

# CXr

– A new generation of Code 0 / Top-Down furling systems



 **SELDÉN**

# Furlable Downwind Sails

## – Power, Performance and Control

Furlable downwind sails offer a powerful and enjoyable sailing experience—whether you're cruising or racing, on small boats or large yachts.

The furling system serves as the vital link between the sailor and the sail, delivering both convenience and safety. For the cruising sailor, it means being able to handle a large Code 0 or gennaker from the comfort of the cockpit. For the performance-oriented crew, it offers the flexibility to quickly switch between different headsails.

All sailors benefit from the ease of dousing and stowing the sail when not in use. Simply zig-zag the furled sail into its bag, secure it along the stanchions, or stow it below deck—quick, tidy, and efficient.

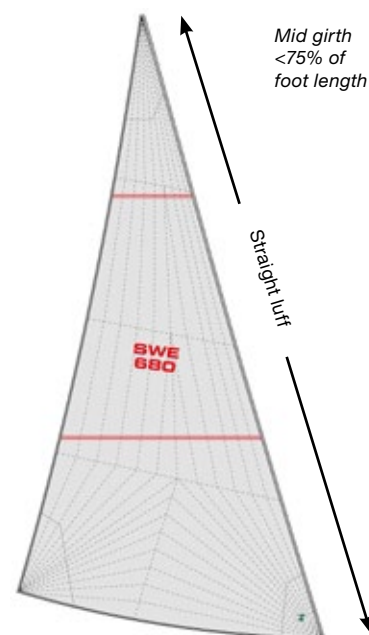




# The sails

## Code 0

The Volvo Ocean Race was the breakthrough for the Code 0 concept, but lately the benefits of this type of sail have become recognized and appreciated also amongst ordinary sailors for the extra power it brings to light wind sailing. The luff is straight, set under tension and made for furling which simplifies the handling of this large sail. An AT-cable is integrated in the luff and is the “axle” between the furling drum and the halyard swivel. The sail is furled from the bottom and up for the luff to be furled tight and simultaneously. The Code 0 is hoisted as high as the mast dimension permits and is tacked to the bow or to a sturdy bowsprit. The design is quite flat and reaches its maximum performance in apparent wind angles between 40° and 90°. Seldén CXr is the right furler for this sail.

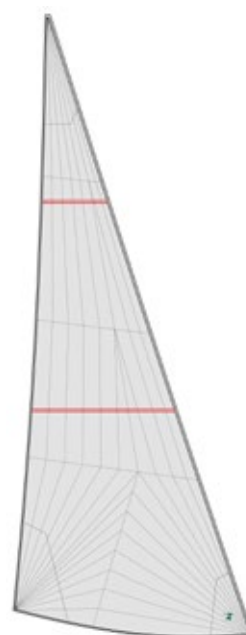


## Cableless Code 0

A Code 0 with a special designed load-bearing luff instead of an AT-cable. Seldén provide tack-boards and head-board to fit CXr furling unit and halyard swivel, ensuring a perfect match for this type of sail.

## Jib 0

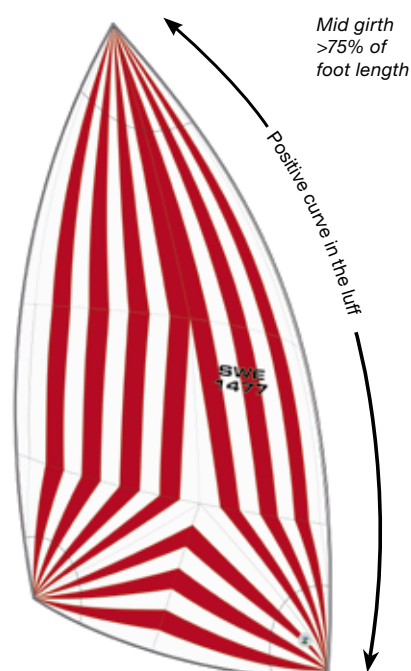
The Jib 0 is an alternative to a light-wind jib and provides good upwind performance in winds up to approximately 6 knots. It is used from close-hauled until the wind angle opens enough to switch to a gennaker or spinnaker. The Jib 0 can advantageously be combined with a staysail for an optimal sail setup. Seldén CXr is the right furler for this sail.





