Main photo Julian Dace; Photography Rick Buettner

his month's group test takes us into the murky waters that surround anchors and anchoring. It's a world in which some products make a big splash and some settle quietly into the mud, while the flurry of claim and counterclaim by rival manufacturers makes it very difficult to see exactly what is going on.

What is absolutely certain is that anchoring is a simple business. Seamen have been doing it for centuries, with considerably less sophisticated equipment than we have available now. Stripped to its basics, anchoring involves nothing more than stopping the boat and letting her drift while you lower the anchor to the seabed and pay out as much warp or chain as necessary. By paying the cable out gradually, the boat's own movement spreads it out along the seabed and stops it from piling up on top of the anchor. When you've let out enough cable, either catch a turn around a cleat or stop the winch, so that the boat's momentum pulls the cable tight. In all but the very mildest or most extreme conditions, that little snatch should be enough to give the anchor its first bite into the seabed. From there on, any heavier load should pull it deeper into the bottom.

There shouldn't be any need for frantic bursts of astern power or repeated raisings and lowerings of the anchor. If anything, these are counterproductive, because over-enthusiastic efforts to 'dig the anchor in' are more likely to break its first, tentative toe-hold on the seabed. It's better just to let the ground tackle settle, let the boat get used to where she is and line up a couple of objects ashore to make sure that the landscape isn't moving past you.

Of course, there are plenty of refinements: it's neater, for instance, if you stop the boat so that it drifts backwards or sideways, rather than running over its own chain, but even this isn't an inviolable rule. The one thing that is absolutely essential is to make sure you've let out enough cable. The simple rule is to 'give it all you've got' on the basis that cable is no use to you when it's in the locker. Most production boats have cables that are far too short anyway.

There are countless more sophisticated-sounding rules of thumb, including 'X times the depth of water' where X can be anything from three to 10 or more, depending on whether the cable is rope or chain and which book you happen to be reading; and the more technical-sounding '20 times the square root of the depth.' The funny thing is that although the object of all this arithmetic is to ensure that the chain doesn't lift the shank of the anchor off the bottom while it is trying to dig in, none of these simplistic formulae take any account of the weight of the chain itself.

How we tested them

After hearing and reading lots of advice, we decided that the best way to test anchors would be by anchoring with them. One important difference between our test procedure and normal anchoring was that we chose anchors that were far too small for the boat: we picked sizes appropriate for a 10m sailing boat and tested them on a 16m motor boat, whose twin 360hp diesels virtually guaranteed that we'd be able to make them drag. The other difference was that instead of securing the anchor cable directly to a winch or cleat, we connected it to a sensitive load cell, measuring the strain in the cable to an accuracy of 1kg.

The cable itself consisted of 5m of 8mm stainless-steel chain, connected to the anchor by a swivel, and 50m of nylon warp. We followed the RYA advice about the amount of cable to use (6 x depth of water), but added an extra couple of metres to offset the fact that our stemhead roller was higher than that of most sailing boats, so in 5m of water we used 32m of rope and chain. We also tried 20m of rope and chain in 3m and achieved similar results.

Having anchored in the usual way, we then applied astern power, first with one engine then with both, and at progressively higher revs, while monitoring the read-out on the load cell. Finally, we recovered the anchor and inspected the sample of seabed that it brought with it, to make sure that we were testing the anchors in comparable conditions.

The original plan was to try each anchor in the mud of Southampton Water, the sand of East Knoll and the gravel of the Bramble Bank. Unfortunately, a combination of deliveries, deadlines and a depression conspired against us, and a pulled muscle cut the programme short after the first sequence of tests, in the gritty mud between Hamble and Southampton.

Different seabeds would undoubtedly yield different results: more sand in the mud would probably have produced more impressive figures all round. Even so, the results were interesting: when it comes to anchors, it seems, you don't necessarily get what you pay for.

Sailing Today's test charter

Sailing Today is dedicated to bringing you the best buying advice available in the sailing market. We achieve this by undertaking comprehensive group tests of the latest gear, comparing and contrasting similar products in rigorous real-world conditions and then presenting our findings in a form that's both logical and easy to understand.

