

TABLE 3 Type B Thermocouple— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| 0 | 0.000 | 0.000 | 0.000 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.002 | -0.002 | -0.002 | 0 |
| 10 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.003 | -0.003 | -0.003 | 10 |
| 20 | -0.003 | -0.003 | -0.003 | -0.003 | -0.003 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | 20 |
| 30 | -0.002 | -0.002 | -0.002 | -0.002 | -0.002 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | 0.000 | 30 |
| 40 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.002 | 40 |
| 50 | 0.002 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 | 0.006 | 0.006 | 50 |
| 60 | 0.006 | 0.007 | 0.007 | 0.008 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 | 60 |
| 70 | 0.011 | 0.012 | 0.012 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 | 0.016 | 0.017 | 0.017 | 70 |
| 80 | 0.017 | 0.018 | 0.019 | 0.020 | 0.020 | 0.021 | 0.022 | 0.022 | 0.023 | 0.024 | 0.025 | 80 |
| 90 | 0.025 | 0.026 | 0.026 | 0.027 | 0.028 | 0.029 | 0.030 | 0.031 | 0.031 | 0.032 | 0.033 | 90 |
| 100 | 0.033 | 0.034 | 0.035 | 0.036 | 0.037 | 0.038 | 0.039 | 0.040 | 0.041 | 0.042 | 0.043 | 100 |
| 110 | 0.043 | 0.044 | 0.045 | 0.046 | 0.047 | 0.048 | 0.049 | 0.050 | 0.051 | 0.052 | 0.053 | 110 |
| 120 | 0.053 | 0.055 | 0.056 | 0.057 | 0.058 | 0.059 | 0.060 | 0.062 | 0.063 | 0.064 | 0.065 | 120 |
| 130 | 0.065 | 0.066 | 0.068 | 0.069 | 0.070 | 0.072 | 0.073 | 0.074 | 0.075 | 0.077 | 0.078 | 130 |
| 140 | 0.078 | 0.079 | 0.081 | 0.082 | 0.084 | 0.085 | 0.086 | 0.088 | 0.089 | 0.091 | 0.092 | 140 |
| 150 | 0.092 | 0.094 | 0.095 | 0.096 | 0.098 | 0.099 | 0.101 | 0.102 | 0.104 | 0.106 | 0.107 | 150 |
| 160 | 0.107 | 0.109 | 0.110 | 0.112 | 0.113 | 0.115 | 0.117 | 0.118 | 0.120 | 0.122 | 0.123 | 160 |
| 170 | 0.123 | 0.125 | 0.127 | 0.128 | 0.130 | 0.132 | 0.134 | 0.135 | 0.137 | 0.139 | 0.141 | 170 |
| 180 | 0.141 | 0.142 | 0.144 | 0.146 | 0.148 | 0.150 | 0.151 | 0.153 | 0.155 | 0.157 | 0.159 | 180 |
| 190 | 0.159 | 0.161 | 0.163 | 0.165 | 0.166 | 0.168 | 0.170 | 0.172 | 0.174 | 0.176 | 0.178 | 190 |
| 200 | 0.178 | 0.180 | 0.182 | 0.184 | 0.186 | 0.188 | 0.190 | 0.192 | 0.195 | 0.197 | 0.199 | 200 |
| 210 | 0.199 | 0.201 | 0.203 | 0.205 | 0.207 | 0.209 | 0.212 | 0.214 | 0.216 | 0.218 | 0.220 | 210 |
| 220 | 0.220 | 0.222 | 0.225 | 0.227 | 0.229 | 0.231 | 0.234 | 0.236 | 0.238 | 0.241 | 0.243 | 220 |
