

ITS – 90 Table for R - Type Thermocouple (Reference Junction at 0 °C)

- Thermoelectric voltage in mV for 5 °C Temperature steps

°C	0	5	10	15	20	25	30	35	40	45
-50	-0.226	-0.208	-0.188	-0.167	-0.145	-0.123	-0.100	-0.076	-0.051	-0.026
0	0.000	0.027	0.054	0.082	0.111	0.141	0.171	0.201	0.232	0.264
50	0.296	0.329	0.363	0.397	0.431	0.466	0.501	0.537	0.573	0.610
100	0.647	0.685	0.723	0.761	0.800	0.839	0.879	0.919	0.959	1.000
150	1.041	1.082	1.124	1.166	1.208	1.251	1.294	1.337	1.381	1.425
200	1.469	1.513	1.558	1.602	1.648	1.693	1.739	1.784	1.831	1.877
250	1.923	1.970	2.017	2.064	2.112	2.159	2.207	2.255	2.304	2.352
300	2.401	2.449	2.498	2.547	2.597	2.646	2.696	2.746	2.796	2.846
350	2.896	2.947	2.997	3.048	3.099	3.150	3.201	3.253	3.304	3.356
400	3.408	3.460	3.512	3.564	3.616	3.669	3.721	3.774	3.827	3.880
450	3.933	3.986	4.040	4.093	4.147	4.201	4.255	4.309	4.363	4.417
500	4.471	4.526	4.580	4.635	4.690	4.745	4.800	4.855	4.910	4.966
550	5.021	5.077	5.133	5.189	5.245	5.301	5.357	5.414	5.470	5.527
600	5.583	5.640	5.697	5.754	5.812	5.869	5.926	5.984	6.041	6.099
650	6.157	6.215	6.273	6.332	6.390	6.448	6.507	6.566	6.625	6.684
700	6.743	6.802	6.861	6.921	6.980	7.040	7.100	7.160	7.220	7.280
750	7.340	7.401	7.461	7.522	7.583	7.644	7.705	7.766	7.827	7.888
800	7.950	8.011	8.073	8.135	8.197	8.259	8.321	8.384	8.446	8.509
850	8.571	8.634	8.697	8.760	8.823	8.887	8.950	9.014	9.077	9.141
900	9.205	9.269	9.333	9.397	9.461	9.526	9.590	9.655	9.720	9.785
950	9.850	9.915	9.980	10.046	10.111	10.177	10.242	10.308	10.374	10.440
1000	10.506	10.572	10.638	10.705	10.771	10.838	10.905	10.972	11.039	11.106
1050	11.173	11.240	11.307	11.375	11.442	11.510	11.578	11.646	11.714	11.782
1100	11.850	11.918	11.986	12.054	12.123	12.191	12.260	12.329	12.397	12.466
1150	12.535	12.604	12.673	12.742	12.812	12.881	12.950	13.019	13.089	13.158
1200	13.228	13.298	13.367	13.437	13.507	13.577	13.646	13.716	13.786	13.856
1250	13.926	13.996	14.066	14.137	14.207	14.277	14.347	14.418	14.488	14.558
1300	14.629	14.699	14.770	14.840	14.911	14.981	15.052	15.122	15.193	15.263
1350	15.334	15.404	15.475	15.546	15.616	15.687	15.758	15.828	15.899	15.969
1400	16.040	16.111	16.181	16.252	16.323	16.393	16.464	16.534	16.605	16.676
1450	16.746	16.817	16.887	16.958	17.028	17.099	17.169	17.240	17.310	17.380
1500	17.451	17.521	17.591	17.661	17.732	17.802	17.872	17.942	18.012	18.082
1550	18.152	18.222	18.292	18.362	18.431	18.501	18.571	18.640	18.710	18.779
1600	18.849	18.918	18.988	19.057	19.126	19.195	19.264	19.333	19.402	19.471
1650	19.540	19.609	19.677	19.746	19.814	19.882	19.951	20.019	20.087	20.154
1700	20.222	20.289	20.356	20.422	20.488	20.554	20.620	20.685	20.749	20.813
1750	20.877	20.940	21.003	21.065						