Products are judged on their ability to do the job for which they're intended, with a bias towards any that offer particularly good value for money – the best performer may be the most expensive, but ST will always favour a product that does the job well without costing the earth.



BEST BUY A product earning the Best Buy award is one that we feel both does the job at hand and offers the best value for money. A Best Buy

won't always be the best performer in the group, and it won't necessarily be the cheapest, but any product given a Best Buy should offer the ideal balance between price and performance and is therefore the one we recommend for the average buyer.



PREMIUM PRODUCT The Premium
Product award is basically what it says:
a top-notch product, but with a price tag
to match. Although Premium Products
we expensive than the porm, you do.

are more expensive than the norm, you do actually get what you pay for. We can't give it a Best Buy, as it doesn't offer the best overall value, but, as with most things, if you can afford a Premium Product, you won't go far wrong.



BUDGET BUY Occasionally, we'll highlight a product that excels by dint of its price. It may not be a star performer, since the other, more expensive

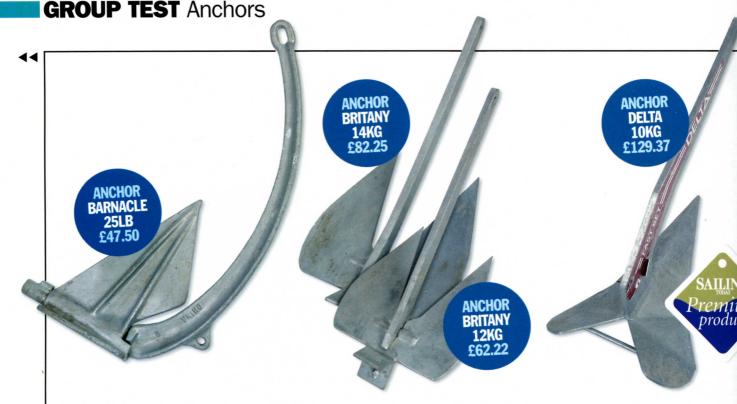
products will be more effective. However, if it fulfils the basic, no-frills requirements of a product of its type for a fraction of the price of its competitors, we'll give it a Budget Buy award.

If a product earns our coveted 'Best Buy', 'Premium Product' or 'Budget Buy' awards, you can be sure that it performed well in testing and is therefore worthy of your investment. Look out for our logos in your local chandlery: it's your way of making sure that you get the best deal, even if you haven't read that particular test.

Award system

- To achieve a Best Buy, a product must score a minimum of four stars for performance and a minimum of four stars for value. If no product in a group achieves these scores, then no Best Buy will be awarded.
- To receive Budget Buy status, a product must earn five stars for value and also perform reasonably. Normally, a Budget Buy product will be significantly cheaper than the Best Buy.
 To achieve Premium Product status, the item
- To achieve Premium Product status, the item on test needs to gain five stars for performance and also offer reasonable value for money. A typical Premium Product will be significantly more expensive than the Best Buy.
- We are not obliged to make any of these categories of award. If we think a whole group of products is poor or overpriced, we'll say so.





BARNACLE 25lb £47.50 Performance **** Value for money ****

The cast steel Barnacle anchor is a curious looking thing, with a single triangular fluke mounted on a C-shaped shank, presumably to ensure that the pull of the cable is directly lined up with the centreline of the fluke.

According to Barnacle's website, it has been the preferred anchor of Caribbean yachtsmen and charter boat captains for over 20 years, with its "40° fluke angle allowing deeper penetrations" while "its unique single plane design" means "there's no rolling out effect of the anchor when the wind veers".

It would certainly stow easily, because it folds flat or could hang over a stemhead roller, but despite the claims made for it, we reckoned that its asymmetric design virtually guaranteed that it would roll over and unbury itself when subjected to any load. That, it transpired, was exactly what happened: it set quickly and held to 40kg before abruptly breaking out. It set itself again, almost immediately, only to repeat the process all over again. The maximum hold we achieved was a modest 80kg.