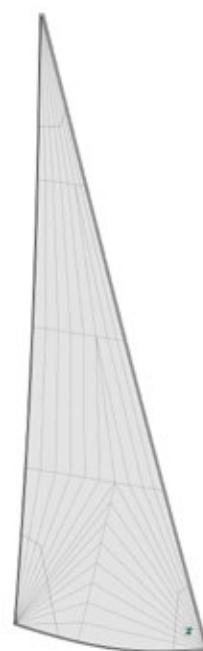
## Asymmetric spinnaker

This sail is often called “gennaker” or “cruising chute”. When the mid girth is  $>75\%$  of the foot length, the sail is defined as a spinnaker in most international measurement rules. The luff is at least 2% longer than the leech and this is what makes the sail asymmetric. This sail is furled with a Seldén CXr system with a Tack Swivel Adaptor providing a swivelling tack attachment for Top-down furling. An AT-cable connects the Tack Swivel Adapter to the halyard swivel and transmits the rotation of the drum enabling the furling to start at the top and work its way down until the entire sail is stowed away. The furling unit is fitted to the bow of the boat, preferably on a retractable Seldén bowsprit to expose the sail to the wind and to create clearance from the forestay. The halyard tension is moderate, and the sail is hoisted with the spinnaker halyard. Before furling and unfurling, a good rule is to tighten the halyard somewhat to utilize the torsional properties of the AT-cable for a fast and controlled manoeuvre. The design of the sail has a great impact on when it will perform at its best, hence, a deep full size gennaker is more of a downwind sail than a sail which is cut flatter. Generally, the sail is developed for light and moderate winds and apparent wind angles between  $90^\circ$  and  $120^\circ$ . Prior to furling we recommend that power is taken out of the sail by releasing the sheet and, if possible, bearing away



## Staysail

A staysail is set inside a gennaker, spinnaker, Code 0 or Jib 0 and contributes to higher boat speed. In most international measurement rules, a staysail has only marginal impact on your rating making it a smart addition to your sail inventory. This sail is also invaluable when sailing downwind in heavy winds. When tightly sheeted, it stabilizes the boat and reduces rolling, improving comfort and control. Seldén CXr is the right furler for this sail.



# A new generation of downwind furlers - loaded with new features

# CXr

Seldén introduces the second generation of downwind furlers —the CXr—building on the success of our popular CX and GX furlers, now enhanced with several new features.

**CXr** – “r” for Ratchet.

## The furling unit

The use of composite materials ensures low weight, while the metal “teeth” of the line driver provide a secure, high-strength grip.

The drum cover is impact-resistant, and the line guide is made from cast, highly polished stainless steel—smooth and rounded for minimal friction.



A wedge separates the furling line, an important feature when the drum is spinning freely.

The fork—compatible with a thimble, tack swivel adapter, or the Seldén Nail terminal—is equipped with a spring-loaded lock.

The pin is captive, ensuring it cannot be lost overboard.

All structural components are manufactured from high-strength Duplex steel and machined aluminium. The drum features sealed steel bearings for long service life and minimal maintenance.

## The halyard swivel

The swivel features the same spring-loaded lock and captive pin as the furling unit, ensuring secure and reliable connections.

It is equipped with a sealed steel bearing for long service life, and a rubber fender is integrated to protect the mast from damage in case of contact.



## The Seldén ratchet

For Seldén, ease of use and reliability are key—and this patented design delivers both.

The concept behind the ratcheting drum is twofold: to prevent unintentional unfurling during hoisting, and to make furling the sail significantly less exhausting.



