Furlers Z - SZ

Code Zero and Asymmetrics

Manual

Nautos™

Assembly Instructions

Furlers Z and SZ are especially designed for headsails without estay and for asymmetrics of various shapes, and are offered two basic systems and several accessories.

The Furler Z works with straight forehead sails like Screachers, Code Zero Stay Sail etc.
The Furler SZ works with curved forehead sail like asymmetrics.

Introduction

This manual contains basic information designed EXCLUSIVELY to specialized or trained people to installation such equipment. Not qualified persons may have serious difficulties and mounting may cause harm to themselves or to the equipment.

On the final pages you will find instructions to measure and prepare the torque cable.

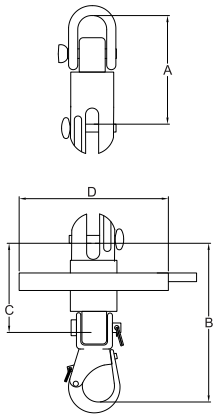
Nautos is not responsible for any incident caused on assembly the product by unskilled personnel.

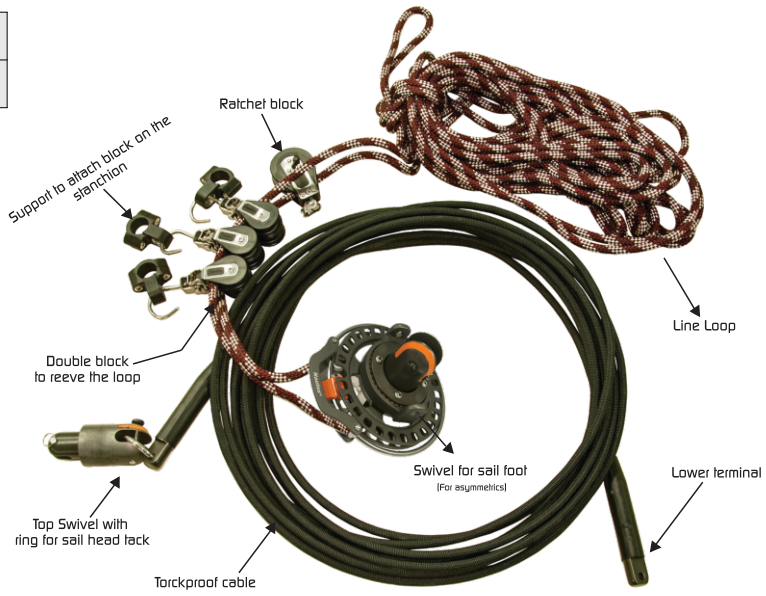
Sail Information

The Nautos Furlers Z and SZ for boats up to 25 ', has a total length of A + B (bellow drawing), which should be subtracted to the fullest extent of the sail and subtract to the measured length of the Torkproof cable.

Application

#3.5	Boats up to 35' or 12mts
#4.5	Boat up to 45' or 15mts





Furler size	A	B	C	D	Working Load	Breaking Load
#3.5	9	15	85	150	1,500kg	2,500kg
#4.5	10,5	19	110	162	2,300kg	3,800kg

Measures in mm

Assembling the line on the Furlers

The line

Use a good quality line, softcover 10mm. This cable must be formed into a loop of sufficient length to circulate the drum and reach the cockpit or appropriate place.

Check with your sailmaker or order it from Nautos. This line can remains at the deck when the Furler is removed or it can be removed with the system.

If the line is permanent, can be passed through blocks. If disassembled, the loop must contain the blocks with links to be fixed on stanchions.

Figure A) With the Furler still disconnected from the sail and cable, pass a line loop through the opening.

