

# NDE2: THE NEW RANGE OF MOTORIZED FURLERS!

**MEETING THE NEEDS OF MODERN SAILORS** 

Today, both sailors and the way they sail are changing. To adapt to these new styles, Profurl has released a new range of NDE2 motorised furlers, specially designed to provide maximum comfort, safety and reliability.

With the development of new motors, Profurl can now offer economical solutions for 30-foot boats.

NDE2 furlers are now available for boats from 9m to more than 22m (see page 51).

Profurl is a pioneer in furler motors, with more than 30 years in the field.

## Profurl Technical partner for IMOCA Bureau Vallée 2

Profurl will be supporting Louis Burton on Bureau Vallée 2 right up to the Vendée Globe 2020. Formerly the Banque Populaire 8 and reigning champion, this boat is fully equipped with Profurl stayfurlers, furlers and swivels.



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### Introduction

#### THE BEST OF PROFURL FOR ALL OUR CUSTOMERS

In 1980 PROFURL developed its first furling system and then quickly became one of the pioneers of this technology, as well as the worldwide market leader.

Today, thanks to its over 40 years of experience in the reefing-furling market, PROFURL is still considered as one of the major market players.

Whatever your sailing program is (cruising, racing, off shore), and depending on the size of your boat or your budget, you will always find the appropriate PROFURL product to equip your yacht.

Our motto: Deliver the best of PROFURL technology to all our customers.



X-Plore expeditions - Profurl in the extreme South Profurl products are designed and manufactured to work for you, no matter where you want to sail. Perfect for all your needs, from the toughest to the smoothest sailing!







#### **PROFURL:**

#### a comprehensive range of products

PROFURL systems are adapted to any kind of sailing program; off shore races, single handed races around the world, cruising...

- > Manual headsail reefing-furling systems for cruising and racing.
- > Motorised headsail systems for big boats.
- > MK4 in-boom furler: for 15 to 18m boats
- > Flying sails furlers for racing and cruising
- > Stayfurlers for racing and fast cruising



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#### **PROFURL: a Wichard Group brand**

Made in France: Profurl reefing systems are made in France, guaranteeing quality and peace of mind

The Wichard Group, a world famous French marine hardware manufacturer, took over PROFURL in 2002.

Wichard: specialized in marine hardware: blocks, stainless steel products, tiller extensions...



#### **Process of manufacturing**

#### **R&D: A high involvement**

- > Our products are first developed by the R&D department based in Pornichet on the West coast of France. The systems are developed by a team of highly skilled engineers, assisted by the latest computer tools and softwares.
- > PROFURL products are the result of a tight collaboration between the R&D team and the world's riggers, sail makers and sailors.
- > Each part is submitted to a range of scientific tests in order to test their resistance, beyond what could actually be experienced on a yacht

#### A rigorous manufacturing process

- > The raw materials are carefully selected and are part of high level specifications, which are planned for extensive use of the systems.
- > The mechanical parts are machined using a controlled patented process, and using extrusions of the purest metallurgical quality. PROFURL systems are not manufactured from castings which can contain impurities which can cause inherent weaknesses.
- > Each part is micro-balled for a perfect surface finish and then anodised in a special green-gold process in order to assure the best protection against harsh marine environment.

#### Tests at sea

- > Each new product is submitted to the sea in the most extreme conditions.
- > The systems are also tested by marine industry professionals including some of the world's greatest skippers, sailmakers...

## The reasons to choose a PROFURL system

- > A comprehensive range of products meeting your needs.
- > Reliable and performant systems.
- > No maintenance required.
- > A warranty on each product (e.g: 10 year warranty for the manual furling systems).
- > A complete traceability process for a better quality.
- > A professional and efficient assistance.
- > A global network of distributors.
- > Over 30 years of experience in the field.
- > Made in France



Traceability process: each Profurl product is identified by a serial number.

#### **Satisfying our customers first**

## HIGH QUALITY OF PRODUCTS AND TRACEABILITY

Each system has a serial number engraved in order to trace our products throughout the unit life.

#### WARRANTY

Each PROFURL product benefits from a world wide warranty: e.g. 10 year warranty for the manual headsail furlers.

#### **ASSISTANCE**

Our hotline is available to answer all your questions: product choice, special fitting...

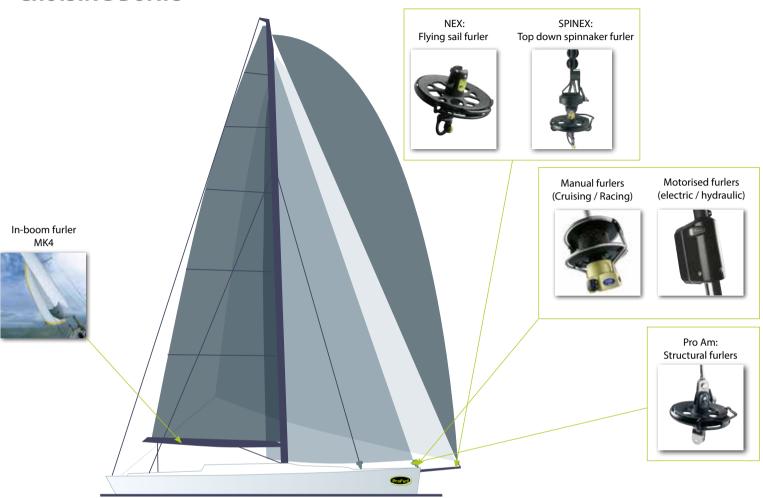
## A GLOBAL NETWORK OF

**DISTRIBUTORS** 

PROFURL products are distributed in more than 50 countries all over the world through a network of professionals well qualified and regularly trained.

# PROFURL PRODUCT OVERVIEW

#### **CRUISING BOATS**



|                                 | Structural<br>system (acts as<br>a forestay for<br>the mast) | Sails which<br>can be used<br>with this<br>system  | Partial furling<br>of the sail | Possibility to<br>sail with a sail<br>fully deployed | Possibility to drop the sails | Sailing<br>programs  |
|---------------------------------|--|--|--------------------------------|--|-------------------------------|--|
| Manual reefing systems          | No   | <ul><li>Genoa</li><li>Staysail</li><li>Solent jib</li></ul>                                  | Yes                            | Yes  | Yes                           | <ul><li> Cruising</li><li> Ocean racing</li><li> Long distance cruising</li></ul>                                      |
| Structural<br>furlers<br>P≂○ ∧M | Yes  | • Genoa<br>• Solent jib  | No                             | Yes  | Yes                           | <ul><li>Regatta / one design</li><li>Day boat</li></ul>  |
| Motorised reefing systems       | No   | <ul><li>Genoa</li><li>Staysail</li><li>Solent jib</li></ul>                                  | Yes                            | Yes  | Yes                           | Cruising     Long distance cruising  |
| Flying sail<br>furlers<br>N≡∺   | No   | <ul><li>Gennaker</li><li>Code zero</li><li>Staysail</li><li>Solent jib</li><li>etc</li></ul> | No                             | Yes  | Yes                           | <ul><li>Ocean racing</li><li>Offshore racing</li><li>Regatta</li><li>Cruising</li><li>Long distance cruising</li></ul> |
| Top down furler<br>≤≂।∾≅×       | No   | Asymmetric spinnaker   | No                             | Yes  | Yes                           | Cruising     Long distance cruising  |



#### **RACING BOATS**



|                                      | Structural<br>system (acts as<br>a forestay for<br>the mast) | Sails which<br>can be used<br>with this<br>system                                     | Partial furling<br>of the sail | Possibility to<br>sail with a sail<br>fully deployed | Possibility to drop the sails | Sailing<br>programs  |
|--------------------------------------|--|---|--------------------------------|--|-------------------------------|--|
| Flying sail<br>furlers N≡×<br>⊢Y⇒≂I⊃ | No   | <ul><li>Gennaker</li><li>Code zero</li><li>Sails with hooks</li></ul>                 | No                             | Yes  | Yes                           | Ocean racing     Maxi-yachts   |
| Swivel Hooks<br>ヘミン<br>エソョネロ         | No   | • Sails with hook   | No                             | Yes  | Yes                           | <ul><li>Ocean racing</li><li>Maxi-yachts</li></ul>   |
| Flying sail<br>furlers<br>N≡×        | No   | <ul><li>Gennaker</li><li>Code zero</li><li>Staysail</li><li>Solent jib• etc</li></ul> | No                             | Yes  | Yes                           | <ul><li>Ocean racing</li><li>Offshore racing</li><li>Regatta</li><li>Cruising</li><li>Long distance cruising</li></ul> |
| Stayfurlers<br>N≡× STR               | Yes  | <ul><li> Genoa</li><li> Staysail</li><li> Solent jib</li></ul>                        | No                             | Yes  | No                            | <ul><li>Ocean racing</li><li>Offshore racing</li><li>Regatta / one design</li><li>Day boat</li></ul>                   |

## Introduction







#### Profurl: a major player in ocean racing

Since the 1980s Profurl has been an integral part of regattas and offshore racing history. Boc Challenge, Vendée Globe, Route du Rhum, circumnavigation records, mini transat and more recently the America's Cup... Profurl has stood shoulder to shoulder with skippers and equipped all kinds of racing boats from mini 6.50 to 40 m maxi trimarans.

#### **Our unequalled references**

- > 2005: World record of Francis Joyon on the multihull Idec (72 days).
- > 2006: Transpacific record on Geronimo with Olivier de Kersauzon.
- > 2006: 1st rank Route du Rhum Roland Jourdain on Sill & Véolia (Open 60')
- > 2008: Round the world, non stop, singlehanded record Françis Joyon on Idec
- > 2010: Route du Rhum: 1st rank: Groupama 3 multihull
- > 2012: 24H solo record: F Joyon / Idec
- > 2013: Single-handed North Atlantic Record: F Joyon / IDEC
- > 2014: Route du Rhum: 1st rank: Banque Populaire 7 2nd rank: Spindrift 2
- > 2015: Transat Jacques Vabre:

1st rank: Vincent Riou on PRB

2nd rank: Armel Le Cléac'h on Banque Populaire 8 2016 / 2017:

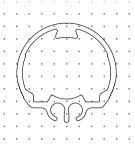
- > Victory in the Vendée Globe Race
- > The Jules Verne Trophy: the IDEC Maxi Trimaran -
- F Joyon, breaking the record in 40 days

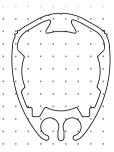




## **Manual reefing** systems







#### **CRUISING SYSTEMS**

With 9 models, the Cruising range offers robustness and safety. They are dedicated to boats from 5 to 26 m. They integrate innovations like the double cage arms and the new feeder design. The Cruising models are equipped with silver anodised extrusions.

#### **RACING SYSTEMS**

The Racing systems bring performance and ease of use thanks to innovations like the opening pre-feeder delivered as standard. They are dedicated to boats from 6 to 20 m and have been especially designed for the racing-cruising sailors. They are equipped with black aerofoil extrusions.



#### High performance systems...

- > The extrusions are made lighter and stronger thanks to a special alloy (6106).
- > The ball bearings have an optimized weight / resistance ratio.
- > The Wichard opening pre-feeder is delivered as standard on Racing models to hoist the sail faster.