See how the ratchet works

## How to use Seldén's ratchet function

Before unfurling, the ratchet mechanism preventing the sail from unfurling unintentionally, must be unlocked. To do this, make a short and distinct pull on the furling line in the same direction as the direction you want the drum to spin.

Imagine you're looking at the drum head-on from aft:

- If you want the drum to spin **clockwise**, pull the line from the **starboard** side of the drum.
- If you want it to spin **counterclockwise**, pull from the **portside**.

## Furling the sail

Furling a large top-down sail can be physically demanding, but with Seldén's ratchet system, you can pause midway without any issues. The ratchet is strong enough to hold the load and resist the torque from the sail.

What makes the system even more convenient is that the ratchet works in both directions. It automatically adapts to the direction you choose—you don't need to decide in advance. Just grab the furling line and pull: the sail will furl smoothly, regardless of the direction.

## Seldén Nail Terminal for AT-Cables

Seldén's Nail Terminal is a solution for Anti-Torsion cables, developed to enable quick, safe, and reliable assembly of Code 0 furling systems.

Machined from anodized aluminium, the terminal features a female fitting into which the AT-cable is inserted. Sharp, hardened stainless steel nails are then driven through the terminal and the AT-cable—either with a vise or by hammering—securing the assembly in place.

Thanks to the use of specially designed nails, the Dyneema® fibers in the cable remain undamaged, ensuring that the load-bearing capability and torsional rigidity of the AT-cable is fully preserved.



Nail Terminal assembly

| ART. NO    | MODEL | FOR AT-CABLE,<br>ø mm... | ...USED FOR |
|------------|-------|--------------------------|-------------|
| 301-305-01 | NT-11 | 11                       | CXr15       |
| 301-306-01 | NT-13 | 13                       | CXr25       |
| 301-307-01 | NT-15 | 15                       | CXr45       |

## Tack Swivel – For Top-down furling

The Tack Swivel is designed to convert a standard CXr furling system into a top-down furling system, which is essential for handling an asymmetric spinnaker.

The sail is connected only at two points: the halyard swivel at the top and the Tack Swivel at the bottom. As the sail is free-flying between these points, it cannot be furled like a traditional sail. Instead, the AT-cable transfers the furling motion from the top, starting to furl the head of the sail first. As the cable continues to rotate, the furl progressively works its way down until the sail is completely furled.

The Tack Swivel is made from machined aluminium, providing strength without unnecessary weight. It features a stainless-steel tack ring with Torlon® ball bearings to ensure smooth rotation even under high load. A Dyneema lashing is provided for attaching the tack of the sail to the Tack Swivel.





There are two versions of Tack Swivels, each designed to accommodate different terminations of the AT-cable.

## Tack Swivel for Nail Terminal

Slide the Tack Swivel on to the Nail terminal and secure with one screw

|                                                                                   | ART. NO    | TO BE USED FOR |                                                                                      |
|-----------------------------------------------------------------------------------|------------|----------------|--------------------------------------------------------------------------------------|
|  | 546-120-10 | CXr15          |  |
|                                                                                   | 546-220-10 | CXr25          |                                                                                      |
|                                                                                   | 546-420-10 | CXr45          |                                                                                      |

## Tack Swivel Adaptor - Fork/Eye

For thimble, Nail terminal or tackboard

|                                                                                     | ART. NO    | TO BE USED FOR |                                                                                       |
|-------------------------------------------------------------------------------------|------------|----------------|---------------------------------------------------------------------------------------|
|  | 546-126-10 | CXr15          |  |
|                                                                                     | 546-226-10 | CXr25          |                                                                                       |
|                                                                                     | 546-426-10 | CXr45          |                                                                                       |

## Select the right model

For Code 0, Jib 0 and staysails, use a Basic Kit. For asymmetric spinnakers, simply add a Tack Swivel Adaptor to the Basic Kit. CXr basic kits and Tack Swivels Adaptors come with a 5-year warranty.

