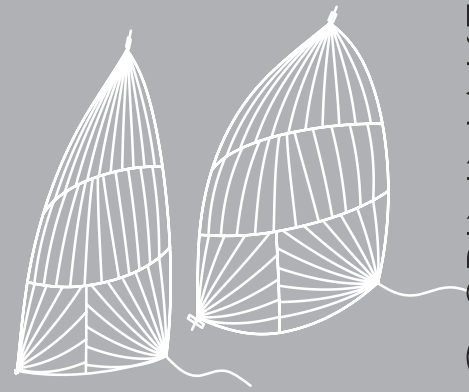


CODE ZERO, GENNAKER &
ASYMMETRIC SPINNAKER
FURLERS



Photo Credit : Shipman / Shipman 50



>> **Sailing fast and safe**

In regatta each second saved while handling sails is important. A long experience in supplying top high quality racing Gennaker furlers has led Facnor to be a reliable partner for the fastest sailing boats. Facnor has kept the same innovative spirit in developing a full range of furlers : the **FX** for Code zero/Gennakers and the **Asym-FX** for the asymmetric Spinnakers. As a complementary equipment to flying sails, the Sparcraft innovative **bowsprit** makes cruising easier.

GENNAKER, CODE ZERO & ASYMMETRIC SPINNAKER



FX GENNAKER & CODE ZERO
FURLERS P34-38

BOWSPRITS



AFX ASYMMETRIC SPINNAKER
FURLERS P40-42



FX & ASYM FX FURLERS



The widely installed FX range enables Gennaker and Code 0 sails to be hoisted easily, quickly and safely. Removable furling line and quick fastenings give an even greater ease of use. The neat design gives lightness to the high resistance mechanisms: the FX furlers let you benefit from the race developed technology for a more comfortable cruising.

FX Flying sail furlers : Comfortable sailing

Like the structural furler, the Code zero & Gennaker furler is an in/out system that does not allow reefing of the sail. The anti-twist rope is captive within the sail luff tape. The sail head and tack are seized to thimbles. These are fixed to the swivel and the drum with quick-release pins. The advantage is the quick installation. The furled sail can quickly be stored after use. With the Code zero & Gennaker furler, no more knots with the Spinnaker around the forestay: in light wind the Code zero & Gennaker can be quickly hoisted and unfurled. This is perfect when you are sailing downwind: with Facnor the performance is worry free!

SAFETY PIN

to release or secure the thimble (drum & swivel)*

* for FX 2500, 4500 & 7000 models



SAILOR TIP

"FURLING LINE TIGHTEN & ROPE..."

Christian Chardonnal
Skipper of "Neurodon" (Class 40')

When racing, we attach a piece of rope at the clew of the Gennaker that the foredeck crew member easily grabs in order to quickly jibe. When sailing single handed we recommend to keep the reefing line under tension so that the sail does not furl out without control".
blog : <http://lesloustikspourleneurodon.blogspot.com>
web : <http://www.neurodon.com>



A STRONG ONE-BLOCK DRUM

The main body of the drum is made of one aluminium block and is CNC machined. (sturdier than a casting part).



REMOVABLE FURLING LINE

CONTINUOUS LINE DRUM

This system eliminates furling line overrides.

QUICK FASTENING DEVICE

FX furlers are fitted with quick fastening device (see p.36).



Photo Credit : Shipman / Shipman 50



FACNOR ADVANTAGES

- Handy : removable furling line without any mechanical operation, possibility to leave the furling line fitted alongside the deck
 - Lightness : optimized system and ultracompact
 - Easily installed and stored (the continuous drum is fitted with quick-release-pin fastenings).
 - Sturdiness : strong one-block drum
 - Maintenance free : high protection of the mechanisms
 - Stainless steel guide insures a smooth and perfect run of the furling line
 - Continuous line drum: low profile design (just above deck), i.e. a maximum sail luff
 - Design neat and purified on all the range
 - Large range of fitting options : 2-to-1 swivel, special textile shackles, Thimble,...
- (See page 38)



SWIVEL

Available in different versions (ex. Two-to-one version, advantage : optimal halyard tension)

THIMBLE

- Stainless steel for FX2500/4500 models
- Aluminium for FX7000/12000/20000 models (options p. 38)



TORQUE ROPE

It transfers efficiently the furling rotation from the drum to the swivel. The torque rope is captive within the sail luff tape.