In all fairness, it must be said that Barnacle recommend a pound of anchor per foot of boat, so this 25lb anchor is rather lighter than would be recommended for our hypothetical 10m yacht. The range extends from 8lb-125lb, in either galvanised steel or manganese bronze, but the next step up is the 40S, which at 18kg seems rather over the top.

Sailing Today Verdict

An innovative design, and a bargain basement price, but its performance in British mud doesn't match the claims made for it in Caribbean sand

BRITANY 12kg £62.22 Performance **** Value for money ***

BRITANY 14kg £82.25 Performance **** Value for money ****

Plastimo's budget range of Britany anchors are a simple, flat-fluke design with a central shank and no stock, produced in galvanised steel, in sizes from 2kg-90kg. The 14kg is recommended for boats of up to 10.5m and the 12kg that we also tested is really aimed at boats up to 9m long.

The catalogue describes the Britany as the "only flat anchor with a shank designed not to foul" and refers to its "geodynamic flukes"— an interesting concept, given that the dictionary defines geodynamics as a branch of geology concerned with large-scale forces and processes of the Earth's interior! More realistically, the whole thing looks as though it has been flame cut from sheet steel and welded together in a relatively low-tech workshop.

One characteristic of flat stockless anchors is their knack of screwing themselves out of the seabed: one fluke starts to bite before the other, so it pulls itself downwards more quickly and may lift the other fluke clear of the bottom. Once this has started, it continues, until the whole anchor has rotated through 180° and the buried fluke pops up to the surface of the seabed. This would account for the erratic readings we recorded on our strain gauge, as the anchor bit, broke out, re-set and broke out again.

This is exactly what the 12kg did, repeatedly breaking out when the load cell reached anything near 100kg, but re-setting very quickly afterwards. The 14kg did much the same, but at conspicuously greater loads, and at one stage produced the biggest reading we were to see on the load cell throughout the entire test – 700kg.

Sailing Today Verdict

Good performance at a budget price from the big version, but the smaller one couldn't touch it

DELTA 10kg £129.37 Performance **** Value for money ***

When it first appeared – being carried aro the 1990 London Boat Show by some wor champion weightlifter – most people probassumed that the Delta was no more than cut-price version of the beloved CQR. It keeps much the same from a distance, but it was more angular; it was welded, rather than comparing the forged; and it didn't have the finger-crush hinge between its shank and the ploughsh

But then people started buying it and u it; magazines started testing it and Deltas started turning up in the most unexpected places such as on RNLI lifeboats.

The CQR's poor relation wasn't such a poor relation after all: it was, in fact, a blog good anchor. It still is. Even in mud, wher might expect the flat-fluke designs to fare than ploughs, the little 10kg Delta outperformed anchors that weighed 40 per more and others that are more than three its price, only breaking out at 525kg. Even that load, it gave up only with the greatest reluctance, having dragged very slowly three mud against a load of nearly half a tor for several minutes.

When we decided to stop for lunch an asked the owner of the boat which anchor he'd like to use, his first reaction was "my own" (a 25kg Delta). Then he changed his mind and picked the 'baby' Delta instead. a lunch hook it did us proud and is actual recommended as the main anchor for boa of up to 40ft in length. Deltas are also available in stainless steel and in a range of sizes from 4kg-63kg.

Sailing Today Verdict

Clearly, unmistakeably, the best of the b and at a very reasonable price



FOB LIGHT E-10 £158.10

Performance **** Value for money ★★★★

FOB LIGHT E-14 £231.70

Performance ★★★★ Value for money $\star \star \star \star \star$

We were supplied with two Foblight anchors, produced by the French anchor specialists FOB from an aluminium/magnesium/titanium alloy that is said to be as strong as steel. Both arrived in padded carrying cases, rather like miniature sleeping bags, but with convenient carry handles at the 'head' end. Inside each case was a kit of parts: two flukes, that slip into a central crown, and a shank, with two holes at one end and a stock that slides through the whole assembly and is held in place with a tough spring clip. The whole job takes a matter of seconds to assemble - the brochure claim of 30 seconds may even err on the side of pessimism.

