DOWNWIND SAILS UPDATE

Downwind and crosswind sails for offshore and performance cruising.

Much has changed with downwind sails over the past 15 years or so. For cruising sailors it used to be a relatively simple choice between a spinnaker flown from a pole and a cruising chute tacked to the stemhead (or to a short bowsprit). Now there's an array of lightweight asymmetric sails including, of course, the one everyone talks about: the Code 0 (though many sails described as Code 0s are really not Code 0s at all, as we will explain). So what has happened, why has it happened and, most importantly, where does it leave you?

Where racing leads...

As developments in cruising so often do, it all started with racing boats. About 20 years ago in the Whitbread (subsequently Volvo) race we witnessed the appearance of the Code 0: a large, lightweight, free-flying headsail rather like a flat-cut asymmetric spinnaker. It was designed to fill the gap between a conventional spinnaker and an upwind headsail – not so much a downwind sail as what you might call a "crosswind" sail.

These sails and their variants have since become popular across the racing world and in cruising circles too. Just bear in mind that many so-called Code 0s are not actually Code 0s because, under the IRC rating rule, a Code 0 has to have a mid-girth that's 75% of its foot measurement. In practice that means a rounded luff that's typically not attached to the torque rope of a furling system. Such a sail is more of a challenge to handle than many cruising sailors want.

There has, however, been an increasing need for cruising sails that fill the gap between upwind headsails and conventional spinnakers, and that's largely because of changes in modern rigs. Back in the days of the IOR (international offshore rule, which influenced cruisers as well as racing yachts), boats tended to have relatively small mainsails and large foretriangles with overlapping genoas. More recently, for easier handling and inspired by racing rules since the end of the IOR, we have seen a move towards larger mainsails and smaller fore-triangles. Self-tacking headsails have become increasingly popular, too. These changes have simplified handling, particularly upwind when much less winching is called for, but they have led to a problem. When you bear away from a close-hauled course and ease a small, close-sheeting headsail, it twists open and loses most of its drive as well as progressively disappearing behind the mainsail. In light winds you will often be slower on a reach than upwind, yet unable to hoist a spinnaker or cruising chute until the wind is approaching, or abaft, the beam. This leaves a wide angle between a fetch and a broad reach when many modern cruisers feel rather lifeless. So what's the answer?

Multiple choices

Fundamentally the choices are the same as always: symmetrical and/or asymmetrical. It's just that there's now a far greater range of asymmetrics (sometimes known as A-Sails) to choose from, ranging from those that are essentially large, lightweight genoas all the way to full-cut asymmetrics for deep downwind angles. As you would expect, at Kemp we offer sails to cover the whole spectrum and we've given a lot of thought to what each sail should be designed to achieve. Even with all our expertise and experience, however, we have yet to come up with one sail that does everything. We will announce it as soon as we have changed some of the laws of physics! In the meantime, read on to see how we can make your downwind sailing fast, fun and trouble-free.

DOWNWIND AND CROSSWIND SAILS – THE OPTIONS

In ascending order of wind angle – from close to broad – below are the sails to choose from. But before we introduce them, a word about furling systems, which are often used to make handling these sails as simple as possible. Furling systems using torque ropes (otherwise known as AT – anti-torsion –cables) have played an essential role in making lightweight, free-flying asymmetric sails manageable by short-handed crews. In many respects they're like conventional furling systems for headsails, only they're not connected to the forestay and, instead of an aluminium extrusion between the bottom drum and the top swivel, there's a torque rope. When you turn the drum, the torque rope turns like a headfoil, without twisting, and the sail wraps around it. Another difference is that some of these downwind sails are not attached to the torque rope – just the tack to the drum and the head to the top swivel. There are also two types of furler: bottom-up and top-down, depending on whether a particular sail should be furled from the tack or the head. We supply both types as appropriate and, importantly, many components are common to both, so if you have multiple sails you won't need to buy two complete furling systems.

1. ULG (Ultra Light Genoa)

Usually made from 3oz polyester (as opposed to spinnaker nylon), the ULG has a straight luff and can be handled with a bottom-up furler or without any handling aids. It's ideal when you're cracked off the wind a few degrees and want to keep the boat powered up.

2. G-Zero (Gennaker)

Our G-Zero is similar to the ULG, also with a straight luff and the torque rope encapsulated in a luff sleeve for easy handling. Being designed for slightly broader angles, it's made from nylon rather than polyester and incorporates more roach in the leech. Suitable for use with a bottom-up furler or a snuffer (or nothing at all if you prefer).

3. G-One (Cruising Chute)

This is the closest equivalent to what has commonly been known as a cruising chute and will help keep the boat moving as the wind comes further abaft the beam. Fuller cut than G-Zero, it's made from spinnaker nylon and, if you have a furling system (top-down for this one), the luff won't be attached to the torque rope. There's also some round (positive roach) in the luff. A snuffer is an alternative handling aid with this sail.

