

Tabelle für PTC-Fühler

| Umgebungstemperatur | | Temperaturkoeffizient (%/K) | KTY81-121 Widerstand (Ohm) | | | Temperatur Brauchwassertemperatur |
|---------------------|------|--------------------------------|-------------------------------|---------|------|--------------------------------------|
| (°C) | (°F) | | Min | Typisch | Max | |
| -55 | -67 | 0,99 | 471 | 485 | 500 | ±3,02 |
| -50 | -58 | 0,98 | 495 | 510 | 524 | ±2,92 |
| -40 | -40 | 0,96 | 547 | 562 | 576 | ±2,74 |
| -30 | -22 | 0,93 | 603 | 617 | 632 | ±2,55 |
| -20 | -4 | 0,91 | 662 | 677 | 691 | ±2,35 |
| -10 | 14 | 0,88 | 726 | 740 | 754 | ±2,14 |
| 0 | 32 | 0,85 | 794 | 807 | 820 | ±1,91 |
| 10 | 50 | 0,83 | 865 | 877 | 889 | ±1,67 |
| 20 | 68 | 0,80 | 941 | 951 | 962 | ±1,41 |
| 25 | 77 | 0,79 | 980 | 990 | 1000 | ±1,27 |
| 30 | 86 | 0,78 | 1018 | 1029 | 1041 | ±1,39 |
| 40 | 104 | 0,75 | 1097 | 1111 | 1125 | ±1,64 |
| 50 | 122 | 0,73 | 1180 | 1196 | 1213 | ±1,91 |
| 60 | 140 | 0,71 | 1266 | 1286 | 1305 | ±2,19 |
| 70 | 158 | 0,69 | 1355 | 1378 | 1402 | ±2,49 |
| 80 | 176 | 0,67 | 1447 | 1475 | 1502 | ±2,80 |
| 90 | 194 | 0,65 | 1543 | 1575 | 1607 | ±3,12 |
| 100 | 212 | 0,63 | 1642 | 1679 | 1716 | ±3,46 |
| 110 | 230 | 0,61 | 1745 | 1786 | 1828 | ±3,83 |
| 120 | 248 | 0,58 | 1849 | 1896 | 1943 | ±4,33 |
| 125 | 257 | 0,55 | 1900 | 1950 | 2000 | ±4,66 |
| 130 | 266 | 0,52 | 1950 | 2003 | 2056 | ±5,07 |
| 140 | 284 | 0,45 | 2044 | 2103 | 2162 | ±6,28 |
| 150 | 302 | 0,35 | 2124 | 2189 | 2254 | ±8,55 |