(supplied on request)

GUIDE/RUBBER RING CONCEPT

Thanks to a clever innovation, the continuous furling line can be quickly removed without any complication. This special feature offers the advantage that the furling line can remain on the deck for further use. There is no need to remove the stanchion blocks. Just remove the furler and the furled sail.



rubber ring to allow the continuous line furler

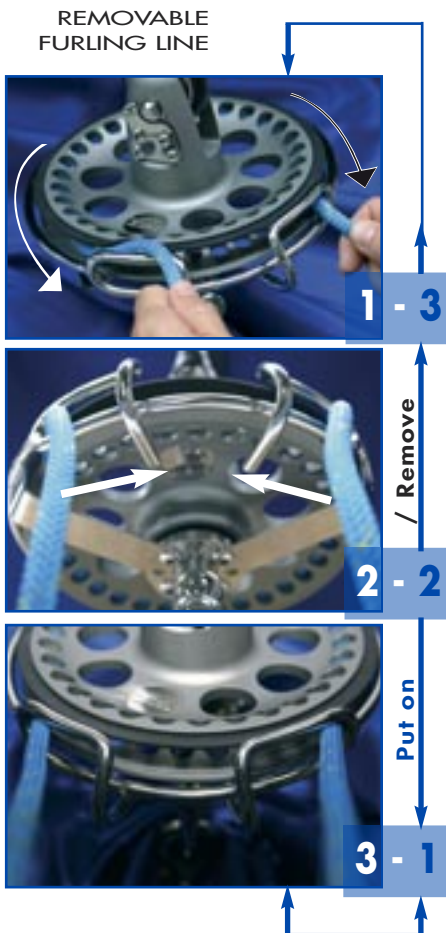


Photo Credit : Outremer

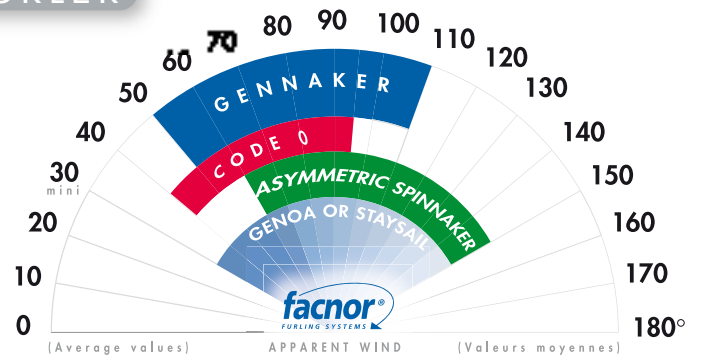


USE CONDITIONS OF THE FURLER



Use conditions :

The use range of the sails as shown on the diagram opposite varies with the force of the wind. We can mainly bear in mind that the FX furlers are better adapted for use with flying headsails between beam and broad reach (i.e. Code Zero and Gennaker). The complementary use with closer reach headsails is possible, however, under certain conditions (see p. 37). Please contact the closest Facnor agent for further advice.