|       | FOR CODE SAILS<br>(Bottom -up)                  | TACK SWIVEL<br>(Top-down)                                       |                          |                                  |                                                 |                                            |
|-------|-------------------------------------------------|-----------------------------------------------------------------|--------------------------|----------------------------------|-------------------------------------------------|--------------------------------------------|
| MODEL | BASIC KIT<br>(furling unit &<br>Halyard swivel) | <sup>1</sup> FOR NAIL TERMINAL<br><sup>2</sup> ADAPTOR FORK/EYE | MAX SERVICE<br>LOAD (kN) | MAX SAIL<br>AREA, m <sup>2</sup> | MAX RIGHTING<br>MOMENT (RM) AT<br>30° HEEL, kNm | MAX APPROXIMATE<br>DISPLACEMENT,<br>TONNES |
| CXr15 | 546-100-10                                      | <sup>1</sup> 546-120-01<br><sup>2</sup> 546-126-10              | 15                       | 80                               | 45                                              | 7,7                                        |
| CXr25 | 546-200-10                                      | <sup>1</sup> 546-220-01<br><sup>2</sup> 546-226-10              | 25                       | 115                              | 90                                              | 14                                         |
| CXr45 | 546-400-10                                      | <sup>1</sup> 546-420-01<br><sup>2</sup> 546-426-10              | 45                       | 200                              | 200                                             | 28                                         |

## Technical specification

| MODEL | AT-CABLE,<br>DIMENSIONS,<br>ø mm | DRUM<br>DIAMETER,<br>ø mm | PIN<br>DIAMETER<br>ø mm | FURLING LINE,<br>DIMENSION,<br>ø mm |
|-------|----------------------------------|---------------------------|-------------------------|-------------------------------------|
| CXr15 | 11                               | 159                       | 10                      | 8                                   |
| CXr25 | 13                               | 172                       | 12                      | 10                                  |
| CXr45 | 15                               | 223                       | 16                      | 12                                  |



## HEADBOARDS



## Tackboard and Headboard for Cableless Code sails

| MODEL | HEADBOARD, ART. NO. | TACKBOARD, ART. NO |
|-------|---------------------|--------------------|
| CXr15 | 546-151R            | 546-150R           |
| CXr25 | 546-251R            | 546-250R           |
| CXr45 | 546-451R            | 546-450R           |

## TACKBOARDS



## Ratchet prevention plugs

If desired, the ratchet of CXr can be inactivated by installing prevention plugs in the furling unit assembly. A possible occasion could be when the furler is used for a staysail which, on a race boat, is used intermittent and hoisted rapidly.

| MODEL | RATCHET PREVENTION PLUGS, ART. NO |
|-------|-----------------------------------|
| CXr15 | 546-121-01R                       |
| CXr25 | 546-221-01R                       |
| CXr45 | 546-421-01R                       |



# Accessories

## Seldén AT-Cables (Anti-Torsion)

The more torsional rigid AT-cable, the quicker and safer the sail will furl. Seldén provide the most rigid cable on the market, three times more rigid than the second best.

| ART. NO.   | LENGTH,<br>mm | DIMENSION,<br>Ø mm | TO BE USED FOR...    |                |
|------------|---------------|--------------------|----------------------|----------------|
|            |               |                    | PREVIOUS MODELS      | CURRENT MODELS |
| 613-020-01 | 13000         | 9                  | CX10                 |                |
| 613-020-02 | 16000         |                    | GX7,5                |                |
| 613-020-03 | 19000         |                    | CX10 + GX7,5 adapter |                |
| 613-021-01 | 13000         | 11                 | GX10                 | CXr15          |
| 613-021-02 | 16000         |                    | CX15                 |                |
| 613-021-03 | 19000         |                    | CX15 + GX10 adapter  |                |
| 613-021-04 | 22000         |                    |                      |                |
| 613-022-01 | 16000         | 13                 | GX15                 | CXr25          |
| 613-022-02 | 19000         |                    | CX25                 |                |
| 613-022-03 | 22000         |                    | CX25 + GX15 adapter  |                |
| 613-022-04 | 25000         |                    |                      |                |
| 613-022-05 | 28000         |                    |                      |                |
| 613-023-01 | 19000         | 15                 | CX45                 | CXr45          |
| 613-023-02 | 22000         |                    | GX25                 |                |
| 613-023-03 | 25000         |                    | CX45 + GX25 adapter  |                |
| 613-023-04 | 28000         |                    |                      |                |