The two holes, incidentally, allow the anchor to be set up to suit 'mud' or 'sand', so we picked the 'mud' hole, which allowed the flukes slightly more movement than they would have had if we had chosen the 'sand' hole.

Manhandling an aluminium anchor is a delight: the E numbers in their names are supposed to refer to the weight of an equivalent steel anchor but the E-14 weighs less than 6kg, while the E-10 makes even the wimpiest wimp look like Superman, at less than 4kg. Unfortunately, their performance was a disappointment and try as we might, we couldn't get the E-10 to set at all. The E-14 fared rather better: it got a grip and held to 160kg, a perfectly respectable power-to-weight ratio of 27:1. But then it broke out abruptly and having done so proved very reluctant to re-set.

Sailing Today Verdict

Pretty looking anchors, well made and lovely to manhandle, but too unreliable and expensive to be recommended

FOB HP 14kg £99.40 Performance ★★★★★ Value for money $\star \star \star \star \star$

The FOB HP looks uncannily like the marginally cheaper Britany: like the Britany, it's a flat fluke anchor with curved edges to the flukes and no stock, but a wedge-shaped crown. Large oval holes in the crown, however, make it very much easier to manhandle and the whole thing looks better made.

Despite this – and the brochure's quasiscientific talk about 'optimum fluke angles' and 'polyvalence' - its performance was pretty modest, achieving a maximum hold of 200kg, and proving surprisingly reluctant to re-set. Given that the most obvious differences between this and the Britany are the shape and position of their crowns, we wondered whether the FOB's hand-holds might be reducing its effectiveness, or whether its shape and position made it particularly prone to being clogged with mud.

Sailing Today Verdict

The FOB HP is available in galvanised steel or stainless and in a range of sizes from 4kg-200kg. It would probably work better in the larger sizes, but at this level its performance isn't encouraging

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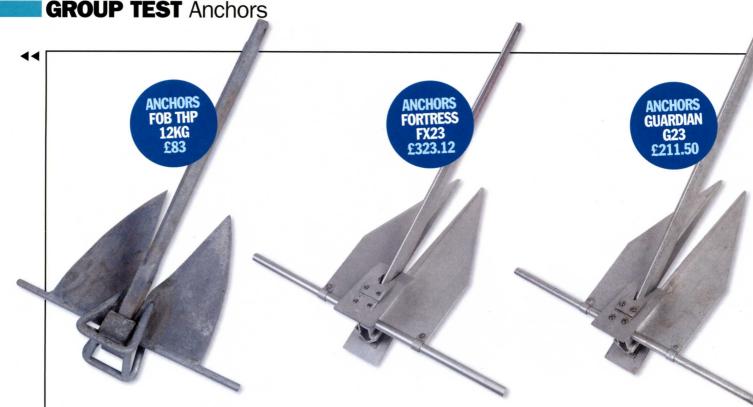
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FOB THP 12kg £83 Performance *** Value for money ***

The FOB THP is a more recent development of the 20-year-old FOB HP and looks far more like the famous, but hard-to-find, Danforth. Significant changes from the older design include sharpened flukes, to help it dig in, and the addition of a short stock, to help both points dig in together and to reduce the risk of it screwing itself out. More surprisingly, perhaps, the crown has been redesigned and is now in the form of a cage of welded steel bar. It's difficult to see how this is supposed to help, though in our test, it proved to be very good at collecting bottom samples!

Overall, though, the changes do seem to have made a significant difference: the 12kg THP proved very much easier to set than its predecessor and held a maximum of 180kg, giving it a rather better power-to-weight ratio. Perhaps the most important difference between the two is that when the THP broke out, it was able to re-set itself, so long as we were drifting reasonably slowly.

The THP is still quite a new design, so it's only available in galvanised steel and in a limited range of weights, from 4kg-20kg, but still enough to cope with anything from a small keelboat or day-sailer to a 10-ton boat of 40ft or so.