#### ...reliable and maintenance free

- > The ball bearings are made of high strength 100 C6 carbon steel and are sealed in a grease bath to increase their working load and prevent corrosion.
- > Watertightness is achieved by the use of two double lip seals preventing foreign bodies (salt, sand, dust, water) from entering the bearing mechanism.
- > The not deformable plastic drums withstand impact (e.g. anchor bump, collision) and are resistant to UV.



#### Ease of use

PROFURL manual furling systems have been designed to ease operations:

- > The standard feeder enables to easily hoist the sail by only one crew member.
- > The optional opening pre-feeder, manufactured by Wichard, smoothly guides the sail's luff tape into the extrusions, whilst rapidly hoisting the sail. When re-hoisting it, the pre-feeder can be reattached to the luff tape without removing the headsail from the extrusion.











#### Safety of use

- > Double cage arms (exclusive to PROFURL) prevent the furling line from jumping off the drum and allow the furling line to re-align onto the drum by simply pulling on the line.
- > Stainless steel locking devices are dedicated to boats with a closed to deck fitting.
- > On the C480, C520, C530 and R480 models, special locking devices have been designed to withstand the higher loads.

#### **Reliability of materials**

PROFURL rigorously selects the materials to be used for the manufacturing of the different components: these parts are submitted to bench-tests in order to assess their resistance.

- > Ball bearings are made of high strength 100 C6 carbon steel.
- > Drums are made of high impact plastic.
- > Extrusions use a special alloy (6106) and offer one of the best weight / resistance ratios.
- > The feeder and the opening pre-feeder are made of stainless steel (316L), except for C290.

#### The benefits of PROFURL systems

- > A wide range of reefing systems for cruising and racing.
- > Cruising systems for boats from 5 to 26 m with round silver anodized extrusions.
- > Racing models for boats from 6 to 20 m with black aerofoil anodized extrusions.
- > One forestay diameter for one furling system.
- > The ability to use an existing forestay (in most cases).
- > Several fitting possibilities: standard, long link plates, with turnbuckle cylinder, below deck, stainless steel lockers
- > Light and robust extrusions.
- > Maintenance free ball bearings.
- > Insulation of the different materials.
- > 10 year world wide limited warranty.



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# Manual reefing systems

Components of models (C290 to C430 - R250 to R430)

#### Swivel:

- Ball bearings sealed in a grease bath.
- Two watertight double lips seals to prevent foreign bodies from entering (water, salt, dust...).

#### **Extrusions:**

- Aluminium extrusions (Cruising: round silver anodised / Racing: aerofoil black anodised).
- · Light weight specialised alloy.
- Optimum torque resistance.

#### **Locking devices:**

- Standard ones for Cruising and Racing models with short link plates
- Stainless steel locking devices with insulated bushes (recommended for boats with high/intensive use). Also mandatory in case of closed to deck fitting.
- The locking devices are available for standard, medium and long link plates attachment configurations.



#### Wrapstop:

Fixed at the top of the stay, it radically prevents the halyard from wrapping around the stay, and reduces potential halyard chafe.

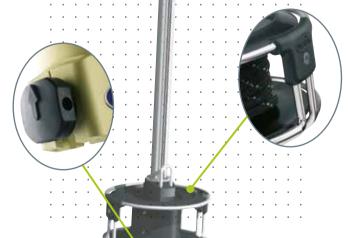
#### Feeder (except C290):

- Stainless steel (316L).
- No fitting tool, attachment is made with a Velcro webbing.
- Option: opening pre-feeder from Wichard.



#### Drum mechanism:

- Withstands tremendous impact.
- Double cage arms prevent the furling line from jumping off the drum.
- Removable: the headsail can be hoisted and set as per a racing foil.
- The drum mechanism contains a maintenance free ball bearings system.

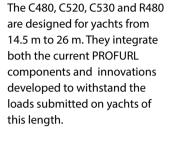




Components of C480, C520, C530 and R480 models

#### Feeder:

- Stainless steel (316L).
- No fitting tool, attachment is made with a Velcro webbing.
- Option: opening pre-feeder from Wichard.



#### **Extrusion:**

A new joiner system with an enhanced grip of the connector screws.



#### **Locking devices:**

New stream line drum mechanism design. Made from two counter plastic halves, and including retaining screws, to withstand lateral loads.



#### The drum:

As per other PROFURL manual headsail furling models, the rope drum and cage are removable. The furling line is attached to one half of the furling drum allowing for removal/rebuild. The double cage arms are engineered to withstand the yachts loads and maintain the alignment of the furling line onto the rope drum.

# Manual reefing systems



#### **DECK ATTACHMENT CONFIGURATIONS**

PROFURL furling systems can be adapted to your boat's configuration, not vice versa.

PROFURL offers a wide range of fittings, a description of each fitting configuration is listed below:

Long link plates fitting



Standard fitting with short link plates



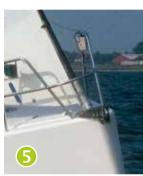
Long link plates fitting



Close to the deck fitting with stainless steel lockers



Fitting with turnbuckle cylinder



Below the deck fitting

#### What kind of fitting for my furling system?



#### STANDARD FITTING WITH SHORT LINK PLATES

Type of locking devices: standard and threaded pin for a stay eye fitting

- Raise the drum mechanism in order to clear the deck in case of obstacles (bow roller etc.).
- Fitting with adjustment plates is also possible



## FITTING WITH LONG LINK PLATES

Type of locking devices: standard

- The drum can be lifted to avoid interference with the anchor and to reduce the sail chafe on the lifelines.
- The forestay length is still adjustable.



## FITTING CLOSE TO THE DECK

Type of locking devices: stainless steel and smooth pin

Increase the luff length



## FITTING WITH A TURNBUCKLE CYLINDER

The rigging screw goes into the turnbuckle cylinder.

- The furler can be fitted lower to the deck.
  - It is also possible to use a combination of a turnbuckle cylinder and long link plates.



#### BELOW THE DECK FITTING

- An aesthetic solution chosen by some boatbuilders (Bénéteau, X-Yacht). Please contact us for more information.
- (+) Adjustable tack fitting



## C260: THE FURLING SYSTEMS FOR LIGHT BOATS

Especially designed for boats from 5 to 7 m, the C260 model is a self-contained halyard furling system. Cost-effective, easy to install on the existing forestay, the C260 does not require any maintenance.

## > The self-contained halyard system

On light sail boats - especially fractionally rigged - it is usually difficult to obtain a tight forestay. The C260 with its self-contained halyard helps to minimise forestay sag by reducing mast compression created by a combination of loads from the halyard and sail.

#### > Ease of installation

The C260 does not require a specialised attachment to the forestay stem head, it is simply attached to the lower swage terminal of the forestay (eye and holes plates or turnbuckle).

For boats transported and stored on a trailer, the C260 can be separated in two sections reducing the risk of damage while in transit.

#### > Ease of use

The self-contained halyard passes over a sheave box fitted into the top of the extrusion and returns down to a sheave and cam cleat. Once the sail is hoisted and tensioned, the remaining length of the halyard is used as a furling line.





# Manual reefing systems



#### **CRUISING MODELS**

- > Large range of 10 models for boats from 5 to 26 m.
- > Round and silver anodised profile.
- > Several fitting possibilities: adjustment plates, long link plates, turnbuckle cylinder, below the deck fitting, stainless steel locking devices
- > Additional option: opening pre-feeder, stainless steel locking devices
- > 10 year world wide limited warranty.
- > **New:** the C290, C320, C350, C420 and C520 models can hold an increased forestay diameter. For example: for an 8mm forestay, you can choose a C320 instead of a C350. If using a swageless eye, you must take both the maximum sail surface area and the drum capacity into consideration.

#### How to choose my furling system?

To correctly select your own furling system, refer to the following steps:

- Step 1: Define your sailing program: cruising or racing-cruising.
- Step 2: Measure accurately the diameter of the forestay (see table below).
- Step 3: Choose one of the fitting systems described on page 14.

|       | Boat length (meter) & max sail area |       |       |      |     |    |                  |    |                |                  |      |                   |
|-------|-------------------------------------|-------|-------|------|-----|----|------------------|----|----------------|------------------|------|-------------------|
| Model | max fore-<br>stay Ø mm              | 5 - 7 | 7 - 9 | 9.50 | 10  | 11 | 12               | 13 | 14             | 16               | 18   | 26+               |
| C260  | 5                                   | 15M²  |       |      |     |    |                  |    |                |                  |      |                   |
| C290  | 6.35 / 7*                           |       | 301   | √l²  |     |    |                  |    |                |                  |      |                   |
| C320  | 7 / 8*                              |       |       |      | 40M | 2  |                  |    |                |                  |      |                   |
| C350  | 8 / 10*                             |       |       |      |     |    | 55M <sup>2</sup> |    |                |                  |      |                   |
| C420  | 10 / 12.7*                          |       |       |      |     |    |                  | 80 | M <sup>2</sup> |                  |      |                   |
| C430  | 12.7                                |       |       |      |     |    |                  |    | 100            | M <sup>2</sup>   |      |                   |
| C480  | 14.3                                |       |       |      |     |    |                  |    | 1              | 20M <sup>2</sup> |      |                   |
| C520  | 16 / 19*                            |       |       |      |     |    |                  |    |                | 14               | 10M² |                   |
| C530  | 19                                  |       |       |      |     |    |                  |    |                |                  | 22   | OM <sup>2</sup>   |
| C700  | 25.4                                |       |       |      |     |    |                  |    |                |                  |      | 300M <sup>2</sup> |

| Cruising range                  | C260                          | C290      | C320   | C350  | C420        | C430         | C480     | C520       | C530  | C700         |
|---------------------------------|-------------------------------|-----------|--|-------|-------------|--------------|----------|------------|-------|--------------|
|                                 | Self-<br>contained<br>halyard |           |  |       | Halyard swi | ivel systems | s        |            |       | On<br>demand |
| Max forestay Ø (mm)             | 5                             | 6,35 / 7* | 7 / 8*   | 8/10* | 10/12.7*    | 12,7         | 14,3     | 16 / 19*   | 19    | 25,4         |
| Equivalent in # rod             | -                             | # 10      | # 12   | # 17  | # 22        | # 40         | # 48     | # 60       | # 76  | # 150        |
| Clevis pin Ø (mm)               | -                             | 8-10-12   | 2-14-16  | 10-12 | -14-16-19-  | 22-25        | 16-1     | 18-19-22-2 | 5-28  | ND           |
| Furling standard length (m)     | 8,50                          | 10        | 12   | 14    | 16          | 18           | 18       | 20         | 22    | ND           |
| Extrusion length (m)            |                               |           |  |       | 2           |              |          |            |       | 2.5          |
| Weight / meter (Kg)             | 0,408                         | 0,557     | 0,661  | 0,728 | 0,933       | 0,933        | 1,200    | 1,460      | 1,460 | 2,800        |
| Removable drum                  | No                            | No        |  |       |             | Yes          |          |            |       | No           |
| Feeder                          | No                            | No        |  |       |             | Υ            | es es    |            |       |              |
| Double luff groove              | Yes                           | No        |  |       |             | Υ            | 'es      |            |       |              |
| Luff line Ø (mm)                | 6                             |           |  | 5     |             |              |          | 6          | 5     |              |
| Luff rope pre-feeder            | No                            |           |  |       |             | Option       |          |            |       |              |
| Long link plates                | No                            |           |  |       |             | Option       |          |            |       |              |
| Turnbuckle cylinder             | No                            | Yes       |  |       | Optio       | n            |          |            |       |              |
| Stainless steel locking devices | No                            | Ор        | tion: all models but C430 model - Specific locking devices: C480, C520, C530 |       |             |              |          |            |       |              |
| Warranty                        |                               |           |  |       | 10 year wo  | orld wide v  | varranty |            |       |              |

<sup>\*</sup>If using a swageless eye, you must take both the maximum sail surface area and the drum capacity into consideration.



