

MAXIMUM TEMPERATURE RANGE

Thermocouple Grade

32 to 3092°F
0 to 1700°C

Extension Grade

32 to 212°F
0 to 100°C

LIMITS OF ERROR

(whichever is greater)

Standard: 0.5°C over 800°C

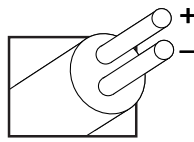
Special: NOT ESTABLISHED

COMMENTS, BARE WIRE ENVIRONMENT:

Oxidizing or Inert; Do Not Insert in Metal Tubes;
Beware of Contamination; High Temperature;
Common Use in Glass Industry

TEMPERATURE IN DEGREES °C

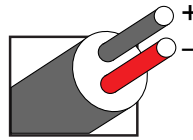
REFERENCE JUNCTION AT 0°C



Thermocouple Grade

NONE ESTABLISHED

Platinum-30% Rhodium
VS.
Platinum-6% Rhodium



Extension Grade

Revised Thermocouple Reference Tables

TYPE B
Reference Tables
N.I.S.T.
Monograph 175
Revised to ITS-90

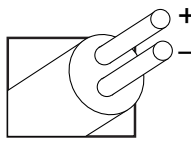
Thermoelectric Voltage in Millivolts

Table with 21 columns and 100 rows of thermoelectric voltage data in millivolts, comparing Platinum-30% Rhodium and Platinum-6% Rhodium grades.

