

Kanthal Wire Resistance (ohm) Chart

| Kanthal A-1 (mm) | AWG | Resistance (Ω /m) | 1cm (Ω /m) | 1.5cm (Ω /m) | 2cm (Ω /m) | 2.5cm (Ω /m) | 3cm (Ω /m) | 3.5cm (Ω /m) | 4cm (Ω /m) | 4.5cm (Ω /m) | 5cm (Ω /m) |
|------------------|------------|---------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
| 0.15 | 34 = 0.16 | 81.00 | 0.81 | 1.22 | 1.62 | 2.03 | 2.43 | 2.84 | 3.24 | 3.65 | 4.05 |
| 0.17 | 33 = 0.18 | 63.01 | 0.63 | 0.95 | 1.26 | 1.58 | 1.89 | 2.21 | 2.52 | 2.84 | 3.15 |
| 0.20 | 32 = 0.202 | 43.60 | 0.44 | 0.65 | 0.87 | 1.09 | 1.31 | 1.53 | 1.74 | 1.96 | 2.18 |
| 0.23 | 31 = 0.227 | 32.85 | 0.33 | 0.49 | 0.66 | 0.82 | 0.99 | 1.15 | 1.31 | 1.48 | 1.64 |
| 0.25 | 30 = 0.255 | 29.30 | 0.29 | 0.44 | 0.59 | 0.73 | 0.88 | 1.03 | 1.17 | 1.32 | 1.47 |
| 0.27 | | 25.53 | 0.26 | 0.38 | 0.51 | 0.64 | 0.77 | 0.89 | 1.02 | 1.15 | 1.28 |
| 0.28 | 29 = 0.286 | 22.69 | 0.23 | 0.34 | 0.45 | 0.57 | 0.68 | 0.79 | 0.91 | 1.02 | 1.13 |
| 0.30 | | 20.11 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.70 | 0.80 | 0.90 | 1.01 |
| 0.31 | | 18.85 | 0.19 | 0.28 | 0.38 | 0.47 | 0.57 | 0.66 | 0.75 | 0.85 | 0.94 |
| 0.32 | 28 = 0.321 | 17.35 | 0.17 | 0.26 | 0.35 | 0.43 | 0.52 | 0.61 | 0.69 | 0.78 | 0.87 |
| 0.33 | | 16.21 | 0.16 | 0.24 | 0.32 | 0.41 | 0.49 | 0.57 | 0.65 | 0.73 | 0.81 |
| 0.34 | | 15.33 | 0.15 | 0.23 | 0.31 | 0.38 | 0.46 | 0.54 | 0.61 | 0.69 | 0.77 |
| 0.35 | 27 = 0.361 | 14.88 | 0.15 | 0.22 | 0.30 | 0.37 | 0.45 | 0.52 | 0.60 | 0.67 | 0.74 |

Vaping Power Chart (Ohm, Volts, Watts)

