339	18.349	18.359	18.369	18.380	18.390	18.400	18.410	18.420	18.431	18.441	1840
1850	18.441	18.451	18.461	18.471	18.481	18.492	18.502	18.512	18.522	18.532	18.542	1850
1860	18.542	18.552	18.563	18.573	18.583	18.593	18.603	18.613	18.623	18.634	18.644	1860
1870	18.644	18.654	18.664	18.674	18.684	18.694	18.705	18.715	18.725	18.735	18.745	1870
1880	18.745	18.755	18.765	18.775	18.785	18.796	18.806	18.816	18.826	18.836	18.846	1880
1890	18.846	18.856	18.866	18.876	18.887	18.897	18.907	18.917	18.927	18.937	18.947	1890
1900	18.947	18.957	18.967	18.977	18.987	18.998	19.008	19.018	19.028	19.038	19.048	1900
1910	19.048	19.058	19.068	19.078	19.088	19.098	19.108	19.118	19.128	19.138	19.149	1910
1920	19.149	19.159	19.169	19.179	19.189	19.199	19.209	19.219	19.229	19.239	19.249	1920
1930	19.249	19.259	19.269	19.279	19.289	19.299	19.309	19.319	19.329	19.339	19.349	1930
1940	19.349	19.359	19.369	19.379	19.389	19.399	19.409	19.419	19.429	19.439	19.449	1940
1950	19.449	19.459	19.469	19.479	19.489	19.499	19.509	19.519	19.529	19.539	19.549	1950
1960	19.549	19.559	19.569	19.579	19.589	19.599	19.609	19.619	19.629	19.639	19.649	1960
1970	19.649	19.659	19.669	19.679	19.689	19.699	19.709	19.719	19.729	19.739	19.749	1970
1980	19.749	19.759	19.769	19.779	19.789	19.799	19.809	19.819	19.829	19.839	19.849	1980
1990	19.849	19.859	19.869	19.879	19.889	19.899	19.909	19.919	19.929	19.939	19.949	1990
°F	0	1	2	3	4	5	6	7	8	9	10	°F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F



°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
2000	19.948	19.957	19.967	19.977	19.987	19.997	20.007	20.017	20.027	20.037	20.047	2000
2010	20.047	20.057	20.066	20.076	20.086	20.096	20.106	20.116	20.126	20.136	20.146	2010
2020	20.146	20.155	20.165	20.175	20.185	20.195	20.205	20.215	20.225	20.235	20.244	2020
2030	20.244	20.254	20.264	20.274	20.284	20.294	20.304	20.313	20.323	20.333	20.343	2030
2040	20.343	20.353	20.363	20.373	20.382	20.392	20.402	20.412	20.422	20.432	20.441	2040
2050	20.441	20.451	20.461	20.471	20.481	20.491	20.500	20.510	20.520	20.530	20.540	2050
2060	20.540	20.549	20.559	20.569	20.579	20.589	20.598	20.608	20.618	20.628	20.638	2060
2070	20.638	20.647	20.657	20.667	20.677	20.687	20.696	20.706	20.716	20.726	20.736	2070
2080	20.736	20.745	20.755	20.765	20.775	20.784	20.794	20.804	20.814	20.824	20.833	2080
2090	20.833	20.843	20.853	20.863	20.872	20.882	20.892	20.902	20.911	20.921	20.931	2090
2100	20.931	20.941	20.950	20.960	20.970	20.980	20.989	20.999	21.009	21.018	21.028	2100
2110	21.028	21.038	21.048	21.057	21.067	21.077	21.086	21.096	21.106	21.116	21.125	2110
2120	21.125	21.135	21.145	21.154	21.164	21.174	21.184	21.193	21.203	21.213	21.222	2120
2130	21.222	21.232	21.242	21.251	21.261	21.271	21.280	21.290	21.300	21.309	21.319	2130
2140	21.319	21.329	21.339	21.348	21.358	21.368	21.377	21.387	21.396	21.406	21.416	2140
2150	21.416	21.425	21.435	21.445	21.454	21.464	21.474	21.483	21.493	21.503	21.512	2150
2160	21.512	21.522	21.532	21.541	21.551	21.560	21.570	21.580	21.589	21.599	21.609	2160
2170	21.609	21.618	21.628	21.637	21.647	21.657	21.666	21.676	21.685	21.695	21.705	2170
