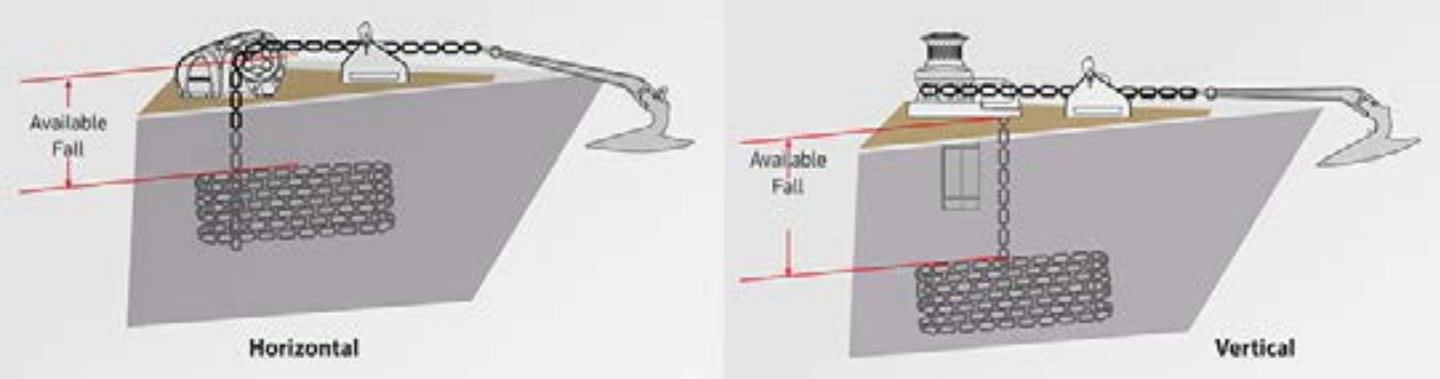
WINDLASS SELECTION GUIDE

There are a number of important criteria to be considered in selecting the correct windlass for your boat. These include the vessel length and beam, displacement, windage (the vessel's topside surface exposed to the wind), anchor size, and rode selection. Practicalities such as locker space and depth of fall for the rode are also important in deciding which windlass is ideal for you.



Vertical or Horizontal Orientation

The two basic configurations of windlasses are differentiated by the drive shaft orientation. Deck thickness and underdeck space are the two primary considerations when deciding which orientation will work best for your application.

Vertical windlasses are characterized by situating the capstan and/or gypsy above the deck and the motor and gearbox below. Vertical windlasses provide a 180° wrap of the anchor rode around the gypsy giving optimal chain control, minimizing slippage and jumping.

Horizontal windlasses are mounted completely above deck with the gypsy and capstan located on either side of the motor. They provide a 90° wrap of the anchor rode around the gypsy.

Space Required In My Chain Locker

Locker space plays an important role in deciding whether to install a vertical or horizontal windlass. Measuring the depth of fall of the rode into the anchor locker way dictate which type of windlass is most suitable for your vessel. Fall is the distance between the center of your gypsy (horizontal) or the deck (vertical) and the top of the rode when the anchor is stowed. The length of chain and/or rope, along with the type of rope (8-plait or 3-strand), must also be taken into account. 8-plait line is better suited for small lockers and the design of the line helps prevent hockling. The depth of fall is the same for chain only rodes and rope/chain rodes. The minimum recommended fall for anchor rodes is 12 inches (horizontal) and 18" (vertical). The windlass does not stow the rode in the locker, gravity does.

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Windlass Selection Guide

Rode Selection

Rope and, particularly chain, selection is extremely important. Windlasses are designed to take chain only, rope only, or both. Rope/chain windlasses are now commonly used on boats up to 65 feet. Chain only rodes remain popular on heavier displacement sail and motor yachts. The gypsy of the particular windlass will determine both size and type of chain which can be utilized. Most new windlasses now specify HT chain, but this is not universal. If the chain is not matched to the gypsy problems may occur, such as the chain jumping off the gypsy or the chain jamming. If you are using a rope to chain rode you must make sure the size of the chain and the size and type of rope match the specifications for the windlass gypsy. Also, the rope must be spliced to the chain. It cannot be joined to the chain with a shackle or any other mechanical coupling device.

Pull Capability

The most useful way to rate windlass performance is by looking at what it will lift and at what speed. The two things to consider are the working load and the maximum pull capabilities of windlass. Working load is the load that the windlass is pulling once the anchor and rode are off the bottom. Maximum pull (sometimes referred to as stall load) is the maximum short term or instantaneous pull of the windlass. Maximum pull capacity of your windlass should be 3 to 4 times the working load.

1. Calculate ground tackle weight (anchor + chain + rope = ground tackle)

eg:	ANCHOR		10m/50ft CHAIN		61m/200ft ROPE		GROUND TACKLE
	30kg/66lbs	+	45kg/100lbs	+	12kg/26lbs	=	**87kg/192lbs**

2. Calculate the maximum pull (total ground tackle x 3 = Maximum pull)

Safety guidelines suggest that the pulling capacity of the windlass should not be less than 3 times the total weight of the ground tackle.

eg:	GROUND TACKLE		MAXIMUM PULL
	87kg/192lbs	x 3 =	**261kg/576lbs**

Safety Tips

Accessories such as chain stoppers or chain snubbers must be used for safe anchoring, the avoidance of unintentional self-launching of the anchor, and for the prevention of damage to your windlass.

When the boat is at anchor, the chain should be secured using a chain stopper or snubber, or the rope rode should be attached to a load-bearing point such as a cleat. You should never use your windlass to pull your boat to the anchor spot. The windlass is designed to lift a dead weight and should not be subjected to the strain of your boat riding at anchor.

When your anchor is stowed and/or you are under way, an anchor snubber should be used to take the load off of the windlass and to assure the anchor does not accidentally deploy.

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