

ニッケル・クロム一種

丸線の導体抵抗および重量

体積抵抗率=108±6 $\mu\Omega \text{ cm}$ 密度=8.41 g/cm³ (20°C)

温度による電気抵抗の標準変化率

| 温 度 (°C) | 20 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1.000 | 1.100 | 1.200 |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 係 数 | 1.000 | 1.004 | 1.009 | 1.016 | 1.021 | 1.019 | 1.011 | 1.003 | 1.002 | 1.006 | 1.015 | 1.027 | — |

| 線 径 mm | 線 許 容 差 mm | 断 面 積 mm ² | 長 さ m/kg | 重 量 g/m | 導 体 抵 抗 許 容 差 % | 導 体 抵 抗 Ω / m | | |
|--------|------------|-----------------------|----------|---------|-----------------|---------------|---------|---------|
| | | | | | | 最 大 | 標 準 | 最 小 |
| 12.0 | ± 0.12 | 113.1 | 1.052 | 951 | ± 5.0 | 0.01003 | 0.00955 | 0.00908 |
| 11.0 | ± 0.11 | 95.03 | 1.252 | 799 | " | 0.01194 | 0.01136 | 0.01080 |
| 10.0 | " | 78.54 | 1.513 | 661 | " | 0.01444 | 0.01375 | 0.01306 |
| 9.0 | ± 0.10 | 63.62 | 1.869 | 535 | " | 0.01782 | 0.01698 | 0.01612 |
| 8.0 | ± 0.09 | 50.27 | 2.36 | 423 | " | 0.0225 | 0.0215 | 0.0205 |
| 7.0 | ± 0.08 | 38.48 | 3.09 | 324 | " | 0.0294 | 0.0281 | 0.0267 |
| 6.5 | " | 33.18 | 3.58 | 279 | " | 0.0341 | 0.0326 | 0.0310 |
| 6.0 | " | 28.27 | 4.20 | 238 | " | 0.0401 | 0.0382 | 0.0363 |
| 5.5 | " | 23.76 | 5.01 | 199.8 | " | 0.0477 | 0.0455 | 0.0432 |
| 5.0 | ± 0.07 | 19.64 | 6.05 | 165.2 | " | 0.0577 | 0.0550 | 0.0523 |
| 4.5 | " | 15.90 | 7.48 | 133.7 | " | 0.0713 | 0.0679 | 0.0646 |
| 4.0 | ± 0.06 | 12.57 | 9.46 | 105.7 | " | 0.0902 | 0.0859 | 0.0817 |
| 3.5 | " | 9.621 | 12.36 | 80.9 | " | 0.1179 | 0.1123 | 0.1067 |
| 3.2 | ± 0.05 | 8.042 | 14.79 | 67.6 | " | 0.1410 | 0.1343 | 0.1276 |
| 2.9 | " | 6.605 | 18.02 | 55.5 | " | 0.1717 | 0.1635 | 0.1553 |
| 2.6 | " | 5.309 | 22.4 | 44.6 | " | 0.213 | 0.203 | 0.1932 |
| 2.3 | " | 4.155 | 28.7 | 34.9 | " | 0.272 | 0.260 | 0.247 |
| 2.0 | ± 0.04 | 3.142 | 37.9 | 26.4 | " | 0.361 | 0.344 | 0.327 |
| 1.8 | " | 2.545 | 46.7 | 21.4 | " | 0.445 | 0.424 | 0.404 |
| 1.6 | ± 0.035 | 2.011 | 59.1 | 16.91 | " | 0.563 | 0.537 | 0.511 |
| 1.5 | " | 1.767 | 67.3 | 14.86 | " | 0.641 | 0.611 | 0.581 |
| 1.4 | " | 1.539 | 77.3 | 12.94 | ± 6.0 | 0.750 | 0.702 | 0.667 |
| 1.3 | ± 0.03 | 1.327 | 89.6 | 11.16 | " | 0.862 | 0.814 | 0.765 |
