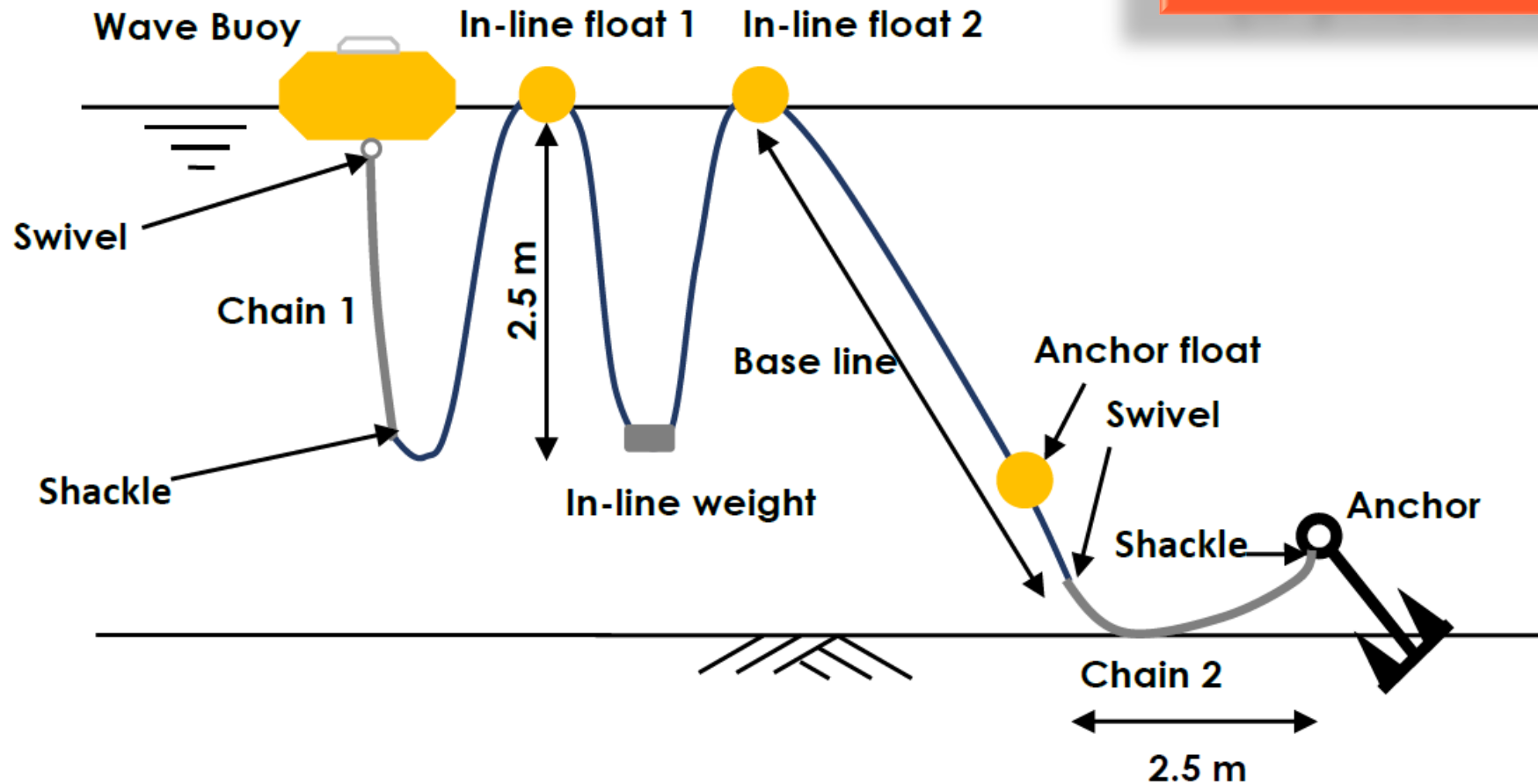


Buoy Mooring (Dyneema type)



Buoy Mooring (Dyneema type)

