



HELPFUL INFORMATION

STUD SIZE CHART

STANDARD STUD SIZE		SCREW DIA. (*)	STANDARD STUD SIZE		SCREW DIA. (*)	STANDARD STUD SIZE		SCREW DIA. (*)
•	#0	.060	●	5/16"	.312	●	3/4"	.750
•	#1	.073		●	3/8"				.375
•	#2	.086	●		7/16"	.437		
•	#3	.099			●	1/2"	.500	
•	#4	.112		●		5/8"	.625	
•	#5	.125				●	1"	1.000
•	#6	.138						
•	#8	.164						
•	#10	.190						
•	#12	.216						
•	#14	.242						
•	1/4"	.250						

RECOMMENDED ATA COLOR CODING

- White • • • Ground return to towing vehicle
- Black • • • ICC required marker & clearance lamps
- Yellow • • • Left-hand directional signal
- Red • • • Stop Lamp
- Green • • • Right-hand, directional signal
- Brown • • • Tail lamp, three-bar marker lamps and clearance or marker lamps other than ICC required
- Blue • • • Auxiliary circuits

VOLTS X AMPS = WATTS WATTS ÷ AMPS = VOLTS WATTS ÷ VOLTS = AMPS

RECOMMENDED WIRE GAUGE FOR AUTOMOTIVE 6 & 12 VOLTS

Load in Amps		Length of Run in Feet					
6V	12V	3'	10'	15'	25'	50'	100'
0.5	1.0	18	18	18	18	18	18
1.0	2	18	18	18	18	18	16
1.5	3	18	18	18	18	18	14
2.5	5	18	18	18	18	14	12
5.0	10	18	18	16	16	12	10
7.5	15	18	18	14	12	10	8
10	20	18	16	14	10	10	6
15	30	18	14	10	10	6	4
20	40	18	12	10	8	6	2
25	50	16	12	10	8	6	2
50	100	12	10	6	4	2	0
75	150	10	8	4	2	1	00
100	200	10	6	4	2	0	4/0

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DECIMAL EQUIVALENTS

$\frac{1}{64}$.015625	$\frac{17}{64}$.265625	$\frac{33}{64}$.515625	$\frac{49}{64}$.765625
$\frac{1}{32}$.03125	$\frac{9}{32}$.28125	$\frac{17}{32}$.53125	$\frac{25}{32}$.78125
$\frac{3}{64}$.046875	$\frac{19}{64}$.296875	$\frac{35}{64}$.546875	$\frac{51}{64}$.796875
$\frac{1}{16}$.0625	$\frac{5}{16}$.3125	$\frac{9}{16}$.5625	$\frac{13}{16}$.8125
$\frac{5}{64}$.078125	$\frac{21}{64}$.328125	$\frac{37}{64}$.578125	$\frac{53}{64}$.828125
$\frac{3}{32}$.09375	$\frac{11}{32}$.34375	$\frac{19}{32}$.59375	$\frac{27}{32}$.84375
$\frac{7}{64}$.109375	$\frac{23}{64}$.359375	$\frac{39}{64}$.609375	$\frac{55}{64}$.859375
$\frac{1}{8}$.125	$\frac{3}{8}$.375	$\frac{5}{8}$.625	$\frac{7}{8}$.875
$\frac{9}{64}$.140625	$\frac{25}{64}$.390625	$\frac{41}{64}$.640625	$\frac{57}{64}$.890625
$\frac{5}{32}$.15625	$\frac{13}{32}$.40625	$\frac{21}{32}$.65625	$\frac{29}{32}$.90625
$\frac{11}{64}$.171875	$\frac{27}{64}$.421875	$\frac{43}{64}$.671875	$\frac{59}{64}$.921875
$\frac{3}{16}$.1875	$\frac{7}{16}$.4375	$\frac{11}{16}$.6875	$\frac{15}{16}$.9375
$\frac{13}{64}$.203125	$\frac{29}{64}$.453125	$\frac{45}{64}$.703125	$\frac{61}{64}$.953125
$\frac{7}{32}$.21875	$\frac{15}{32}$.46875	$\frac{23}{32}$.71875	$\frac{31}{32}$.96875
$\frac{15}{64}$.234375	$\frac{31}{64}$.484375	$\frac{47}{64}$.734375	$\frac{63}{64}$.984375
$\frac{1}{4}$.25	$\frac{1}{2}$.5	$\frac{3}{4}$.75	1

WIRE GAUGE CONVERSION CHART

Move decimal point three places to right to read mils

AWG	Diameter Inches	CMA	AWG	Diameter Inches	CMA
4/0	.460	212,000	19	.036	1,290
3/0	.410	168,000	20	.032	1,020
2/0	.365	133,000	21	.0285	810
1/0	.325	106,000	22	.0253	642
1	.289	83,700	23	.0226	509
2	.258	66,400	24	.0201	404
3	.229	52,600	25	.0179	320
4	.204	41,700	26	.0159	254
5	.182	33,100	27	.0142	202
6	.162	26,300	28	.0126	160
7	.144	20,800	29	.0113	127
8	.128	16,500	30	.0100	101
9	.114	13,100	31	.0089	79.7
10	.102	10,400	32	.0080	63.2
11	.091	8,230	33	.0071	50.1
12	.081	6,530	34	.0063	39.8
13	.072	5,180	35	.0056	31.5
14	.064	4,110	36	.0050	25.0
15	.057	3,260	37	.0045	19.8
16	.051	2,580	38	.0040	15.7
17	.045	2,050	39	.0035	12.5
18	.040	1,620	40	.0031	9.9

WIRE AND CABLE CARRYING CAPACITIES

Cable Gauge	Light Circuit Cable (Continuous Duty)	Battery Cable (Intermittent Duty)	Welding Cable (Up to 50 feet)
18	3 Amperes	.....	.....
16	6 Amperes	.....	.....
14	15 Amperes	.....	.....
12	20 Amperes	.....	.....
10	25 Amperes	.....	.....
8	35 Amperes	.....	.....
6	50 Amperes	90 Amperes	60 Amperes
4	.....	125 Amperes	150 Amperes
2	.....	150 Amperes	200 Amperes
1	.....	200 Amperes	250 Amperes
1/0	.....	225 Amperes	300 Amperes
2/0	.....	275 Amperes	400 Amperes
3/0	.....	325 Amperes	.....
4/0	.....	.....	.....

Note: In intermittent duty, the battery cable will carry 200% of its rated ampere capacity.

To determine ampere loads in lamp circuits, add the candle power of all lamps in the circuit and divide by eight.