#### **RACING MODELS**

- > Range of 5 models for boats from 6 to 20 m.
- > Black anodised aerofoil profile.
- > Several fittings: adjustment plates, long link plates, turnbuckle cylinder, below the deck fitting, stainless steel locking devices
- > Options: stainless steel locking devices, turnbuckle cylinder
- > 10 year world wide limited warranty.



#### How to choose my furling system?

To correctly select your own furling system, refer to the following steps:

- Step 1: Define your sailing program: cruising or racing-cruising.
- Step 2: Measure accurately the diameter of the forestay (see table below).
  - Step 3: Choose one of the fitting systems described on page 14.

|       | Boat                 | len | gth             | (me | ter) | & n  | nax | sail             | area | 3  |                  |    |
|-------|----------------------|-----|-----------------|-----|------|------|-----|------------------|------|----|------------------|----|
| Model | Max forestay<br>Ø mm | 6   | 7               | 8   | 9    | 10   | 11  | 12               | 13   | 14 | 16               | 19 |
| R250  | 6.35                 | 3   | OM <sup>2</sup> |     |      |      |     |                  |      |    |                  |    |
| R350  | 8                    |     |                 |     | 4    | I5M² |     |                  |      |    |                  |    |
| R420  | 10                   |     |                 |     |      |      |     | 70M <sup>2</sup> |      |    |                  |    |
| R430  | 11.1                 |     |                 |     |      |      |     |                  | 90M  | 2  |                  |    |
| R480  | 12.7 / 14*           |     |                 |     |      |      |     |                  |      | 10 | DOM <sup>2</sup> |    |

| Racing range                    | R250    | R350   | R420                | R430                 | R480       |  |  |  |
|---------------------------------|---------|--|---------------------|----------------------|------------|--|--|--|
|                                 |         |  | Halyard swivel syst | ems                  |            |  |  |  |
| Max. forestay Ø (mm)            | 6,35    | 8  | 10                  | 11.1                 | 12.7 / 14* |  |  |  |
| Equivalent in # rod             | # 10    | # 17   | # 22                | # 30                 | # 40       |  |  |  |
| Clevis pin Ø (mm)               | 8-10-12 | 8-10-12-14-16 10-12-14-16-19-22-25 16-18-19-22-25- |                     |                      |            |  |  |  |
| Furling standard length (m)     | 8       | 12   | 14                  | 16                   | 18         |  |  |  |
| Extrusion length (m)            | 2       | 2  | 2                   | 2                    | 2          |  |  |  |
| Weight / meter Kg               | 0,383   | 0,638  | 0,835               | 0,835                | 1,200      |  |  |  |
| Removable drum                  |         |  | Yes                 |                      |            |  |  |  |
| Feeder                          |         |  | Yes                 |                      |            |  |  |  |
| Opening pre-feeder              |         |  | Yes                 |                      |            |  |  |  |
| Double luff groove              |         |  | Yes                 |                      |            |  |  |  |
| Luff line Ø (mm)                |         | 5 ו  | nm                  |                      | 6 mm       |  |  |  |
| Long link plates                |         |  | Option              |                      |            |  |  |  |
| Turnbuckle cylinder             | Option  |  |                     |                      |            |  |  |  |
| Stainless steel locking devices | Ор      | tion for all models b                              | ut R430 model - For | R480 specific lockin | g devices  |  |  |  |
| Warranty                        |         | 10   | year world wide wa  | arranty              |            |  |  |  |

<sup>\*</sup>If using a swageless eye, you must take both the maximum sail surface area and the drum capacity into consideration.

# Manual reefing systems



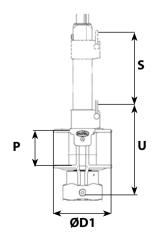
#### **BELOW THE DECK MODELS**

- > For Cruising models from C290 to C430 and Racing models from R250 toR480
- > Adjustable tack point above the deck
- > Aesthetic solution enabling easier operations with anchor
- > Optimized luff and thus better boat performances
- > 10 year world wide warranty



photo X Yach

| Below the deck fitting          | C290              | C320SP   | C350SP            | C420SP            | C430SP             | R250SP            | R350SP            | R420SP            | R430SP            | R480SP              |
|---------------------------------|-------------------|--|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| Model                           | Cr                | uising mod   | lel - round       | & silver pro      | fil                | F                 | lacing mod        | del - oval &      | black profi       | il                  |
| Max sail area                   | 30 m <sup>2</sup> | 40 m <sup>2</sup>  | 55 m <sup>2</sup> | 80 m <sup>2</sup> | 100 m <sup>2</sup> | 30 m <sup>2</sup> | 45 m <sup>2</sup> | 70 m <sup>2</sup> | 90 m <sup>2</sup> | 100 m <sup>2</sup>  |
| Max. forestay Ø (mm)            | 6,35              | 7  | 8                 | 10                | 12,7               | 6,35              | 8                 | 10                | 11,1              | 12                  |
| Equivalent in # rod             | # 10              | # 12   | # 17              | # 22              | # 40               | # 10              | # 17              | # 22              | # 30              | # 40                |
| Clevis pin Ø (mm)               | 8/10/12           | 8/10/12/14/16 10/12/14/16/19/22/25 8/10/12/14  |                   |                   |                    |                   | /14/16            | 10/12/14/1        | 6/19/22/25        | 16/19/22 /<br>25/28 |
| Furling standard length (m)     | 10                | 12   | 14                | 16                | 18                 | 8                 | 12                | 14                | 16                | 18                  |
| Extrusion length (m)            |                   |  |                   |                   | 2                  | m                 |                   |                   |                   |                     |
| Weight/meter Kg                 | 0,557             | 0,661  | 0,728             | 0,933             | 0,933              | 0,383             | 0,638             | 0,835             | 0,835             | 1.200               |
| Removable drum                  |                   |  |                   |                   | N                  | О                 |                   |                   |                   |                     |
| Feeder                          | No                |  |                   |                   |                    | Yes               |                   |                   |                   |                     |
| Opening prefeeder               |                   |  | Option            |                   |                    |                   |                   | Yes               |                   |                     |
| Double luff groove              | No                |  |                   |                   |                    | Yes               |                   |                   |                   |                     |
| Luff line Ø (mm)                |                   |  |                   |                   | 5                  |                   |                   |                   |                   | 6                   |
| Long link plates                |                   |  |                   |                   | Opt                | ion               |                   |                   |                   |                     |
| Turnbuckle cylinder             |                   | Yes  |                   |                   |                    |                   |                   |                   |                   |                     |
| Stainless steel locking devices | Optio             | Option for all models but C430SP and R430SP models - Specific locking devices for R480 model |                   |                   |                    |                   |                   |                   |                   |                     |
| Warranty                        |                   |  |                   | 10 year w         | orld wide          | warranty          |                   |                   |                   |                     |



|     | BELOW THE DECK: DIMENSIONS (MM) |        |        |        |        |        |        |        |        |        |  |  |
|-----|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--|
|     | C290                            | C320SP | C350SP | C420SP | C430SP | R250SP | R350SP | R420SP | R430SP | R480SP |  |  |
| Р   | 150                             | 190    | 190    | 190    | 190    | 150    | 190    | 190    | 190    | 250    |  |  |
| S   | 170                             | 250    | 300    | 300    | 300    | 170    | 250    | 300    | 300    | 690    |  |  |
| U   | 213                             | 265    | 265    | 265    | 265    | 210    | 265    | 265    | 265    | 342    |  |  |
| ØD1 | 140                             | 192    | 222    | 242    | 242    | 140    | 192    | 242    | 242    | 276    |  |  |



# STRUCTURAL FURLERS



#### STRUCTURAL FURLERS

PRO AM is a new generation of structural furlers for 5 to 9.5 metre boats designed for "all or nothing" sailing (with sails fully unfurled). The sail is hoisted and hauled thanks to a second swivel called a "halyard swivel". PRO AM also allows you to strike the sail for wintering, maintenance or just for storage after use. 3 sizes available for 5, 6 and 7 mm diameter stays.

#### Why choosing PRO AM?

- > The ideal system for Day Boats and Sports Boats
- > Light and easy to handle
- > Sail can be hoisted and lowered
- > Possibility to remove easily the halyard swivel only.
- > Quick fitting and removal for trailer boats
- > Profurl system: maintenance-free components mounted in a sealed grease bath.
- > Three-year Profurl worldwide limited warranty.



#### Structural

> The stay fastens directly on the spool and the swivel, so PRO AM supports the mast.

#### All or nothing sailing

> Because it is a structural element, PRO AM allows you to sail with the sail fully unfurled or fully furled. A classic furler with extrusions allows you to sail partially furled.

#### **Efficient**

- > The PRO AM halyard swivel is fitted with ball bearings to ensure excellent rotation even under heavy loads.
- > PRO AM has light and compact components (spool and swivel) and textile fastening systems on the halyard swivel. With no extrusions to increase windage, the sail enjoys superior performance.



#### **PRO AM applications**

- > Day boats
- > Sports boats
- > One designs and class boats (J80, Surprise, Dragon...)

#### Sail types

> Jib, solent mounted on snap hook or sleeve





#### PRO AM: how does it work?

- Unlike a classic furler, the PRO AM has a halyard swivel (or tensioning swivel) which allows you to hoist and lower the sail.
- **2** Attachment of the halyard on the halyard swivel
- **3** The halyard clew of the sail is fastened to the Wichard soft shackle.
- The head swivel allows the cable to rotate and thus furl the sail.
- **5** The tack of the sail is fastened to the Wichard shackle.
- **6** The stay (5, 6 or 7 mm single strand) is fastened to the drum and the swivel at the head
- The stainless steel toggles are fitted to the boat's deck and mast.



#### **Performance**

#### S-GRIP: Better line grip

The special groove design, allowing for deformation of the line, ensures:

- better line grip, even when wet!
- easier furling
- minimum line wear



#### **OPTIMAL FURLING: Furl without effort**

The optimal spool diameter provides ideal torque, which:

- · makes furling easier
- reduces effort



#### XTRA-LIGHT SYSTEMS: Lightness first

The size and weight of each component (spool, swivel, and terminals) have been optimised to:

- improve sailing performance
- ensure easier handling of the systems



#### Safety

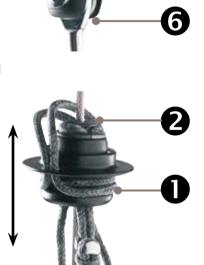
**SAFE SYSTEM** enables you to stop the running of the furling line during deployment of sail and thus:

- prevent accidents or damage caused by a free running line.
- manoeuvre more quickly and easily
- prevent excessive wear of the line



#### **SMART LOCK: Wire lock (only on fork models)**

- Wire locking system completely integrated into the drum mechanism
- •No need to use a lanyard.
- No risk of jamming caused by adjacent lines.
- Keeps the pin free to turn (no strain).
- Locking indicator on the pin.







