

How to match cable & equipment

- ▶ When replacing cable, always install cable of equal or heavier gauge, never lighter
- ▶ In cold climates, use a heavier cable gauge to improve starting

Determining Wire and Cable Gauge Size by Circuit Amps and Length

Total Circuit Amps	Wire Gauge for Length in Feet (Total circuit length)												
	12V	3'	5'	7'	10'	15'	20'	25'	30'	40'	50'	75'	100'
1	18	18	18	18	18	18	18	18	18	18	18	18	18
3	18	18	18	18	18	18	18	18	18	18	18	14	14
5	18	18	18	18	18	18	18	18	18	16	14	12	12
7	18	18	18	18	18	18	18	16	16	14	14	10	10
10	18	18	18	18	18	16	16	16	14	12	12	10	10
15	18	18	18	18	14	14	12	12	12	12	10	8	8
20	16	16	16	16	14	12	10	10	10	10	8	6	6
24	14	14	14	14	12	12	10	10	10	8	6	6	6
30	12	12	12	12	10	10	10	10	10	6	4	4	4
40	10	10	10	10	10	10	8	8	6	6	4	2	2
50	8	8	8	8	8	8	8	8	6	6	2	2	2
100	4	4	4	4	4	4	4	4	4	2	1	1/0	1/0
150	2	2	2	2	2	2	2	2	2	1	2/0	2/0	2/0
200	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	4/0	4/0	4/0

Metric and AWG wire size

Metric values are expressed as a range and vary by country

mm ²	1	2	3	4-5	6-8	9-13	14-21	22-35	36-42	43-53	54-68	69-86	87-107
AWG	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0