

Amp Load x Length = Wire Size

	2'	4'	6'	8'	10'	12'
10 amp (120w)	16 ga	16 ga	16 ga	14 ga	14 ga	14 ga
15 amp (180w)	16 ga	16 ga	14 ga	14 ga	14 ga	12 ga
20 amp (240w)	16 ga	14 ga	14 ga	12 ga	12 ga	10 ga
25 amp (300w)	14 ga	14 ga	12 ga	10 ga	10 ga	10 ga
30 amp (360w)	14 ga	14 ga	12 ga	10 ga	10 ga	8 ga
40 amp (480w)	14 ga	12 ga	10 ga	8 ga	8 ga	8 ga
50 amp (600w)	12 ga	12 ga	10 ga	8 ga	4 ga	4 ga
60 amp (720w)	12 ga	10 ga	8 ga	8 ga	4 ga	4 ga
70 amp (840w)	12 ga	10 ga	8 ga	4 ga	4 ga	4 ga
80 amp (960w)	12 ga	8 ga	8 ga	4 ga	4 ga	4 ga
100 amp (1200w)	10 ga	8 ga	4 ga	4 ga	4 ga	4 ga
120 amp (1440w)	10 ga	8 ga	4 ga	4 ga	4 ga	1/0 ga
140 amp (1680w)	8 ga	4 ga	4 ga	4 ga	1/0 ga	1/0 ga
160 amp (1920w)	8 ga	4 ga	4 ga	1/0 ga	1/0 ga	1/0 ga
180 amp (2160w)	8 ga	4 ga	4 ga	1/0 ga	1/0 ga	1/0 ga
200 amp (2400w)	8 ga	4 ga	4 ga	1/0 ga	1/0 ga	1/0 ga
250 amp (3000w)	4 ga	4 ga	1/0 ga	1/0 ga	1/0 ga	1/0 ga

Note: These are minimum sizes. You may want to add a safety margin by increasing the wire size.

GAUGE CONVERSION

Wire ga	Wire Dia
2/0 awg	.3648"
1/0 awg	.3249"
1 awg	.2893"
2 awg	.2576"
4 awg	.2043"
6 awg	.1620"
8 awg	.1280"
10 awg	.1018"
12 awg	.0800"
14 awg	.0640"
16 awg	.0508"

OHM'S LAW