Sailing Today Verdict

The redesign makes the THP much more reliable than its predecessor – take care not to confuse the two!

FORTRESS FX23 £323.12

Performance ★★★★ Value for money ★★★★

The Fortress arrived in a long cardboard box, rather like the kind that contain all the balsa wood and plans you need to build a model aeroplane, but slightly heavier. Inside were all the pre-cut, pre-shaped pieces of aluminium and stainless-steel nuts and bolts you need to build your own anchor. It was a bit more of a palaver than assembling the Foblight kit, with 10 nuts and bolts involving three spanners and a screwdriver, but it was straightforward enough and the end result looked quite impressive.

Unfortunately, although the packaging proclaims that "Experts agree... Fortress is the World's best anchor", our expertise wasn't up to the job of replicating the impressive claims made for the Fortress. The numbers represent the weight (in pounds) of an 'equivalent' steel anchor, so the FX23 is supposed to be equivalent to a steel anchor of about 9kg-13kg, which, according to Fortress's website, makes it suitable for boats of up to 45ft. We, however, found it extremely difficult to set and that it then broke out abruptly at a relatively modest 230kg. Try as we might, we could not then persuade it to re-set itself, other than by bringing the boat to a complete standstill and starting again.

Its very low weight of just under 7kg gave the FX23 one of the best power-to-weight ratios of the group and makes it very tempting for whoever has to manhandle it. The flip side of low weight, however, is its reluctance to set and refusal to re-set, while its power-to-price ratio is terrifying. It's available in a wide range of sizes, from 1.8kg-31.1kg and is supposed to be suitable for boats of between 5m and 46m.

Sailing Today Verdict

A very expensive way of buying very modest performance

GUARDIAN G23 £211.50 Performance **** Value for money ****

In what could be taken as tacit acceptance of the fact that the Fortress might be a shade on the pricey side, the same company offer the Guardian range, describing it as "The Safer, More Affordable Alternative to Heavy Steel Anchors". It's basically a Fortress, but without such a high quality finish and without one or two of the Fortress's refinements. It's produce in a similar range of sizes, from the 1.1kg G5 the 31kg G125, though their main UK distributor only stocks the smaller ones, up to the 8.1kg G37. Each Guardian, though, is slightly smaller and lighter than the corresponding Fortress – our G23, for instance was nearly a 1kg lighter than the F23.

It came as no surprise, therefore, to find the its behaviour was generally similar – it was just as difficult to set and just as unwilling to re-set and its performance was slightly down on the of the Fortress. Its power-to-weight ratio was slightly lower and its power-to-price ratio distinctly better.

Sailing Today Verdict

In terms of price and performance, the G23 is a head-on competitor to the Foblight E-14 but it's nowhere near as well-constructed or as easy to assemble



KOBRA 12kg £82.19
Performance ****
Value for money ****

KOBRA 14kg £85.71 Performance ***** Value for money ****

Similarities between the Kobra and the Delta are uncanny: the Kobra is also a hollow ploughshare design of folded and welded steel, with a heavily weighted tip and a reinforcing bar underneath to keep the 'wings' of the ploughshare apart.

The big difference is that unlike the rigid construction of the Delta, the shank of the Kobra is pivoted, allowing it to fold down towards the fluke when not in use. Unlike the famous CQR, however, the Kobra's pivot is designed so that when the anchor is ready to use, the shank can be locked in position. The idea behind this complexity is to make the anchor easier to stow. Folding the stock down certainly reduces the height of the anchor by a few inches – the 12kg version, for instance, is 71mm shorter in its stowed mode – the trouble is that folding it up also makes it longer, by 61mm. Was it really worth it, or was the main object really to set it apart from the Delta?

With two anchors from the same family to play with, we expected similar behaviour from both and an increased performance as the size increased. In fact, the 12 and 14kg versions behaved very similarly to each other: both set easily and showed no inclination to break out; they held an increasing load and when it got too much, they simply dragged through the sea bed with a more or less constant resistance. The surprising difference was that although the 12kg model was well up with the front-runners, and actually out-performed the Delta, the 14kg version turned in a disappointing performance by dragging at just 130kg.