| 230 | 0.243 | 0.245 | 0.248 | 0.250 | 0.252 | 0.255 | 0.257 | 0.259 | 0.262 | 0.264 | 0.267 | 230 |
| 240 | 0.267 | 0.269 | 0.271 | 0.274 | 0.276 | 0.279 | 0.281 | 0.284 | 0.286 | 0.289 | 0.291 | 240 |
| 250 | 0.291 | 0.294 | 0.296 | 0.299 | 0.301 | 0.304 | 0.307 | 0.309 | 0.312 | 0.314 | 0.317 | 250 |
| 260 | 0.317 | 0.320 | 0.322 | 0.325 | 0.328 | 0.330 | 0.333 | 0.336 | 0.338 | 0.341 | 0.344 | 260 |
| 270 | 0.344 | 0.347 | 0.349 | 0.352 | 0.355 | 0.358 | 0.360 | 0.363 | 0.366 | 0.369 | 0.372 | 270 |
| 280 | 0.372 | 0.375 | 0.377 | 0.380 | 0.383 | 0.386 | 0.389 | 0.392 | 0.395 | 0.398 | 0.401 | 280 |
| 290 | 0.401 | 0.404 | 0.407 | 0.410 | 0.413 | 0.416 | 0.419 | 0.422 | 0.425 | 0.428 | 0.431 | 290 |
| 300 | 0.431 | 0.434 | 0.437 | 0.440 | 0.443 | 0.446 | 0.449 | 0.452 | 0.455 | 0.458 | 0.462 | 300 |
| 310 | 0.462 | 0.465 | 0.468 | 0.471 | 0.474 | 0.478 | 0.481 | 0.484 | 0.487 | 0.490 | 0.494 | 310 |
| 320 | 0.494 | 0.497 | 0.500 | 0.503 | 0.507 | 0.510 | 0.513 | 0.517 | 0.520 | 0.523 | 0.527 | 320 |
| 330 | 0.527 | 0.530 | 0.533 | 0.537 | 0.540 | 0.544 | 0.547 | 0.550 | 0.554 | 0.557 | 0.561 | 330 |
| 340 | 0.561 | 0.564 | 0.568 | 0.571 | 0.575 | 0.578 | 0.582 | 0.585 | 0.589 | 0.592 | 0.596 | 340 |
| 350 | 0.596 | 0.599 | 0.603 | 0.607 | 0.610 | 0.614 | 0.617 | 0.621 | 0.625 | 0.628 | 0.632 | 350 |
| 360 | 0.632 | 0.636 | 0.639 | 0.643 | 0.647 | 0.650 | 0.654 | 0.658 | 0.662 | 0.665 | 0.669 | 360 |
| 370 | 0.669 | 0.673 | 0.677 | 0.680 | 0.684 | 0.688 | 0.692 | 0.696 | 0.700 | 0.703 | 0.707 | 370 |
| 380 | 0.707 | 0.711 | 0.715 | 0.719 | 0.723 | 0.727 | 0.731 | 0.735 | 0.738 | 0.742 | 0.746 | 380 |
| 390 | 0.746 | 0.750 | 0.754 | 0.758 | 0.762 | 0.766 | 0.770 | 0.774 | 0.778 | 0.782 | 0.787 | 390 |
| 400 | 0.787 | 0.791 | 0.795 | 0.799 | 0.803 | 0.807 | 0.811 | 0.815 | 0.819 | 0.824 | 0.828 | 400 |
| 410 | 0.828 | 0.832 | 0.836 | 0.840 | 0.844 | 0.849 | 0.853 | 0.857 | 0.861 | 0.866 | 0.870 | 410 |
| 420 | 0.870 | 0.874 | 0.878 | 0.883 | 0.887 | 0.891 | 0.896 | 0.900 | 0.904 | 0.909 | 0.913 | 420 |
| 430 | 0.913 | 0.917 | 0.922 | 0.926 | 0.930 | 0.935 | 0.939 | 0.944 | 0.948 | 0.953 | 0.957 | 430 |
| 440 | 0.957 | 0.961 | 0.966 | 0.970 | 0.975 | 0.979 | 0.984 | 0.988 | 0.993 | 0.997 | 1.002 | 440 |
| 450 | 1.002 | 1.007 | 1.011 | 1.016 | 1.020 | 1.025 | 1.030 | 1.034 | 1.039 | 1.043 | 1.048 | 450 |