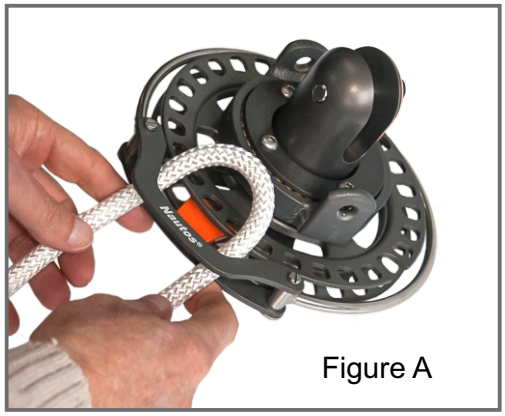


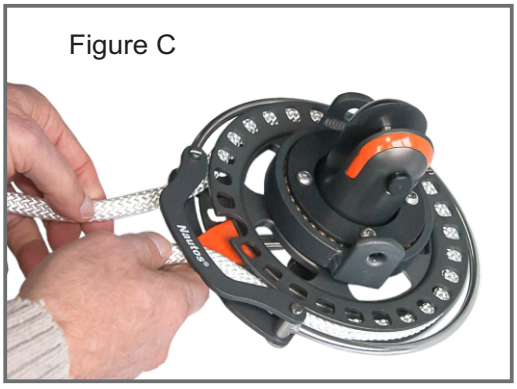
Figure A

Figure B) Pull the handle to have some looseness. Plug the line into the disc opening and rotate the disc to accomodate the line.

Figure B

Figure C) Make sure everything is tight and the line is organized.

Figure C



Operating the Furler

Nautos strongly advises that to operate this equipment for the first time must be accompanied by experienced person in this operation and it must be in calm weather conditions.

If you choose to assemble it directly on the bow use a security harness connected to a reliable point.

Using a 5mm Allen wrench loose and rotate the disc protection according to the desired direction (Figure D)

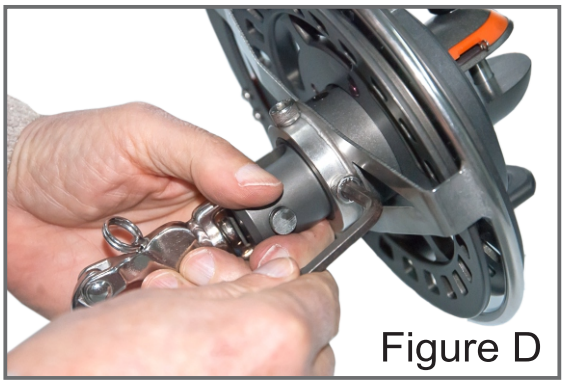


Figure D

Attach the cable to the upper swivel and the swivel must be attached to an adequate halyard (Figure E).


Figure E

Attach the sail to the bottom Furler (figure F and G) (see page 6 Furler SZ for information about asymmetrics). Attach the Furler to the bow or to the bowsprint. Be sure that everything is free, sheets properly reeved and the line loop organized and locked.

Hoist up the sail until correct tension in the halyard .

Check all systems, make sure the sheets are organized and the loop is in normal path.

<u>Be sure to use proper gloves</u>

Start unroll pulling by the leeward sheet, with little wind, the sail will unfurl itself.
Attention to de running line, do not attempt to secure it or severe burn may occur.

Furlers Z

Exclusive for straight forehead (Code Zero)

FURLING

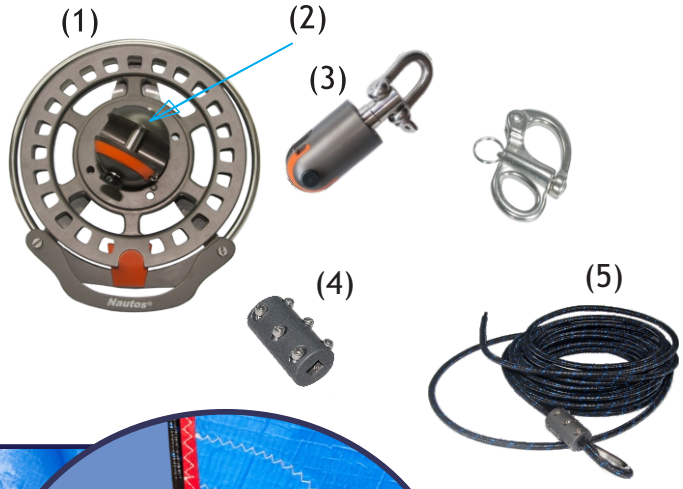
With the halyard moderately stretched, start pulling the cable on the way to roll it, if the conditions are above of moderate, easy enough to reduce the pressure on the leeward , however do not allow the sail to flutter. Keep the sheet with some tension also, operate in stages.

