

*Table of Resistance of Metals and Alloys at 60° Centigrade, from Dr. Mathiessen's experiments.**

| NAMES OF METALS. | Resistance of a wire one metre long and one millimetre in diameter. Ohms. | Resistance of a wire one metre long, weighing one gramme Ohms. | Resistance of a wire 1 foot long, 1/1000th of an inch in diameter. Ohms. | Resistance of a wire one foot long, weighing one grain. Ohms. | Approximate percentage of variation in resistance for 1°C of temp. at 20°C. |
|---|--|---|---|--|---|
| Silver annealed..... | 0.01937 | 0.1544 | 9.151 | 0.2214 | 0.377 |
| " hard drawn | 0.02103 | 0.1680 | 9.936 | 0.2415 | |
| Copper annealed ... | 0.02057 | 0.1440 | 9.718 | 0.2064 | 0.388 |
| " hard drawn | 0.02104 | 0.1469 | 9.940 | 0.2106 | |
| Gold annealed | 0.02650 | 0.4080 | 12.52 | 0.5849 | 0.365 |
| " hard drawn ... | 0.02697 | 0.4150 | 12.74 | 0.5950 | |
| Zinc pressed | 0.07244 | 0.4067 | 34.22 | 0.5831 | 0.365 |
| Platinum annealed | 0.1166 | 1.96 | 55.09 | 2.810 | |
| Iron annealed | 0.1251 | 0.7654 | 59.10 | 1.097 | |
| Tin pressed | 0.1701 | 0.9738 | 80.36 | 1.396 | 0.365 |
| Lead pressed..... | 0.2526 | 2.257 | 119.39 | 3.236 | 0.387 |
| Mercury liquid | 1.2247 | 13.06 | 578.6 | 18.72 | 0.072 |
| Platinum silver ... alloy, hard or annealed, 2 parts silver, 1 platinum | 0.3140 | 2.959 | 148.35 | 4.243 | 0.031 |
| German silver hard or annealed | 0.2695 | 1.85 | 127.32 | 2.652 | 0.044 |
| Gold-silver alloy hard or annealed, 2 parts gold, 1 silver | 1.1399 | 1.668 | 66.10 | 2.391 | 0.065 |

*This table gives the resistances of *chemically pure* metals; the resistances of commercial metals are always higher. It has been extracted from a table in "Electricity and Magnetism," by Prof. Fleeming Jenkin, F.R.S.S., etc. The variation in resistance due to temperature are from "Rough Notes of a Course of Lectures on apparatus used in Military Telegraphy and Firing Mines." S.M.E., Chatham.