| 460 | 1.048 | 1.053 | 1.057 | 1.062 | 1.067 | 1.071 | 1.076 | 1.081 | 1.086 | 1.090 | 1.095 | 460 |
| 470 | 1.095 | 1.100 | 1.105 | 1.109 | 1.114 | 1.119 | 1.124 | 1.129 | 1.133 | 1.138 | 1.143 | 470 |
| 480 | 1.143 | 1.148 | 1.153 | 1.158 | 1.163 | 1.167 | 1.172 | 1.177 | 1.182 | 1.187 | 1.192 | 480 |
| 490 | 1.192 | 1.197 | 1.202 | 1.207 | 1.212 | 1.217 | 1.222 | 1.227 | 1.232 | 1.237 | 1.242 | 490 |
| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |

TABLE 3 Type B Thermocouple— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

B°C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| 500 | 1.242 | 1.247 | 1.252 | 1.257 | 1.262 | 1.267 | 1.272 | 1.277 | 1.282 | 1.288 | 1.293 | 500 |
| 510 | 1.293 | 1.298 | 1.303 | 1.308 | 1.313 | 1.318 | 1.324 | 1.329 | 1.334 | 1.339 | 1.344 | 510 |
| 520 | 1.344 | 1.350 | 1.355 | 1.360 | 1.365 | 1.371 | 1.376 | 1.381 | 1.387 | 1.392 | 1.397 | 520 |
| 530 | 1.397 | 1.402 | 1.408 | 1.413 | 1.418 | 1.424 | 1.429 | 1.435 | 1.440 | 1.445 | 1.451 | 530 |
| 540 | 1.451 | 1.456 | 1.462 | 1.467 | 1.472 | 1.478 | 1.483 | 1.489 | 1.494 | 1.500 | 1.505 | 540 |
| 550 | 1.505 | 1.511 | 1.516 | 1.522 | 1.527 | 1.533 | 1.539 | 1.544 | 1.550 | 1.555 | 1.561 | 550 |
| 560 | 1.561 | 1.566 | 1.572 | 1.578 | 1.583 | 1.589 | 1.595 | 1.600 | 1.606 | 1.612 | 1.617 | 560 |
| 570 | 1.617 | 1.623 | 1.629 | 1.634 | 1.640 | 1.646 | 1.652 | 1.657 | 1.663 | 1.669 | 1.675 | 570 |
| 580 | 1.675 | 1.680 | 1.686 | 1.692 | 1.698 | 1.704 | 1.709 | 1.715 | 1.721 | 1.727 | 1.733 | 580 |
| 590 | 1.733 | 1.739 | 1.745 | 1.750 | 1.756 | 1.762 | 1.768 | 1.774 | 1.780 | 1.786 | 1.792 | 590 |
| 600 | 1.792 | 1.798 | 1.804 | 1.810 | 1.816 | 1.822 | 1.828 | 1.834 | 1.840 | 1.846 | 1.852 | 600 |
| 610 | 1.852 | 1.858 | 1.864 | 1.870 | 1.876 | 1.882 | 1.888 | 1.894 | 1.901 | 1.907 | 1.913 | 610 |
| 620 | 1.913 | 1.919 | 1.925 | 1.931 | 1.937 | 1.944 | 1.950 | 1.956 | 1.962 | 1.968 | 1.975 | 620 |
| 630 | 1.975 | 1.981 | 1.987 | 1.993 | 1.999 | 2.006 | 2.012 | 2.018 | 2.025 | 2.031 | 2.037 | 630 |
| 640 | 2.037 | 2.043 | 2.050 | 2.056 | 2.062 | 2.069 | 2.075 | 2.082 | 2.088 | 2.094 | 2.101 | 640 |
| 650 | 2.101 | 2.107 | 2.113 | 2.120 | 2.126 | 2.133 | 2.139 | 2.146 | 2.152 | 2.158 | 2.165 | 650 |
| 660 | 2.165 | 2.171 | 2.178 | 2.184 | 2.191 | 2.197 | 2.204 | 2.210 | 2.217 | 2.224 | 2.230 | 660 |
