

Cable Sizing

The following charts give recommended figures for maximum continuous current that may be drawn through a variety of cable sizing. Generally it is good practice to over spec cable sizes as conditions and temperature can vary from time to time.

If you need to calculate current and you know the wattage and voltage, then use the following equation Amps = Watts / Volts.

For example: 21 Watt rear rain lamp
 Amps = 21 Watts / 12 Volts
 Amps = 1.75

Multi Strand Standard Cable		
Square Sectional Size (mm ²)	Max Current (A)	Typical Applications
1 mm ²	8.75A	General Wiring, LED Lights, Instrumentation/Sensors, ECU
2 mm ²	17.5A	General Wiring, Conventional Lighting, Fuel Pump, Heaters
3 mm ²	27.5A	High Current Lighting, Ammeter, Battery Charger, Fuel Pump
4.5 mm ²	35A	Battery Charger, Alternator, Ammeter, Compressor, Motors
6 mm ²	42A	Battery Charger, Alternator, Ammeter, Compressor, Motors
7 mm ²	50A	Battery Charger, Heavy Duty Alternator
8.5 mm ²	60A	Battery Charger, Heavy Duty Alternator
10 mm ²	70A	Battery Charger, Heavy Duty Alternator, Slave Battery

Multi Strand Thinwall Cable		
Square Sectional Size (mm ²)	Max Current (A)	Typical Applications
0.5 mm ²	11A	General Wiring, LED Lights, Instrumentation/Sensors, ECU
1 mm ²	16.5A	General Wiring, Conventional Lighting, Fuel Pump, Heaters
2 mm ²	25A	High Current Lighting, Ammeter, Battery Charger, Fuel Pump
3 mm ²	33A	Battery Charger, Alternator, Ammeter, Compressor, Motors
4 mm ²	39A	Battery Charger, Alternator, Ammeter, Compressor, Motors
6 mm ²	50A	Battery Charger, Heavy Duty Alternator
7 mm ²	57A	Battery Charger, Heavy Duty Alternator
8.5 mm ²	63A	Battery Charger, Heavy Duty Alternator, Slave Battery
10 mm ²	70A	Battery Charger, Heavy Duty Alternator, Slave Battery

Battery & Starter Cable			
Square Sectional Size (mm ²)	Max Current (A)	Outer Diameter (mm)	Typical Applications
16 mm ²	110A	7.5 mm	Starter Motor, Slave Battery
25 mm ²	170A	9.8 mm	Starter Motor, Slave Battery
40 mm ²	300A	11.8 mm	Heavy Duty Starter Motor, Slave Battery
60 mm ²	415A	14.5 mm	Heavy Duty Starter Motor, Slave Battery

Technical articles should be taken as advice only, if in any doubt consult a qualified mechanic or the parts supplier/manufacture.