## Endless furling line

| ART. NO.<br>LINE ONLY | ART. NO.<br>LINE WITH<br>TWIN CAM<br>BLOCK<br>INSTALLED | LENGTH,<br>mm | DIMENSION,<br>Ø mm | TO BE USED FOR...  |                   |
|-----------------------|---------------------------------------------------------|---------------|--------------------|--------------------|-------------------|
|                       |                                                         |               |                    | PREVIOUS<br>MODELS | CURRENT<br>MODELS |
| 611-007-06            | 611-007-31                                              | 2 x 4000      | 8                  | CX10               | CXr15             |
| 611-007-07            | 611-007-32                                              | 2 x 8000      |                    | CX15               |                   |
| 611-007-09            | 611-007-33                                              | 2 x 10000     |                    | GX7,5              |                   |
| 611-007-08            | 611-007-34                                              | 2 x 12000     |                    | GX10               |                   |
| 611-011-05            | 611-011-31                                              | 2 x 5000      | 10                 | CX25               | CXr25             |
| 611-011-06            | 611-011-32                                              | 2 x 7000      |                    | GX15               |                   |
| 611-011-07            | 611-011-33                                              | 2 x 9000      |                    |                    |                   |
| 611-011-18            | 611-011-34                                              | 2 x 12000     |                    |                    |                   |
| 611-011-19            | 611-011-35                                              | 2 x 15000     |                    |                    |                   |
| 611-015-06            | 611-015-31                                              | 2 x 5000      | 12                 | CX45               | CXr45             |
| 611-015-07            | 611-015-32                                              | 2 x 9000      |                    | GX25               |                   |
| 611-015-08            | 611-015-33                                              | 2 x 12000     |                    |                    |                   |
| 611-015-09            | 611-015-34                                              | 2 x 17000     |                    |                    |                   |



- 1 Single-Cam block for furling line  
PBB50 Art. No. 405-001-41R (max Ø10 mm line)  
PBB60 Art. No. 406-001-41R (Ø12 mm line)
- 2 Twin-Cam block for furling line  
PBB50 Art. No. 405-001-40R (max Ø10 mm line)  
PBB60 Art. No. 406-001-40R (Ø12 mm line)

Learn more about  
furling line setups



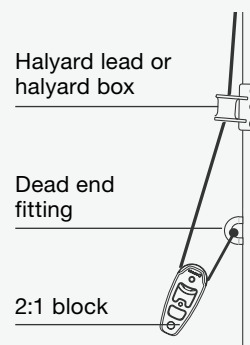
## Double Fairlead

Ordinary blocks cannot be used to lead the endless furling line back to the cockpit. Seldén Double Fairlead consist of a composite bracket fitted to a 25 mm or 30 mm stanchion and a spring loaded "push-and-twist" bracket in stainless steel. Easy to open to attach the line and just as easy to close. The Double Fairlead prevents the line to get tangled up and the smooth stainless bracket prevents friction. Art. No. 480-501-01R.



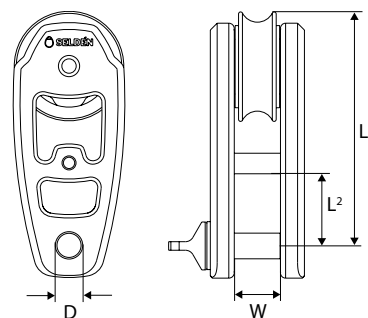
## Code 0 halyard with 2:1 purchase

To boost the performance when using a Code 0, the halyard load must be higher than what normal halyard boxes and stoppers can handle. Therefore, a 2:1 purchase needs to be arranged by fixing the dead end of the halyard in the mast and letting it run through a block attached to the halyard swivel. Position on the mast must be specified by Seldén. In most cases Code 0 sails need to be hoisted lower than gennakers and spinnakers.