Sailing Today Verdict

A Delta look-alike at a lower price, but with some inexplicable differences between models

MANSON RAY £432.40 Performance **** Value for money ****

Most people would probably take one look at the Manson Ray, and say, "Oh, it's a Bruce." But it's not. It's made in New Zealand by a firm that specialises in the production of stainless-steel anchors to various different designs, including a CQR look-alike called the Manson Plough and the Ray, both in sizes up to 1,000kg.

At 10kg, our test anchor is close to the bottom of this range and a bit on the small side for our hypothetical 10m boat, but it acquitted itself well, with a maximum holding power that put it well up in the middle of the fleet, a power-to-weight ratio comparable with the best of the aluminium anchors and a useful willingness to dig itself back in whenever we broke it out.

Its biggest drawback is undoubtedly its price: at £432.40 it was the most expensive anchor in the test, as well as one of the smallest.

Sailing Today Verdict

Beautiful looks combined with good, workmanlike performance, but at an eye-watering price

What the makers say about the results...

■ Plastimo (Britany, Fortress, Guardian and Kobra) Thanks for giving us the opportunity to react on the anchor test results. We would simply like to confirm that we agree with the 'rules of the game', knowing that anchors are always tricky to test, as different locations would generate different results.

■ Fortress (Fortress and Guardian)

While for some unknown reason the Fortress and Guardian anchors did not perform well in the gritty mud between Hamble and Southampton, these same anchors performed heroically in the mud bottoms from North Carolina to Maryland during the recent Hurricane Isabel, as told to us by many grateful customers.

■ Blue Water Supplies (Spade)

While a little surprised with these test results, it is clear that this limited test couldn't do justice to the Spade's and Océane's abilities as highly effective allround performance anchors. The 'huge ball of mud' is, however, quite normal – the Spade's unique design allows this to be displaced during penetration.

■ Lewmar (Delta) The Delta[™] anchor is Lewmar's top-selling anchor – and it's easy to see why. Consistent and reliable in performance, it is type-approved by Lloyd's as a high-holding power anchor and is specified as the primary anchor by numerous Lifeboat organisations. It's guaranteed for life, guaranteed to perform.

■ Superyacht Docs (Manson)

Hand crafting small anchors is less costefficient than big ones, but the 'eye watering' really comes when some cast versions start to pit and rust after going in salt water. Five years down the track is where value for money should be looked at! Beautiful looks are required on beautiful boats.

- Sunshine Maritime The WASI Claw has been tested by all the German boating magazines and even by the Seeberufsgenossenschaft, an official German society. In every test it has always proven the best choice in all tests done under all practical conditions. It is the only anchoring system ever approved by Germanischer Lloyds.
- Calibra (FOB/Yamaha/Barnacle) We always say to customers take your time when anchoring; it does take time to set, but once it does, it does the job! Our guarantee has always been, bring it back if it doesn't work and we will give you your money back. We have never had a return.

GROUP TEST Anchors



SPADE 80S £321.95

Performance ★★★★ Value for money ★★★★

SPADE 80A £360.73

Performance ★★★★ Value for money ★★★★

The design of the Spade anchor seems to be based on its namesake: a garden spade. After all, when you dig with a spade, you use the concave side, not the convex rear surface. So, rather than using a convex fluke, like the CQR, Delta and Kobra, the Spade has a hollowed upper surface above a V-sectioned 'keel' - almost like an inverted plough anchor. Based on the idea that it's area rather than weight that counts, Spade anchors are sized according to their area (our 80, for instance, has a nominal fluke area of 800cm²) and range from a size 40, for boats up to 20ft, to a 200 for boats up to 82ft. Each size is available in galvanised steel or aluminium, with the aluminium versions weighing about half as much as the steel ones, but claimed to offer the same performance.