| 1.2 | " | 1.131 | 105.2 | 9.51 | " | 1.012 | 0.955 | 0.898 |
| 1.1 | " | 0.9503 | 125.2 | 7.99 | " | 1.205 | 1.136 | 1.069 |
| 1.0 | ± 0.025 | 0.7854 | 151.3 | 6.61 | " | 1.458 | 1.375 | 1.293 |
| 0.9 | " | 0.6362 | 186.9 | 5.35 | " | 1.799 | 1.698 | 1.595 |
| 0.85 | " | 0.5675 | 210 | 4.77 | " | 2.01 | 1.903 | 1.789 |
| 0.80 | " | 0.5027 | 236 | 4.23 | " | 2.27 | 2.15 | 2.02 |
| 0.75 | " | 0.4418 | 269 | 3.72 | " | 2.58 | 2.44 | 2.30 |
| | | | m/g | g/km | | | | |
| 0.70 | ± 0.02 | 0.3848 | 0.309 | 3240 | " | 2.97 | 2.81 | 2.64 |
| 0.65 | " | 0.3318 | 0.358 | 2790 | ± 7.0 | 3.48 | 3.25 | 3.03 |
| 0.60 | " | 0.2827 | 0.420 | 2380 | " | 4.08 | 3.82 | 3.56 |
| 0.55 | " | 0.2376 | 0.501 | 1998 | " | 4.86 | 4.55 | 4.23 |
| 0.50 | ± 0.015 | 0.1964 | 0.605 | 1652 | " | 5.88 | 5.50 | 5.12 |
| 0.45 | " | 0.1590 | 0.748 | 1337 | " | 7.26 | 6.79 | 6.32 |
| 0.40 | " | 0.1257 | 0.946 | 1057 | " | 9.19 | 8.59 | 8.00 |
| 0.35 | " | 0.09621 | 1.236 | 809 | ± 8.0 | 12.13 | 11.23 | 10.33 |
| 0.32 | " | 0.08042 | 1.479 | 676 | " | 14.50 | 13.43 | 12.36 |
| 0.29 | " | 0.06605 | 1.802 | 555 | " | 17.66 | 16.35 | 15.04 |
| 0.26 | ± 0.01 | 0.05309 | 2.24 | 446 | " | 21.9 | 20.3 | 18.71 |
| 0.23 | " | 0.04155 | 2.87 | 349 | " | 28.0 | 26.0 | 24.0 |
| 0.20 | " | 0.03142 | 3.79 | 264 | " | 37.1 | 34.4 | 31.7 |
| 0.18 | " | 0.02545 | 4.67 | 214 | ± 9.0 | 46.2 | 42.4 | 38.7 |
| 0.16 | ± 0.008 | 0.02011 | 5.91 | 169.1 | " | 58.5 | 53.7 | 48.9 |
| 0.15 | " | 0.01767 | 6.73 | 148.6 | " | 66.2 | 61.1 | 55.7 |
| 0.14 | " | 0.01539 | 7.73 | 129.4 | " | 76.5 | 70.2 | 63.9 |
| 0.13 | " | 0.01327 | 8.96 | 111.6 | " | 88.6 | 81.4 | 74.1 |
| 0.12 | ± 0.006 | 0.01131 | 10.52 | 95.1 | " | 104.1 | 95.5 | 86.9 |
| 0.11 | " | 0.009503 | 12.52 | 79.9 | ± 10.0 | 125.1 | 113.6 | 103.5 |
| 0.10 | " | 0.007854 | 15.13 | 66.1 | " | 151.3 | 137.5 | 125.1 |
| 0.09 | " | 0.006362 | 18.69 | 53.5 | " | 186.7 | 169.8 | 154.4 |
| 0.08 | " | 0.005027 | 23.6 | 42.3 | ± 11.0 | 238. | 215 | 191.2 |
| 0.07 | ± 0.005 | 0.003848 | 30.9 | 32.4 | " | 311. | 281 | 251 |
| 0.06 | ± 0.004 | 0.002827 | 42.0 | 23.8 | " | 424. | 382 | 340 |
| 0.05 | " | 0.001364 | 60.5 | 16.52 | ± 12.0 | 615 | 550 | 484 |