| 670 | 2.230 | 2.237 | 2.243 | 2.250 | 2.256 | 2.263 | 2.270 | 2.276 | 2.283 | 2.289 | 2.296 | 670 |
| 680 | 2.296 | 2.303 | 2.309 | 2.316 | 2.323 | 2.329 | 2.336 | 2.343 | 2.350 | 2.356 | 2.363 | 680 |
| 690 | 2.363 | 2.370 | 2.376 | 2.383 | 2.390 | 2.397 | 2.403 | 2.410 | 2.417 | 2.424 | 2.431 | 690 |
| 700 | 2.431 | 2.437 | 2.444 | 2.451 | 2.458 | 2.465 | 2.472 | 2.479 | 2.485 | 2.492 | 2.499 | 700 |
| 710 | 2.499 | 2.506 | 2.513 | 2.520 | 2.527 | 2.534 | 2.541 | 2.548 | 2.555 | 2.562 | 2.569 | 710 |
| 720 | 2.569 | 2.576 | 2.583 | 2.590 | 2.597 | 2.604 | 2.611 | 2.618 | 2.625 | 2.632 | 2.639 | 720 |
| 730 | 2.639 | 2.646 | 2.653 | 2.660 | 2.667 | 2.674 | 2.681 | 2.688 | 2.696 | 2.703 | 2.710 | 730 |
| 740 | 2.710 | 2.717 | 2.724 | 2.731 | 2.738 | 2.746 | 2.753 | 2.760 | 2.767 | 2.775 | 2.782 | 740 |
| 750 | 2.782 | 2.789 | 2.796 | 2.803 | 2.811 | 2.818 | 2.825 | 2.833 | 2.840 | 2.847 | 2.854 | 750 |
| 760 | 2.854 | 2.862 | 2.869 | 2.876 | 2.884 | 2.891 | 2.898 | 2.906 | 2.913 | 2.921 | 2.928 | 760 |
| 770 | 2.928 | 2.935 | 2.943 | 2.950 | 2.958 | 2.965 | 2.973 | 2.980 | 2.987 | 2.995 | 3.002 | 770 |
| 780 | 3.002 | 3.010 | 3.017 | 3.025 | 3.032 | 3.040 | 3.047 | 3.055 | 3.062 | 3.070 | 3.078 | 780 |
| 790 | 3.078 | 3.085 | 3.093 | 3.100 | 3.108 | 3.116 | 3.123 | 3.131 | 3.138 | 3.146 | 3.154 | 790 |
| 800 | 3.154 | 3.161 | 3.169 | 3.177 | 3.184 | 3.192 | 3.200 | 3.207 | 3.215 | 3.223 | 3.230 | 800 |
| 810 | 3.230 | 3.238 | 3.246 | 3.254 | 3.261 | 3.269 | 3.277 | 3.285 | 3.292 | 3.300 | 3.308 | 810 |
| 820 | 3.308 | 3.316 | 3.324 | 3.331 | 3.339 | 3.347 | 3.355 | 3.363 | 3.371 | 3.379 | 3.386 | 820 |
| 830 | 3.386 | 3.394 | 3.402 | 3.410 | 3.418 | 3.426 | 3.434 | 3.442 | 3.450 | 3.458 | 3.466 | 830 |
| 840 | 3.466 | 3.474 | 3.482 | 3.490 | 3.498 | 3.506 | 3.514 | 3.522 | 3.530 | 3.538 | 3.546 | 840 |
| 850 | 3.546 | 3.554 | 3.562 | 3.570 | 3.578 | 3.586 | 3.594 | 3.602 | 3.610 | 3.618 | 3.626 | 850 |
| 860 | 3.626 | 3.634 | 3.643 | 3.651 | 3.659 | 3.667 | 3.675 | 3.683 | 3.692 | 3.700 | 3.708 | 860 |
| 870 | 3.708 | 3.716 | 3.724 | 3.732 | 3.741 | 3.749 | 3.757 | 3.765 | 3.774 | 3.782 | 3.790 | 870 |
| 880 | 3.790 | 3.798 | 3.807 | 3.815 | 3.823 | 3.832 | 3.840 | 3.848 | 3.857 | 3.865 | 3.873 | 880 |
| 890 | 3.873 | 3.882 | 3.890 | 3.898 | 3.907 | 3.915 | 3.923 | 3.932 | 3.940 | 3.949 | 3.957 | 890 |