OBSCAPE

Chain 1

In-line float 1

In-line float 2

In-line weight

Base Line

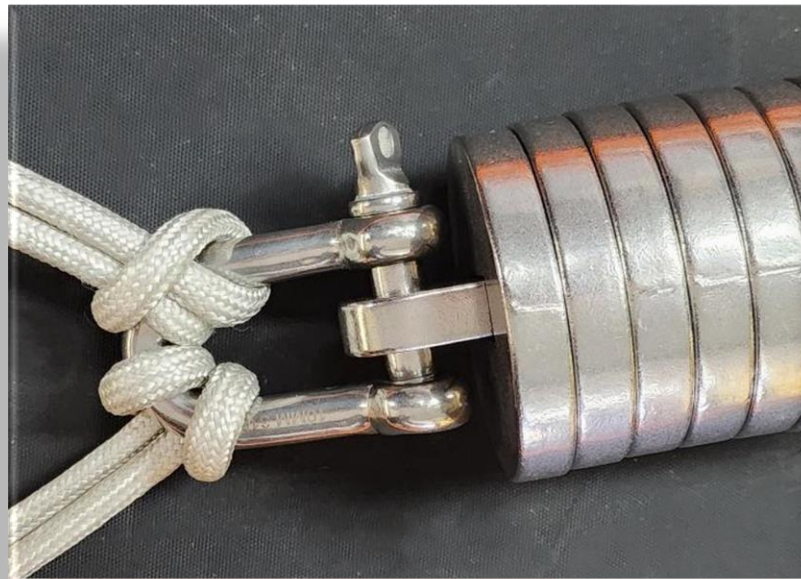
Anchor Float

Swivel

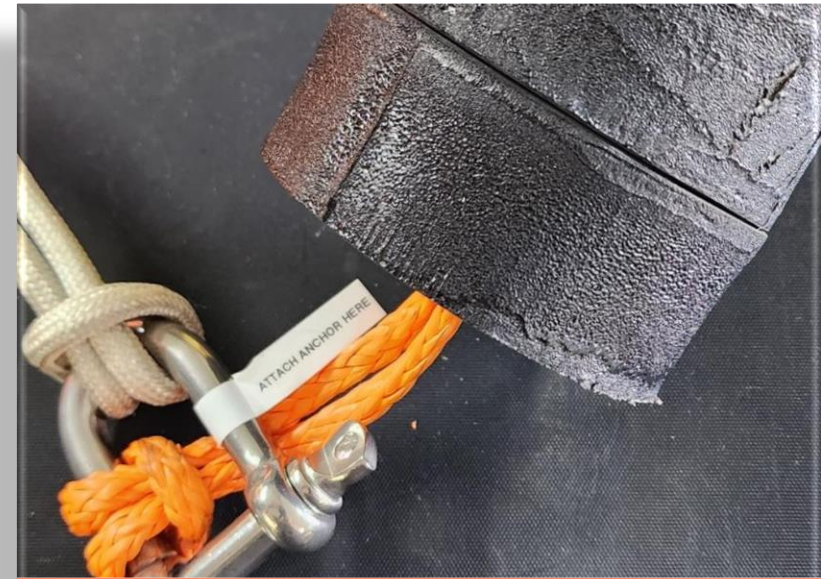




Stainless steel chain and shackles



Stainless steel In-line weight



Foam Anchor Float



Dyneema type Base line



Industry standard floats and marine knots

Dyneema type mooring line:

12-STRAND UHMWPE SINGLE BRAID Heat-treated with Abrasion-Resistant Coating.

