

Thermocouples Reference Data (ITS90) mV v/s Temperature (Standard : ASTM E 230-03)

Tolerances	TYPE 'T' Cu-CuNi	TYPE 'E' NiCr-CuNi	TYPE 'J' Fe-CuNi	TYPE 'K' NiCr-NiAl	TYPE 'N' NiCrSi-NiSi	TYPE 'S' PtRh10%-Pt	TYPE 'R' PtRh13%-Pt	TYPE 'B' PtRh30%-PtRh6%
	±0°C or ±0.75%	±1.7°C or ±0.5%	±2.2°C or ±75%	±2.2°C or ±75%	±2.2°C or ±75%	±1.5°C or ±25%	±1.5°C or ±25%	±0.5% Over 800°C
Standard	±0.5°C or ±0.4%	±1°C or ±0.4%	±1.1°C or ±0.4%	±1.1°C or ±0.4%	±1.1°C or ±0.4%	±6°C or ±0.1%	±6°C or ±0.1%	±0.25% Over 800°C
Special	±0.5°C or ±0.4%	±1°C or ±0.4%	±1.1°C or ±0.4%	±1.1°C or ±0.4%	±1.1°C or ±0.4%	±6°C or ±0.1%	±6°C or ±0.1%	±0.25% Over 800°C
-100	-3.379	-5.237	-4.633	-3.554	-2.407	-	-	-
0	0	0	0	0	0	0	0	0.033
100	4.279	6.319	5.269	4.096	2.774	0.646	0.647	0.178
200	9.228	13.421	10.799	8.138	5.913	1.441	1.469	0.431
300	14.862	21.036	16.327	12.209	9.341	2.323	2.401	0.787
400	20.872	28.946	21.848	16.397	12.974	3.259	3.408	1.242
500		37.005	27.393	20.644	16.748	4.233	4.471	1.792
600		45.093	33.102	24.905	20.613	5.239	5.583	2.431
700			39.132	29.129	24.527	6.275	6.743	3.154
800			45.494	33.275	28.455	7.345	7.95	3.957
900				37.326	32.371	8.449	9.208	4.834
1000				41.276	36.256	9.587	10.506	5.78
1100				45.119	40.087	10.757	11.85	6.786
1200				48.838	43.846	11.951	13.228	7.311
1250				50.644	45.694	12.554	13.926	7.848
1300				52.41	47.513	13.159	14.629	8.956
1400						14.373	16.04	10.099
1500						15.582	17.451	11.263
1600								12.433
1700								

TEMPERATURE °C

Temperature Sensor Technology

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