| 900 | 3.957 | 3.965 | 3.974 | 3.982 | 3.991 | 3.999 | 4.008 | 4.016 | 4.024 | 4.033 | 4.041 | 900 |
| 910 | 4.041 | 4.050 | 4.058 | 4.067 | 4.075 | 4.084 | 4.093 | 4.101 | 4.110 | 4.118 | 4.127 | 910 |
| 920 | 4.127 | 4.135 | 4.144 | 4.152 | 4.161 | 4.170 | 4.178 | 4.187 | 4.195 | 4.204 | 4.213 | 920 |
| 930 | 4.213 | 4.221 | 4.230 | 4.239 | 4.247 | 4.256 | 4.265 | 4.273 | 4.282 | 4.291 | 4.299 | 930 |
| 940 | 4.299 | 4.308 | 4.317 | 4.326 | 4.334 | 4.343 | 4.352 | 4.360 | 4.369 | 4.378 | 4.387 | 940 |
| 950 | 4.387 | 4.396 | 4.404 | 4.413 | 4.422 | 4.431 | 4.440 | 4.448 | 4.457 | 4.466 | 4.475 | 950 |
| 960 | 4.475 | 4.484 | 4.493 | 4.501 | 4.510 | 4.519 | 4.528 | 4.537 | 4.546 | 4.555 | 4.564 | 960 |
| 970 | 4.564 | 4.573 | 4.582 | 4.591 | 4.599 | 4.608 | 4.617 | 4.626 | 4.635 | 4.644 | 4.653 | 970 |
| 980 | 4.653 | 4.662 | 4.671 | 4.680 | 4.689 | 4.698 | 4.707 | 4.716 | 4.725 | 4.734 | 4.743 | 980 |
| 990 | 4.743 | 4.753 | 4.762 | 4.771 | 4.780 | 4.789 | 4.798 | 4.807 | 4.816 | 4.825 | 4.834 | 990 |
| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |

TABLE 3 Type B Thermocouple— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| 1000 | 4.834 | 4.843 | 4.853 | 4.862 | 4.871 | 4.880 | 4.889 | 4.898 | 4.908 | 4.917 | 4.926 | 1000 |
| 1010 | 4.926 | 4.935 | 4.944 | 4.954 | 4.963 | 4.972 | 4.981 | 4.990 | 5.000 | 5.009 | 5.018 | 1010 |
| 1020 | 5.018 | 5.027 | 5.037 | 5.046 | 5.055 | 5.065 | 5.074 | 5.083 | 5.092 | 5.102 | 5.111 | 1020 |
| 1030 | 5.111 | 5.120 | 5.130 | 5.139 | 5.148 | 5.158 | 5.167 | 5.176 | 5.186 | 5.195 | 5.205 | 1030 |
| 1040 | 5.205 | 5.214 | 5.223 | 5.233 | 5.242 | 5.252 | 5.261 | 5.270 | 5.280 | 5.289 | 5.299 | 1040 |
| 1050 | 5.299 | 5.308 | 5.318 | 5.327 | 5.337 | 5.346 | 5.356 | 5.365 | 5.375 | 5.384 | 5.394 | 1050 |
| 1060 | 5.394 | 5.403 | 5.413 | 5.422 | 5.432 | 5.441 | 5.451 | 5.460 | 5.470 | 5.480 | 5.489 | 1060 |
| 1070 | 5.489 | 5.499 | 5.508 | 5.518 | 5.528 | 5.537 | 5.547 | 5.556 | 5.566 | 5.576 | 5.585 | 1070 |
| 1080 | 5.585 | 5.595 | 5.605 | 5.614 | 5.624 | 5.634 | 5.643 | 5.653 | 5.663 | 5.672 | 5.682 | 1080 |
| 1090 | 5.682 | 5.692 | 5.702 | 5.711 | 5.721 | 5.731 | 5.740 | 5.750 | 5.760 | 5.770 | 5.780 | 1090 |
| 1100 | 5.780 | 5.789 | 5.799 | 5.809 | 5.819 | 5.828 | 5.838 | 5.848 | 5.858 | 5.868 | 5.878 | 1100 |
| 1110 | 5.878 | 5.887 | 5.897 | 5.907 | 5.917 | 5.927 | 5.937 | 5.947 | 5.956 | 5.966 | 5.976 | 1110 |
