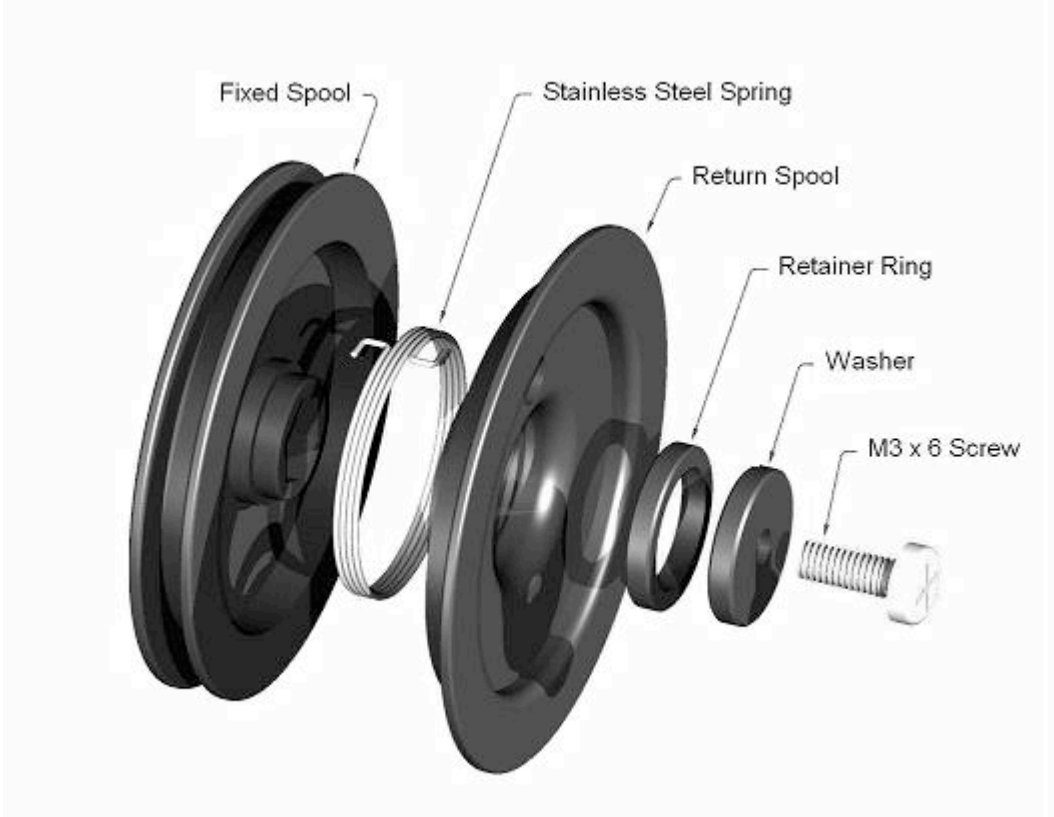
SmartWinch **Self Tensioning Drums**



The RMG self tensioning drums allow for the elimination of tensioning devices in the sheeting system such as shock cord, rubber band material, hat elastic, springs etc. The spring loaded return spool in these drums takes up any slack and maintains a positive tension in the sheeting system. This even applies to the spiral drum 45zs4st. Till now, spirals needed to be used with a single line off the drum and a long length of elastic material attached to a fixed point on the boat to maintain tension. Now the 45zs4st spiral can be used just like the standard double drums and the endless loop sheeting system.

32 mm and 42 mm ST Drums are available in Left and Right hand versions. The direction of the winch when sheeting OUT determines which ST drum to use. When the winch drum turns clockwise (viewed from top of drum) to sheet OUT, the Right hand ST drum should be specified. When the winch turns anticlockwise to sheet OUT the Left hand version should be specified.

Available sizes

32mm x 3mm double spool 

42mm x 3mm double spool 

45mm x 4 turn tapered spool 

The 32zs6 and 45zs9 spirals and the 26mm std and all wides are not available as self tensioning drums.

To purchase please go to the contact SmartwinchUK

How To Use

Setting up the sheeting system with the self tensioning drums is not much different to a normal endless loop sheeting system. But a few of points need to be made to ensure correct operation. In the case of the 32stR/L and 42stR/L there is an insignificant differential in travel between the fixed spool and the return spool so the majority of the spring travel can be used to create tension in the sheeting system. But ensure that there is always at least a small amount of travel left in the spring at any position from full in to full out. The amount of spring travel in the 42stR/L and 32stR/L is around 1 turn.

For the 45zs4st, there is a differential of about 3/4 of a turn between the travel of the spiral and the return spool. The point of maximum differential occurs about 100 mm travel distance out from the spiral fully loaded (close hauled) position. So when the drum is at close hauled or at full out, the return spool should have about one full turn left in the spring. If less than 3/4 of a turn is left in the spring, then the spring will bind and damage is possible.

The important thing to remember for all three self tensioning drums is that some spring travel must remain at all times. In other words, the spring must never become bound up tight at any point in the winches travel.

Note that if the drum thumb screw is to be used with the 45zs4st, then the #dtst must be used.). The standard thumb screw #dts can be used for the other two drums.

If you already have a drum thumb screw and would like to use it with an st drum, it must be one of the later versions which has a flange diameter of 12mm and can only be used with the 32st or 42st. The earlier thumb screws of only 10 mm diameter are not suitable for use with an st drum. If the thumb screw is not used, it is essential that the washer supplied with the st drum is used.

Main Points

- Ideal sheet line material is 36 kg Spectra or smaller.
- Maximum recommended line size is 36 kg. Dacron.
- Sail load must be taken by the fixed spool.
- The return spool is only to be used to give tension to the line coming off the fixed spool.
- 42stR/L and 32stR/L drums must always have some free travel left. The spring must never become bound.
- 45zs4st drum must have 1 turn of return spool travel left when at close hauled to prevent spring binding.
- At least 1 turn of sheet line should remain on each spool at any time.
- Always use the supplied retaining washer or appropriate drum thumb screw to retain the drum.

- Ensure that there is always tension on the fixed spool line over the entire travel range.