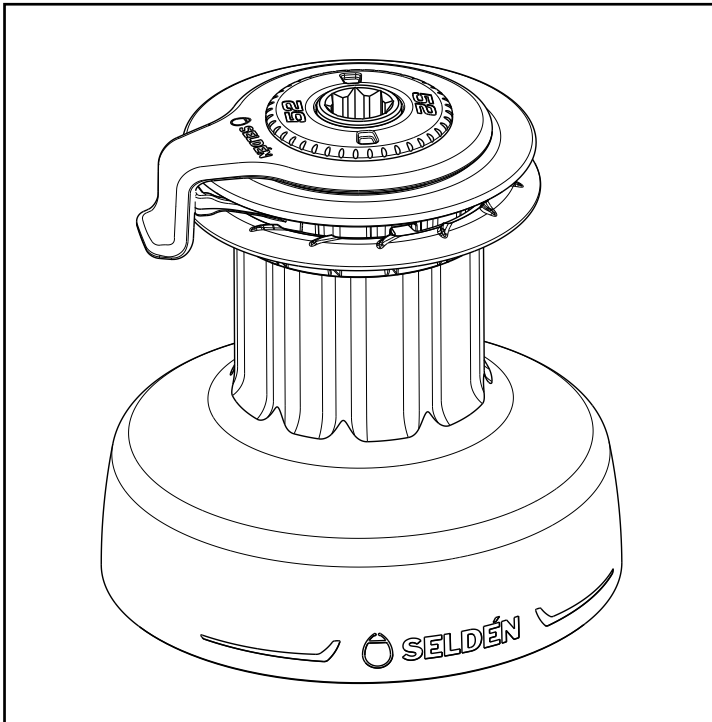


Manual

2-speed self-tailing winches

***S30, S40, S46, S52, S60
& S66***

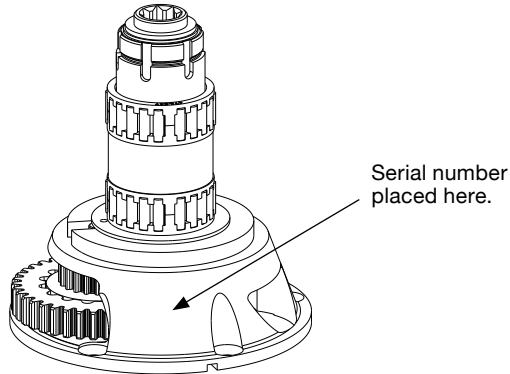


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1. Introduction

Congratulations on the purchase of your new Series S, self-tailing winch. This manual cover installation and operating instructions for the S30, S40, S46, S52, S60 and S66 self-tailing winches. The model designation is found on the top cover of the winch. Serial number is found on top of the winch base.



Please read the entire manual before assembly/usage and keep the manual available for future reference. The latest version of this manual is available at www.seldenmast.com.

Safety Precautions

Carefully pay attention to, and follow, the instructions with the following symbols:



This symbol indicates a critical moment in the assembly or technical advice.



This symbol indicates a potentially hazardous situation. If not avoided, this could result in serious personal injury or damage to property.

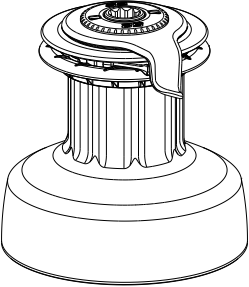


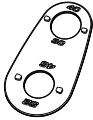
Choosing the correct version of S-winch for your boat:

The key to a safe and properly working installation is correct dimensioning in relation to the boat size the products shall be used on. Seldén provides dimensioning guidelines in catalogues, leaflets and on the website. If there are any questions about selecting the right product, please consult an authorized Seldén dealer. All dealers are listed at www.seldenmast.com and divided in categories describing their competence.

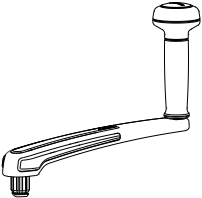
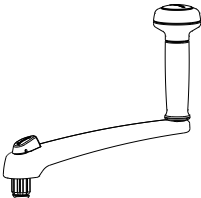


2 Seldén Series-S winch, S30-S66

The Seldén S-winchcs are manually operated and of self-tailing type with two gears forward.