| 1120 | 5.976 | 5.986 | 5.996 | 6.006 | 6.016 | 6.026 | 6.036 | 6.046 | 6.055 | 6.065 | 6.075 | 1120 |
| 1130 | 6.075 | 6.085 | 6.095 | 6.105 | 6.115 | 6.125 | 6.135 | 6.145 | 6.155 | 6.165 | 6.175 | 1130 |
| 1140 | 6.175 | 6.185 | 6.195 | 6.205 | 6.215 | 6.225 | 6.235 | 6.245 | 6.256 | 6.266 | 6.276 | 1140 |
| 1150 | 6.276 | 6.286 | 6.296 | 6.306 | 6.316 | 6.326 | 6.336 | 6.346 | 6.356 | 6.367 | 6.377 | 1150 |
| 1160 | 6.377 | 6.387 | 6.397 | 6.407 | 6.417 | 6.427 | 6.438 | 6.448 | 6.458 | 6.468 | 6.478 | 1160 |
| 1170 | 6.478 | 6.488 | 6.499 | 6.509 | 6.519 | 6.529 | 6.539 | 6.550 | 6.560 | 6.570 | 6.580 | 1170 |
| 1180 | 6.580 | 6.591 | 6.601 | 6.611 | 6.621 | 6.632 | 6.642 | 6.652 | 6.663 | 6.673 | 6.683 | 1180 |
| 1190 | 6.683 | 6.693 | 6.704 | 6.714 | 6.724 | 6.735 | 6.745 | 6.755 | 6.766 | 6.776 | 6.786 | 1190 |
| 1200 | 6.786 | 6.797 | 6.807 | 6.818 | 6.828 | 6.838 | 6.849 | 6.859 | 6.869 | 6.880 | 6.890 | 1200 |
| 1210 | 6.890 | 6.901 | 6.911 | 6.922 | 6.932 | 6.942 | 6.953 | 6.963 | 6.974 | 6.984 | 6.995 | 1210 |
| 1220 | 6.995 | 7.005 | 7.016 | 7.026 | 7.037 | 7.047 | 7.058 | 7.068 | 7.079 | 7.089 | 7.100 | 1220 |
| 1230 | 7.100 | 7.110 | 7.121 | 7.131 | 7.142 | 7.152 | 7.163 | 7.173 | 7.184 | 7.194 | 7.205 | 1230 |
| 1240 | 7.205 | 7.216 | 7.226 | 7.237 | 7.247 | 7.258 | 7.269 | 7.279 | 7.290 | 7.300 | 7.311 | 1240 |
| 1250 | 7.311 | 7.322 | 7.332 | 7.343 | 7.353 | 7.364 | 7.375 | 7.385 | 7.396 | 7.407 | 7.417 | 1250 |
| 1260 | 7.417 | 7.428 | 7.439 | 7.449 | 7.460 | 7.471 | 7.482 | 7.492 | 7.503 | 7.514 | 7.524 | 1260 |
| 1270 | 7.524 | 7.535 | 7.546 | 7.557 | 7.567 | 7.578 | 7.589 | 7.600 | 7.610 | 7.621 | 7.632 | 1270 |
| 1280 | 7.632 | 7.643 | 7.653 | 7.664 | 7.675 | 7.686 | 7.697 | 7.707 | 7.718 | 7.729 | 7.740 | 1280 |
| 1290 | 7.740 | 7.751 | 7.761 | 7.772 | 7.783 | 7.794 | 7.805 | 7.816 | 7.827 | 7.837 | 7.848 | 1290 |
| 1300 | 7.848 | 7.859 | 7.870 | 7.881 | 7.892 | 7.903 | 7.914 | 7.924 | 7.935 | 7.946 | 7.957 | 1300 |
| 1310 | 7.957 | 7.968 | 7.979 | 7.990 | 8.001 | 8.012 | 8.023 | 8.034 | 8.045 | 8.056 | 8.066 | 1310 |
| 1320 | 8.066 | 8.077 | 8.088 | 8.099 | 8.110 | 8.121 | 8.132 | 8.143 | 8.154 | 8.165 | 8.176 | 1320 |
| 1330 | 8.176 | 8.187 | 8.198 | 8.209 | 8.220 | 8.231 | 8.242 | 8.253 | 8.264 | 8.275 | 8.286 | 1330 |
| 1340 | 8.286 | 8.298 | 8.309 | 8.320 | 8.331 | 8.342 | 8.353 | 8.364 | 8.375 | 8.386 | 8.397 | 1340 |