## Block for 2:1 purchase

| ART. NO.    | DIM. | WEIGHT, g | L <sup>1</sup> | L <sup>2</sup> | W  | D  | SAFE WORKING LOAD, kg | BREAKING LOAD, kg | MAX LINE SIZE, mm | TO BE USED FOR... |
|-------------|------|-----------|----------------|----------------|----|----|-----------------------|-------------------|-------------------|-------------------|
| 403-501-01R | 30   | 100       | 68             | 21             | 13 | 8  | 1500                  | 3000              | 10                | CX15, CXr 15      |
| 404-501-01R | 40   | 187       | 85             | 26             | 18 | 10 | 2500                  | 5000              | 12                | CX25, GX25, CXr25 |
| 405-501-01R | 50   | 335       | 104            | 31             | 24 | 12 | 4000                  | 8000              | 16                | CX45, CXr 45      |



## Dead end fitting

| ART. NO.    | MAST SECTION                                                                                                           | MAX ROPE, Ø mm | MAX RM AT 30° HEEL, kNm |
|-------------|------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------|
| 508-843-01R | E177, E206, C137, C153, C156, C175, C180, C192, C193, C208, C211, C227, F170, F176, F185, F194, F199, F212, F217, F228 | 12             | 45                      |
| 508-844-01R | E206, C225, C242, C245, C261, C264, C285, F246, F252, F265, F272, F286, F291, F305                                     | 14             | 180                     |
| 508-838-01R | C280, C321, C365, F324, F370, F406                                                                                     | 16             | 350                     |



## Thimbles for AT-cable

Combine with a traditional AT-cable clamp as used for previous CX systems.

| ART. NO.<br>(2 pcs) | FOR AT-CABLE, Ø mm | TO BE USED FOR... |
|---------------------|--------------------|-------------------|
| 545-114-01          | 8-9                | CX10              |
| 545-116-01          | 10-11              | CXr15             |
| 545-216-01          | 12-13              | CXr25             |
| 545-416-01          | 14-16              | CXr45             |

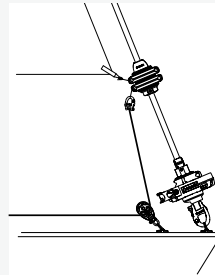
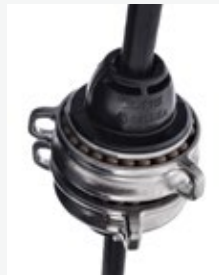




## Adjustable Tack Swivel

This accessory for top-down furlers enables the sailor to easily trim the luff of the gennaker. The Adjustable Tack Swivel slides up and down over the AT-cable and is handled from the cockpit with a down haul. As opposed to trimming the luff by slacking the halyard, the AT-cable can now be permanently tensioned and always ready for furling.

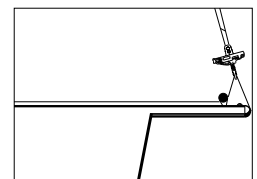
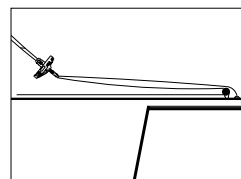
| ART. NO.   | TO BE USED FOR...<br>AT-CABLE, ø mm |
|------------|-------------------------------------|
| 545-040-10 | 9                                   |
| 545-140-10 | 11                                  |
| 545-240-10 | 13                                  |
| 545-440-10 | 15                                  |



*The sliding sleeve of the Adjustable Tack Swivel is split into two halves, allowing for retrofit installation over an existing Nail terminal.*