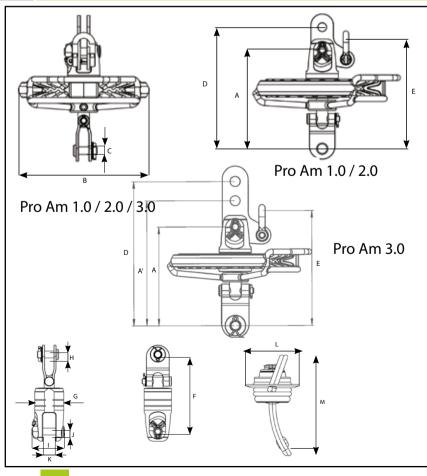
#### **CHOOSE YOUR PRO AM FOR BOATS FROM 5 TO 12M:**

| PRO AM 1.0       | PRO  | PRO  |  |
|------------------|--|--|--|
| from 5 to 7 m    | from 7 to 9,5 m                              | from 9 to 12 m   |  |
| 5 mm             | 6 mm   | 7 mm   |  |
| 1000 Kg          | 2000 Kg                                      | 2000 Kg  |  |
| 600 Kg           | 600 Kg                                       | 600 Kg   |  |
| 120 mm           | 150 mm                                       | 150 mm   |  |
| 8 mm             | 10 mm  | 12 mm  |  |
| ye diameter 8 mm |  | 12 mm  |  |
|                  | from 5 to 7 m  5 mm  1000 Kg  600 Kg  120 mm | from 5 to 7 m from 7 to 9,5 m  5 mm 6 mm  1000 Kg 2000 Kg  600 Kg  120 mm 150 mm  8 mm 10 mm |  |





#### **Technical data: ProAm**



| Technical data: spool   | 20 \M<br>1.0 | \<br>0<br>0<br>1<br>1 | PR 0 < M<br>3.0 |  |
|-------------------------|--------------|-----------------------|-----------------|--|
| A / A' mm               | 104          | 122                   | 128 / 162       |  |
| B mm                    | 140          | 180                   | 180             |  |
| C mm                    | 8            | 10                    | 12              |  |
| D mm                    | 128          | 152                   | 187             |  |
| E mm                    | 118          | 142                   | 149             |  |
| Ø spool : mm            | 120          | 150                   | 150             |  |
| Ø furling line mm       | 10           | 10                    | 10              |  |
| Weight: spool (only) Kg | 0.660        | 1.080                 | 1.080           |  |

| Technical data: swivel           | PRO ^M | S<br>O<br>O<br>N | 2<br>0<br>0<br>n |
|----------------------------------|--------|------------------|------------------|
| F mm                             | 90     | 109              | 115              |
| G mm                             | 34     | 42               | 42               |
| H mm                             | 8      | 10               | 12               |
| l mm                             | 38     | 47               | 47               |
| J mm                             | 8      | 10               | 10               |
| K mm                             | 15     | 18               | 18               |
| Weight: swivel (only) Kg         | 0.210  | 0.340            | 0.340            |
| Technical data: halyard swivel   |        |                  |                  |
| L mm                             | 70     | 70               | 70               |
| M mm                             | 129    | 129              | 129              |
| Weight: halyard swivel (only) Kg | 0,150  | 0,150            | 0.150            |

<sup>\*:</sup> The spool and swivel working loads take into consideration the stainless steel cable breaking loads used as a forestay.



# Flying sail furlers

#### NEX GENERATION:

#### THE FLYING-SAIL FURLER FOR EVERY SAILOR

Discover the NEX, Profurl's new generation of continuous-line, flying-sail furlers, developed through Profurl's know-how and R&D with input from some of today's greatest skippers to improve the performance of your yacht and ensure safe, optimum deployment of your flying sails.

The NEX flying-sail furler enables you to sail with the correct sail fully deployed, and since it is easy to change, you can have the best sail in any wind conditions. The NEX is made for every sailor, professional or amateur.

#### ~≡×: models

- > 6 models available for boats from 6 to 25m: NEX0.9, NEX1.5, NEX2.5, NEX5.0, NEX 8.0 and NEX 12.0
- > Optimal size and weight
- > Wide range of terminals to fit your boat: Wichard snap shackle, MXEvo (Wichard halyard shackle), standard shackles, 2:1 halyard blocks
- > Proven Profurl Technology: maintenance free systems permanently sealed in grease (except the NEX0.9)
- > Selective materials: for optimal strength/weight ratio
- > 3 year world-wide limited warranty

NEX 0.9

NEX 1.5

NEX 2.5

NEX 5.0

















NEX 8.0





NEX 12.0





#### **Benefits of NEX flying sail furlers**



#### Improved performance

- > Allows use of the best suited sail to sailing conditions
- > Optimal size and weight (e.g., maximum sail luff)



#### Ease of use and safety

- > Quick operations (rigged in seconds)
- > Enhanced safety: sail furled from cockpit
- > Reduced sails storage
- > Quick sail attachment device (I-Connect)
- > Quick line installation and removal (Quick Fit)

#### **~≡**≍: Sail range of use





Asymetric spinnaker\*







Stavsail

#### \*The flyng sail furlers can not be used with asymmetric spinnakers

# Outremer

#### **Types of sails**

The flying-sail furler is designed to be used with light and heavy flying, asymmetrical sails, e.g., gennaker and code zero, between a beam reach and a broad reach.



#### **Light sails**

> Gennaker, code zero, screacher, light or mutlipurpose genoas, fisherman.



#### **Heavy sails**

- > Solent, reacher, staysail, storm jib
- > Combined with a 2:1 purchase, NEX is an efficient alternative to a removable stainless steel forestay.

# Apparent wind - Average values might change with wind force 30" 90" 120"



## Download the NEX video



#### Tips:

- > To furl the sail effectively and without effort, it is recommended to tension the halyard before the operation.
- > The NEX flying sail furlers do not require any maintenance.

# Flying sail furlers





#### **Performance**

#### S-GRIP: Better line grip

The special groove design, allowing for deformation of the line, ensures:

- better line grip, even when wet!
- · easier furling
- minimum line wear



#### **OPTIMAL FURLING: Furl without effort**

The optimal spool diameter provides ideal torque, which:

- makes furling easier
- reduces effort



#### **XTRA-LIGHT SYSTEMS: Lightness first**

The size and weight of each component (spool, swivel, and terminals) have been optimised to:

- improve sailing performance
- ensure easier handling of the systems











#### **SAFE SYSTEM: Removable Line**

The SAFE SYSTEM enables you to stop the furling line running during sail deployment and thus:

- prevent accidents or damage caused by a free running line.
- manoeuvre more quickly and easily
- prevent excessive wear of the line





#### Easy to use

#### **I-CONNECT: The Quick Sail Attachment Device**

Available on NEX spools and swivels, enables you to quickly attach or remove the sails because of:

- a quick, ergonomic system (for singled handed operation)
- a fully integrated captive pin
- no risk of fouling with adjacent lines



#### **QUICK FIT: Line Fitting**

Enables you to fit or unfit the continuous line rapidly.

- rapid fitting
- · long splicing possible
- the furling line may be left in position on deck
- furlers can be changed without changing the line



#### **TUNE & LOCK: Adjustment and installation**

The system is fitted and adjusted with a single screw:

- · adapts to the line outlet and deck layout
- reduction of excessive line friction
- quick installation with only one pre-fitted screw

# Flying sail furlers

#### **CHOOSE YOUR NEX AMONG 4 MODELS FOR BOATS FROM 6 TO 18M**

|                                      | NEX O.9                          | NEX 1.5              | NEX <i>2.</i> 5       | N≡× <b>5</b> .0      |
|--------------------------------------|----------------------------------|----------------------|-----------------------|----------------------|
| Max light sail area (i.e: gennaker)* | 35 m <sup>2</sup>                | 60 m²                | 80 m²                 | 150 m <sup>2</sup>   |
| Max Working Load**                   | 900 Kg                           | 1500 Kg              | 2500 Kg               | 5000 Kg              |
| Spool Diameter                       | 125 mm                           | 140 mm               | 180 mm                | 195 mm               |
| Displacement (cruising boat)*        | 2800 Kg                          | 5000 Kg              | 8500 Kg               | 15000 Kg             |
| Examples for a monohuli*             | Mini 6.50 -<br>Cruising boat 27' | Cruising boat<br>32' | Cruising boat<br>42 ' | Cruising boat<br>55' |

If used on a multihull or for a heavy sail (on monohull), please choose the larger model .

included (see technical data on page 70). The product should not be used above these working loads in any circumstances.

#### **TERMINALS AND ACCESSORIES**

|   | NEX O.9               | N=× 1.5              | NEX 2.5                    | NEX 5.0             |  |  |  |
|---|-----------------------|----------------------|----------------------------|---------------------|--|--|--|
| Lower terminals on drum mechanism               |                       |                      |                            |                     |  |  |  |
| Clevis pin snap shackle                         | included              | included             | included                   | included            |  |  |  |
| MXEvo: halyard shackle                          | option (MXEvo ø 6)    | option (MXEvo ø 6)   | option (MXEvo ø 8)         | option (MXEvo ø 10) |  |  |  |
| Upper terminals on swivel                       |                       |                      |                            |                     |  |  |  |
| Wichard shackle                                 | included              | included             | included                   | included            |  |  |  |
| <b>MXEvo halyard shackle</b> option (MXEvo ø 6) |                       | option (MXEvo ø 6)   | option (MXEvo ø 8)         | option (MXEvo ø 10) |  |  |  |
| Halyard block                                   | option                |                      |                            |                     |  |  |  |
| Accessories                                     |                       |                      |                            |                     |  |  |  |
| Thimbles  | option: stainless ste | el thimbles with bar | option: aluminium thimbles |                     |  |  |  |
| Furling line                                    | option                |                      |                            |                     |  |  |  |
| Anti-twist torque rope                          | option                |                      |                            |                     |  |  |  |

<sup>\*:</sup> The values shown in the table are for information only and should be verified by a professional taking into account the characteristics of the boat.

<sup>\*\*</sup>The working loads shown are the maximum working loads of the mechanisms only and are not the loads of the complete system when terminals are



#### **Components of NEX flying sail furlers**

The NEX flying-sail furlers are composed of 2 mechanisms, the spool and swivel, each with terminals allowing for fitting or use. An anti-twist torque rope which transmits the rotation up to the head of the sail is fitted inside the luff of the sail supplied by the sailmaker.











Clevis pin snap shackle: lower terminal

#### Fitting terminals



MXEvo: halyard shackle lower and upper terminal



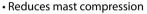
HR Wichard shackle

#### **Profurl innovative terminal solutions by Wichard**

Profurl supplies innovative terminals: easy to use and with optimal sizes and weight. Wichard's forging expertise ensures that these terminals, especially developed for NEX, provide one the best strength to weight ratios on the market.