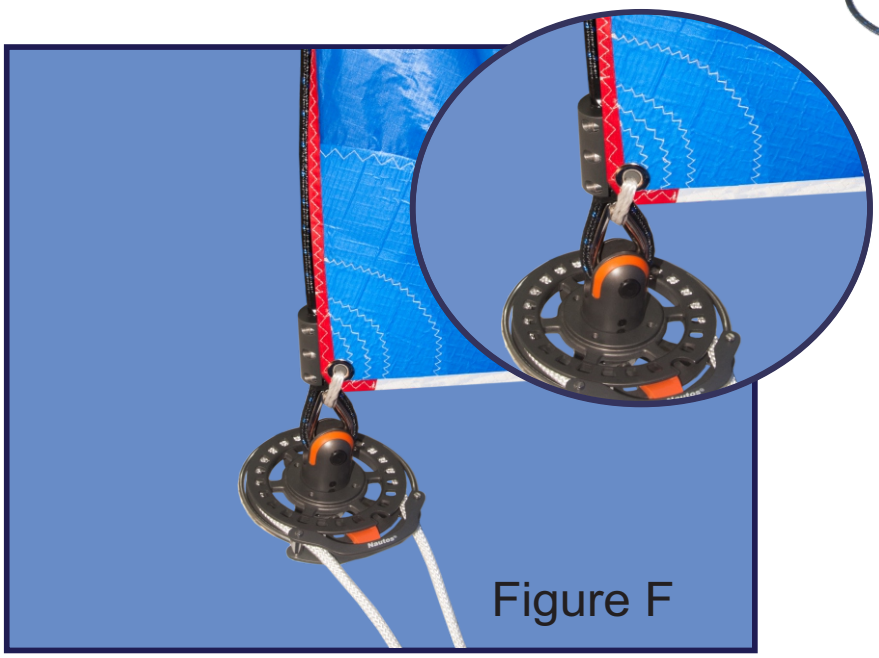
SPECIFICATIONS

Furler size	Sail type	Maximum sail area	Torckproof Cable length	Torckproof Ø	Line Ø
#3.5	Straight forehead sails like Screachers, Code Zero Stay Sail etc.	60mt² 650 sq ft	16m 53 ft	10mm	10 mm 3/8'
#4.5	Straight forehead sails like Screachers, Code Zero Stay Sail etc.	80mt² 861 sq ft	22m 72 ft	12mm	10 mm 3/8'

PARTS

Furler (1)
Swivel (2)
Top swivel (3)
Cable Clamp (4) - sold separately
TORK cable (5) - sold separately





Furlers Z

Exclusive for straight forehead (Code Zero)

