

Cable Sizing Selection Chart

Step 1. DC Amps

Locate the current flow in amps of your circuit along the top of the chart below.

Step 2. Circuit Type

Select the correct circuit type. Examples of Non Critical circuit are general lighting, windlasses, bait pumps, general appliances. Examples of Critical circuits are panel main feeders, bilge blowers, electronics, navigation lights.

Step 3. Cable Length

Find the correct cable length range. Please note that the cable length is total length of the positive and negative wires. I.E. Distance from battery to appliance multiplied by 2.

Step 4. Correct Cable Size

Intersect the DC Amps with the cable length range to identify the correct coloured symbol.

2. Circuit Type		1. DC Amps															
10% Voltage Drop Non Critical	3% Voltage Drop Critical	5A	10A	15A	20A	25A	30A	40A	50A	60A	70A	80A	90A	100A	120A	150A	200A
0-6 m	0-2 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
6-9 m	2-3 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
9-15 m	3-4.5 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
15-19 m	4.5-6 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
19-24 m	6-7.5 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
24-30 m	7.5-9 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
30-40 m	9-12 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
40-51 m	12-15 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
51-61 m	15-18 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	18-21 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	21-24 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	24-27 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	27-30 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	30-33 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	33-37 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
	37-40 m	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗

Step 5. Cable Conversion Table

Match the correct coloured symbol from the previous step using the table below to find the cable size and specifications.

IMPORTANT: Measurements of Diameter and Cross Section of cable does not include insulation. Cable Icons are for representational purposes only and are not to be taken as actual cable sizes.

Note: Sometimes gauges are expressed as follows (e.g. 4/0 is the same as 0000). AWG stands for American Wire Gauges.

Standard	Unit													
AWG	0000	000	00	0	1	2	4	6	8	10	12	14	16	
Diameter (mm)	11.68	10.40	9.27	8.25	7.35	6.54	5.19	4.11	3.26	2.59	2.05	1.63	1.29	
Cross Section (mm ²)	107.1	84.9	67.5	53.5	42.4	33.6	21.2	13.3	8.4	5.3	3.3	2.1	1.3	
Colour Code														