#### > MXEvo: Wichard halyard shackle (option on all NEX models)





- · Optimal dimensions and weights
- Replaces standard halyard blocks
- Can be used as 2:1 purchase on drum mechanism
- Can be used as a simple shackle (with a single knot)
- Perfect for swivels and spools
- Outstanding working and breaking loads
- Material: body in 316L stainless steel and pin in HR S/s.
- 3 sizes available: MXEvo ø 6, MXEvo ø 8 and MXEvo ø 10 for lines from 8 to 14 mm

#### > Wichard Clevis Pin Snap Shackle

- Included on all models
- Ergonomic ball stoppers for easier handling
- Optimal sizes and weights (no intermediate fittings)
- Forged in 17/4 stainless steel for High Resistance, with a black surface coating
- Outstanding working and breaking loads



> Double fairlead for continuous line

> Aluminium thimble / Stainless steel thimble





lan Lipinski, Winner 2015 & 2017 Mini Transat Equipped with NEX flying sail furler



# Flying sail furlers

## YACHTS, MAXI-YACHTS, RACING BOATS, MAXI CATAMARANS: CHOOSE NEX 8.0 AND NEX 12.0 FURLERS





70' Maxi Catamaran - Roleeno - built by Sunreef - fitted with Profurl

| Withinionan                           |                    |           |
|---------------------------------------|--------------------|-----------|
|                                       | NEX 8.0            | NEX 12.0  |
| Max light sail area<br>(i.e gennaker) | 250 m <sup>2</sup> | 350 m²    |
| Max working load**                    | * 8000 Kg          | 12.000 Kg |
| Spool diameter                        | 200 m              | 230 m     |
| Boat examples                         | Multihull 60'      | + 80'     |

NEX 16.0, NEX 20.0

NEX 25.0, NEX 30.0...

Larger sizes available on request

#### DRUM VERSION ALSO AVAILABLE



|                           | NEX 8.0                     | NEX 12.0 |  |  |  |  |
|---------------------------|-----------------------------|----------|--|--|--|--|
| Lower terminals available |                             |          |  |  |  |  |
| Lashing eye               | Yes                         | Yes      |  |  |  |  |
| Trigger snapshackle       | Yes Part #<br>Wichard 2656  | No       |  |  |  |  |
| Halyard block             | Yes                         | Yes      |  |  |  |  |
| Hardsheave 3:1            | Yes                         | Yes      |  |  |  |  |
| Trigger snapshackle       | Tylaska T30 on<br>demand    | No       |  |  |  |  |
| Upper terminals available |                             |          |  |  |  |  |
| Lashing eye               | Yes                         | Yes      |  |  |  |  |
| D shackle                 | Yes part #<br>Wichard 11206 | No       |  |  |  |  |
| Halyard block             | Yes                         | Yes      |  |  |  |  |

<sup>\*:</sup> The values shown in the table are for information only and should be verified by a professional taking into account the characteristics of the boat. \*\* The working loads shown are the maximum working loads of the mechanisms only and are not the loads of the complete system when terminals are included (see technical data on page 70). The product should not be used above these working loads in any circumstances.



#### **ASSEMBLY OPTIONS: NEX8.0 & NEX 12.0**

For the models NEX 8.0 and NEX 12.0, Profurl offers a wide range of tack and head fittings to ensure seamless integration into your rig.



Lashing eye



Trigger snapshackle: Wichard Part # 2656



Halyard block



Trigger snapshackle: Tylaska T30



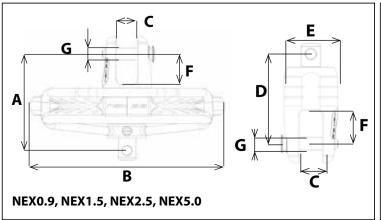
Hardsheave 3:1

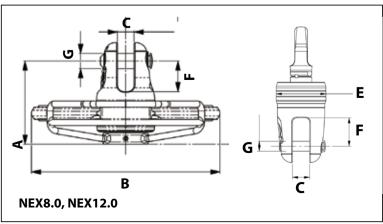


Wichard D shackle Part # 11206

#### **Technical data: NEX**

|            | Technical data: spool      | N≡× 0.9 | Z≡× 1.5 | 2≡× <i>2.</i> 5 | 2≡× 5.0 | N≡× <i>8.0</i>     | NEX 12.0  |
|------------|----------------------------|---------|---------|-----------------|---------|--------------------|-----------|
|            | Height pin to pin: A mm    | 62,4    | 73,6    | 82,9            | 109,5   | 105                | 108.5     |
|            | Width drum mechanism: B mm | 125     | 140     | 180             | 230     | 210                | 245       |
|            | Width fork: C mm           | 12      | 15      | 18              | 19      | 24 (FF#3)          | 22 (FF#2) |
| ms .       | Depth under pin: F mm      | 23      | 22      | 26              | 34      | 40                 | 40        |
| mechanisms | Ø pin G mm                 | 8       | 8       | 10              | 12      | 14                 | 20        |
| <br> cha   | Ø spool: mm                | 100     | 120     | 150             | 195     | 200                | 230       |
| Ĕ          | Ø continuous line mm       | 8       | 10      | 10              | 10      | 10                 | 10        |
| data for   | Weight: spool (only) Kg    | 0,330   | 0,530   | 0,820           | 1,440   | 1.800              | 2.700     |
|            | Technical data: swivel     |         |         |                 |         |                    |           |
| cal        | Height pin to pin: D mm    | 47,3    | 58,8    | 69,6            | 94      | depending on model |           |
| Technical  | Width swivel: E mm         | 31      | 34      | 42              | 50      | 70                 | 83        |
| Ĭ          | Width fork: C mm           | 12      | 15      | 18              | 19      | 24 (FF#3)          | 22 (FF#2) |
|            | Depth under pin: F mm      | 23      | 22      | 26              | 34      | 40                 | 40        |
|            | Ø pin G mm                 | 8       | 8       | 10              | 12      | 14 (FF#3)          | 20 (FF#2  |
|            | Weight: swivel (only) Kg   | 0,100   | 0,140   | 0,240           | 0,470   | 1.200              | 1.660     |
|            | Max ø luff line mm         | 8       | 8       | 12              | 16      |                    |           |





# Flying sail furlers



#### **EC MODELS: FLYING SAIL FURLERS WITH DRUM**

- > With a drum and a single furling line similar to manual headsail furler.
- > Economical system.
- > Wide choice of attachments (snap shackle, large eye...).
- > New: black anodised mechanisms

|                           | EC 1500           | EC 2500              | EC 4000           | EC 6000 | EC 12000           |
|---------------------------|-------------------|----------------------|-------------------|---------|--------------------|
| Max Working Load*         | 1500 Kg           | 2500 Kg              | 4000 Kg           | 6000 Kg | 12000 Kg           |
| Boat size if light sails* | 36′               | 42′                  | 55′               | 70′     | 120′               |
| Boat size if heavy sails* | 35′               | 38′                  | 50′               | 60′     | 70′                |
| Average sail area*        | 35 m <sup>2</sup> | 45-50 m <sup>2</sup> | 80 m <sup>2</sup> | 140 m²  | 260 m <sup>2</sup> |

<sup>\*:</sup> The values shown in the table are for information only and should be verified by a professional taking in to account the characteristics of the boat.

#### **Fitting options for EC models**

|                                  | EC 1500                   | EC 2500                   | EC 4000                   | EC 6000                   | EC 12000                  |
|----------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Terminal on anti twist luff rope | Eye / standard<br>thimble |
| Upper terminal on swivel         | Large eye                 | Eye or block              | Eye or block              | Eye or block              | Shackle                   |
| Lower drum attachment            | Large eye                 | Large eye                 | Snap shackle              | Large eye / block         | Double jaw toggle         |





# Top down spinnaker furler ⇒

## (Re)discover the joys of asymmetric spinnakers

#### S⊃INEX: overview

- > 4 models available: SPINEX 0.9, SPINEX 1.5, SPINEX 2.5, SPINEX 5.0
- > For boat lengths of 5 to 18 m and asymmetric spinnakers
- > Delivered as standard: anti-twist cable, end fittings, high-density spheres
- > SPIN KIT available separately, fits NEX furlers
- > Uses Profurl technology
- > Three-year Profurl international warranty
- > Patented system

#### Why choose Spinex



#### Easy to use, safe, efficient, adaptable

Using asymmetric spinnakers in some conditions can be dangerous. With the Spinex, you're going to rediscover the joys of this type of sailing because it allows you to:

- > Easily handle this type of sail (even short-handed)
- > Remain in the safety of the cockpit
- > Improve the performance of your sailing-boat by using downwind sails



#### Adaptable: One system for many uses

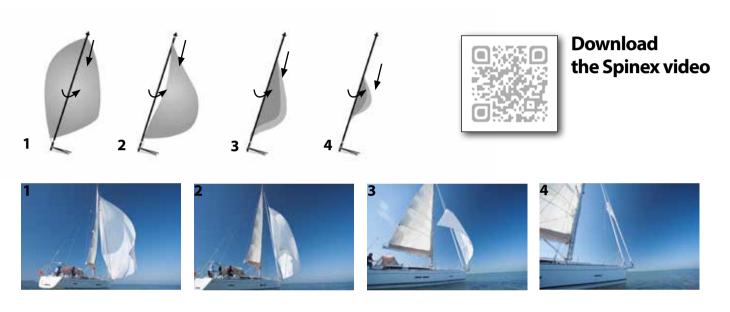
The Spinex can easily be converted into a NEX by removing the swivel tack from the drum and the end fittings, and then it can be used for sails like a gennaker or a code zero.





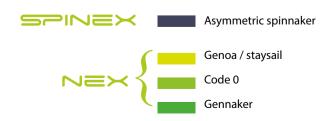
#### **Top down furling**

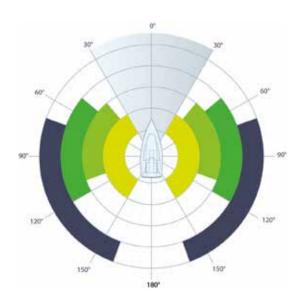
- > When it comes to asymmetric spinnakers, top down furling is the best solution for bringing in your sail. The concept first appeared on maxi yachts before filtering down to more modestly-sized sailing-boats.
- > Thanks to its swivel tack, the sail can be furled from the top downward to progressively stifle the sail without creating a jam.



#### Which sails?

- > The Spinex is designed to furl flying sails with a loose luff, such as asymmetrical spinnakers.
- > Gennakers, code zeros, staysails and so on can be furled using a NEX furler (see page 24 of this catalogue).





# Top down spinnaker furler





#### **ADVANTAGES TO USING SPINEX**



#### > SAIL BEARING TECHNOLOGY: EFFICIENT, RELIABLE FURLING

**Problem:** Because asymmetric spinnaker cloth is both light and fragile, the anti-twist cable has a tendency to damage it. Also, the cable spins faster than the sail during furling which means the latter sometimes jams.

**Profurl solution: Sail Bearing Technology** comprises high-density spheres that spin freely around the anti-twist cable in order to protect the sail from the cable. Sail Bearing Technology allows you to:

- · keep the sail away from the cable
- stop reverse furling, which causes the sail to jam
- reduce wear of the sailcloth
- make furling easier and faster because it has a greater diameter than the cable on its own



#### > A COMPLETE SYSTEM READY TO USE

- SPINEX comes with drum, swivel, cable, end fittings, tack swivel, etc.
- Except for the length of the cable, SPINEX is ready to fit and ready to use out of the box.



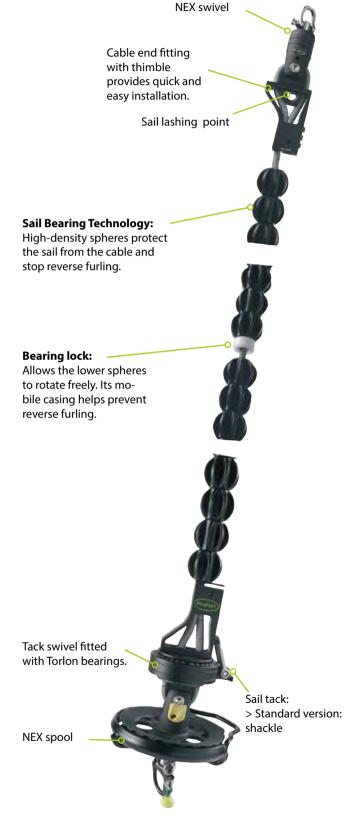
#### > MULTI-PURPOSE AND ADAPTABLE

- Remove the tack swivel and turn your SPINEX into a NEX ready to use with gennakers and code zeros.
- Profurl's SPIN KIT fits on NEX furlers.