Application

Sail with straight forehead
for winds less than 90 degrees
apparent

Code Zero
Screetcher
Stay sail

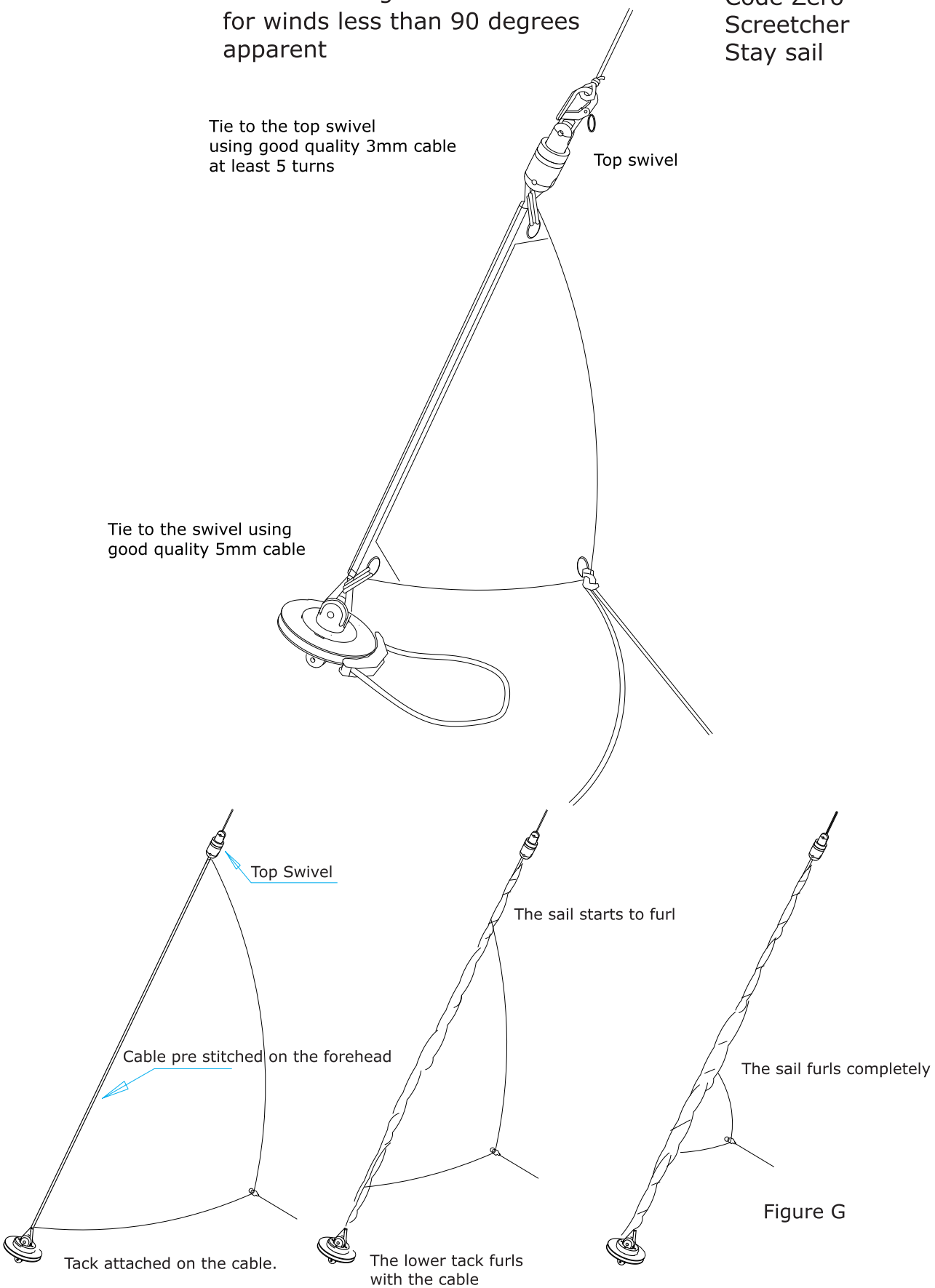


Figure G

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Furlers SZ

For curved forehead (Asymmetrics)

The Furlers "SZ" models are designed for asymmetric spynakers and variations of this design with forehead more curved, usually an option for quarter to stern winds. The characteristic of this model is the extra swivel in the base (Figure G).