2180	21.705	21.714	21.724	21.733	21.743	21.753	21.762	21.772	21.781	21.791	21.801	2180
2190	21.801	21.810	21.820	21.829	21.839	21.848	21.858	21.868	21.877	21.887	21.896	2190
2200	21.896	21.906	21.915	21.925	21.935	21.944	21.954	21.963	21.973	21.982	21.992	2200
2210	21.992	22.001	22.011	22.020	22.030	22.040	22.049	22.059	22.068	22.078	22.087	2210
2220	22.087	22.097	22.106	22.116	22.125	22.135	22.144	22.154	22.163	22.173	22.182	2220
2230	22.182	22.192	22.201	22.211	22.220	22.230	22.239	22.249	22.258	22.268	22.277	2230
2240	22.277	22.287	22.296	22.306	22.315	22.325	22.334	22.344	22.353	22.363	22.372	2240
2250	22.372	22.382	22.391	22.401	22.410	22.420	22.429	22.438	22.448	22.457	22.467	2250
2260	22.467	22.476	22.486	22.495	22.505	22.514	22.524	22.533	22.542	22.552	22.561	2260
2270	22.561	22.571	22.580	22.590	22.599	22.608	22.618	22.627	22.637	22.646	22.656	2270
2280	22.656	22.665	22.674	22.684	22.693	22.703	22.712	22.721	22.731	22.740	22.750	2280
2290	22.750	22.759	22.768	22.778	22.787	22.797	22.806	22.815	22.825	22.834	22.844	2290
2300	22.844	22.853	22.862	22.872	22.881	22.890	22.900	22.909	22.919	22.928	22.937	2300
2310	22.937	22.947	22.956	22.965	22.975	22.984	22.993	23.003	23.012	23.021	23.031	2310
2320	23.031	23.040	23.050	23.059	23.068	23.078	23.087	23.096	23.106	23.115	23.124	2320
2330	23.124	23.134	23.143	23.152	23.161	23.171	23.180	23.189	23.199	23.208	23.217	2330
2340	23.217	23.227	23.236	23.245	23.255	23.264	23.273	23.282	23.292	23.301	23.310	2340
2350	23.310	23.320	23.329	23.338	23.347	23.357	23.366	23.375	23.385	23.394	23.403	2350
2360	23.403	23.412	23.422	23.431	23.440	23.449	23.459	23.468	23.477	23.486	23.496	2360
2370	23.496	23.505	23.514	23.523	23.533	23.542	23.551	23.560	23.570	23.579	23.588	2370
2380	23.588	23.597	23.607	23.616	23.625	23.634	23.644	23.653	23.662	23.671	23.680	2380
2390	23.680	23.690	23.699	23.708	23.717	23.726	23.736	23.745	23.754	23.763	23.772	2390
2400	23.772	23.782	23.791	23.800	23.809	23.818	23.828	23.837	23.846	23.855	23.864	2400
2410	23.864	23.873	23.883	23.892	23.901	23.910	23.919	23.928	23.938	23.947	23.956	2410
2420	23.956	23.965	23.974	23.983	23.993	24.002	24.011	24.020	24.029	24.038	24.047	2420
2430	24.047	24.057	24.066	24.075	24.084	24.093	24.102	24.111	24.121	24.130	24.139	2430
2440	24.139	24.148	24.157	24.166	24.175	24.184	24.193	24.203	24.212	24.221	24.230	2440
2450	24.230	24.239	24.248	24.257	24.266	24.275	24.284	24.294	24.303	24.312	24.321	2450
2460	24.321	24.330	24.339	24.348	24.357	24.366	24.375	24.384	24.393	24.403	24.412	2460
2470	24.412	24.421	24.430	24.439	24.448	24.457	24.466	24.475	24.484	24.493	24.502	2470
2480	24.502	24.511	24.520	24.529	24.538	24.547	24.556	24.565	24.574	24.583	24.593	2480
2490	24.593	24.602	24.611	24.620	24.629	24.638	24.647	24.656	24.665	24.674	24.683	2490
°F	0	1	2	3	4	5	6	7	8	9	10	°F



TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F

°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
2500	24.683	24.692	24.701	24.710	24.719	24.728	24.737	24.746	24.755	24.764	24.773	2500
