



Magnet Wire Tool

This calculator provides Magnet Wire characteristics for sizes 6 to 55 AWG.

To use it, please select the AWG size and insulation options in the drop-down menus, below.

SELECT AWG SIZE:

35.00



SELECT AN INSULATION TYPE:

Polyimide-ML - NEMA MW16C



COMPUTE MAGNET WIRE DATA

HOW TO ORDER:

Options	AWG	Build	Insulation Code
1	35.00	S	ML
2	35.00	H	ML
3	35.00	T	ML
4	35.00	Q	ML

Builds: (S = Single build - H = Heavy build - T = Triple build - Q = Quadruple build) Non-standard insulation builds available upon request.

Colors: Ask our Sales representatives about the variety of colors available in each of the insulation types.

INSULATION INFORMATION:

Temperature Class:	240° C	NEMA Specification:	MW 16C
Insulation Type:	Polyimide-ML	Federal Specification:	JW1177/15
MWS Code:	ML	IEC Specification:	317-7

Insulation Characteristics: ML is a film coated magnet wire made with polyimide resin. It is a Class 240° C thermal life insulation with exceptional resistance to chemical solvents and burnout. It will operate at a temperature up to 240° C. The outstanding cut-thru of over 400°C and its ability to withstand excessive overloads extends the use of magnet wire in extreme conditions. ML is unaffected by prolonged exposure to varnish solvents and it's compatible with virtually all systems.

General Applications: Fractional and integral horsepower motors, high temperature continuous duty coils and relays, hermetic and sealed units, heavy duty hand tool motors, encapsulated coils.

BARE WIRE SPECIFICATIONS:

DCR based on resistivity of 10.371 ohms per circular mil foot @ 20 degrees C (100%IACS Conductivity)

AWG	Bare Min.	Bare Nom.	Bare Max.	DCR Min.	DCR Nom.	DCR Max.	CMils	Feet Per LB
35.00	0.005500	0.005600	0.005700	319.20000	330.70000	342.80000	31.36000	10500.000

INSULATED WIRE SPECIFICATION:

Values listed below are derived from the NEMA MW1000-2015 Standard and MWS internal standards

Insulation Build	Insulated Min.	Insulated Nom.	Insulated Max.	Feet Per LB
Single	0.005900	0.006200	0.006500	10250.000000
Heavy	0.006400	0.006700	0.007000	9891.000000
Triple	0.006800	0.007200	0.007500	9532.000000
Quad	0.007200	0.007700	0.008200	9173.000000