The heavy galvanised steel version (the heaviest anchor in our group, at 15kg), dug in promptly and held up to a respectable 270kg. Having broken out, though, it seemed reluctant to re-set. When we pulled it up, it was obvious why: it had lived up to its name by digging up a huge ball of mud, which couldn't slip off the hollowed surface as it would from a more conventional plough anchor.

The identical Spade, made out of aluminium alloy, behaved in much the same way, except that it broke out earlier and was even less willing to set itself.

Sailing Today Verdict Very pricey for modest performance

SPADE OCEANE 8 £116.33

Performance ****
Value for money ****

The latest variant of the Spade was offered to us as a prototype. It's intended to overcome one of the biggest problems with the existing version, by simplifying the construction and reducing the weight to produce a more economical anchor. In that, at least, it succeeds.

Sailing Today Verdict

Try as we might, we couldn't get it to grip at all!

WASI CLAW £389.28 Performance *** Value for money ***

Wagener and Simon is a German firm that doesn't regard its Bugelanker or 'Claw' as ju an anchor: to them, it's part of a complete or 'Ground Tackle System' that includes its Powerball swivel and highly polished chain made of 316 stainless steel.

The anchor itself is available in sizes fro 6kg-52kg, to suit boats of up to 54 tons. It's simple-looking design, with no moving par and just a single, flat triangular fluke, rather longer and narrower than most, with the shrising from the crown end. Perhaps the modistinctive feature is a semicircle of stout stainless bar across the crown, which doesn seem to have any obvious function when anchoring, but which certainly made it easy manhandle the 14kg test anchor.

In our test, it was slow to set, but once to Claw had grabbed hold of the bottom, it had a respectable 260kg before breaking out. On it had done so, however, we had to bring th boat to a complete standstill by using the engines to stop her drift before we could get it to re-set.

Sailing Today Verdict

Like all stainless anchors, the Claw is expensive for its performance



YAMAHA MARINE FOLDING ANCHOR £122.50

Performance ★★★★★ Value for money ★★★★

A real odd-ball this, the Marine Folding Anchor is made for Yamaha, mainly for use in small RIBs and personal watercraft as a replacement for the traditional – and almost completely useless – grapnel type of folding anchor.

Like its predecessors, it starts off small, and folds up even smaller, until you'd never guess that it's an anchor. To be honest, it looks more like some instrument of mediaeval torture or the cutters from an industrial-scale food processor. Whoever designed it, though, must have been a wizard at origami, because as you squeeze the end of its two-part shank together to fit the shackle, the whole thing opens out like an umbrella.

Its six hinges and umpteen precisely-cut stainless parts must make it expensive to make, and it certainly isn't designed to hold a cruising yacht, so in terms of hard numbers, its power-to-weight ratio is uninspiring and its power-to-price ratio is even worse. But very small anchors always have an in-built disadvantage in such comparisons, so we weren't particularly disappointed. It did its job: it set easily and quickly and when we dragged it, it set itself again. Compared with a traditional small grapnel, it seemed pretty good.

Sailing Today Verdict

It's pricey, especially if you compare it with the even more traditional bag of sand or pebbles

Anchors at a glance

Supplier	Make	Model	Material	Weight (kg)	Hold (kg)	BrokeOut	Reset	Price
Calibra	Barnacle	25lb	Galvanised	12.5	80	yes	easy	£47.50
Plastimo	Britany	12kg	Galvanised	12	100	yes	easy	£62.22
Plastimo	Britany	14kg	Galvanised	14	700	yes	easy	£82.25
Lewmar	Delta	10kg	Galvanised	10	525	no	v easy	£129.37
Calibra	FOB	Foblight E-10	Alloy	3.9	-	-	-	£158.10
Calibra	FOB	Foblight E-14	Alloy	5.8	160	yes	v hard	£231.70
Calibra	FOB	THP12kg	Galvanised	12	180	yes	OK	£83.00
Calibra	FOB	HP14kg	Galvanised	14	200	yes	v hard	£99.40
Plastimo	Fortress	FX23	Alloy	6.8	230	yes	v hard	£323.12
Plastimo	Guardian	G23	Alloy	5.8	170	yes	v hard	£211.50
Plastimo	Kobra	14kg	Galvanised	14	130	no	v easy	£85.71
Plastimo	Kobra	12kg	Galvanised	12	650	no	v easy	£82.19
Superyacht	Manson	Ray	Stainless	10	260	yes	easy	£432.40
Blue Water	Spade	Oceane 8	Galvanised	8	-	-	-	£116.33
Blue Water	Spade	80S	Galvanised	15	270	yes	hard	£321.95
Blue Water	Spade	80A	Alloy	7	135	yes	v hard	£360.73
Sunshine	Wasi	Claw	Stainless	14	260	yes	v hard	£389.28
Calibra	Yamaha	MFA	Stainless	2.8	14	yes	easy	£122.50