2510	24.773	24.782	24.791	24.800	24.809	24.818	24.827	24.836	24.845	24.854	24.863	2510
2520	24.863	24.871	24.880	24.889	24.898	24.907	24.916	24.925	24.934	24.943	24.952	2520
2530	24.952	24.961	24.970	24.979	24.988	24.997	25.006	25.015	25.024	25.033	25.042	2530
2540	25.042	25.051	25.059	25.068	25.077	25.086	25.095	25.104	25.113	25.122	25.131	2540
2550	25.131	25.140	25.149	25.158	25.166	25.175	25.184	25.193	25.202	25.211	25.220	2550
2560	25.220	25.229	25.238	25.247	25.255	25.264	25.273	25.282	25.291	25.300	25.309	2560
2570	25.309	25.318	25.327	25.335	25.344	25.353	25.362	25.371	25.380	25.389	25.397	2570
2580	25.397	25.406	25.415	25.424	25.433	25.442	25.451	25.459	25.468	25.477	25.486	2580
2590	25.486	25.495	25.504	25.512	25.521	25.530	25.539	25.548	25.557	25.565	25.574	2590
2600	25.574	25.583	25.592	25.601	25.610	25.618	25.627	25.636	25.645	25.654	25.662	2600
2610	25.662	25.671	25.680	25.689	25.698	25.706	25.715	25.724	25.733	25.742	25.750	2610
2620	25.750	25.759	25.768	25.777	25.785	25.794	25.803	25.812	25.821	25.829	25.838	2620
2630	25.838	25.847	25.856	25.864	25.873	25.882	25.891	25.899	25.908	25.917	25.926	2630
2640	25.926	25.934	25.943	25.952	25.961	25.969	25.978	25.987	25.996	26.004	26.013	2640
2650	26.013	26.022	26.031	26.039	26.048	26.057	26.065	26.074	26.083	26.092	26.100	2650
2660	26.100	26.109	26.118	26.126	26.135	26.144	26.153	26.161	26.170	26.179	26.187	2660
2670	26.187	26.196	26.205	26.213	26.222	26.231	26.239	26.248	26.257	26.265	26.274	2670
2680	26.274	26.283	26.291	26.300	26.309	26.317	26.326	26.335	26.343	26.352	26.361	2680
2690	26.361	26.369	26.378	26.387	26.395	26.404	26.413	26.421	26.430	26.439	26.447	2690
2700	26.447	26.456	26.464	26.473	26.482	26.490	26.499	26.508	26.516	26.525	26.533	2700
2710	26.533	26.542	26.551	26.559	26.568	26.577	26.585	26.594	26.602	26.611	26.620	2710
2720	26.620	26.628	26.637	26.645	26.654	26.663	26.671	26.680	26.688	26.697	26.705	2720
2730	26.705	26.714	26.723	26.731	26.740	26.748	26.757	26.765	26.774	26.783	26.791	2730
2740	26.791	26.800	26.808	26.817	26.825	26.834	26.842	26.851	26.860	26.868	26.877	2740
2750	26.877	26.885	26.894	26.902	26.911	26.919	26.928	26.936	26.945	26.953	26.962	2750
2760	26.962	26.971	26.979	26.988	26.996	27.005	27.013	27.022	27.030	27.039	27.047	2760
2770	27.047	27.056	27.064	27.073	27.081	27.090	27.098	27.107	27.115	27.124	27.132	2770
2780	27.132	27.141	27.149	27.158	27.166	27.174	27.183	27.191	27.200	27.208	27.217	2780
2790	27.217	27.225	27.234	27.242	27.251	27.259	27.268	27.276	27.285	27.293	27.301	2790
2800	27.301	27.310	27.318	27.327	27.335	27.344	27.352	27.361	27.369	27.377	27.386	2800
2810	27.386	27.394	27.403	27.411	27.420	27.428	27.436	27.445	27.453	27.462	27.470	2810
2820	27.470	27.478	27.487	27.495	27.504	27.512	27.520	27.529	27.537	27.546	27.554	2820
2830	27.554	27.562	27.571	27.579	27.588	27.596	27.604	27.613	27.621	27.630	27.638	2830
2840	27.638	27.646	27.655	27.663	27.671	27.680	27.688	27.696	27.705	27.713	27.722	2840
2850	27.722	27.730	27.738	27.747	27.755	27.763	27.772	27.780	27.788	27.797	27.805	2850