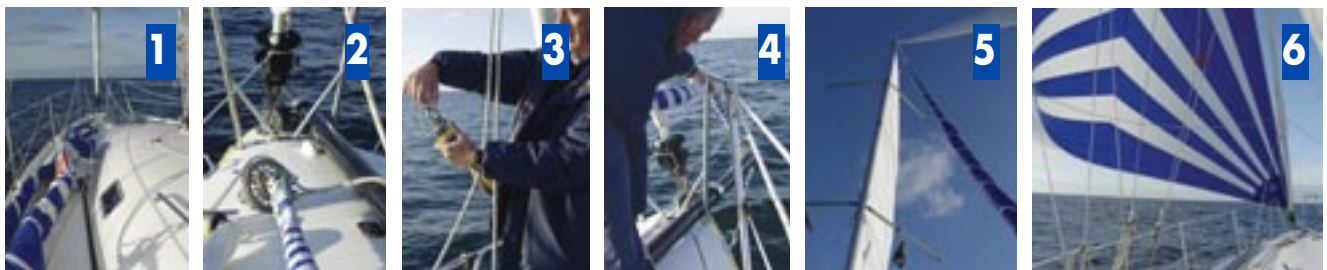


Sail indicative range of use
⚠ This sail indicative range of use varies with the wind force
Please contact the closest Facnor agent for further advice.

Installation of the Code zero and Gennaker furler:

the short sequence below shows how easily the Gennaker furler is installed :

E A S Y I N S T A L L A T I O N O N B O A R D



- Lie the Gennaker furled on the deck, fit the bottom thimble onto the drum (fig 1&2);
- Fit the upper thimble onto the swivel (fig 3), and adjust the bowsprit (fig 4);
- Hoist (fig 5), unfurl while controlling the sheet (fig 6). Ready !

Note: always keep the reefing line under tension and fit a line stopper. Lower the furled sail after use.



FURLING LINE AND FASTENING DEVICES

Removing the furling line : "as easy as abc" : Thanks to a clever innovation, the continuous furling line can be quickly removed without any complication. This special feature offers the advantage that the furling line can remain on the deck for further use. There is no need to remove the stanchion blocks. Just remove the furler and the furled sail.

Easy installed and stored : The continuous drum is fitted with quick-release-pin fastenings (snap shackles or special textile shackles) that make for quick and easy installation and removal of the Gennaker or Code 0.

Quick - release - pin fastenings : The sail can be removed from the furler in one "click". Fitted with :

- Push-pin (FX 12 000 & FX 20 000 models)
- New safety-clip fastening (FX 2500, 4500, & 7000 models)
- G-ring (FX 900 & 1500 models)

Easy change and re-use of continuous line furler

As it is very simple to remove the sail from the furler and to fit the block option on to the swivel, the Gennaker can be quickly changed for the staysail if needed*. Furthermore, it is also easy to store the sail and clean the furler mechanism.

* provided that the loads are equivalent for both sails



The intermediate models are fitted with a safety-clip device



SAILOR TIP

Bernard de Ravignan
Nantes Shipshandler

Tighten well the Gennaker luff before furling and secure the reefing line so that the sail does not furl out without any control."





THE STANDARD CODE 0 AND GENNAKER FURLER (DRUM) FXT

The Standard Code zero & gennaker furler (FXT) includes a drum as on the classic headsail furling systems. The drum is fitted with a shackle or a jaw at the top (tack) and with a snap shackle at the bottom (deck fixing). It is quickly installed and removed after use. Able to support high loads, the "SDG STD" model helps to furl easily a Gennaker or a flying sail. The mechanism of the drum and the swivel are made of aluminium and fitted with steel bearings protected by waterproof joints (maintenance free). An alternative solution for users who prefer a discontinuous furling line.

The main criteria to select the FXT model is the loads of the sail (see below) :

FXT MODEL	FXT 4500	FXT 7000	FXT CUSTOM
Boat length	9,5 à 16 31' to 55'	+ 16 + 55'	on request
Max. sail area	100 m ² 1073 ft ²	200 m ² 2147 ft ²	
Safe Working Load*	4 500 Kg 9921 lbs	7 000 Kg 15432 lbs	



* The S.W.L. is the maximum safe working load over which distortions of the furler can appear. This load is approx. 50% of the breaking load (depending on models)

- The swivel and the drum are fitted with the same bearings (top shackle for halyard fitting).

THE GENNAKER CONTINUOUS LINE FURLER FX

The continuous line Code zero & gennaker furler (FX) are made of two main components, one flat continuous line drum and one swivel. This model eliminates the override of the furling line (no overlapping round the drum). The low profile design of the drum allows a maximum luff and the large diameter gives more furling power. It is half weight of a standard Gennaker furler. The new opening guide makes the Fx furler easier to use. Facnor offers a wide range of gennaker furlers suitable from 6.50 up to the mega-yachts. Facnor, as originator of Gennaker continuous line furlers, has the longest experience in this type of products.