Revised Thermocouple Reference Tables

TYPE B

Reference Tables
N.I.S.T.
Monograph 175
Revised to
ITS-90

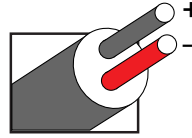


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TEMPERATURE IN DEGREES °C
REFERENCE JUNCTION AT 0°C

Thermoelectric Voltage in Millivolts

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C | °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| 1200 | 6.786 | 6.797 | 6.807 | 6.818 | 6.828 | 6.838 | 6.849 | 6.859 | 6.869 | 6.880 | 6.890 | 1200 | 1550 | 10.679 | 10.691 | 10.703 | 10.714 | 10.726 | 10.738 | 10.749 | 10.761 | 10.773 | 10.784 | 10.796 | 1550 |
| 1210 | 6.890 | 6.901 | 6.911 | 6.922 | 6.932 | 6.942 | 6.953 | 6.963 | 6.974 | 6.984 | 6.995 | 1210 | 1560 | 10.796 | 10.808 | 10.819 | 10.831 | 10.843 | 10.854 | 10.866 | 10.877 | 10.889 | 10.901 | 10.913 | 1560 |
| 1220 | 6.995 | 7.005 | 7.016 | 7.026 | 7.037 | 7.047 | 7.058 | 7.068 | 7.079 | 7.089 | 7.100 | 1220 | 1570 | 10.913 | 10.924 | 10.936 | 10.948 | 10.959 | 10.971 | 10.983 | 10.994 | 11.006 | 11.018 | 11.029 | 1570 |
| 1230 | 7.100 | 7.110 | 7.121 | 7.131 | 7.142 | 7.152 | 7.163 | 7.173 | 7.184 | 7.194 | 7.205 | 1230 | 1580 | 11.029 | 11.041 | 11.053 | 11.064 | 11.076 | 11.088 | 11.099 | 11.111 | 11.123 | 11.134 | 11.146 | 1580 |
| 1240 | 7.205 | 7.216 | 7.226 | 7.237 | 7.247 | 7.258 | 7.269 | 7.279 | 7.290 | 7.300 | 7.311 | 1240 | 1590 | 11.146 | 11.158 | 11.169 | 11.181 | 11.193 | 11.205 | 11.216 | 11.228 | 11.240 | 11.251 | 11.263 | 1590 |
| 1250 | 7.311 | 7.322 | 7.332 | 7.343 | 7.353 | 7.364 | 7.375 | 7.385 | 7.396 | 7.407 | 7.417 | 1250 | 1600 | 11.263 | 11.275 | 11.286 | 11.298 | 11.310 | 11.321 | 11.333 | 11.345 | 11.357 | 11.368 | 11.380 | 1600 |
| 1260 | 7.417 | 7.428 | 7.439 | 7.449 | 7.460 | 7.471 | 7.482 | 7.492 | 7.503 | 7.514 | 7.524 | 1260 | 1610 | 11.380 | 11.392 | 11.403 | 11.415 | 11.427 | 11.438 | 11.450 | 11.462 | 11.474 | 11.485 | 11.497 | 1610 |
| 1270 | 7.524 | 7.535 | 7.546 | 7.557 | 7.567 | 7.578 | 7.589 | 7.600 | 7.610 | 7.621 | 7.632 | 1270 | 1620 | 11.497 | 11.509 | 11.520 | 11.532 | 11.544 | 11.555 | 11.567 | 11.579 | 11.591 | 11.602 | 11.614 | 1620 |
| 1280 | 7.632 | 7.643 | 7.653 | 7.664 | 7.675 | 7.686 | 7.697 | 7.707 | 7.718 | 7.729 | 7.740 | 1280 | 1630 | 11.614 | 11.626 | 11.637 | 11.649 | 11.661 | 11.673 | 11.684 | 11.696 | 11.708 | 11.719 | 11.731 | 1630 |
| 1290 | 7.740 | 7.751 | 7.761 | 7.772 | 7.783 | 7.794 | 7.805 | 7.816 | 7.827 | 7.837 | 7.848 | 1290 | 1640 | 11.731 | 11.743 | 11.754 | 11.766 | 11.778 | 11.790 | 11.801 | 11.813 | 11.825 | 11.836 | 11.848 | 1640 |
| 1300 | 7.848 | 7.859 | 7.870 | 7.881 | 7.892 | 7.903 | 7.914 | 7.924 | 7.935 | 7.946 | 7.957 | 1300 | 1650 | 11.848 | 11.860 | 11.871 | 11.883 | 11.895 | 11.907 | 11.918 | 11.930 | 11.942 | 11.953 | 11.965 | 1650 |
| 1310 | 7.957 | 7.968 | 7.979 | 7.990 | 8.001 | 8.012 | 8.023 | 8.034 | 8.045 | 8.056 | 8.066 | 1310 | 1660 | 11.965 | 11.977 | 11.988 | 12.000 | 12.012 | 12.024 | 12.035 | 12.047 | 12.059 | 12.070 | 12.082 | 1660 |
| 1320 | 8.066 | 8.077 | 8.088 | 8.099 | 8.110 | 8.121 | 8.132 | 8.143 | 8.154 | 8.165 | 8.176 | 1320 | 1670 | 12.082 | 12.094 | 12.105 | 12.117 | 12.129 | 12.141 | 12.152 | 12.164 | 12.176 | 12.187 | 12.199 | 1670 |
| 1330 | 8.176 | 8.187 | 8.198 | 8.209 | 8.220 | 8.231 | 8.242 | 8.253 | 8.264 | 8.275 | 8.286 | 1330 | 1680 | 12.199 | 12.211 | 12.222 | 12.234 | 12.246 | 12.257 | 12.269 | 12.281 | 12.292 | 12.304 | 12.316 | 1680 |
| 1340 | 8.286 | 8.298 | 8.309 | 8.320 | 8.331 | 8.342 | 8.353 | 8.364 | 8.375 | 8.386 | 8.397 | 1340 | 1690 | 12.316 | 12.327 | 12.339 | 12.351 | 12.363 | 12.374 | 12.386 | 12.398 | 12.409 | 12.421 | 12.433 | 1690 |
