

Sole Diesel Marine Engine – Guidelines for Yachts

This table is to be used as a guide only.

Engine type	BHP	Yacht Displacement (Weight in Tonnes)	LWL in feet (Water Line Length)
Mini 11	11	1 - 3	22 - 26
Mini 17	16	3 – 4	25 - 28
Mini 29	27.2	6 – 7	32 – 36
Mini 33	31.4	8 – 9	36 – 38
Mini 44	42	9 – 12	38 – 42
Mini 55	52	12 – 15	42 – 45
Mini 62	59	15 - 17	43 - 46
Mini 74	65	17 - 22	46 – 50
SN-110	101	22 - 24	50 - 52
SM-105	95	24 - 26	51 - 53
SDZ-165	160	25 - 30	52 - 55

Use this table as a rough guide only when selecting the size of engine you require for displacement hulls / sailing yachts. The assumption is that you will wish to reach maximum hull speed and require a suitable engine to achieve this. This assumption may not be correct if you have a racing yacht and only want limited power to reach your moorings; or conversely you do motor sailing with your family and wish a 30 percent safety factor.

You should talk to the hull designer and boat builder for their recommendations of engine power and propeller size (as theoretically they have specified the boats designed performance / hull speed) – the propeller supplier then specifies a suitable propeller to achieve the boats designed performance (based upon engine brake horse power and rpm) - we then supply the required engine.

A generally accepted rule of thumb for displacement hulls is 4 bhp per ton for cruising yachts
 Maximum hull speed in Knots (for displacement hulls) = 1.3 (or 1.4 for a sleek hull) x $\sqrt{\text{Water Line length (in feet)}}$

When considering one of our engines for repowering your craft, please consider your existing engine as the starting point for the power required.

With Catamarans

Ask the Boat Builder / Designer for the recommended engine size. If you have a semi-displacement or planing hull the above guide is not relevant.

Engines Plus Limited do not accept any responsibility for incorrect engine selection.