2860	27.805	27.813	27.822	27.830	27.838	27.847	27.855	27.863	27.872	27.880	27.888	2860
2870	27.888	27.897	27.905	27.913	27.922	27.930	27.938	27.946	27.955	27.963	27.971	2870
2880	27.971	27.980	27.988	27.996	28.005	28.013	28.021	28.029	28.038	28.046	28.054	2880
2890	28.054	28.063	28.071	28.079	28.087	28.096	28.104	28.112	28.120	28.129	28.137	2890
2900	28.137	28.145	28.153	28.162	28.170	28.178	28.186	28.195	28.203	28.211	28.219	2900
2910	28.219	28.228	28.236	28.244	28.252	28.261	28.269	28.277	28.285	28.294	28.302	2910
2920	28.302	28.310	28.318	28.326	28.335	28.343	28.351	28.359	28.368	28.376	28.384	2920
2930	28.384	28.392	28.400	28.409	28.417	28.425	28.433	28.441	28.450	28.458	28.466	2930
2940	28.466	28.474	28.482	28.490	28.499	28.507	28.515	28.523	28.531	28.540	28.548	2940
2950	28.548	28.556	28.564	28.572	28.580	28.588	28.597	28.605	28.613	28.621	28.629	2950
2960	28.629	28.637	28.646	28.654	28.662	28.670	28.678	28.686	28.694	28.703	28.711	2960
2970	28.711	28.719	28.727	28.735	28.743	28.751	28.759	28.768	28.776	28.784	28.792	2970
2980	28.792	28.800	28.808	28.816	28.824	28.832	28.840	28.849	28.857	28.865	28.873	2980
2990	28.873	28.881	28.889	28.897	28.905	28.913	28.921	28.929	28.938	28.946	28.954	2990
°F	0	1	2	3	4	5	6	7	8	9	10	°F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F



°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
3000	28.954	28.962	28.970	28.978	28.986	28.994	29.002	29.010	29.018	29.026	29.034	3000
3010	29.034	29.042	29.050	29.058	29.067	29.075	29.083	29.091	29.099	29.107	29.115	3010
3020	29.115	29.123	29.131	29.139	29.147	29.155	29.163	29.171	29.179	29.187	29.195	3020
3030	29.195	29.203	29.211	29.219	29.227	29.235	29.243	29.251	29.259	29.267	29.275	3030
3040	29.275	29.283	29.291	29.299	29.307	29.315	29.323	29.331	29.339	29.347	29.355	3040
3050	29.355	29.363	29.371	29.379	29.387	29.395	29.403	29.411	29.419	29.427	29.435	3050
3060	29.435	29.443	29.451	29.459	29.466	29.474	29.482	29.490	29.498	29.506	29.514	3060
3070	29.514	29.522	29.530	29.538	29.546	29.554	29.562	29.570	29.578	29.586	29.593	3070
3080	29.593	29.601	29.609	29.617	29.625	29.633	29.641	29.649	29.657	29.665	29.673	3080
3090	29.673	29.680	29.688	29.696	29.704	29.712	29.720	29.728	29.736	29.744	29.752	3090
3100	29.752	29.759	29.767	29.775	29.783	29.791	29.799	29.807	29.815	29.822	29.830	3100
3110	29.830	29.838	29.846	29.854	29.862	29.870	29.877	29.885	29.893	29.901	29.909	3110
3120	29.909	29.917	29.924	29.932	29.940	29.948	29.956	29.964	29.971	29.979	29.987	3120
3130	29.987	29.995	30.003	30.011	30.018	30.026	30.034	30.042	30.050	30.057	30.065	3130
3140	30.065	30.073	30.081	30.089	30.097	30.104	30.112	30.120	30.128	30.135	30.143	3140
3150	30.143	30.151	30.159	30.167	30.174	30.182	30.190	30.198	30.205	30.213	30.221	3150
3160	30.221	30.229	30.237	30.244	30.252	30.260	30.268	30.275	30.283	30.291	30.299	3160
3170	30.299	30.306	30.314	30.322	30.330	30.337	30.345	30.353	30.361	30.368	30.376	3170
3180	30.376	30.384	30.391	30.399	30.407	30.415	30.422	30.430	30.438	30.445	30.453	3180
3190	30.453	30.461	30.469	30.476	30.484	30.492	30.499	30.507	30.515	30.522	30.530	3190