The main criteria to select the FX model is the loads of the sail (see below) :

FX MODEL	FX 900	FX 1500	FX 2500	FX 4500	FX 7000	FX 12000	FX 20000
Boat length ^m _{feet}	6 to 10,5 m 20' to 30'	10 to 12 m 30' to 40'	12 to 14 m 40' to 45'	13 to 16 m 42' to 55'	16 to 20 m 55' to 70'	+ 20 m + 70'	+ 25 m + 82'
Sail area advised	30 m ² 322 ft ²	55 m ² 590 ft ²	80 m ² 861 ft ²	140 m ² 1500 ft ²	250 m ² 2690 ft ²	350 m ² 3770 ft ²	+ 500 m ² + 5380 ft ²
Safe Working Load*	900 kg 1984 lbs	1,5 ton 3306 lbs	2,5 tons 5511 lbs	4,5 tons 9920 lbs	7 tons 15 432 lbs	12 tons 26 455 lbs	20 tons 44 100 lbs



* The S.W.L. is the maximum safe working load over which distortions of the furler can appear. This load is approx. 50% of the breaking load (depending on models)

STAYSAIL FITTED ON FX FURLERS

A Staysail can be fitted on a FX furler : in this configuration, we recommend to install a 2-to-1 block (halyard better tighten and less tension in the mast). See next page.

The main criteria to select the FX model is the loads of the sail (see below) :

FX MODEL	FX 1500	FX 2500	FX 4500	FX 7000	Staysail
Staysail area maxi. (à titre indicatif)	20 m ² 215 ft ²	30 m ² 322 ft ²	50 m ² 538 ft ²	70 m ² 753 ft ²	over 70' boat, it is highly recommended to fit a structural furler (see page 29)
Safe Working Load*	1,5 tons	2,5 tons	4,5 tons	7 tons	



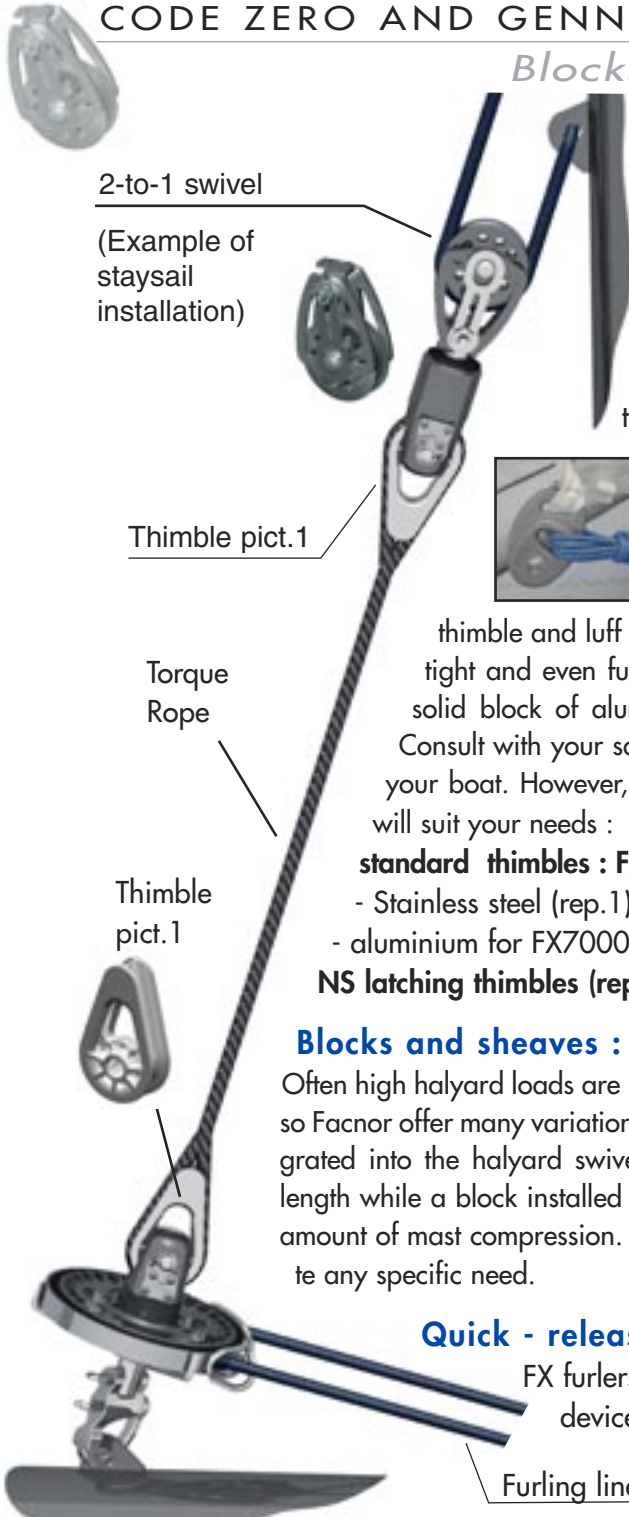
We remind you that an adapted deck attachment must be installed