| 1350 | 8.397 | 8.408 | 8.419 | 8.430 | 8.441 | 8.453 | 8.464 | 8.475 | 8.486 | 8.497 | 8.508 | 1350 |
| 1360 | 8.508 | 8.519 | 8.530 | 8.542 | 8.553 | 8.564 | 8.575 | 8.586 | 8.597 | 8.608 | 8.620 | 1360 |
| 1370 | 8.620 | 8.631 | 8.642 | 8.653 | 8.664 | 8.675 | 8.687 | 8.698 | 8.709 | 8.720 | 8.731 | 1370 |
| 1380 | 8.731 | 8.743 | 8.754 | 8.765 | 8.776 | 8.787 | 8.799 | 8.810 | 8.821 | 8.832 | 8.844 | 1380 |
| 1390 | 8.844 | 8.855 | 8.866 | 8.877 | 8.889 | 8.900 | 8.911 | 8.922 | 8.934 | 8.945 | 8.956 | 1390 |
| 1400 | 8.956 | 8.967 | 8.979 | 8.990 | 9.001 | 9.013 | 9.024 | 9.035 | 9.047 | 9.058 | 9.069 | 1400 |
| 1410 | 9.069 | 9.080 | 9.092 | 9.103 | 9.114 | 9.126 | 9.137 | 9.148 | 9.160 | 9.171 | 9.182 | 1410 |
| 1420 | 9.182 | 9.194 | 9.205 | 9.216 | 9.228 | 9.239 | 9.251 | 9.262 | 9.273 | 9.285 | 9.296 | 1420 |
| 1430 | 9.296 | 9.307 | 9.319 | 9.330 | 9.342 | 9.353 | 9.364 | 9.376 | 9.387 | 9.398 | 9.410 | 1430 |
| 1440 | 9.410 | 9.421 | 9.433 | 9.444 | 9.456 | 9.467 | 9.478 | 9.490 | 9.501 | 9.513 | 9.524 | 1440 |
| 1450 | 9.524 | 9.536 | 9.547 | 9.558 | 9.570 | 9.581 | 9.593 | 9.604 | 9.616 | 9.627 | 9.639 | 1450 |
| 1460 | 9.639 | 9.650 | 9.662 | 9.673 | 9.684 | 9.696 | 9.707 | 9.719 | 9.730 | 9.742 | 9.753 | 1460 |
| 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 |
| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |

TABLE 3 Type B Thermocouple— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

B°C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| 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 |
| 1550 | 10.679 | 10.691 | 10.703 | 10.714 | 10.726 | 10.738 | 10.749 | 10.761 | 10.773 | 10.784 | 10.796 | 1550 |
| 1560 | 10.796 | 10.808 | 10.819 | 10.831 | 10.843 | 10.854 | 10.866 | 10.877 | 10.889 | 10.901 | 10.913 | 1560 |
| 1570 | 10.913 | 10.924 | 10.936 | 10.948 | 10.959 | 10.971 | 10.983 | 10.994 | 11.006 | 11.018 | 11.029 | 1570 |
| 1580 | 11.029 | 11.041 | 11.053 | 11.064 | 11.076 | 11.088 | 11.099 | 11.111 | 11.123 | 11.134 | 11.146 | 1580 |
| 1590 | 11.146 | 11.158 | 11.169 | 11.181 | 11.193 | 11.205 | 11.216 | 11.228 | 11.240 | 11.251 | 11.263 | 1590 |
| 1600 | 11.263 | 11.275 | 11.286 | 11.298 | 11.310 | 11.321 | 11.333 | 11.345 | 11.357 | 11.368 | 11.380 | 1600 |
| 1610 | 11.380 | 11.392 | 11.403 | 11.415 | 11.427 | 11.438 | 11.450 | 11.462 | 11.474 | 11.485 | 11.497 | 1610 |