3200	30.530	30.538	30.546	30.553	30.561	30.569	30.576	30.584	30.592	30.599	30.607	3200
3210	30.607	30.615	30.622	30.630	30.638	30.645	30.653	30.661	30.668	30.676	30.684	3210
3220	30.684	30.691	30.699	30.707	30.714	30.722	30.729	30.737	30.745	30.752	30.760	3220
3230	30.760	30.768	30.775	30.783	30.790	30.798	30.806	30.813	30.821	30.829	30.836	3230
3240	30.836	30.844	30.851	30.859	30.867	30.874	30.882	30.889	30.897	30.905	30.912	3240
3250	30.912	30.920	30.927	30.935	30.943	30.950	30.958	30.965	30.973	30.980	30.988	3250
3260	30.988	30.996	31.003	31.011	31.018	31.026	31.033	31.041	31.049	31.056	31.064	3260
3270	31.064	31.071	31.079	31.086	31.094	31.101	31.109	31.116	31.124	31.132	31.139	3270
3280	31.139	31.147	31.154	31.162	31.169	31.177	31.184	31.192	31.199	31.207	31.214	3280
3290	31.214	31.222	31.229	31.237	31.244	31.252	31.259	31.267	31.274	31.282	31.289	3290
3300	31.289	31.297	31.304	31.312	31.319	31.327	31.334	31.342	31.349	31.357	31.364	3300
3310	31.364	31.372	31.379	31.386	31.394	31.401	31.409	31.416	31.424	31.431	31.439	3310
3320	31.439	31.446	31.454	31.461	31.468	31.476	31.483	31.491	31.498	31.506	31.513	3320
3330	31.513	31.521	31.528	31.535	31.543	31.550	31.558	31.565	31.572	31.580	31.587	3330
3340	31.587	31.595	31.602	31.610	31.617	31.624	31.632	31.639	31.647	31.654	31.661	3340
3350	31.661	31.669	31.676	31.683	31.691	31.698	31.706	31.713	31.720	31.728	31.735	3350
3360	31.735	31.742	31.750	31.757	31.765	31.772	31.779	31.787	31.794	31.801	31.809	3360
3370	31.809	31.816	31.823	31.831	31.838	31.845	31.853	31.860	31.867	31.875	31.882	3370
3380	31.882	31.889	31.897	31.904	31.911	31.919	31.926	31.933	31.941	31.948	31.955	3380
3390	31.955	31.963	31.970	31.977	31.984	31.992	31.999	32.006	32.014	32.021	32.028	3390
3400	32.028	32.036	32.043	32.050	32.057	32.065	32.072	32.079	32.086	32.094	32.101	3400
3410	32.101	32.108	32.116	32.123	32.130	32.137	32.145	32.152	32.159	32.166	32.174	3410
3420	32.174	32.181	32.188	32.195	32.203	32.210	32.217	32.224	32.231	32.239	32.246	3420
3430	32.246	32.253	32.260	32.268	32.275	32.282	32.289	32.296	32.304	32.311	32.318	3430
3440	32.318	32.325	32.332	32.340	32.347	32.354	32.361	32.368	32.376	32.383	32.390	3440
3450	32.390	32.397	32.404	32.411	32.419	32.426	32.433	32.440	32.447	32.454	32.462	3450
3460	32.462	32.469	32.476	32.483	32.490	32.497	32.505	32.512	32.519	32.526	32.533	3460
3470	32.533	32.540	32.547	32.555	32.562	32.569	32.576	32.583	32.590	32.597	32.604	3470
3480	32.604	32.612	32.619	32.626	32.633	32.640	32.647	32.654	32.661	32.668	32.675	3480
3490	32.675	32.683	32.690	32.697	32.704	32.711	32.718	32.725	32.732	32.739	32.746	3490
°F	0	1	2	3	4	5	6	7	8	9	10	°F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F

°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
3500	32.746	32.753	32.760	32.768	32.775	32.782	32.789	32.796	32.803	32.810	32.817	3500
3510	32.817	32.824	32.831	32.838	32.845	32.852	32.859	32.866	32.873	32.880	32.887	3510
3520	32.887	32.894	32.901	32.908	32.915	32.922	32.929	32.937	32.944	32.951	32.958	3520