SPECIFICATIONS

Furler size	Sail type	Maximum sail area	Torkproof Cable length	Torkproof Ø	Line Ø
#3.5	Curved forehead sails like Asymmetrics, Code Zero 2,3,4 Sail etc.	100mt² 1100 sq ft	16mt 53 ft	10mm	10 mm 3/8'
#4.5	Curved forehead sails like Asymmetrics, Code Zero 2,3,4 Sail etc.	145mt² 1560 sq ft	22mt 72 ft	12mm	10 mm 3/8'

PARTS

Furler (1)

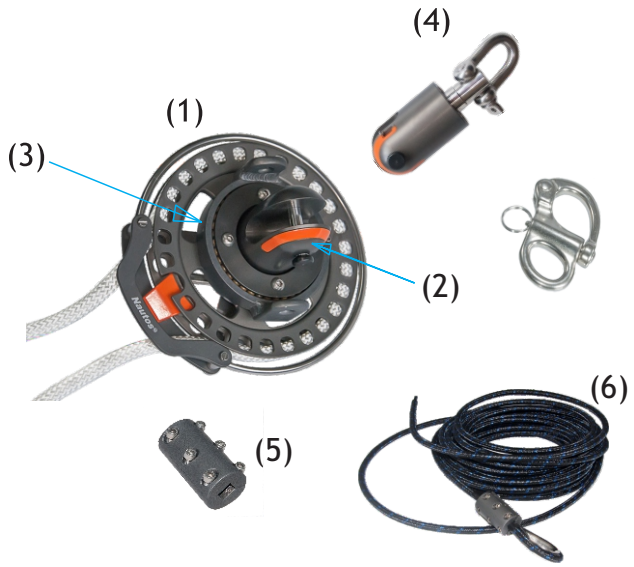
Swivel (2)

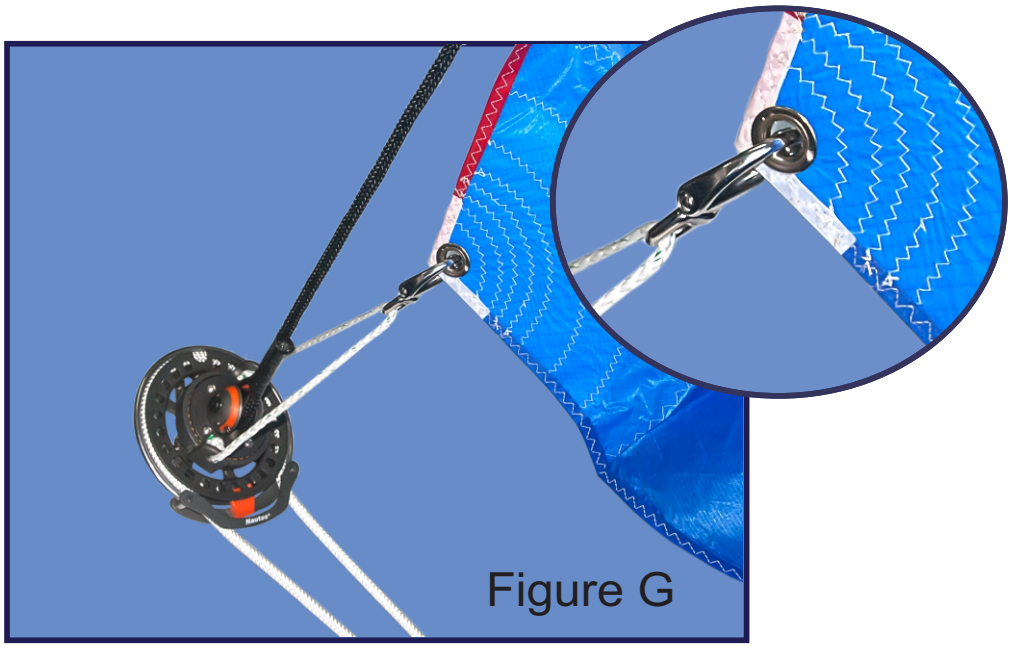
Extra swivel (3)

Top swivel (4)