Tabelle für NTC-Fühler

| Umgebungstemperatur (°C) | Widerstand (KOhm) | | | | | |
|-----------------------------|-------------------|--------|--------|--------|--------|--------|
| | 102AT | 202AT | 502AT | 103AT* | 203AT | 503AT |
| -50 | 24,46 | 55,66 | 154,60 | 329,50 | 1253 | 3168 |
| -45 | 18,68 | 42,17 | 116,50 | 247,70 | 890,50 | 2257 |
| -40 | 14,43 | 32,34 | 88,91 | 188,50 | 642,00 | 1632 |
| -35 | 11,23 | 26,96 | 68,19 | 144,10 | 465,80 | 1186 |
| -30 | 8,834 | 19,48 | 52,87 | 111,30 | 342,50 | 872,80 |
| -25 | 6,998 | 15,29 | 41,21 | 86,43 | 253,60 | 646,30 |
| -20 | 5,594 | 12,11 | 32,44 | 47,77 | 190,00 | 484,30 |
| -15 | 4,501 | 9,655 | 25,66 | 53,41 | 143,20 | 364,60 |
| -10 | 3,651 | 7,763 | 20,48 | 42,47 | 109,10 | 277,50 |
| -5 | 2,979 | 6,277 | 16,43 | 33,90 | 83,75 | 212,30 |
| 0 | 2,449 | 5,114 | 13,29 | 27,28 | 64,88 | 164,00 |
| 5 | 2,024 | 4,188 | 10,80 | 22,05 | 50,53 | 127,50 |
| 10 | 1,684 | 3,454 | 8,840 | 17,96 | 39,71 | 99,99 |
| 15 | 1,408 | 2,862 | 7,267 | 14,69 | 31,36 | 78,77 |
| 20 | 1,184 | 2,387 | 6,013 | 12,09 | 24,96 | 62,56 |
| 25 | 1,000 | 2,000 | 5,000 | 10,00 | 20,00 | 50,00 |
| 30 | 0,8486 | 1,684 | 4,179 | 8,313 | 16,12 | 40,20 |
| 35 | 0,7229 | 1,424 | 3,508 | 6,940 | 13,06 | 32,48 |
| 40 | 0,6189 | 1,211 | 2,961 | 5,827 | 10,65 | 26,43 |
| 45 | 0,5316 | 1,033 | 2,509 | 4,911 | 8,716 | 21,59 |
| 50 | 0,4587 | 0,8854 | 2,137 | 4,160 | 7,181 | 17,75 |
| 55 | 0,3949 | 0,7620 | 1,826 | 3,536 | 5,941 | 14,64 |
| 60 | 0,3446 | 0,6587 | 1,567 | 3,020 | 4,943 | 12,15 |
| 65 | 0,3000 | 0,5713 | 1,350 | 2,588 | 4,127 | 10,13 |
| 70 | 0,2622 | 0,4975 | 1,168 | 2,228 | 3,464 | 8,482 |
| 75 | 0,2285 | 0,4343 | 1,014 | 1,924 | 2,916 | 7,129 |
| 80 | 0,1999 | 0,3807 | 0,8835 | 1,668 | 2,468 | 6,022 |
| 85 | 0,1751 | 0,3346 | 0,7722 | 1,451 | 2,096 | 5,105 |
| 90 | 0,1536 | 0,2949 | 0,6771 | 1,266 | 1,788 | 4,345 |
| 95 | - | - | 0,5961 | 1,108 | 1,530 | 3,712 |
| 100 | - | - | 0,5265 | 0,9731 | 1,315 | 3,185 |
| 105 | - | - | 0,4654 | 0,8572 | 1,134 | 2,741 |
| 110 | - | - | 0,4128 | 0,7576 | 0,9807 | 2,369 |

*Standard NTC Fühler von Eliwell

Tabelle für NTC-Fühler - erweiterter Bereich

| Umgebungstemperatur (°C) | Widerstand (KOhm) | | |
|-----------------------------|-------------------|---------|---------|
| | Min | Typisch | Max |
| -40 | 321,654 | 333,562 | 345,877 |
| -35 | 233,032 | 241,072 | 249,364 |
| -30 | 170,611 | 176,082 | 181,710 |
| -25 | 126,176 | 129,925 | 133,773 |
| -20 | 94,221 | 96,807 | 99,454 |
| -15 | 71,015 | 72,809 | 74,640 |
| -10 | 54,004 | 55,253 | 56,525 |
| -5 | 41,419 | 42,292 | 43,179 |
| 0 | 32,028 | 32,640 | 33,260 |
| 5 | 24,962 | 25,391 | 25,824 |
| 10 | 19,601 | 19,902 | 20,205 |
| 15 | 15,504 | 15,713 | 15,924 |
| 20 | 12,348 | 12,493 | 12,639 |
| 25 | 9,900 | 10,000 | 10,100 |
| 30 | 7,962 | 8,055 | 8,150 |
| 35 | 6,444 | 6,530 | 6,616 |
| 40 | 5,247 | 5,325 | 5,403 |
| 45 | 4,296 | 4,367 | 4,438 |
| 50 | 3,537 | 3,601 | 3,665 |
| 55 | 2,928 | 2,985 | 3,042 |
| 60 | 2,436 | 2,487 | 2,538 |
| 65 | 2,037 | 2,082 | 2,127 |
| 70 | 1,711 | 1,751 | 1,792 |
| 75 | 1,444 | 1,480 | 1,516 |
| 80 | 1,224 | 1,256 | 1,288 |
| 85 | 1,042 | 1,070 | 1,099 |
| 90 | 0,890 | 0,916 | 0,941 |
| 95 | 0,764 | 0,786 | 0,810 |
| 100 | 0,658 | 0,678 | 0,699 |
| 105 | 0,569 | 0,587 | 0,605 |
| 110 | 0,493 | 0,510 | 0,526 |
| 115 | 0,429 | 0,444 | 0,459 |
| 120 | 0,375 | 0,388 | 0,402 |
| 125 | 0,328 | 0,340 | 0,353 |
| 130 | 0,289 | 0,299 | 0,310 |
| 135 | 0,254 | 0,264 | 0,274 |
| 140 | 0,224 | 0,234 | 0,243 |
| 145 | 0,199 | 0,207 | 0,215 |
| 150 | 0,177 | 0,184 | 0,192 |