#### > OTHER ADVANTAGES:

- Compatible with NEX technology, such as I-Connect, Safe System, etc.
- Improved safety when worked from the cockpit or short-handed.
- Requires little storage space.
- $\bullet \ \ \text{System compatible with all types of asymmetric spinnakers}.$





#### **CHOOSE THE RIGHT SPINEX FOR YOU (5-18 M BOATS):**

|                                    | ===================================== | SPINEX 1.5   | 57NEX 2.5    | SPINEX 5.0               |
|------------------------------------|---------------------------------------|--------------|--------------|--------------------------|
| Boat length<br>(not contractual)   | up to 9 m                             | up to 11 m   | up to 14 m   | up to 18 m               |
| Sail area recommended              | up to 50 m²                           | up to 80 m²  | up to 130 m² | up to 250 m <sup>2</sup> |
| Maximum working load               | 900 Kg                                | 1500 Kg      | 2500 Kg      | 5000 Kg                  |
| Spool diameter                     | 100 mm                                | 120 mm       | 150 mm       | 195 mm                   |
| Lower end fitting                  |                                       | Clevis pin s | nap shackle  |                          |
| Upper end fitting                  |                                       | D sha        | ackle        |                          |
| Anti-twist cable Ø                 | 9.5 mm                                | 9.5 mm       | 12.7 mm      | 12.7 mm                  |
| Cable length delivered as standard | 14 m                                  | 17 m         | 20 m         | 25 m                     |
| Weight of cable & spheres per m    | 0.450 Kg / m                          | 0.450 Kg / m | 0.460 Kg / m | 0.460Kg / m              |

<sup>\*:</sup> The working loads shown are the maximum working loads of the mechanisms (spool and swivel) only and are not the loads of the complete system when terminals are included. The product should not be used above these working loads in any circumstances.

#### **SPINEX: content**



### Are you already using a Profurl NEX furler and want to furl your asymmetric spinnaker? Get the SPIN KIT!

Use Profurl's SPIN KIT to turn NEX furlers into asymmetric spinnaker furlers. SPIN KIT includes anti-twist cable, spheres, and upper and lower end fittings.

|                                    | SPIN 0.9  | SPIN 1.5   | SPIN 2.5   | SPIN 5.0   |
|------------------------------------|-----------|------------|------------|------------|
| Boat length (not contractual)      | up to 9 m | up to 11 m | up to 14 m | up to 18 m |
| Part #NEX                          | NEX 0.9   | NEX 1.5    | NEX 2.5    | NEX 5.0    |
| Cable length delivered as standard | 14 m      | 17 m       | 20 m       | 25 m       |

# Top down spinnaker furler

#### りつこの

## ADVICES FOR USING THE SPINEX



#### 1st time:

> When setting for the first time, we recommend you do this in light winds. Check all halyard and sheet leads.



#### **Furling:**

> Tension must be applied to anti-twist cable by hauling on the halyard. It should be taut and stable. Be careful not to apply excessive tension, especially when you use an electric winch.



#### **Direction of furling:**

> As the anti-twist cable is a shape-memory component, we recommend you always furl your sail in the same direction to facilitate handling.



Fig 1.1

#### Wind angles:

> When unfurling the sail, stay within an apparent angle of between 90 and 120 degrees to help setting.

Fig 1.2.

When furling, the apparent angle must be within 150 and 160 degrees (with the mainsail set to the head of the mast).



Fig 2.2

Anchor

#### **INSTALLATION ADVICES**

Spi halyard block

Spi halyard block

Spi halyard block

Forestay

Forestay

Fig 3.1

Fig 3.2.

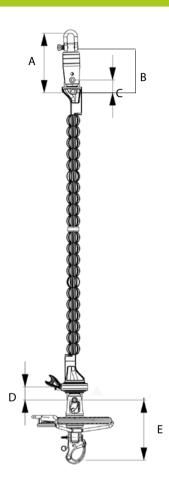
Fig 4.1

Fig 4.2.

Fig 2.1.



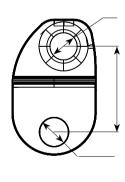
### Technical data: SPINEX



|                              |  | SPIZEX<br>O.9 | SPIN≡×<br>1.5 | SPIZEX<br>2.5 | SPIZEX<br>S.O |
|------------------------------|--|---------------|---------------|---------------|---------------|
|                              | A mm   | 99.30         | 110.8         | 149.60        | 185           |
|                              | B mm   | 67.30         | 78.8          | 101.60        | 135           |
| Ë                            | C mm   | 32            | 32            | 48            | 50            |
| anis                         | D mm   | 32            | 32            | 48            | 50            |
| ech                          | E mm   | 101.9         | 113.10        | 136.9         | 175           |
| Ē                            | 0 spool: mm  | 100 mm        | 120 mm        | 150 mm        | 195 mm        |
| a fo                         | 0 furling line mm  | 8             | 10            | 10            | 10            |
| dat                          | 0 anti-twist cable mm                                    | 9.5 mm        | 9.5 mm        | 12.7 mm       | 12.7 mm       |
| ical                         | Weight: spool (only) Kg                                  | 0.330         | 0.530         | 0.820         | 1.440         |
| Technical data for mechanism | Weight: tack swivel, lower<br>end fitting and thimble Kg | 0.390         | 0.395         | 0.645         | 0.640         |
|                              | Weight: swivel (only) Kg                                 | 0.100         | 0.140         | 0.240         | 0.470         |
|                              | Weight upper terminal and thimble Kg                     | 0.110         | 0.115         | 0.290         | 0.285         |

| nbles                    |        | SPINEX<br>0.9 | SPINEX | SPIVEX<br>2.5 | SPINEX<br>5.0 |
|--------------------------|--------|---------------|--------|---------------|---------------|
| : thin                   | A mm   | 11            | 14     | 17            | 18            |
| Technical data: thimbles | B mm   | 31.5          | 31.5   | 42            | 42            |
| chnica                   | 0 C mm | 10            | 10     | 14            | 14            |
| Te                       | D mm   | 10.50         | 10.50  | 12            | 16            |





### **Accessories** for furlers and flying sail furlers











20220/ 21220

| Part # | Description  | Applications   |
|--------|--|--|
| 20120  | Stainless steel single fairlead<br>For 25mm stanchion Maximum line diameter : 20mm   | For manual headsail, flying sail and stayfurlers with drum |
| 21020  | Deck fairlead – M10 screw  | For manual headsail, flying sail and stayfurlers with drum |
| 20220  | Stainless steel double fairlead with Velcro stripe for continuous line. For 25mm stanchion maximum Maximum line diameter: 20mm - | For flying sail and stayfurlers with spool                 |
| 21220  | Stainless steel double fairlead with Velcro stripe for continuous line. For 28mm stanchion maximum Maximum line diameter : 20mm  | For flying sail and stayfurlers with spool                 |
| 21120  | Stainless steel articulated fairlead - For 25 & 28mm stanchion maximum Maximum line diameter : 20mm                              | For manual headsail, flying sail and stayfurlers with drum |
|        |  |  |





#### TERMINALS AND ACCESSORIES FOR FLYING SAIL FURLERS

A wide range of terminals is available\* for our NEX & SPINEX ranges including:

- > MXEvo Halyard shackle
- > Halyard blocks
- > Trigger snap shackles
- > Hardsheave 3:1
- > Simple or Lashing eye
- > Stainless steel and aluminum thimbles
- \*Some terminals are only available on defined systems.











#### **NEX AND SPINEX FLYING SAIL FURLERS:** SPLICED FURLING LINES – STANDARD LENGTH

#### For Line Description models Part # Polyester braid: beige - dia 8 mm -54122 standard length L: 12 m **NEX 0.9, SPINEX 0.9** Polyester braid: beige - dia 8 mm -54123 standard length L: 14 m Polyester braid: beige - dia 10 mm -NEX1.5, NEX 2.5, 54125 standard length L: 16 m NEX 5.0, SPINEX 1.5, SPINEX 2.5. Polyester braid: beige - dia 10 mm -54127 SPINEX 5.0 standard length L: 20 m

Customized lengths for spliced furling lines are also available on request.

#### **MANUAL HEADSAIL FURLERS:** SPLICED FURLING LINES - STANDARD LENGTH

| For<br>models  | Line<br>Part # | Description  |
|--|----------------|--|
| C260, C320,<br>R250, R350                            | P250901        | 20 m reefing line ø. 6 + 1 articulated fairlead#<br>Wichard 21120 + 3 single fairleads # Wichard 20120     |
| C290, C350, C420,<br>C430, R350, R420,<br>R430       | P250902        | 25 m reefing line ø. 8 + 1 articulated fairlead#<br>Wichard 21120 + 4 single fairleads # Wichard<br>20120  |
| C350, C420, C430,<br>C480, R350, R420,<br>R430, R480 | P250903        | 25 m reefing line ø. 10 + 1 articulated fairlead#<br>Wichard 21120 + 4 single fairleads # Wichard<br>20120 |
| C430, C480, C520,<br>C530, R420, R430                | P250904        | 30 m reefing line ø. 10 + 1 articulated fairlead#<br>Wichard 21120 + 5 single fairleads # Wichard<br>20120 |







# Stayfurlers:

#### **NEX STR STAYFURLER: SAIL ANOTHER WAY!**

Are you hard to please, especially when you want to sail another way? If you're looking for a safe, powerful and easy to use solution, then Profurl's NEX STR stayfurler is for you!





#### Stayfurlers for everyone

- > Initially reserved for the sailing elite (60' open, ORMA multihulls), stayfurlers are becoming increasingly common on a variety of sailing boats:
  - Cruisers
  - Racers
  - · Regatta boats & one-designs
  - · Day boats
- > Compatible sail types: genoa, staysail and solent jib.



#### **NEX STR overview:**

- > 5 standard models available: NEX STR 4.0, 5.0, 8.0, 10.0 and 12.0
- > Upper size models available on request: NEX STR 16.0, 20.0, 30.0 and 40.0
- > Optimal size and weight for a great performance
- > Various end fittings available for every kind of deck layout
- > The greased-immersed systems are watertight and require no maintenance.
- > 3 year Profurl worldwide warranty



#### Why using a NEX STR stayfurler?



#### IMPROVE THE PERFORMANCE OF YOUR SAILING BOAT

- > Replacing aluminium extrusions with Kevlar or PBO fiber cables significantly reduces weight (see below).
- > Optimizing the size and weight of the mechanisms maximizes luff and reduces weight considerably.



#### SAFE, EASY TO USE AND COMFORTABLE

- > The SMART LOCK system enables locking the cable and prevents accidental dismantling without hindering the pin rotation. Entirely integrated into the stayfurler mechanism, the system also prevents adjacent lines from jamming. Available in fork versions.
- > The SAFE SYSTEM on NEX STR stayfurlers allows you to immobilize the furling line when unfurling, thus avoiding accidents and injuries
- > All furling and unfurling are done from the cockpit.
- > The overall weight reduction improves both safety and comfort when sailing.