Cable Clamp (5) - sold separately

TORK cable (6) - sold separately

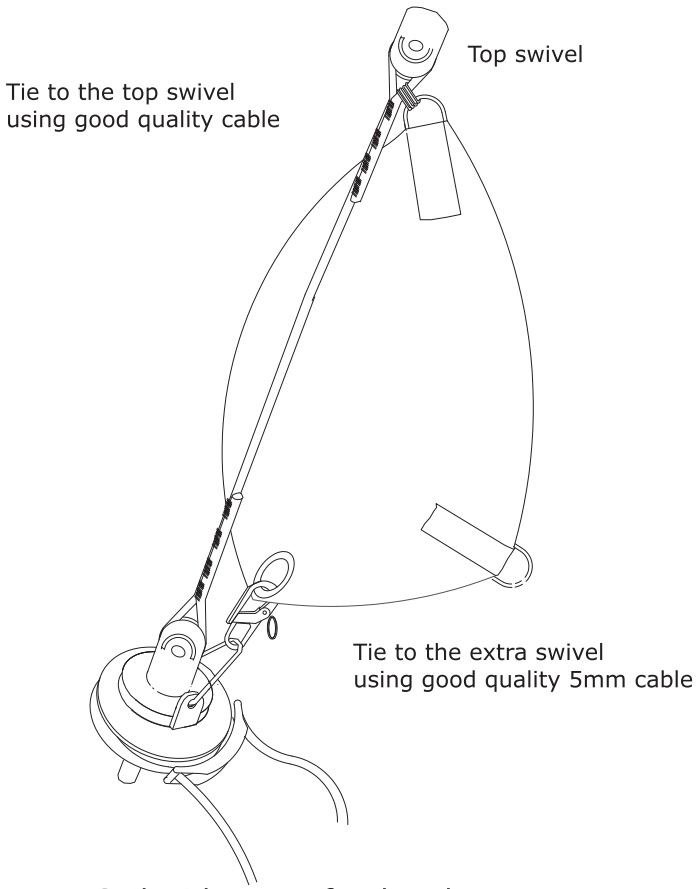




Furlers SZ

For curved forehead (Asymmetrics)

Application: Sail with curve forehead Code 1-6 for winds more than 90 degrees.



Sail with curve forehead
for winds more than 90 degrees
apparent

Code 1-6
Reacher
Gennaker

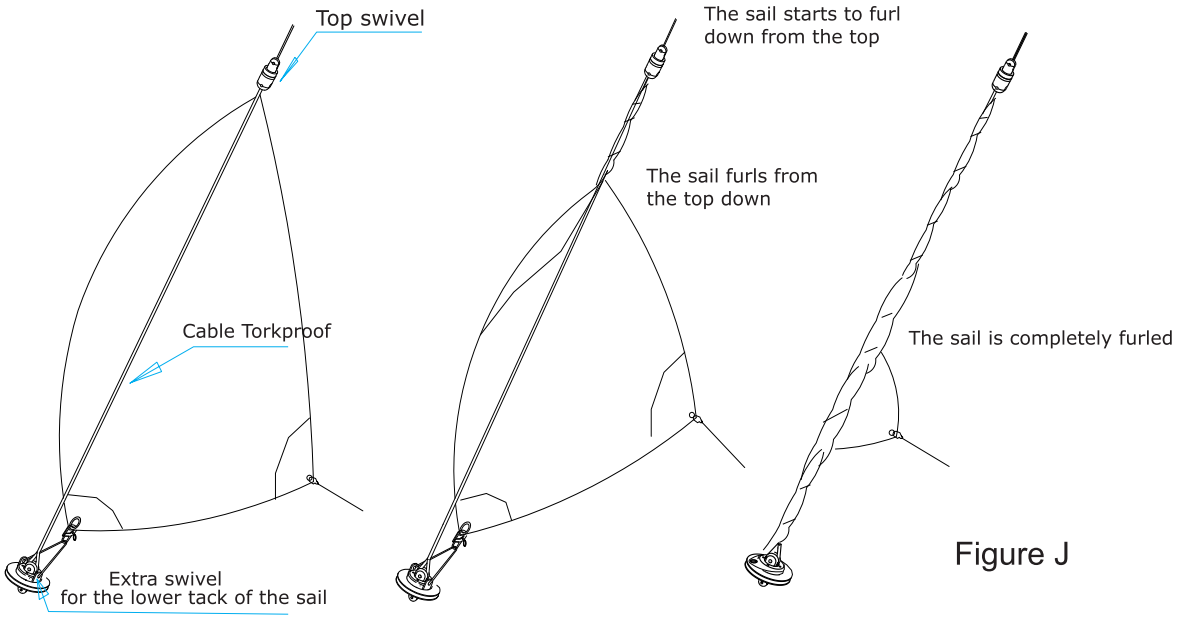
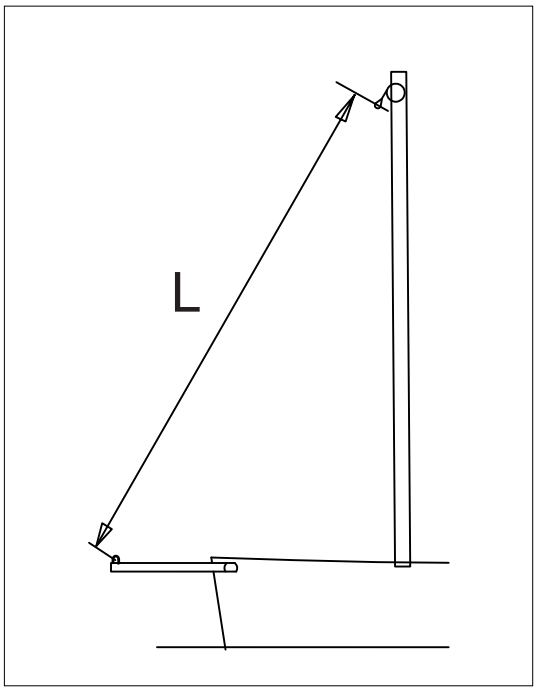