3530	32.958	32.965	32.972	32.979	32.986	32.993	33.000	33.007	33.014	33.021	33.027	3530
3540	33.027	33.034	33.041	33.048	33.055	33.062	33.069	33.076	33.083	33.090	33.097	3540
3550	33.097	33.104	33.111	33.118	33.125	33.132	33.139	33.146	33.153	33.160	33.167	3550
3560	33.167	33.174	33.181	33.188	33.194	33.201	33.208	33.215	33.222	33.229	33.236	3560
3570	33.236	33.243	33.250	33.257	33.264	33.271	33.277	33.284	33.291	33.298	33.305	3570
3580	33.305	33.312	33.319	33.326	33.333	33.340	33.346	33.353	33.360	33.367	33.374	3580
3590	33.374	33.381	33.388	33.395	33.401	33.408	33.415	33.422	33.429	33.436	33.443	3590
3600	33.443	33.449	33.456	33.463	33.470	33.477	33.484	33.490	33.497	33.504	33.511	3600
3610	33.511	33.518	33.525	33.531	33.538	33.545	33.552	33.559	33.565	33.572	33.579	3610
3620	33.579	33.586	33.593	33.599	33.606	33.613	33.620	33.627	33.633	33.640	33.647	3620
3630	33.647	33.654	33.660	33.667	33.674	33.681	33.688	33.694	33.701	33.708	33.715	3630
3640	33.715	33.721	33.728	33.735	33.742	33.748	33.755	33.762	33.769	33.775	33.782	3640
3650	33.782	33.789	33.795	33.802	33.809	33.816	33.822	33.829	33.836	33.842	33.849	3650
3660	33.849	33.856	33.863	33.869	33.876	33.883	33.889	33.896	33.903	33.909	33.916	3660
3670	33.916	33.923	33.930	33.936	33.943	33.950	33.956	33.963	33.970	33.976	33.983	3670
3680	33.983	33.990	33.996	34.003	34.009	34.016	34.023	34.029	34.036	34.043	34.049	3680
3690	34.049	34.056	34.063	34.069	34.076	34.082	34.089	34.096	34.102	34.109	34.116	3690
3700	34.116	34.122	34.129	34.135	34.142	34.149	34.155	34.162	34.168	34.175	34.182	3700
3710	34.182	34.188	34.195	34.201	34.208	34.214	34.221	34.228	34.234	34.241	34.247	3710
3720	34.247	34.254	34.260	34.267	34.273	34.280	34.287	34.293	34.300	34.306	34.313	3720
3730	34.313	34.319	34.326	34.332	34.339	34.345	34.352	34.358	34.365	34.371	34.378	3730
3740	34.378	34.384	34.391	34.397	34.404	34.410	34.417	34.423	34.430	34.436	34.443	3740
3750	34.443	34.449	34.456	34.462	34.469	34.475	34.482	34.488	34.495	34.501	34.508	3750
3760	34.508	34.514	34.521	34.527	34.533	34.540	34.546	34.553	34.559	34.566	34.572	3760
3770	34.572	34.578	34.585	34.591	34.598	34.604	34.611	34.617	34.623	34.630	34.636	3770
3780	34.636	34.643	34.649	34.655	34.662	34.668	34.675	34.681	34.687	34.694	34.700	3780
3790	34.700	34.707	34.713	34.719	34.726	34.732	34.738	34.745	34.751	34.757	34.764	3790
3800	34.764	34.770	34.777	34.783	34.789	34.796	34.802	34.808	34.815	34.821	34.827	3800
3810	34.827	34.834	34.840	34.846	34.853	34.859	34.865	34.871	34.878	34.884	34.890	3810
3820	34.890	34.897	34.903	34.909	34.916	34.922	34.928	34.934	34.941	34.947	34.953	3820
3830	34.953	34.960	34.966	34.972	34.978	34.985	34.991	34.997	35.003	35.010	35.016	3830
3840	35.016	35.022	35.028	35.035	35.041	35.047	35.053	35.059	35.066	35.072	35.078	3840
3850	35.078	35.084	35.091	35.097	35.103	35.109	35.115	35.122	35.128	35.134	35.140	3850
3860	35.140	35.146	35.153	35.159	35.165	35.171	35.177	35.183	35.190	35.196	35.202	3860
3870	35.202	35.208	35.214	35.220	35.227	35.233	35.239	35.245	35.251	35.257	35.263	3870