## 



#### **Performance**

#### S-GRIP: Better line grip

The special groove design, allowing for deformation of the line, ensures:

- better line grip, even when wet!
- easier furling
- · minimum line wear



#### **OPTIMAL FURLING: Furl without effort**

The optimal spool diameter provides ideal torque, which:

- · makes furling easier
- reduces effort



#### **XTRA-LIGHT SYSTEMS: Lightness first**

The size and weight of each component (spool, swivel, and terminals) have been optimised to:

- improve sailing performance
- ensure easier handling of the systems



#### Safety

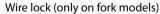
#### **SAFE SYSTEM: Removable Line**

The SAFE SYSTEM enables you to stop the running of the furling line during deployment of sail and thus:

- prevent accidents or damage caused by a free running line.
- · manoeuvre more quickly and easily
- prevent excessive wear of the line









- No need to use a lanyard.
- No risk of jamming caused by adjacent lines.
- Keeps the pin free to turn (no strain).
- · Locking indicator on the pin.







#### **NEX STR MODELS AVAILABLE AS STANDARD**

|                           | VEX STR<br>4.0                      | NEX STR<br>S.O                   | NEX STR<br>8.0 | NEX STR<br>10.0 | NEX STR<br>12.0 |
|---------------------------|-------------------------------------|----------------------------------|----------------|-----------------|-----------------|
| Max working load          | 4T                                  | 5T                               | 8T             | 10T             | 12T             |
| Examples                  | RM 1060                             | Class 40                         | RM 1350        | 50'             | Open 60'        |
| Fiber cable terminals     | Biconic end<br>fittings<br>(Navtec) | Biconic end fittings or thimbles |                |                 |                 |
| Lower mechanism           | Spo                                 | ool                              |                | Spool or drum   |                 |
| Swivel terminals          | Eye or lashing eye                  |                                  |                |                 |                 |
| Lower mechanism terminals | Eye, lashing eye or purchase 4:1    |                                  |                |                 |                 |

#### Find out page 46 how to select the right model adapted to your boat



NEX STR 5.0 stayfurler



NEX STR 20 stayfurler on 80' catamaran -Magic Cat - Fitting Atelier Gréement



Stayfurler NEX STR 12.0 -

#### **NEX STR CUSTOM RANGE AVAILABLE ON DEMAND**

|                  | NEX STR | NEX STR<br>20.0 | NEX STR<br>30.0      | NEX STR<br>40.0     |
|------------------|---------|-----------------|----------------------|---------------------|
| Max working load | 16T     | 20T             | 30T                  | 40T                 |
| Examples         | 70'     | 80'             | 100'<br>(IDEC Sport) | 130'<br>(Spindrift) |

40T Stayfurler for staysail



# Stayfurlers:

| Choo   | Choose your standard stayfurler model                |                           | Coding  | Advice                 |  |
|--|--|---------------------------|---|------------------------|--|
| 1 What   | What is your cable made of and what is its diameter? |                           |   |                        | To get the right stayfurler, we need to know<br>what stainless steel wire is recommended by<br>the beatward or the prohitort.  |
| Stainless s  | teel wire  | Fiber cable               | Model size  |                        | the boatyard or the architect.   |
| 1 x 19 mm  | Rod  | Size                      | that corresponds to the cable   | NEX STR 5.0            | Example: for a 10 mm diameter 1x19 wire,<br>the equivalent fiber cable must have a breaking<br>load of 14 tonnes. Thus, the appropriate model<br>is the NEX STR 5.0.   |
| 8  | # 10   | 9T - 14T                  | NEX STR 4.0   |                        |  |
| 10   | # 17   | 14T                       | NEX STR 5.0   |                        |  |
| 12   | # 22   | 19T                       | NEX STR 8.0   |                        |  |
| 14   | # 30   | 24T<br>30T                | NEX STR 10.0  |                        |  |
| 16)  |  |                           | NEX STR 12.0  |                        |  |
| ( <sup>2</sup> )   | s the choser   | Biconic (Navtec): N       | or N  | NEX STR 5.0 - <u>N</u> | Cables with thimbles are installed on fork mechanisms.     Biconic end fittings (e.g. Navtec) are installed on threaded mechanisms.  |
| What type of drum do you want? - Mark S or D  Spool: S  Drum: D                    |  | NEX STR 5.0 - N <u>S</u>  | The spool version provides optimal sail luff and is used in conjunction with a continuous furling line. The drum version can be simply fitted to the deck and uses a classic furling line (1 strand).   |                        |  |
| What are the deck terminals? - Mark E, L or P  Eye: E  Lashing eye: L  Purchase: P |  | NEX STR 5.0 - NS <u>E</u> | Eye end fitting: Fitted with a toggle for classic metal fittings.     Lashing eye end fitting: a light and performance-enhancing solution. Fitted with a loop to make a light anchoring point     The friction purchase allows the stay to be adjusted from below. 4:1 Adjustments. Loop may be fastened. |                        |  |
| What are the mast terminals? - Mark E or L  Eye: E  Lashing eye: L                 |  |                           |   | NEX STR 5.0 -<br>NSEE  | Eye end fitting: a simple and reliable solution for fitting the swivel to the mast. Fitted with a toggle for classic metal fittings.     Lashing eye end fitting: a light and performance-enhancing solution. Fitted with a loop to make a light anchoring point |
| Par  | Part number of the complete stayfurler               |                           |   | NEX STR 5.0            | - NSEE   |

See comparison table on page 8







#### Advantages for the crew

- > Improve the performance of your yacht
- > Easy handling
- > Makes furling easy
- > Ideal for solo or short-handed sailing

#### Sail types

- > Sails fitted to a furler
- > Ideal for hooked-on sails

## Examples of boats using NEX Hybrid

- > 60 feet IMOCA: BPVIII, PRB, St Michel Virbac
- > Maxi trimaran IDEC SPORT
- > Solo maxi trimaran Banque Populaire VII
- > Maxi trimaran Spindrift 2
- > Mega Yachts

#### and some records:

- > Vendée Globe 2016 2017: 1st place 4th place
- > Jules Verne Trophy: record on IDEC Sport
- > Victory in Transat Jacques Vabre 2015: PRB
- > Victory in La Route du Rhum 2014: Banque Populaire VII
- > Mediterranean crossing record in 2013: Banque Populaire VII
- > Victory in La Route du Rhum 2010: Groupama 3

PROFURL is proud to present the Nex Hybrid range of furlers for boats up to 100' long, sailed solo or short-handed. Nex Hybrid features Ceramic Bearing Technology (CBT) which reduces friction and weight considerably.

Using these extremely corrosion-resistant bearings enables Profurl to banish metal fastenings in favour of soft textile ones.

**NEX Hybrid swivel** 







| FLYING SAIL FURLER: NEX 6.X |         |  |       |  |  |  |  |
|-----------------------------|---------|--|-------|--|--|--|--|
|                             | Spool   | Spool Swivel Swivel hook                                     |       |  |  |  |  |
| SWL                         |         | 6 tons   |       |  |  |  |  |
| BL                          | 12 tons |  |       |  |  |  |  |
| Weight                      | 1570 g  | 800 g  | 980 g |  |  |  |  |
| Height                      | 121 mm  | 121 mm 104.50 mm hooked position                             |       |  |  |  |  |
| Width fork                  | 22 mm   |  |       |  |  |  |  |
| Terminals                   |         | As standard: loop - others: N.A solidsheave eye, 4:1 diabolo |       |  |  |  |  |





Swivel hook: NEX9.X -LOCK



Top Down Version









NEX 9.X

NEX 9.X Spool version

| FLYING SAIL FURLER: NEX 9.X |           |                                  |        |             |  |  |
|-----------------------------|-----------|----------------------------------|--------|-------------|--|--|
|                             | Spool     | Drum                             | Swivel | Swivel hook |  |  |
| SWL                         | 9 tonnes  |                                  |        |             |  |  |
| BL                          | 18 tonnes |                                  |        |             |  |  |
| Weight                      | 1990 g    | 2250 g                           | 850 g  | 1550        |  |  |
| Height                      | 124 mm    | Hooked position: 214 mm          |        |             |  |  |
| Width fork                  | 22 mm     |                                  |        |             |  |  |
| Terminals                   |           | loop - others<br>eye, 4:1 diabol |        | N.A         |  |  |

| STAYFURLER: NEXSTR 9.X |                      |                                   |  |  |  |  |  |
|------------------------|----------------------|-----------------------------------|--|--|--|--|--|
|                        | Spool                | Spool Drum Swivel                 |  |  |  |  |  |
| SWL                    | 9 tonnes             |                                   |  |  |  |  |  |
| BL                     | 18 tonnes            |                                   |  |  |  |  |  |
| Weight                 | 1880 g 2300 g 850 g  |                                   |  |  |  |  |  |
| Height                 | 124 mm 124 mm 107 mm |                                   |  |  |  |  |  |
| Width fork             | 22 mm                |                                   |  |  |  |  |  |
| Terminals              |                      | : loop - others<br>eye, 4:1 diabo |  |  |  |  |  |

Drum version

For larger sizes: 12.0, 20.0, 25.0, 30.0, please contact us.





#### Why choosing Ceramic Bearing Technology?

CBT allows Profurl to add ceramic ball bearings to their furling systems.

CBT has the following benefits:

- > up to 30% less friction
- > fewer components because metal fastenings are replaced by

textile fastenings

- > assemblies up to 30% lighter (no grease, seals, etc.)
- > optimizes the size of the assemblies
- > systems are highly resistant to corrosion, maintenance free, and easy to use and fit

Textile fastening anchored to the inner mechanism of the assembly.



NEX Hybrid Swivel

#### **Benefits**

> Weight: -30%

> Dimensions: -30%

> Friction: -30%

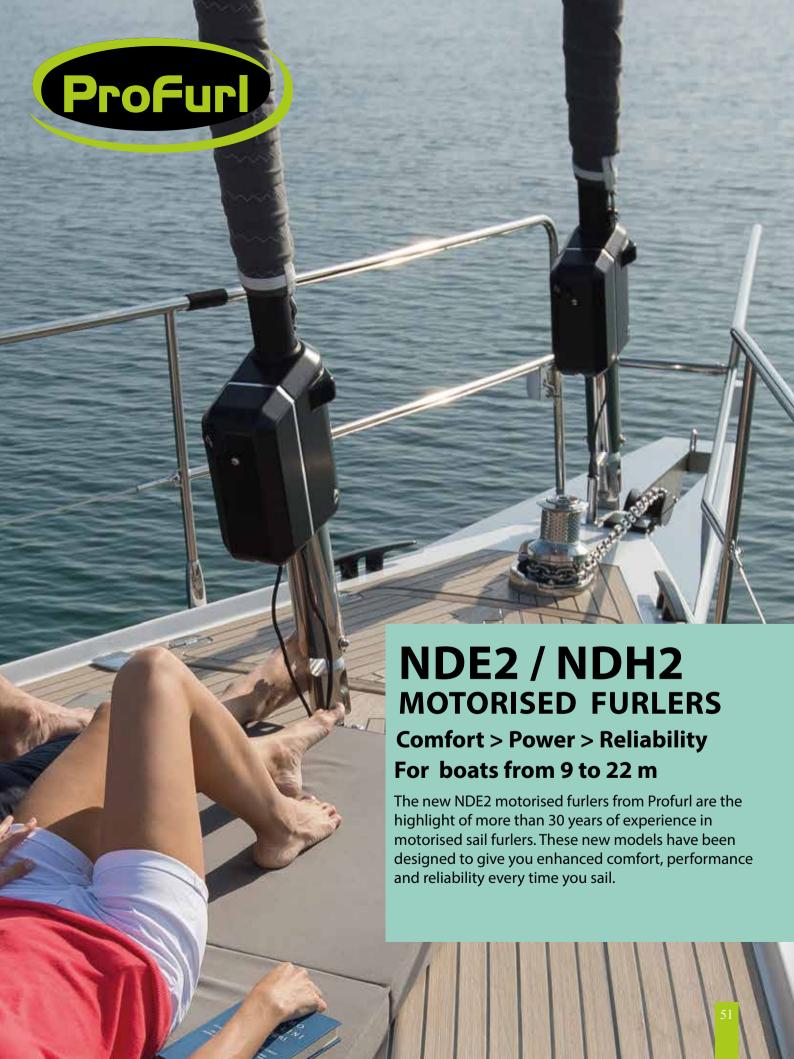
#### Why using ceramic bearings?