Tabelle Temperaturfühler

Tabelle für Pt100-Fühler

| Umgebungs-temperatur | Widerstand |
|----------------------|------------|----------------------|------------|----------------------|------------|----------------------|------------|----------------------|------------|
| (°C) | (Ohm) |
| -200 | 18,52 | 20 | 107,79 | 230 | 186,84 | 440 | 260,78 | 650 | 329,64 |
| -190 | 22,83 | 30 | 111,67 | 240 | 190,47 | 450 | 264,18 | 660 | 332,79 |
| -180 | 27,10 | 40 | 115,54 | 250 | 194,10 | 460 | 267,56 | 670 | 335,93 |
| -170 | 31,34 | 50 | 119,40 | 260 | 197,71 | 470 | 270,93 | 680 | 339,06 |
| -160 | 35,54 | 60 | 123,24 | 270 | 201,31 | 480 | 274,29 | 690 | 342,18 |
| -150 | 39,72 | 70 | 127,08 | 280 | 204,90 | 490 | 277,64 | 700 | 345,28 |
| -140 | 43,88 | 80 | 130,90 | 290 | 208,48 | 500 | 280,98 | 710 | 348,38 |
| -130 | 48,00 | 90 | 134,71 | 300 | 212,05 | 510 | 284,30 | 720 | 351,46 |
| -120 | 52,11 | 100 | 138,51 | 310 | 215,61 | 520 | 287,62 | 730 | 354,53 |
| -110 | 56,19 | 110 | 142,29 | 320 | 219,15 | 530 | 290,92 | 740 | 357,59 |
| -100 | 60,26 | 120 | 146,07 | 330 | 222,68 | 540 | 294,21 | 750 | 360,64 |
| -90 | 64,30 | 130 | 149,83 | 340 | 226,21 | 550 | 297,49 | 760 | 363,67 |
| -80 | 68,33 | 140 | 153,58 | 350 | 229,72 | 560 | 300,75 | 770 | 366,70 |
| -70 | 72,33 | 150 | 157,33 | 360 | 233,21 | 570 | 304,01 | 780 | 369,71 |
| -60 | 76,33 | 160 | 161,05 | 370 | 236,70 | 580 | 307,25 | 790 | 372,71 |
| -50 | 80,31 | 170 | 164,77 | 380 | 240,18 | 590 | 310,49 | 800 | 375,70 |
| -40 | 84,27 | 180 | 168,48 | 390 | 243,64 | 600 | 313,71 | 810 | 378,68 |
| -30 | 88,22 | 190 | 172,17 | 400 | 247,09 | 610 | 316,92 | 820 | 381,65 |
| -20 | 92,16 | 200 | 175,86 | 410 | 250,53 | 620 | 320,12 | 830 | 384,60 |
| -10 | 96,09 | 210 | 179,53 | 420 | 253,96 | 630 | 323,30 | 840 | 387,55 |
| 0 | 100,00 | 220 | 183,19 | 430 | 257,38 | 640 | 326,48 | 850 | 390,48 |
| 10 | 103,90 | | | | | | | | |