Conclusion

Anchors, nowadays, have to fulfil two quite different roles: on the one hand, they need to be light and easily manageable, so that you can anchor for lunch or to read the Sunday papers without having to spend the following week in agony from your efforts at getting the damn thing back on board or from trying to persuade it to self-stow the right way up; on the other, an anchor could be your last line of defence – the emergency brake that allows you to stop everything. The only requirement for this kind of anchor is that it needs to grab hold of the seabed quickly and tenaciously.

Almost inevitably, if an anchor is pushed to its limits (of course, that really means pulled to its limits), something has got to give. Either the anchor will break out of the bottom altogether, or it will drag, or it may do a combination of the two.

We were looking for the perfect anchor: one that did both jobs by being light enough to manhandle on the size of boat that might not have a powered winch, yet was able to hold the kind of load to which it might be subjected in a gale. Measuring weights and holding power was relatively easy, but our decision was also coloured by the fact that an anchor that suddenly lets go and won't re-set is considerably less useful than one which re-anchors itself almost as soon as it has broken out, but that both of these are outclassed by an anchor which doesn't break out at all, but which continues to drag at something close to its maximum holding power.

It was disappointing to find that in spite of the claims made for them, and the quasiscientific claptrap used to back them up, some anchors turned in the poor performances that we have come to associate with so much so-called safety equipment. To this year's depressing catalogue of dan buoys that fall apart, lifebelts that snap and lifejackets that don't inflate, it seems we must now add anchors that can't make a hole in mud.

The aluminium ones were all disappointing. Try as we might, we couldn't get the Foblight E-10 to set at all, while the Foblight E-14, the Fortress, Guardian and Spade were all reluctant, at best. So far as we could tell, the reason is a matter of simple physics. A steel anchor that weighs 12kg in air would weigh about 10kg in sea water. If you made exactly the same design in aluminium, it would weigh about 4kg in air and only 2.5kg in sea water. In all but the softest bottom, the aluminium anchor simply doesn't have enough weight to penetrate and with big, flat flukes acting like snowshoes, it can do nothing but sit on the mud until the boat starts to drag fast enough for it to take off and fly like an underwater kite.

Amid this depressing picture, four anchors stood head and shoulders above the rest. Three of them are cheap. The fourth is very pricey – Manson Ray, which wasn't a top performer in any respect, but was sufficiently capable that we'd be perfectly happy to have one on board. It deserves its honourable mention, though, for being such a beautiful thing that it seemed a shame to get it wet!

The 14kg Britany stood out as a cheap, simple anchor that achieved massive holding power with minimal fuss. It looked agricultural, but it did the job. We were worried, though, that the lighter version didn't even come close.

The best buy, on the strength of our test results alone, just has to be the 12kg Kobra. It combined high holding power with fast setting and a marked reluctance to break out, without being too awkward to manhandle. Again, though, we were somewhat concerned that it didn't seem to share its virtues with its bigger sister the 14kg.

We had no such worries about the Delta. Of course, this was partly because we only had one Delta to compare! That one, however, confirmed the reports from previous tests by other magazines and by bodies such as the RNLI, as well as our own experience that if you drop a Delta, you can virtually guarantee that you're anchored.