Figure J

Atenção: Code Zero S can be used on sail straight forehead,
however the tack should be fixed on the lower base of the cable.

Calculating the torque cable length

To determine the correct cable measurement, initially measure the total length “L”



The length "L" is obtained by measuring the distance from the fixing point on the bowsprint where the furler will be attached until the eye or shaclein the proper halyard.

This measure will be modified in several ways to obtain the Final Length.

The final length is defined for each furler model, calculated by the following sequence:

1 - Subtract the value that the cable will yield when subjected to the halyard straining

L x 0,978: (LC) is the length of the cable less the yielding part. The Subtract value is approximately between 30 and 40 cm

2 - Next step is necessary to Subtract the value (F,) which is the furler body length plus the top swivel length. This value is 0,24 for furler 3.5 and 0,29 for furler 4.5.

3 - Once the step 2 is done, we need to add a length (T) that is required to make the cable terminal. This value is fixed 0.17m or 17 centimeters for each terminal, if it is already received from the factory with the thimble installed, add once, if you need to install both terminals, add twice.

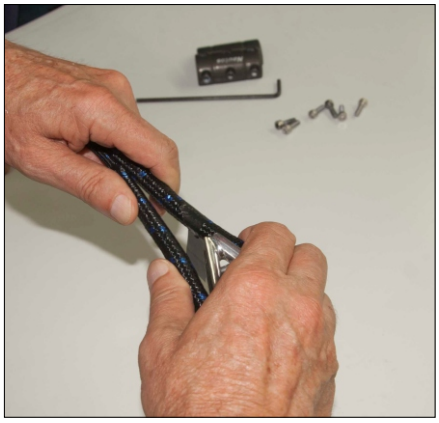
4 - Now with the final length almost defined, add an (EXTRA) for safety, this should be approximately 0.25m or 25cm.

Final length formula:

Lx0,98= LC
Final length= LC - F + T + EXTRA

TESTING: after assembling the terminals according to the instructions on the page 9, it is time to run a test. Connect the furler (drum) to boom sprint, the top furler to the halyard (Figure E, page 3) and give adequate tension. If everything is correct, you can cut the extra leftover cable.