Tabelle für Pt1000-Fühler

| Umgebungs-temperatur | Widerstand |
|----------------------|------------|----------------------|------------|----------------------|------------|----------------------|------------|----------------------|------------|
| (°C) | (Ohm) |
| -200 | 185,281 | 20 | 1077,936 | 230 | 1868,465 | 440 | 2608,235 | 650 | 3297,246 |
| -190 | 228,327 | 30 | 1116,731 | 240 | 1904,843 | 450 | 2642,196 | 660 | 3328,790 |
| -180 | 271,029 | 40 | 1155,411 | 250 | 1941,106 | 460 | 2676,042 | 670 | 3360,219 |
| -170 | 313,408 | 50 | 1193,976 | 260 | 1977,254 | 470 | 2709,773 | 680 | 3391,533 |
| -160 | 355,484 | 60 | 1232,426 | 270 | 2013,287 | 480 | 2743,389 | 690 | 3422,731 |
| -150 | 397,277 | 70 | 1270,961 | 280 | 2049,205 | 490 | 2776,889 | 700 | 3453,815 |
| -140 | 432,903 | 80 | 1308,981 | 290 | 2085,007 | 500 | 2810,275 | 710 | 3484,783 |
| -130 | 480,081 | 90 | 1347,085 | 300 | 2120,695 | 510 | 2843,545 | 720 | 3515,637 |
| -120 | 521,127 | 100 | 1385,075 | 310 | 2156,267 | 520 | 2876,701 | 730 | 3546,375 |
| -110 | 561,954 | 110 | 1422,949 | 320 | 2191,725 | 530 | 2909,741 | 740 | 3576,998 |
| -100 | 602,578 | 120 | 1460,709 | 330 | 2227,067 | 540 | 2942,666 | 750 | 3607,506 |
| -90 | 643,012 | 130 | 1498,353 | 340 | 2262,294 | 550 | 2975,476 | 760 | 3637,899 |
| -80 | 683,267 | 140 | 1535,882 | 350 | 2297,406 | 560 | 3008,171 | 770 | 3668,177 |
| -70 | 723,355 | 150 | 1573,296 | 360 | 2332,403 | 570 | 3040,751 | 780 | 3698,340 |
| -60 | 763,286 | 160 | 1610,595 | 370 | 2367,285 | 580 | 3073,216 | 790 | 3728,387 |
| -50 | 903,068 | 170 | 1647,779 | 380 | 2402,052 | 590 | 3105,565 | 800 | 3758,320 |
| -40 | 842,71 | 180 | 1684,848 | 390 | 2436,703 | 600 | 3137,800 | 810 | 3788,137 |
| -30 | 882,218 | 190 | 1721,801 | 400 | 2471,240 | 610 | 3169,919 | 820 | 3917,840 |
| -20 | 921,6 | 200 | 1758,640 | 410 | 2505,661 | 620 | 3201,924 | 830 | 3847,427 |
| -10 | 960,859 | 210 | 1795,363 | 420 | 2539,968 | 630 | 3233,813 | 840 | 3876,899 |
| 0 | 1000 | 220 | 1831,972 | 430 | 2574,159 | 640 | 3265,587 | 850 | 3906,256 |
| 10 | 1039,025 | | | | | | | | |

Tabelle für TCJ-Fühler

| Rück | 0°C | -10°C | -20°C | -30°C | -40°C | -50°C | -60°C | -70°C | -80°C | -90°C |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| -200°C | -7,890 | -8,095 | - | - | - | - | - | - | - | - |
| -100°C | -4,633 | -5,037 | -5,426 | -5,801 | -6,159 | -6,500 | -6,821 | -7,123 | -7,403 | -7,659 |
| 0°C | 0,000 | -0,501 | -0,995 | -1,482 | -1,961 | -2,431 | -2,893 | -3,344 | -3,786 | -4,215 |
| | 10°C | 20°C | 30°C | 40°C | 50°C | 60°C | 70°C | 80°C | 90°C | 100°C |
| 0°C | 0,000 | 0,507 | 1,019 | 1,537 | 2,059 | 2,585 | 3,116 | 3,650 | 4,187 | 4,726 |
| 100°C | 5,269 | 5,814 | 6,360 | 6,909 | 7,459 | 8,010 | 8,562 | 9,115 | 9,669 | 10,224 |
| 200°C | 10,779 | 11,334 | 11,889 | 12,445 | 13,000 | 13,555 | 14,110 | 14,665 | 15,219 | 15,773 |
| 300°C | 16,327 | 16,881 | 17,434 | 17,986 | 18,538 | 19,090 | 19,642 | 20,194 | 20,745 | 21,297 |
| 400°C | 21,848 | 22,400 | 22,952 | 23,504 | 24,059 | 24,610 | 25,164 | 25,720 | 26,276 | 26,834 |
| 500°C | 27,393 | 27,953 | 28,516 | 29,080 | 29,647 | 30,216 | 30,788 | 31,362 | 31,939 | 32,519 |
| 600°C | 33,102 | 33,689 | 34,279 | 34,873 | 35,470 | 36,071 | 36,675 | 37,284 | 37,896 | 38,512 |
| 700°C | 39,132 | 39,755 | 40,382 | 41,012 | 41,645 | 42,281 | 42,919 | 43,559 | 44,203 | 44,848 |
| 800°C | 45,494 | 46,141 | 46,786 | 47,431 | 48,074 | 48,715 | 49,353 | 49,989 | 50,622 | 51,251 |
| 900°C | 51,877 | 52,500 | 53,119 | 53,735 | 54,347 | 54,956 | 55,561 | 56,164 | 56,763 | 57,360 |
| 1000°C | 57,953 | 58,545 | 59,134 | 59,721 | 60,307 | 60,890 | 61,473 | 62,054 | 62,634 | 63,214 |
| 1100°C | 63,792 | 64,370 | 64,948 | 65,525 | 66,102 | 66,679 | 67,255 | 67,831 | 68,406 | 68,980 |
| 1200°C | 69,553 | - | - | - | - | - | - | - | - | - |