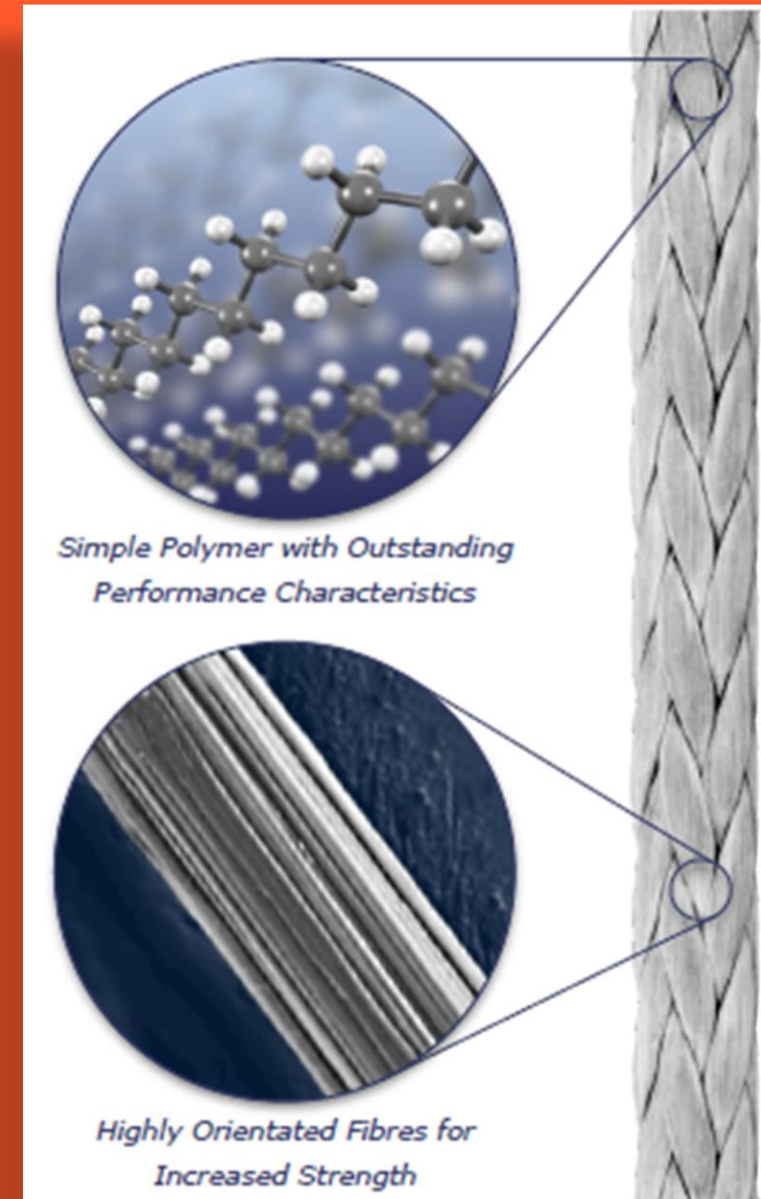
Simple Polymer with Outstanding Performance Characteristics Highly Orientated Fibres for Increased Strength.

FEATURES

- ▶ Extreme strength-to-weight ratio
- ▶ 15 x stronger than steel
- ▶ Safer than wire (low recoil)
- ▶ Hydrophobic fibre (no water absorption)
- ▶ Floats
- ▶ Low creep
- ▶ Resistant to kinking
- ▶ Maintains high strength around tight-radius bends
- ▶ Exceptional UV and chemical resistance
- ▶ Abrasion-resistant coating reduces likelihood of snagging.

TECHNICAL

- ▶ Ultra-high molecular weight polyethylene
- ▶ 32 cN/dtex tenacity
- ▶ 3.5% elongation at break
- ▶ 0.98 g/cm³ density



Please note:

Waves and ambient currents will lead to tensile forces on the mooring line of any buoy. In order to allow the Obscape Wave Buoy to still move with the wave orbital motion, a system of in-line weights and floats is needed. The recommended general mooring design is shown in the figure below. The table gives the specifications of all components, partly depending on the expected maximum current speed and water depth.

Chain 1 should not be replaced by a normal line, as it is important for optimal wave buoy dynamics.

Chain 2 is *not* supplied with your Obscape mooring line and must be sourced by you. It is important to install this chain as it is needed to keep anchor forces as much as possible parallel to the seabed. This will stimulate anchor burrowing.

The anchor float is needed to prevent the line from dragging over the seabed. This will prevent excessive wear of the line. The anchor float needs resist to water pressure at seabed level. Therefore, a foam anchor float supplied as it is preferred over a hollow anchor float.

The anchor weight is *not* included and must be sourced by you. Design of your mooring line has been based on a steel ship anchor in a sandy seabed. For gravity anchors, significantly higher submerged weights are advised. For non-sandy substrates, it is advised to seek local experience and advice.

Please ensure you read the Obscape Mooring Guideline thoroughly and diligently follow all instruction from supporting national and local buoy mooring guides before attempting to assemble your mooring.

For long-term deployments and/or energetic environments, it is advised to increase the mooring line diameter. Regular checks of the mooring line condition may help to prevent mooring line failure.

When determining the water depth from sea charts, be aware that these typically report water depth w.r.t. lowest astronomical tide rather than mean water depth.

An Obscape Wave Buoy functions optimally in currents < 0.5 m/s. Performance may be compromised at higher ambient flow velocities, which are over and above 1 m/s.

This mooring design guideline is provided for reference ONLY and are based on the experience of Obscape staff. Obscape and its associated companies do not take responsibility for practical performance of mooring lines.

Further advisory, occupational health and safety can be obtained from (but not limited to):

https://www.coris.noaa.gov/activities/resourceCD/resources/mooring_buoy_g.pdf