



## Modular Buoys

### - Standard Modular Anchor Pendant Buoy

We offer two types of surface modular anchor pendant buoy:

- Standard Modular Anchor Pendant Buoy
- Donut Modular Anchor Pendant Buoy

Standard modular anchor pendant buoys consist of removable, interchangeable modules with discrete end modules and centre modules assembled onto central steelwork and fixed in position with retaining flanges, making up buoys ranging from 1Te to 100Te nett buoyancy.

This system allows for the number of centre modules to vary according to the nett buoyancy required. This makes these buoys a flexible and cost effective option because the addition or subtraction of the centre modules allows for them to be redeployed on future projects.

Each module is manufactured from a high performance, low density rigid polyurethane foam core, which is encapsulated within a rigid polymer skin. The core is lightweight and closed cell, it will not absorb water even if the skin is punctured. The modules are for surface use only and should not be submerged and subject to hydrostatic pressure.

Nominal skin thickness is 12-14mm and it is coloured bright yellow. The skin provides protection for the flotation core against impact damage during deployment and recovery from the vessel.

The standard steelwork is fabricated from carbon steel (to BS EN 10 025) and consists of a central tubular section with an anchor handling cross at one end and a pad eye capable of accepting shackling at the other. The steelwork is blast cleaned and coal tar epoxy painted.

The buoy is assembled by threading the modules onto the central steelwork. Location spigots placed between adjacent modules ensure alignment and prevent rotation during deployment, the modules are also keyed to the end flanges to prevent rotation.

The end flanges are welded into position, should extra modules be required or removed the weld is ground away and the flange removed.



## Modular Buoys

### - Donut Modular Anchor Pendant Buoy

We offer two types of surface modular anchor pendant buoy:

- Standard Modular Anchor Pendant Buoy
- Donut Modular Anchor Pendant Buoy

We have been supplying donut modular anchor pendant buoys for over many years, mainly for pipe laying operations. They were first introduced in the mid 1980's to replace traditional heavy steel buoys which were outlawed in the North Sea because of the dangers that they posed to fishing vessels.

The donut modular system typically comprises of 2 or 4 removable and interchangeable modules which rotate around a central steel skeleton or frame. A nett buoyancy range from 4Te to 40Te is achievable.

The "donuts" are constructed by spiral winding and thermolaminating polyethylene foam onto a central steel spool, producing an energy absorbing core which is then encapsulated within a tough polyurethane elastomer protective skin. The resilient core ensures that the buoy is completely self-fendering and the buoy is also resistant to abrasion and ultra-violet degradation.

Our Modular Anchor Pendant Buoy Systems can be manufactured to suit any specific size or buoyancy requirement.

Standard production colours are yellow or orange, however we will manufacture modular buoys in other colours to meet specific customer requirements. Optional items include internal radar reflectors, reflective tape and navigation lights.



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### Mini Modular Buoy

Nett Buoyancy (kg)	No. end Modules	No. centre modules	Total No.
1800	2	-	2
3300	2	1	3
4800	2	2	4
6300	2	3	5

End Module: L: 1740 W: 1740 H: 600 Centre Module: L: 1740 W: 1740 H: 675

### Standard Modular Buoy

Nett Buoyancy (kg)	No. end Modules	No. centre modules	Total No.
7000	2	-	2
10500	2	1	3
14000	2	2	4
17500	2	3	5
21000	2	4	6

End Module: L: 2350 W: 2350 H: 1100 Centre Module: L: 2350 W: 2350 H: 750

### Mega Modular Buoy

Nett Buoyancy (kg)	No. end Modules	No. centre modules	Total No.
14500	2	-	2
21750	2	1	3
29000	2	2	4
36000	2	3	5
43000	2	4	6

End Module: L: 3000 W: 3000 H: 1300 Centre Module: L: 3000 W: 3000 H: 1000

### Donut Modular Buoy

Nett Buoyancy (kg)	No of modules	Diameter (metres)
4000	2	2.00
8000	2	2.30
11000	2	2.95
16500	2	3.17
23000	2	3.18
30000	2	3.40



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