Tabelle für TCK-Fühler

| Rück | 0°C | -10°C | -20°C | -30°C | -40°C | -50°C | -60°C | -70°C | -80°C | -90°C |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| -200°C | -5,730 | -6,035 | -6,158 | -6,262 | -6,344 | -6,404 | -6,441 | -6,458 | - | - |
| -100°C | -3,554 | -3,852 | -4,138 | -4,411 | -4,669 | -4,913 | -5,141 | -5,354 | -5,550 | -5,730 |
| 0°C | 0,000 | -0,392 | -0,778 | -1,156 | -1,527 | -1,889 | -2,243 | -2,587 | -2,920 | -3,243 |
| | 10°C | 20°C | 30°C | 40°C | 50°C | 60°C | 70°C | 80°C | 90°C | 100°C |
| 0°C | 0,000 | 0,397 | 0,798 | 1,203 | 1,612 | 2,023 | 2,436 | 2,851 | 3,267 | 3,682 |
| 100°C | 4,096 | 4,509 | 4,920 | 5,328 | 5,735 | 6,138 | 6,540 | 6,941 | 7,340 | 7,739 |
| 200°C | 8,138 | 8,539 | 8,940 | 9,343 | 9,747 | 10,153 | 10,561 | 10,971 | 11,382 | 11,795 |
| 300°C | 12,209 | 12,624 | 13,040 | 13,457 | 13,874 | 14,293 | 14,713 | 15,133 | 15,554 | 15,975 |
| 400°C | 16,397 | 16,820 | 17,243 | 17,667 | 18,091 | 18,516 | 18,941 | 19,366 | 19,792 | 20,218 |
| 500°C | 20,644 | 21,071 | 21,497 | 21,924 | 22,350 | 22,776 | 23,203 | 23,629 | 24,055 | 24,480 |
| 600°C | 24,905 | 25,330 | 25,755 | 26,179 | 26,602 | 27,025 | 27,447 | 27,869 | 28,289 | 28,710 |
| 700°C | 29,129 | 29,548 | 29,965 | 30,382 | 30,798 | 31,213 | 31,628 | 32,041 | 32,453 | 32,865 |
| 800°C | 33,275 | 33,685 | 34,093 | 34,501 | 34,908 | 35,313 | 35,718 | 36,121 | 36,524 | 36,925 |
| 900°C | 37,326 | 37,725 | 38,124 | 38,522 | 38,918 | 39,314 | 39,708 | 40,101 | 40,490 | 40,885 |
| 1000°C | 41,276 | 41,665 | 42,053 | 42,440 | 42,826 | 43,211 | 43,595 | 43,978 | 44,359 | 44,740 |
| 1100°C | 45,119 | 45,497 | 45,873 | 46,249 | 46,623 | 46,995 | 47,367 | 47,737 | 48,105 | 48,473 |
| 1200°C | 48,838 | 49,202 | 49,565 | 49,926 | 50,286 | 50,644 | 51,000 | 51,355 | 51,708 | 52,060 |
| 1300°C | 52,410 | 52,759 | 53,106 | 53,451 | 53,795 | 54,138 | 54,479 | 54,819 | - | - |