* The S.W.L. is the maximum safe working load over which distortions of the furler can appear. This load is approx. 50% of the breaking load (depending on models)

CODE ZERO AND GENNAKER FURLERS OPTIONS

Blocks, thimbles, sheaves, pin fastenings



Code Zeros and Gennakers are finished with luff ropes that provide the sail with strength to handle the high halyard load required for proper function. Facnor furlers are designed with this important feature in mind and we manufacture thimbles that fit the jaw of the furler to accommodate different luff ropes. The FX code zero and gennaker furlers are designed with an open jaw to transmit the twist of the luff rope.

The thimbles

Luff ropes finished with Facnor lightweight aluminum thimbles fit the exact inside dimension of the jaw on the furler for a clean finish at the tack and head. The

thimble and luff rope quickly transfer the furling action from the drum to the luff for tight and even furling. Facnor thimbles are CNC machined from a solid block of aluminum so they resist crushing under high loads. Consult with your sailmaker to find the best luff rope configuration for your boat. However, you can be sure that Facnor makes thimbles that will suit your needs :

standard thimbles : FX 2500 to FX 20000

- Stainless steel (rep.1) for FX2500/4500 models;
- aluminium for FX7000/12000/20000 models;

NS latching thimbles (rep.2).

Blocks and sheaves :

Often high halyard loads are required to properly sail with Code Zeros so Facnor offer many variations of 2 to 1 fittings. Compact sheaves integrated into the halyard swivel reduce weight aloft and increase luff length while a block installed on the bottom of the drum can reduce the amount of mast compression. Many options are available to accommodate any specific need.

Quick - release - pin fastenings :

FX furlers can be fitted with different quick fastening device : loops, snapshackles, shackles, ...



Thimble pict.1



Custom thimble pict.2



2-to-1 swivel

- FX 2500
- FX 4500
- FX 7 000
- FX 12 000
- FX 20 000



- FX 7 000
- FX 12 000
- FX 20 000



- FX 900
- FX 1500
- FX 2 500
- FX 4 500

COVERS FOR CONTINUOUS LINE DRUM AND SWIVELS



Cover for continuous line drum (photo : Asym-FX)

Continuous line drum covers : The new Facnor FX and Asym FX cover is ideal for protecting your continuous line furlers from deck impacts. The cover is made of padded PVC and assembled with thick and strong strips. Thanks to hook-and-loop fasteners the cover is quickly fitted.

Standard available for the FX & Asym-FX 2500, FX & Asym-FX 4500, FX & Asym-FX 7000 (other cover model on request).

Swivel covers : they have the same features as the covers of the continuous line drum but with additional benefit of securing the mast and the sailing crew. Standard available for FX 2500, FX & FXT 4500, FX & FXT 7000.

