

# Sailing Performance & Tips

*Information Document*



This document is a performance speed guide on what you can expect from a Schionning sailing design. These are average performance statistics based on experience sailing our designs, based on 11 - 12 m cruising designs such as our Cosmos 1100, Wilderness 1120 and Wilderness 1250. The new Arrow Series and G-Force Series could expect slightly higher performance than quoted here.

### WITH A TRUE WIND SPEED OF 15 KNOTS

**To Windward:** Speed 8 – 9 Knots

Sailing to windward at an average of 45 degrees (tacking through 90 degrees) you can expect speed of 8 - 9 Knots. In flat water you could be tighter at 80 degrees, whereas in choppy conditions you may open up the angle a little to gain more drive.

### TIPS ON TACKING

Catamarans should be light and they therefore carry less way. A good design should tack easily without needing to back the jib. Make sure you make good speed to carry you through, tack on top of a wave to pivot more easily, let her turn naturally through the turn. Do not turn too sharply as the rudders will act as brakes and stop her half way through the tack. Most modern catamarans are mainsail driven, so as you tack, drop the traveler a little (500mm down the track) then get the jib in smartly and as she picks up speed, winch the traveler back to centre.

**Off the wind:** Reaching with Genoa and mainsail Speed 12 - 13 Knots.

The best point of sail when reaching is when the apparent wind is at 90 degrees to centreline. Pop the screecher or kite and chasing the apparent wind can get you up to wind speed or a little more, add waves in the right direction and exciting surfing speeds are the usual.

Bigger cats like the 1480's can add a few knots to these speeds and lighter more performance oriented designs like the G-Force and Arrow Series can get into the mid 20's quite often. These speeds are often quoted but in real life are pretty scary and exciting and need good sailing skills to do.

**Downwind:** Speed - 8 - 10 knots with the odd surf at a few knots more.

On this leg multihulls act much like any other boat, if they're light with big spinnakers they will be faster, multihulls usually tack downwind to use the apparent wind and gaining more speed, you can make this a wider angle for more speed but longer distances are then covered - a bit more work. I prefer to just bring her up a little to just fill the Genoa nicely and then jibe her over every hour or two.

### HOW TO USE DAGGERBOARDS

Both daggerboards should be pushed right down (full boards) when going to windward and then raised progressively as you free off onto a reach. Bring them right up when running downwind.



G-Force 1800 'KATO'

Boards can be broken if you run off onto a reach in fresh conditions with full boards down, the high speed puts them under enormous strain and breakages are common. A tip is to relieve the windward pressure just before bearing away onto a reach by steering quickly down a bit then back up a few times, wriggling her a bit, while the crew pull the boards up to about half down, suitable for a reach.

All cats are different so play with your boards. While running downwind it's surprising that just a little shift of the boards up or down can make steering far easier.

### GENERAL

Most catamarans now use a self-tacking jib, main and screecher for cruising, racing oriented sailors can add a spinnaker.

Drag tends to increase with speed so when evaluating potential speed of the different design look at the waterline beam value.

Most of our designs are fast initially then the fatter say 12:1 Beam-Length ratio catamarans are harder to push past 14 knots and need more wind to reach 20 knots, they feel stressed and you will also find this exciting or a little scary to achieve. The slimmer hulls like the G-Force and Arrow designs have 14 - 15:1 Beam to Length Ratio & slide more easily past 20 knots only being exciting in the mid-20s. Longer waterline length is always a luxury and the G-Force



1800 will run effortlessly at 19-21 knots.

I hope that this assists you understand the finer points of Schionning catamaran sailing in terms of weight and physical characteristics. Our team is available via email at [info@schionningdesigns.com.au](mailto:info@schionningdesigns.com.au) should you require further clarification on our designs.

I wish you luck with your research and hope to see you on a Schionning design soon!

All the best.

*Jeff Schionning*