Wiring Fundamentals

Wire Gauge (AWG) vs Current Rating



Wire Specification

- M22759/16
- Insulation Material: Tefzel
- Conductor: Tin Plated Copper
- Voltage Rating: 600 V
- Maximum Temperature: 150 °C

Wire Gauge (AWG)	Current Rating at 80°C ambient [A]*	Current Rating at 100°C ambient [A]*	Resistance [ohm/m]	Resistance [ohm/1000 ft]
24#	4.5	4	0.071	22
22#	6	5	0.045	14
20#	8	6	0.028	8.5
18#	11	9	0.018	5.5
16#	15	12	0.014	4.3
14#	22	18	0.009	2.7
6#	90‡	75‡	0.0015	0.44
4#	120‡	100‡	0.0009	0.28
2#	150‡	120‡	0.0006	0.18

*The current ratings above are an indication only and will not apply in all circumstances. The actual maximum current rating is determined by the maximum allowed temperature for the wire (150 °C). The temperature of the wire is affected by many factors including the temperature of adjacent wires, how the wires are bundled and covered, the ambient temperature and the current.

‡Current rating for a single wire in free air

Recommended Wire Gauge	Output	
24# to 20#	8 Amp Outputs	
20# to 16#	20 Amp Outputs	
4# to 2#	Battery Positive	