4. Racing Asymmetrics (A0–A5)

For racing sailors we offer the full range of racing asymmetrics, from the Code 0 (A0) to specialised reaching and running sails. Please ask for details.

5. The Butterfly Sail

With this option you have two sails in one. It consists of two ULGs sharing a luff rope. Use them folded together in the same way as a ULG or, with the wind from astern, spread your wings and open them up one each side. If you pole the windward one out, you can sail with the wind up to 15° off dead astern. Use with a bottom-up furler.

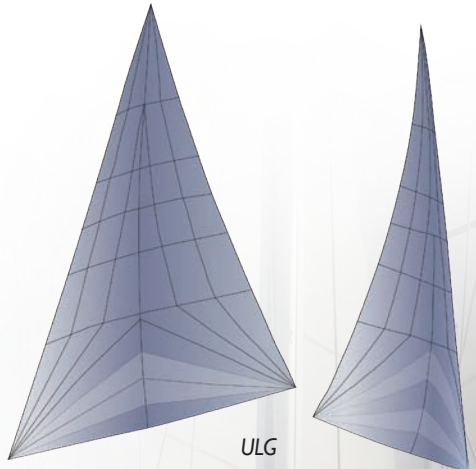
6. Symmetrical, poled-out spinnakers (S1–S5)

We're listing this as a single option but, of course, there's a whole host of choices for different wind strengths and points of sailing. These sails are still the most efficient solution for sailing deep downwind and running square, but they do call for a pole and a little more experience.

All downwind sails are a compromise and, as you can see, there's quite a choice. ULGs and G-Zeros are the easiest to handle. If you're going to have just one sail, we would suggest a G-Zero or a G-One. If your budget allows two, a ULG and a G-One would be a good combination. Bear in mind that, depending on conditions and how well they're furled, you will often be able to hoist a ULG, G-Zero or G-One and leave it up for a day's sailing with no need to drop and re-hoist each time you use it (though do bear in mind the greater susceptibility to UV degradation of these thinner fabrics).

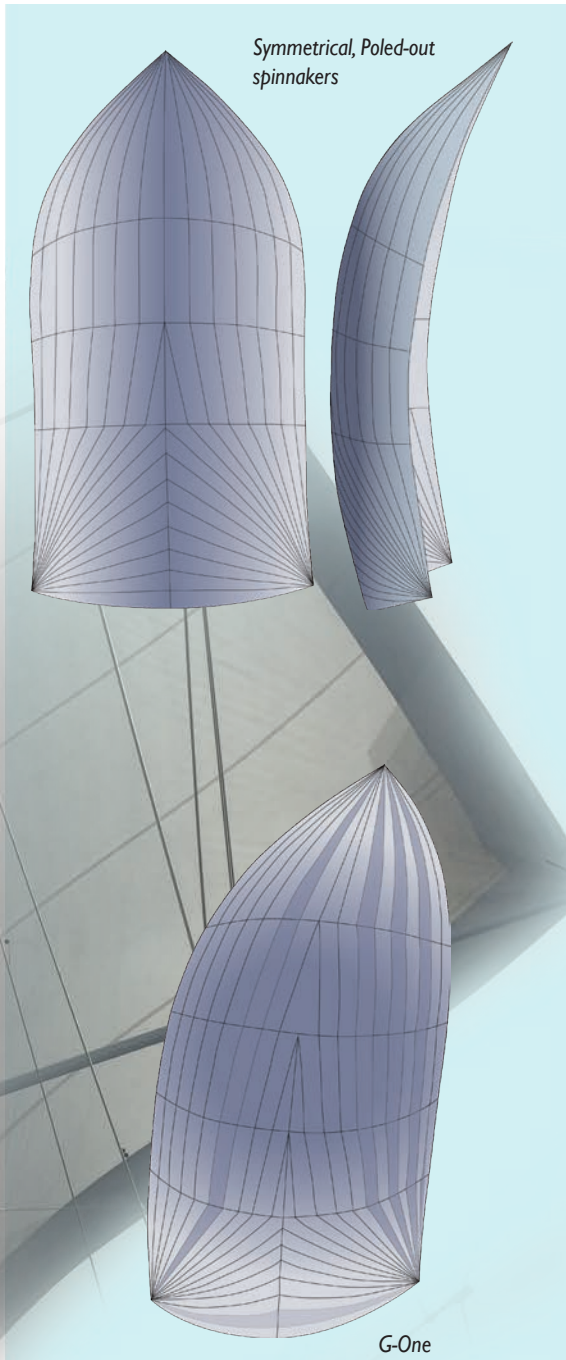
And finally, let's not forget...

7. The magic, all-in-one downwind sail that does everything brilliantly. When we've invented this, we will supply it in a package with a dozen sky hooks to hang things from – and that's a promise!



ULG

G-Zero



Symmetrical, Poled-out spinnakers

G-One