2.1 Included parts

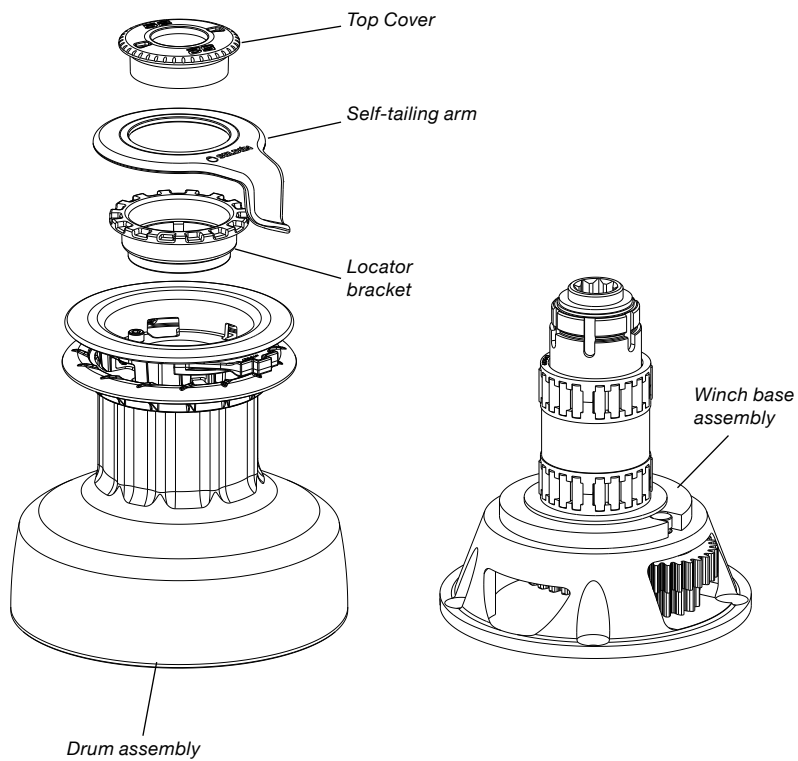
Description		Item No.	Illustration
Seldén Series S-winch			
S30	Aluminium drum	475-130-01	
S40	Aluminium drum	475-140-01	
S46	Aluminium drum	475-146-01	
S52	Aluminium drum	475-152-01	
S60	Aluminium drum	475-160-01	
S66	Aluminium drum	475-166-01	
Drilling template			
S30		597-198-E	
S40		597-509-E	
S46		597-511-E	
S52			
S60		597-512-E	
S66			
Manual for assembly and operation		597-489-E	
Winch tool		473-010	

2.2 Optional parts

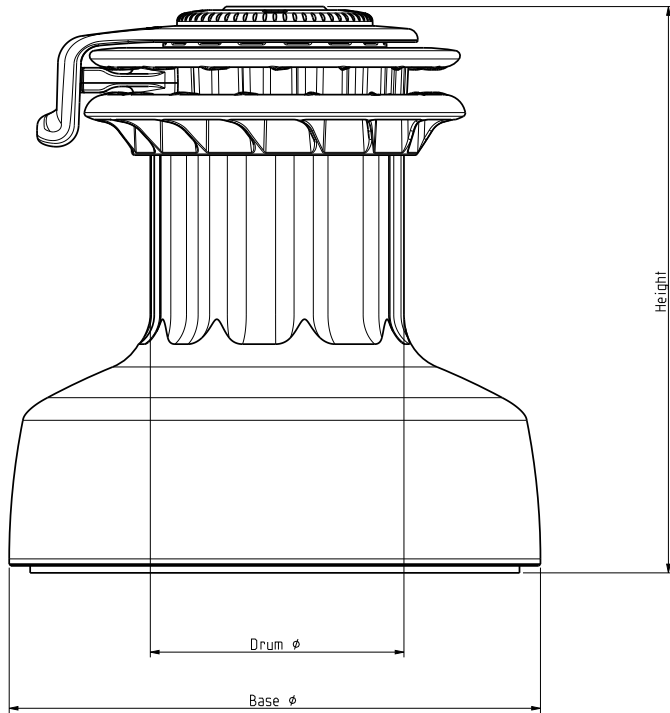
Description	Item No.	Illustration
10" Race GRIP winch handle	474-501-10	
8" Race GRIP winch handle	474-401-10	
10" STANDARD winch handle	474-301-10	
8" STANDARD winch handle	474-201-10	
Seldén lubrication grease	312-501	
Pawl oil (50 ml)	312-709-01	

