SIDE-POWER
Thruster systems

Thruster Calculation for:
Camano Troll 31 V2

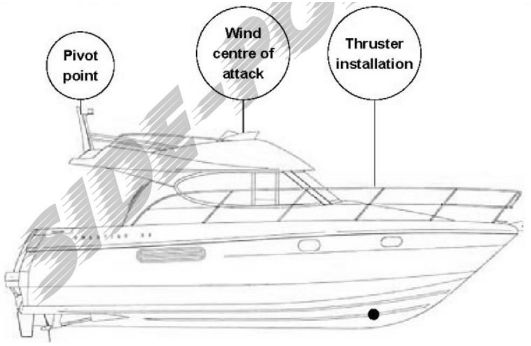
Presented by: La Conner

For boat: Flybridge cruisers 0 - 999

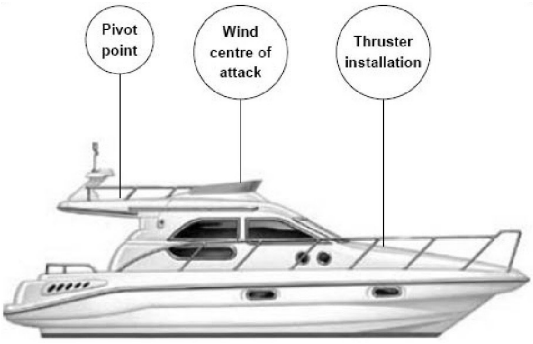
Thruster sizes are calculated from an average of the boat models shown below:

Side-Power thruster model		SE60/185S Rated at 60 kg	SE80/185T Rated at 80 kg	SE100/185T Rated at 100 kg
A	Turn bow against maximum direct side wind of	21.2 kn 10.9 m/s	24.5 kn 12.6 m/s	27.4 kn 14.1 m/s
B	Thruster equals total windpressure at	14.8 kn 7.6 m/s	17 kn 8.7 m/s	19.1 kn 9.8 m/s
C	Equal size bow+stern holds against	20.9 kn 10.8 m/s	24 kn 12.3 m/s	27 kn 13.9 m/s

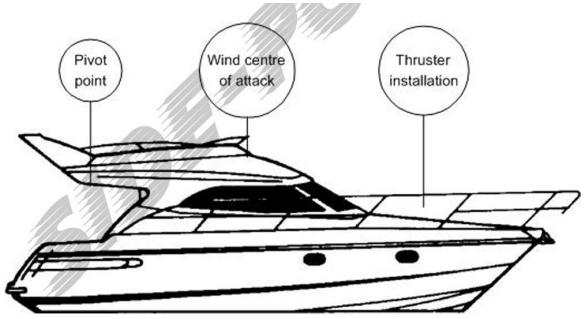
Jeanneau Prestige 32



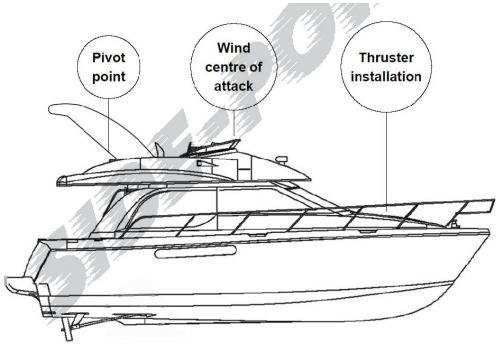
Sealine F33



Princess 34



Meridian 341 Sedan



Explanation

A This windspeed is the calculated maximum speed of a direct (90°)sidewind that the thruster will turn the bow against. When you get closer to the maximum, the bow will be turned very slowly towards the wind, and the whole boat will generally drift away from the wind.
We advice that this number is never less than 17,5 knots.
Economy : 17,5 -19,5 knots - Normal : 19,6 -22,5 knots - High power : 22,6 + knots

B This windspeed is the calculated speed of a direct (90°) sidewind where the boats pivot point will stay in the same place, i.e. the bow moves into the wind and the stern falls off. We advice that this number is never less than 13,5 knots

C We generally advice the use of the same sternthruster as bowthruster.However, the sternthruster will normally perform better than the bowthruster because of its position outside the hull (leverage advantage) and perfect tunnel. However, the difference is only approx. 15% so that the closest match is normally still to have the same thruster size if you wish the boat to move as much directly sideways as possible when using both thrusters. In some cases with electric thrusters the sternthruster also have the advantage of better voltage because of its proximity to the batteries in which case one size down from the bowhtruster might be the best solution.

Note: Please observe that these calculations have been made in good faith and as exactly as possible based on available information. However, Sleipner Motor can not guarantee the accuracy and assumes no responsibility for actual performance in any boat.