

# Wire Size Specifications

Table: UL486E

Wire size		Assigned maximum ampere rating
AWG or kcmil	mm <sup>2</sup>	A
30	0.05	0.5
28	0.08	0.8
26	0.13	1
24	0.20	2
22	0.32	3
20	0.52	5
18	0.82	7
16	1.3	10
14	2.1	15
12	3.3	20
10	5.3	30
8	8.4	50
6	13.3	65
4	21.2	85
3	26.6	100
2	33.6	115
1	42.4	130
1/0	53.5	150
2/0	67.4	175
3/0	85.0	200
4/0	107	230
250	127	255
300	152	285
350	177	310
400	203	335
500	253	380
600	304	420
700	355	460
750	380	475
800	405	490
900	456	520
1000	507	545
1250	633	590
1500	760	625
1750	887	650
2000	1010	665

## Amperage versus Wire Size

Table: UL486E – Assigned maximum ampere rating versus wire size for copper conductors. Values are for not more than three conductors in raceway or cable (reference: National Electrical Code, ANSI/NFPA 70-1999).

## Wire Size and Cross-sectional Area

Approximate relationship between conductors of cross-sectional areas in mm<sup>2</sup> and AWG sizes as used in North America (reference: IEC 998-1).

Cross-sectional area mm <sup>2</sup>	Wire size AWG
0.5	20
0.75	18
1.0	-
1.5	16
2.5	14
4	12
6	10
10	8
16	6
25	4
35	2

## Definitions

### **Unprepared Conductor:**

A conductor which has been cut and the insulation of which has been removed for insertion into a terminal. The conductor end is bare.

### **Prepared Conductor:**

A conductor, the strands of which are soldered or tinned, or the end of which is fitted with a cable lug, eyelet, quick-connect, ring terminal, spade terminal, or similar component, prior to insertion into the terminal.

### **Factory Wiring Terminal:**

A terminal intended in the end application to be connected under controlled conditions, usually at a manufacturer's location. Such terminations shall use prepared or unprepared conductors.

### **Field Wiring Terminal:**

A terminal to which wiring connections are made in the field and that is subjected to the requirements of a terminal for field wiring as specified in the National Electrical Code, NFPA 70. Such terminations shall accept unprepared conductors.