Vaping Power Chart 2.0

| | | Volts | | | | | | | | | | | | | | | | | | | | |
|--------------------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | 3.00 | 3.20 | 3.40 | 3.70 | 4.00 | 4.20 | 4.50 | 4.75 | 5.00 | 5.25 | 5.50 | 5.75 | 6.00 | 6.25 | 6.50 | 6.75 | 7.00 | 7.25 | 7.50 | 7.75 | 8.00 |
| Resistance in Ohms | 1.20 | 7.50 | 8.53 | 9.63 | 11.41 | 13.33 | 14.70 | 16.88 | 18.80 | 20.83 | 22.97 | 25.21 | 27.55 | 30.00 | 32.55 | 35.21 | 37.97 | 40.83 | 43.80 | 46.88 | 50.05 | 53.33 |
| | 1.30 | 6.92 | 7.88 | 8.89 | 10.53 | 12.31 | 13.57 | 15.58 | 17.36 | 19.23 | 21.20 | 23.27 | 25.43 | 27.69 | 30.05 | 32.50 | 35.05 | 37.69 | 40.43 | 43.27 | 46.20 | 49.23 |
| | 1.50 | 6.00 | 6.83 | 7.71 | 9.13 | 10.67 | 11.76 | 13.50 | 15.04 | 16.67 | 18.38 | 20.17 | 22.04 | 24.00 | 26.04 | 28.17 | 30.38 | 32.67 | 35.04 | 37.50 | 40.04 | 42.67 |
| | 1.80 | 5.00 | 5.69 | 6.42 | 7.61 | 8.89 | 9.80 | 11.25 | 12.53 | 13.89 | 15.31 | 16.81 | 18.37 | 20.00 | 21.70 | 23.47 | 25.31 | 27.22 | 29.20 | 31.25 | 33.37 | 35.56 |
| | 2.00 | 4.50 | 5.12 | 5.78 | 6.85 | 8.00 | 8.82 | 10.13 | 11.28 | 12.50 | 13.78 | 15.13 | 16.53 | 18.00 | 19.53 | 21.13 | 22.78 | 24.50 | 26.28 | 28.13 | 30.03 | 32.00 |
| | 2.20 | 4.09 | 4.65 | 5.25 | 6.22 | 7.27 | 8.02 | 9.20 | 10.26 | 11.36 | 12.53 | 13.75 | 15.03 | 16.36 | 17.76 | 19.20 | 20.71 | 22.27 | 23.89 | 25.57 | 27.30 | 29.09 |
| | 2.40 | 3.75 | 4.27 | 4.82 | 5.70 | 6.67 | 7.35 | 8.44 | 9.40 | 10.42 | 11.48 | 12.60 | 13.78 | 15.00 | 16.28 | 17.60 | 18.98 | 20.42 | 21.90 | 23.44 | 25.03 | 26.67 |
| | 2.80 | 3.21 | 3.66 | 4.13 | 4.89 | 5.71 | 6.30 | 7.23 | 8.06 | 8.93 | 9.84 | 10.80 | 11.81 | 12.86 | 13.95 | 15.09 | 16.27 | 17.50 | 18.77 | 20.09 | 21.45 | 22.86 |
| | 3.00 | 3.00 | 3.41 | 3.85 | 4.56 | 5.33 | 5.88 | 6.75 | 7.52 | 8.33 | 9.19 | 10.08 | 11.02 | 12.00 | 13.02 | 14.08 | 15.19 | 16.33 | 17.52 | 18.75 | 20.02 | 21.33 |
| | 3.20 | 2.81 | 3.20 | 3.61 | 4.28 | 5.00 | 5.51 | 6.33 | 7.05 | 7.81 | 8.61 | 9.45 | 10.33 | 11.25 | 12.21 | 13.20 | 14.24 | 15.31 | 16.43 | 17.58 | 18.77 | 20.00 |
| | 3.50 | 2.57 | 2.93 | 3.30 | 3.91 | 4.57 | 5.04 | 5.79 | 6.45 | 7.14 | 7.88 | 8.64 | 9.45 | 10.29 | 11.16 | 12.07 | 13.02 | 14.00 | 15.02 | 16.07 | 17.16 | 18.29 |
| | 4.00 | 2.25 | 2.56 | 2.89 | 3.42 | 4.00 | 4.41 | 5.06 | 5.64 | 6.25 | 6.89 | 7.56 | 8.27 | 9.00 | 9.77 | 10.56 | 11.39 | 12.25 | 13.14 | 14.06 | 15.02 | 16.00 |
| | 4.50 | 2.00 | 2.28 | 2.57 | 3.04 | 3.56 | 3.92 | 4.50 | 5.01 | 5.56 | 6.13 | 6.72 | 7.35 | 8.00 | 8.68 | 9.39 | 10.13 | 10.89 | 11.68 | 12.50 | 13.35 | 14.22 |
| | 5.00 | 1.80 | 2.05 | 2.31 | 2.74 | 3.20 | 3.53 | 4.05 | 4.51 | 5.00 | 5.51 | 6.05 | 6.61 | 7.20 | 7.81 | 8.45 | 9.11 | 9.80 | 10.51 | 11.25 | 12.01 | 12.80 |
| | 5.50 | 1.64 | 1.86 | 2.10 | 2.49 | 2.91 | 3.21 | 3.68 | 4.10 | 4.55 | 5.01 | 5.50 | 6.01 | 6.55 | 7.10 | 7.68 | 8.28 | 8.91 | 9.56 | 10.23 | 10.92 | 11.64 |
| 6.00 | 1.50 | 1.71 | 1.93 | 2.28 | 2.67 | 2.94 | 3.38 | 3.76 | 4.17 | 4.59 | 5.04 | 5.51 | 6.00 | 6.51 | 7.04 | 7.59 | 8.17 | 8.76 | 9.38 | 10.01 | 10.67 | |
| 6.50 | 1.38 | 1.58 | 1.78 | 2.11 | 2.46 | 2.71 | 3.12 | 3.47 | 3.85 | 4.24 | 4.65 | 5.09 | 5.54 | 6.01 | 6.50 | 7.01 | 7.54 | 8.09 | 8.65 | 9.24 | 9.85 | |

| Key | Just right |
|---|---|
| TOO HOT, burnout pretty much certain | A little cool, vapor production is lessened |
| Too hot, higher is risking coil burnout | Too cool, very little vapor production |
| Too warm, some juices may fry | Cold, for all intents not functional |