Ceramic bearings were first used in aerospace industry.

- > Ceramic balls are held in casings. The silicon nitride balls are low density but extremely hard. They will not lose their shape even under the heaviest loads, resulting in less friction and a greater lifespan.
- > These bearings also show remarkable resistance to corrosion. Thanks to these revolutionary components Profurl can design "open" systems which contain no grease or seals. The textile fastening is now anchored to the inner mechanism of the assembly.



NEX Hybrid spool - 20.0T installed on the maxi multihull IDEC Sport



## NDE2 / NDH2: Motorised furlers

All Profurl motorized furlers have been developed to bring you comfort, reliability & safety.

For the NDE2 C350, C420 and C430, Profurl has developed a new engine power system (multi-motor) that make furlers more economic and compact to gain space on the deck.

 $NDE2\ C480, C520, C530\ \&\ C600\ benefit\ from\ the\ NDE\ Profurl\ technology\ (mono\ motor)\ developed\ and\ experienced\ for\ more\ than$ 

30 years. These furlers are specifically dedicated to boats from 14m.

## Benefits of the motorised systems

- > Large range of systems.
- > Great comfort with minimum effort.
- > Easy installation on the existing forestay.
- > Minimal sound.
- > Low power consumption.
- > Capability to convert a manual furler into a motorized furler
- > Maintenance free
- > 2 or 3 year world wide limited warranty.



#### NDE2: ELECTRIC MODELS

|                                   | Multi-engine Technology |                       |                    | Mono-engine Technology            |                        |                      |                      |
|-----------------------------------|-------------------------|-----------------------|--------------------|-----------------------------------|------------------------|----------------------|----------------------|
|                                   | NDE2<br>C350            | NDE2<br>C420          | NDE2<br>C430       | NDE2<br>C480                      | NDE2<br>C520           | NDE2<br>C530         | NDE2<br>C600         |
| Boat length                       | from 11 to<br>13.50 m   | from 13 to<br>15 m    | from 14 to<br>16 m | from 14,5 to<br>18,5 m            | from 16,5 to<br>18,5 m | from 18,5 to<br>22 m | + 22 m               |
| Forestay dia                      | 8 / 10* mm              | 10 / 12.7* mm         | 12,7 mm            | 14,3 mm                           | 16 / 19 * mm           | 19 mm                | 22* mm               |
| Forestay length                   | 14 m                    | 16 m                  | 18 m               | 18 m                              | 20 m                   | 22 m                 | 24 m                 |
| Power                             | 400 W                   | 800 W                 |                    | 24V: 1200 W - 12V: 800W           |                        |                      |                      |
| Circuit breaker /<br>Power supply | 24V: 30 A<br>12V: 60A   | 24V: 30 A<br>12V: 60A |                    | 24V: 30 A<br>12V: 60A             |                        |                      | 24V: 40A<br>12V: 60A |
| Optimal / Max<br>torque           | 45 / 115 Nm             | 55 / 135 Nm           |                    | 24V: 80 / 300 Nm 12V: 78 / 200 Nm |                        |                      |                      |
| Optimal rotating speed            | 40 tr / min             | 55 tr / min           |                    | 33 tr / min                       |                        |                      |                      |
| Warranty                          | 2 year                  | 2 year                |                    | 3 year                            |                        |                      |                      |



#### ND2H: HYDRAULIC MODELS

- > 4 models available for boats from 14.50 to 22 m.
- > Available in "Cruising" version (with round extrusions).
- > Connection of the gear motor to the hydraulic pack with 2 feeding hoses finished by a female 7/16" JIC.
- > Turnbuckle cylinder included on all models
- > Length of the extrusion: 2 m.

#### **NDH2: HYDRAULIC MODELS**

| NOTIZE ITTORAGETE MODELS   |                        |                        |                      |              |  |  |  |  |
|----------------------------|------------------------|------------------------|----------------------|--------------|--|--|--|--|
|                            | NDH2<br>C480           | NDH2<br>C520           | NDH2<br>C5 30        | NDH2<br>C600 |  |  |  |  |
| Boat length                | from 14,5<br>to 18,5 m | from 16,5<br>to 18,5 m | from 18,5<br>to 22 m | above 22 m   |  |  |  |  |
| Forestay diameter          | 14,3 mm                | 16 / 19 * mm           | 19 mm                | 22* mm       |  |  |  |  |
| Forestay Length            | 18 m                   | 20 m                   | 22 m                 | 24 m         |  |  |  |  |
| Maximum operating pressure | 140 bars               |                        |                      |              |  |  |  |  |
| Max torque                 | 300 Nm                 |                        |                      |              |  |  |  |  |
| Maximum flow recommended   | 15 L / mn              |                        |                      |              |  |  |  |  |
| Maximum speed of rotation  | 30 Rpm                 |                        |                      |              |  |  |  |  |
| Warranty                   | 3 year                 |                        |                      |              |  |  |  |  |



Privilège série 6 - ©Privilège Marine



#### More comfort on board

- > Wired remote controller Part # 53320
- > Radio remote controller Part # 53310

<sup>\*:</sup> if using a swageless eye



### NDE2 / NDH2: **Motorised furlers**



#### TOTAL COMFORT AND TOTAL SECURITY

When you choose a Profurl motorised furler, comfort and ease of use come guaranteed, allowing you to get the most out of your sailing.

- > Navigation without any physical effort required through the command box (wired or remote-control options available)
- > The sail can be furled in either direction
- > Generates minimal noise
- > No specific upkeep required
- > The auto-locking mechanism prevents the sail from unfurling at inopportune times
- > The circuit breaker lets you cut supply in an emergency (jammed genoa sheet, incorrect manoeuvre, etc.)
- > In case of problem, the emergency system will let you furl or unfurl the sails manually



#### **PROVEN RELIABILITY**

Our NDE2 / NDH2 furlers have been designed to offer unmatched reliability, whatever the sailing conditions:

- > 30 years of experience designing gearmotor reducers
- > The structure and the design of our NDE2 / NDH2 reducers is based on more than 20 years of developing NDE systems
- > The use of high-quality materials ensures enhanced durability and longevity
- > Carefully selected surface treatment ensures effective corrosion resistance
- > The robust extrusions support higher torque couples
- > The vent eliminates any internal condensation (only for models from NDE2 C480, to NDE2 C600)
- > Highly resistant and ISO 10133 compliant electrical cables (only for models from NDE2 C480, to NDE2 C600)



#### **PERFORMANCE**

Norofurl furlers have a specially designed motor system which lets you manoeuvre the sails quickly, easily and repeatedly.

- > The torque / speed ratio is optimal, meaning you can unfurl and furl in all sailing conditions
- > Power consumption is a crucial feature on a motorised system; the Profurl systems require a low power supply, making special batteries unnecessary



#### **EASE OF INSTALLATION**



- > Can be adjusted to suit your existing forestay
- > NDE2 / NDH2 furlers are available in a range of assembly configurations (stainless steel tube or link plates) meaning they can be adapted to suit the layout of your deck
- > The capacity of the turnbuckle cylinder is increased by 100 mm for the C520, C530, C600 (Ø 22mm forestay with turnbuckle).



#### **MODERN DESIGN**

The new design means they can be used on all deck layouts and modern sail designs, having already been used on major sailing boats (Amel 50, CNB 66).



In case of power supply failure, the PROFURL motorised system includes a handle socket (handle supplied) located at the rear of the housing, allowing for instant manual operation.



#### **MOTORIZATION KIT:**

Capability to convert a Profurl manual furler into a motorized furler by keeping the extrusions. For other brands, contact us.



## MK4: In-boom furler

For boats from 15 to 18 m, Profurl offers its MK4 in-boom furler.

#### Safe and easy operations

Hoisting or reefing the mainsail is a simple and safe operation. The in-boom furler requires the use of only one halyard and one furling line, and allows full control of the mainsail from the cockpit.

#### An efficient system

The on-water performance of the PROFURL in-boom furler is the main goal. This system is designed to be used with full length battens. It allows for a fully battened mainsail with a normal roach, to maximize the yacht performance.

The system's parts have been optimized to get the best possible weight / performance / durability ratios.

|                   | On demand                       |  |  |
|-------------------|---------------------------------|--|--|
|                   | MK4                             |  |  |
| Boat length (LOA) | from 15 to 18 m                 |  |  |
| Max. displacement | 24000 Kg                        |  |  |
| Max. luff length  | 21,0 m                          |  |  |
| Max. foot length  | 7,0 m                           |  |  |
| Colour            | Epoxy powder coated anodisation |  |  |



## Advantages of the PROFURL in-boom furlers

- > Increased safety during mainsail raising and lowering operations.
- > Ease of use: one halyard and one furling line.
- > Can be fitted on most boats with aluminium masts.
- > Full battened mainsail to improve the performance of the boat.
- > No maintenance required.
- > 3 year world wide limited warranty.









You are looking for technical information, a spare part.
You will find all our documentation on
www.profurl.com



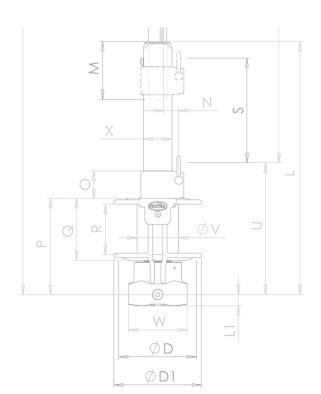
Our hotline is also at your disposal either by e-mail: hotline@wichard.com

or by phone: +33 (0)2 51 76 00 35



Our network of retailers and distributors is also at your service to assist you in your project.

See the list on page 58



#### PROFURL DISTRIBUTORS PER COUNTRY

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| Azores                     | Mid Atlantic Yacht Services  | 9900-114  | Horta               | 351       | 292 391 616      | mays@mail.telepac.pt             |
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| Belgium                    | Wittevrongel Sails & Rigging | 8370      | Blankenberge        | 32        | 0 50 41 18 63    | info@wittevrongel.be             |
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| China                      | Sunrise Marineware Ltd       |           | Shenzhen            | 86        | 755 866 50 101   | sales@sunrisemw.com              |
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| Croatia                    | Ramina Pomorstvo             | 21000     | Split               | 385       | 2139 82 33       | ramina-pomorstvo@st.t-com.hr     |
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