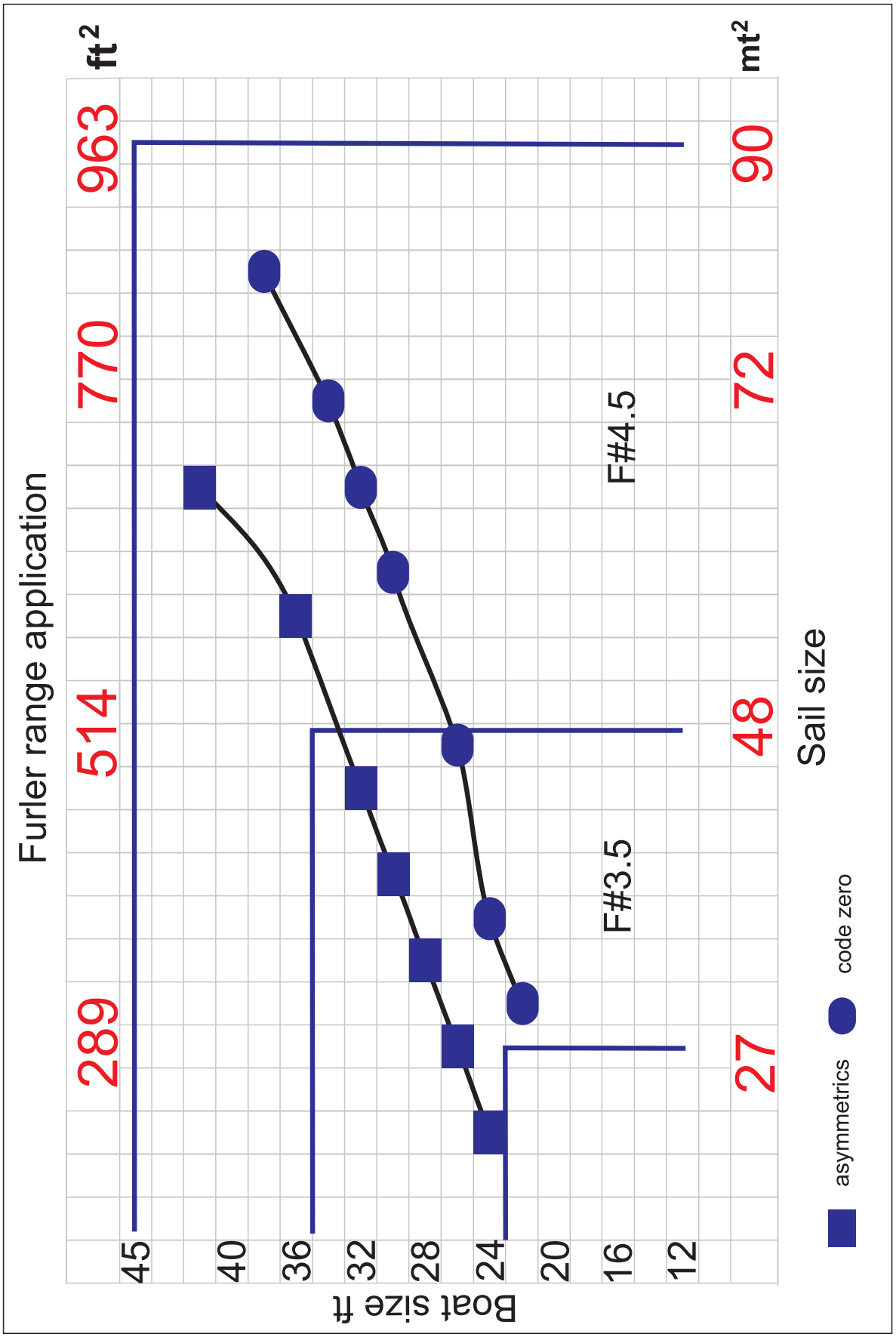
Assembling the cable clamp



Use the 4 long screws to start the tightening.

When closed, replace the 4 long screws by the normal ones provided.

Furlers #3.5 and # 4.5



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