Power is measured in watts, calculated by v^2/R

You want to keep your power level in the green, if you dont you will have problems.
 More Info. at www.ohmslawcalculator.com

Estimated Wire Resistance with Turn's

| Turns | Kanthal wire | 1.5mm Silica | 2mm Silica | 2.5mm Silica | 3mm Silica | 3.5mm Silica | 4mm Silica | 5mm Silica |
|-------|--------------|--------------|------------|--------------|------------|--------------|------------|------------|
| 3 | 0.15 | 1.09 | 1.46 | 1.82 | 2.19 | 2.55 | 2.92 | 3.65 |
| 4 | 0.15 | 1.46 | 1.94 | 2.43 | 2.92 | 3.40 | 3.89 | 4.86 |
| 5 | 0.15 | 1.82 | 2.43 | 3.04 | 3.65 | 4.25 | 4.86 | 6.08 |
| 3 | 0.17 | 0.89 | 1.19 | 1.49 | 1.78 | 2.08 | 2.38 | 2.97 |
| 4 | 0.17 | 1.19 | 1.59 | 1.98 | 2.38 | 2.77 | 3.17 | 3.96 |
| 5 | 0.17 | 1.49 | 1.98 | 2.48 | 2.97 | 3.47 | 3.96 | 4.95 |
| 3 | 0.2 | 0.62 | 0.82 | 1.03 | 1.23 | 1.44 | 1.64 | 2.05 |
| 4 | 0.2 | 0.82 | 1.10 | 1.37 | 1.64 | 1.92 | 2.19 | 2.74 |
| 5 | 0.2 | 1.03 | 1.37 | 1.71 | 2.05 | 2.40 | 2.74 | 3.42 |
| 3 | 0.23 | 0.46 | 0.62 | 0.77 | 0.93 | 1.08 | 1.24 | 1.54 |
| 4 | 0.23 | 0.62 | 0.82 | 1.03 | 1.24 | 1.44 | 1.65 | 2.06 |
| 5 | 0.23 | 0.77 | 1.03 | 1.29 | 1.54 | 1.80 | 2.06 | 2.57 |
| 3 | 0.25 | 0.41 | 0.55 | 0.69 | 0.83 | 0.97 | 1.10 | 1.38 |
| 4 | 0.25 | 0.55 | 0.74 | 0.92 | 1.10 | 1.29 | 1.47 | 1.84 |
| 5 | 0.25 | 0.69 | 0.92 | 1.15 | 1.38 | 1.61 | 1.84 | 2.30 |
| 3 | 0.27 | 0.36 | 0.48 | 0.60 | 0.72 | 0.84 | 0.96 | 1.20 |
| 4 | 0.27 | 0.48 | 0.64 | 0.80 | 0.96 | 1.12 | 1.28 | 1.60 |
| 5 | 0.27 | 0.60 | 0.80 | 1.00 | 1.20 | 1.40 | 1.60 | 2.00 |
| 3 | 0.28 | 0.32 | 0.43 | 0.53 | 0.64 | 0.75 | 0.85 | 1.06 |
| 4 | 0.28 | 0.43 | 0.57 | 0.71 | 0.85 | 0.99 | 1.14 | 1.42 |
| 5 | 0.28 | 0.53 | 0.71 | 0.89 | 1.06 | 1.24 | 1.42 | 1.77 |
| 3 | 0.3 | 0.28 | 0.38 | 0.47 | 0.57 | 0.66 | 0.76 | 0.95 |
| 4 | 0.3 | 0.38 | 0.50 | 0.63 | 0.76 | 0.88 | 1.01 | 1.26 |
| 5 | 0.3 | 0.47 | 0.63 | 0.79 | 0.95 | 1.10 | 1.26 | 1.58 |