| 1620 | 11.497 | 11.509 | 11.520 | 11.532 | 11.544 | 11.555 | 11.567 | 11.579 | 11.591 | 11.602 | 11.614 | 1620 |
| 1630 | 11.614 | 11.626 | 11.637 | 11.649 | 11.661 | 11.673 | 11.684 | 11.696 | 11.708 | 11.719 | 11.731 | 1630 |
| 1640 | 11.731 | 11.743 | 11.754 | 11.766 | 11.778 | 11.790 | 11.801 | 11.813 | 11.825 | 11.836 | 11.848 | 1640 |
| 1650 | 11.848 | 11.860 | 11.871 | 11.883 | 11.895 | 11.907 | 11.918 | 11.930 | 11.942 | 11.953 | 11.965 | 1650 |
| 1660 | 11.965 | 11.977 | 11.988 | 12.000 | 12.012 | 12.024 | 12.035 | 12.047 | 12.059 | 12.070 | 12.082 | 1660 |
| 1670 | 12.082 | 12.094 | 12.105 | 12.117 | 12.129 | 12.141 | 12.152 | 12.164 | 12.176 | 12.187 | 12.199 | 1670 |
| 1680 | 12.199 | 12.211 | 12.222 | 12.234 | 12.246 | 12.257 | 12.269 | 12.281 | 12.292 | 12.304 | 12.316 | 1680 |
| 1690 | 12.316 | 12.327 | 12.339 | 12.351 | 12.363 | 12.374 | 12.386 | 12.398 | 12.409 | 12.421 | 12.433 | 1690 |
| 1700 | 12.433 | 12.444 | 12.456 | 12.468 | 12.479 | 12.491 | 12.503 | 12.514 | 12.526 | 12.538 | 12.549 | 1700 |
| 1710 | 12.549 | 12.561 | 12.572 | 12.584 | 12.596 | 12.607 | 12.619 | 12.631 | 12.642 | 12.654 | 12.666 | 1710 |
| 1720 | 12.666 | 12.677 | 12.689 | 12.701 | 12.712 | 12.724 | 12.736 | 12.747 | 12.759 | 12.770 | 12.782 | 1720 |
| 1730 | 12.782 | 12.794 | 12.805 | 12.817 | 12.829 | 12.840 | 12.852 | 12.863 | 12.875 | 12.887 | 12.898 | 1730 |
| 1740 | 12.898 | 12.910 | 12.921 | 12.933 | 12.945 | 12.956 | 12.968 | 12.980 | 12.991 | 13.003 | 13.014 | 1740 |
| 1750 | 13.014 | 13.026 | 13.037 | 13.049 | 13.061 | 13.072 | 13.084 | 13.095 | 13.107 | 13.119 | 13.130 | 1750 |
| 1760 | 13.130 | 13.142 | 13.153 | 13.165 | 13.176 | 13.188 | 13.200 | 13.211 | 13.223 | 13.234 | 13.246 | 1760 |
| 1770 | 13.246 | 13.257 | 13.269 | 13.280 | 13.292 | 13.304 | 13.315 | 13.327 | 13.338 | 13.350 | 13.361 | 1770 |
| 1780 | 13.361 | 13.373 | 13.384 | 13.396 | 13.407 | 13.419 | 13.430 | 13.442 | 13.453 | 13.465 | 13.476 | 1780 |
| 1790 | 13.476 | 13.488 | 13.499 | 13.511 | 13.522 | 13.534 | 13.545 | 13.557 | 13.568 | 13.580 | 13.591 | 1790 |
| 1800 | 13.591 | 13.603 | 13.614 | 13.626 | 13.637 | 13.649 | 13.660 | 13.672 | 13.683 | 13.694 | 13.706 | 1800 |
| 1810 | 13.706 | 13.717 | 13.729 | 13.740 | 13.752 | 13.763 | 13.775 | 13.786 | 13.797 | 13.809 | 13.820 | 1810 |
| 1820 | 13.820 | | | | | | | | | | | 1820 |

°C 0 1 2 3 4 5 6 7 8 9 10 °C