## Low friction shackle

This snap shackle has a big, well rounded loop allowing the line to slide with low friction and it can be used to tension a Seldén CXr with 2:1 purchase. This not only makes for better performance but it also makes it easier to connect the Seldén CXr to a bowsprit, from the foredeck. The shackle is made of high strength Duplex steel and has a quality mirror finish.



| ART. NO.    | DIMENSION | WEIGHT, g | SAFE WORKING LOAD, kg | BREAKING LOAD, kg | TO BE USED FOR... |
|-------------|-----------|-----------|-----------------------|-------------------|-------------------|
| 307-435-01R | 50        | 70        | 900                   | 1800              | CX10, GX7,5, GX10 |
| 307-436-01R | 60        | 118       | 1500                  | 3000              | CX15, GX15, CXr15 |
| 307-437-01R | 80        | 278       | 2500                  | 5000              | CX25, GX25, CXr25 |
| 307-438-01R | 100       | 540       | 4000                  | 8000              | CX45, CXr 45      |



## Bracket for Top-Down furler on masthead rig

To allow for a furling gennaker system to be used for a mast head rig, the halyard must be moved forward to prevent conflict between the halyard swivel and the forestay.

A mast head bracket with a smooth halyard lead solves the problem. This bracket is intended for gennakers/asymmetric spinnakers only and not Code 0's.

Max righting moment (RM) at 30° heel; 35 kNm.

Calculate your boat's RM with the calculator found on our website.



Art. No. 508-060-01R

## Anti-Twist shackle

The Anti-Twist shackle is an optional shackle connecting the halyard to the halyard swivel. The long pin will lean against the mast and prevent a "soft" halyard from twisting.

This shackle is not necessary for a 2:1 halyard set up nor is it for a high quality Dyneema® halyard.

| ART. NO.    | DIMENSION       | TO BE USED FOR... |
|-------------|-----------------|-------------------|
| 545-030-01R | M6, L = 220 mm  | CX10, GX7.5, GX10 |
| 545-130-01R | M8, L = 220 mm  | CX15, GX15, CXr15 |
| 545-230-01R | M10, L = 280 mm | CX25, GX25, CXr25 |
| 545-430-01R | M12, L = 390 mm | CX45, CXr45       |





CXr furler on a retractable carbon bowsprit. The low friction shackle (optional) underneath the drum is connected to the tack-line. 2:1 purchase enables the bowman to pull the drum out on the bowsprit while remaining on the foredeck. It also makes for a high luff load.

# DINGHIES KEELBOATS YACHTS

**Seldén Mast AB, Sweden**  
Tel +46 (0)31 69 69 00  
e-mail [info@seldenmast.com](mailto:info@seldenmast.com)

**Seldén Mast Limited, UK**  
Tel +44 (0)1329 50 40 00  
e-mail [info@seldenmast.co.uk](mailto:info@seldenmast.co.uk)

**Seldén Mast Inc., USA**  
Tel +1 843-760-6278  
e-mail [info@seldenus.com](mailto:info@seldenus.com)

**Seldén Mast A/S, Denmark**  
Tel +45 39 18 44 00  
e-mail [info@seldenmast.dk](mailto:info@seldenmast.dk)

**Seldén Mid Europe B.V.,  
Netherlands**  
Tel +31 (0)111-698 120  
e-mail [info@seldenmast.nl](mailto:info@seldenmast.nl)

**Seldén Mast SAS, France**  
Tel +33 (0)251 362 110  
e-mail [info@seldenmast.fr](mailto:info@seldenmast.fr)

The Seldén Group is the world's leading manufacturer of mast and rigging systems in carbon and aluminium for dinghies, keelboats and yachts.

Our well known brands are Seldén and Furlex.

The worldwide success of Furlex has enabled us to build a network of over 750 authorised dealers covering the world's marine markets. So wherever you sail, you can be sure of fast access to our service, spare parts and know-how.

[www.seldenmast.com](http://www.seldenmast.com)

SELDÉN and FURLEX are registered trademarks of Seldén Mast AB.