3880	35.263	35.270	35.276	35.282	35.288	35.294	35.300	35.306	35.312	35.319	35.325	3880
3890	35.325	35.331	35.337	35.343	35.349	35.355	35.361	35.367	35.373	35.379	35.386	3890
3900	35.386	35.392	35.398	35.404	35.410	35.416	35.422	35.428	35.434	35.440	35.446	3900
3910	35.446	35.452	35.458	35.464	35.470	35.476	35.482	35.488	35.494	35.500	35.506	3910
3920	35.506	35.513	35.519	35.525	35.531	35.537	35.543	35.549	35.555	35.561	35.567	3920
3930	35.567	35.573	35.578	35.584	35.590	35.596	35.602	35.608	35.614	35.620	35.626	3930
3940	35.626	35.632	35.638	35.644	35.650	35.656	35.662	35.668	35.674	35.680	35.686	3940
3950	35.686	35.692	35.698	35.703	35.709	35.715	35.721	35.727	35.733	35.739	35.745	3950
3960	35.745	35.751	35.757	35.763	35.768	35.774	35.780	35.786	35.792	35.798	35.804	3960
3970	35.804	35.810	35.815	35.821	35.827	35.833	35.839	35.845	35.851	35.856	35.862	3970
3980	35.862	35.868	35.874	35.880	35.886	35.891	35.897	35.903	35.909	35.915	35.920	3980
3990	35.920	35.926	35.932	35.938	35.944	35.949	35.955	35.961	35.967	35.973	35.978	3990

°F 0 1 2 3 4 5 6 7 8 9 10 °F

TABLE 22 Type C Thermocouple— thermoelectric voltage as a function of temperature (°F); reference junctions at 32 °F



°F	0	1	2	3	4	5	6	7	8	9	10	°F
Thermoelectric Voltage in Millivolts												
4000	35.978	35.984	35.990	35.996	36.001	36.007	36.013	36.019	36.024	36.030	36.036	4000
4010	36.036	36.042	36.047	36.053	36.059	36.065	36.070	36.076	36.082	36.088	36.093	4010
4020	36.093	36.099	36.105	36.110	36.116	36.122	36.127	36.133	36.139	36.145	36.150	4020
4030	36.150	36.156	36.162	36.167	36.173	36.179	36.184	36.190	36.196	36.201	36.207	4030
4040	36.207	36.212	36.218	36.224	36.229	36.235	36.241	36.246	36.252	36.258	36.263	4040
4050	36.263	36.269	36.274	36.280	36.286	36.291	36.297	36.302	36.308	36.314	36.319	4050
4060	36.319	36.325	36.330	36.336	36.341	36.347	36.353	36.358	36.364	36.369	36.375	4060
4070	36.375	36.380	36.386	36.391	36.397	36.402	36.408	36.413	36.419	36.425	36.430	4070
4080	36.430	36.436	36.441	36.447	36.452	36.458	36.463	36.469	36.474	36.480	36.485	4080
4090	36.485	36.491	36.496	36.501	36.507	36.512	36.518	36.523	36.529	36.534	36.540	4090
4100	36.540	36.545	36.551	36.556	36.561	36.567	36.572	36.578	36.583	36.589	36.594	4100
4110	36.594	36.599	36.605	36.610	36.616	36.621	36.626	36.632	36.637	36.642	36.648	4110
4120	36.648	36.653	36.659	36.664	36.669	36.675	36.680	36.685	36.691	36.696	36.701	4120
4130	36.701	36.707	36.712	36.717	36.723	36.728	36.733	36.739	36.744	36.749	36.755	4130
4140	36.755	36.760	36.765	36.771	36.776	36.781	36.786	36.792	36.797	36.802	36.808	4140
4150	36.808	36.813	36.818	36.823	36.829	36.834	36.839	36.844	36.850	36.855	36.860	4150
4160	36.860	36.865	36.871	36.876	36.881	36.886	36.891	36.897	36.902	36.907	36.912	4160
4170	36.912	36.917	36.923	36.928	36.933	36.938	36.943	36.948	36.954	36.959	36.964	4170
4180	36.964	36.969	36.974	36.979	36.985	36.990	36.995	37.000	37.005	37.010	37.015	4180
4190	37.015	37.020	37.026	37.031	37.036	37.041	37.046	37.051	37.056	37.061	37.066	4190
4200	37.066											4200

°F 0 1 2 3 4 5 6 7 8 9 10 °F