| 1350 | 8.397 | 8.408 | 8.419 | 8.430 | 8.441 | 8.453 | 8.464 | 8.475 | 8.486 | 8.497 | 8.508 | 1350 | 1700 | 12.433 | 12.444 | 12.456 | 12.468 | 12.479 | 12.491 | 12.503 | 12.514 | 12.526 | 12.538 | 12.549 | 1700 |
| 1360 | 8.508 | 8.519 | 8.530 | 8.542 | 8.553 | 8.564 | 8.575 | 8.586 | 8.597 | 8.608 | 8.620 | 1360 | 1710 | 12.549 | 12.561 | 12.572 | 12.584 | 12.596 | 12.607 | 12.619 | 12.631 | 12.642 | 12.654 | 12.666 | 1710 |
| 1370 | 8.620 | 8.631 | 8.642 | 8.653 | 8.664 | 8.675 | 8.687 | 8.698 | 8.709 | 8.720 | 8.731 | 1370 | 1720 | 12.666 | 12.677 | 12.689 | 12.701 | 12.712 | 12.724 | 12.736 | 12.747 | 12.759 | 12.770 | 12.782 | 1720 |
| 1380 | 8.731 | 8.743 | 8.754 | 8.765 | 8.776 | 8.787 | 8.799 | 8.810 | 8.821 | 8.832 | 8.844 | 1380 | 1730 | 12.782 | 12.794 | 12.805 | 12.817 | 12.829 | 12.840 | 12.852 | 12.863 | 12.875 | 12.887 | 12.898 | 1730 |
| 1390 | 8.844 | 8.855 | 8.866 | 8.877 | 8.889 | 8.900 | 8.911 | 8.922 | 8.934 | 8.945 | 8.956 | 1390 | 1740 | 12.898 | 12.910 | 12.921 | 12.933 | 12.945 | 12.956 | 12.968 | 12.980 | 12.991 | 13.003 | 13.014 | 1740 |
| 1400 | 8.956 | 8.967 | 8.979 | 8.990 | 9.001 | 9.013 | 9.024 | 9.035 | 9.047 | 9.058 | 9.069 | 1400 | 1750 | 13.014 | 13.026 | 13.037 | 13.049 | 13.061 | 13.072 | 13.084 | 13.095 | 13.107 | 13.119 | 13.130 | 1750 |
| 1410 | 9.069 | 9.080 | 9.092 | 9.103 | 9.114 | 9.126 | 9.137 | 9.148 | 9.160 | 9.171 | 9.182 | 1410 | 1760 | 13.130 | 13.142 | 13.153 | 13.165 | 13.176 | 13.188 | 13.200 | 13.211 | 13.223 | 13.234 | 13.246 | 1760 |
| 1420 | 9.182 | 9.194 | 9.205 | 9.216 | 9.228 | 9.239 | 9.251 | 9.262 | 9.273 | 9.285 | 9.296 | 1420 | 1770 | 13.246 | 13.257 | 13.269 | 13.280 | 13.292 | 13.304 | 13.315 | 13.327 | 13.338 | 13.350 | 13.361 | 1770 |
| 1430 | 9.296 | 9.307 | 9.319 | 9.330 | 9.342 | 9.353 | 9.364 | 9.376 | 9.387 | 9.398 | 9.410 | 1430 | 1780 | 13.361 | 13.373 | 13.384 | 13.396 | 13.407 | 13.419 | 13.430 | 13.442 | 13.453 | 13.465 | 13.476 | 1780 |
| 1440 | 9.410 | 9.421 | 9.433 | 9.444 | 9.456 | 9.467 | 9.478 | 9.490 | 9.501 | 9.513 | 9.524 | 1440 | 1790 | 13.476 | 13.488 | 13.499 | 13.511 | 13.522 | 13.534 | 13.545 | 13.557 | 13.568 | 13.580 | 13.591 | 1790 |
| 1450 | 9.524 | 9.536 | 9.547 | 9.558 | 9.570 | 9.581 | 9.593 | 9.604 | 9.616 | 9.627 | 9.639 | 1450 | 1800 | 13.591 | 13.603 | 13.614 | 13.626 | 13.637 | 13.649 | 13.660 | 13.672 | 13.683 | 13.694 | 13.706 | 1800 |
| 1460 | 9.639 | 9.650 | 9.662 | 9.673 | 9.684 | 9.696 | 9.707 | 9.719 | 9.730 | 9.742 | 9.753 | 1460 | 1810 | 13.706 | 13.717 | 13.729 | 13.740 | 13.752 | 13.763 | 13.775 | 13.786 | 13.797 | 13.809 | 13.820 | 1810 |
| 1470 | 9.753 | 9.765 | 9.776 | 9.788 | 9.799 | 9.811 | 9.822 | 9.834 | 9.845 | 9.857 | 9.868 | 1470 | | | | | | | | | | | | | |
| 1480 | 9.868 | 9.880 | 9.891 | 9.903 | 9.914 | 9.926 | 9.937 | 9.949 | 9.961 | 9.972 | 9.984 | 1480 | | | | | | | | | | | | | |
| 1490 | 9.984 | 9.995 | 10.007 | 10.018 | 10.030 | 10.041 | 10.053 | 10.064 | 10.076 | 10.088 | 10.099 | 1490 | | | | | | | | | | | | | |
| 1500 | 10.099 | 10.111 | 10.122 | 10.134 | 10.145 | 10.157 | 10.168 | 10.180 | 10.192 | 10.203 | 10.215 | 1500 | | | | | | | | | | | | | |
| 1510 | 10.215 | 10.226 | 10.238 | 10.249 | 10.261 | 10.273 | 10.284 | 10.296 | 10.307 | 10.319 | 10.331 | 1510 | | | | | | | | | | | | | |
| 1520 | 10.331 | 10.342 | 10.354 | 10.365 | 10.377 | 10.389 | 10.400 | 10.412 | 10.423 | 10.435 | 10.447 | 1520 | | | | | | | | | | | | | |
| 1530 | 10.447 | 10.458 | 10.470 | 10.482 | 10.493 | 10.505 | 10.516 | 10.528 | 10.540 | 10.551 | 10.563 | 1530 | | | | | | | | | | | | | |
| 1540 | 10.563 | 10.575 | 10.586 | 10.598 | 10.609 | 10.621 | 10.633 | 10.644 | 10.656 | 10.668 | 10.679 | 1540 | | | | | | | | | | | | | |