2.3 Technical specification

Main components



Dimensions and technical data



Model	Height (mm)	Base Ø (mm)	Drum Ø (mm)	Suitable line dimensions (mm)	Power ratio		Weight (kg)	Safe Working Load (SWL, kN)
					High Gear	Low Gear		
S30	150	Ø139	Ø75	8-12	12:1	30:1	2,9	8,4
S40	162	Ø152	Ø75	8-12	13:1	40:1	3,5	11,2
S46	186	Ø184	Ø90	8-14	13:1	46:1	5,8	12,9
S52	186	Ø184	Ø90	8-14	15:1	52:1	5,8	14,6
S60	239	Ø245	Ø120	8-16	18:1	60:1	13,0	16,8
S66	239	Ø245	Ø120	8-16	20:1	66:1	13,1	18,5



Exceeding the recommended max line dimensions may damage the self-tailing halves and may also cause other damages and/or injury.

3 Installation



Installation of a Seldén Winch must be carried out by a competent installer who has read and understood this installation manual, the purpose and function of the winch and has checked the loads, winch sizing and mounting requirements prior to installation.

Winch orientation, position relative to associated components and location regarding deck reinforcement and suitability must be checked and any reinforcement work carried out prior to installation. The installer takes full responsibility to ensure these checks have been undertaken. This may require the assistance of a boat yard or certified marine engineers.

Seldén Mast does not provide fasteners. The installer is responsible for the sourcing and specifying load capacity of the fasteners, ensuring they are rated for the expected loads from the winch. Any fastener should be made from marine grade stainless steel.

Seldén Mast AB does not take responsibility for the incorrect installation of a winch, the insufficient reinforcement of the deck at the location of the winch, water ingress due to insufficient sealing or any damage to interior as a result of water ingress.

Fastener recommendations:

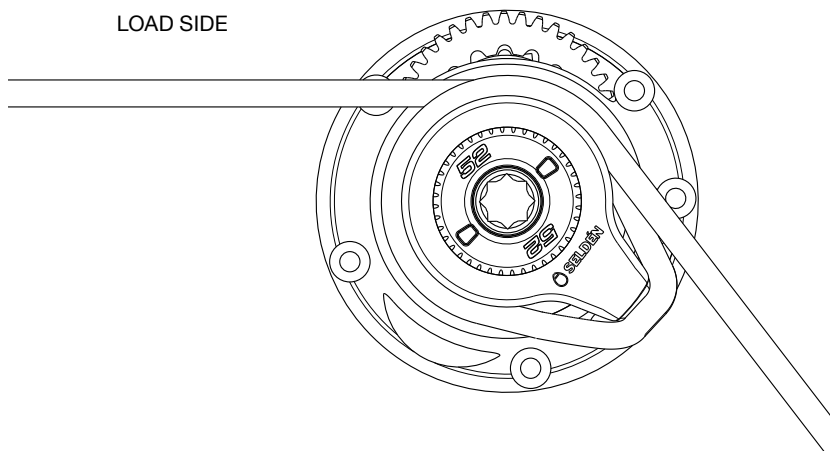
S30	5 pcs	Countersunk M6 screws
S40	4 pcs	Countersunk M8 screws
S46/S52	5 pcs	Countersunk M8 screws
S60/S66	5 pcs	Countersunk M10 screws

3.1 Installation preparation

Winch orientation

For optimum performance during use, the winch must be oriented correctly for the intended application.

If the winch is to be used for handling of multiple lines, e.g. placed on the coach roof for use as a halyard winch in combination with running spinnaker or gennaker sheets, the winch shall be oriented and optimized for the highest load.



3.2 Fitting the winch

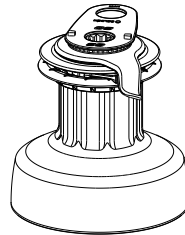
1.

Use the provided drilling template and mark and drill holes suitable for the intended fastening method.
Take special consideration for the winch orientation before drilling to allow compliance with chapter 3.1, Winch orientation.

(If needed, the drilling template can be downloaded from www.seldenmast.com.
When printing from the web, scaling issues may occur. Verify the template before using.)

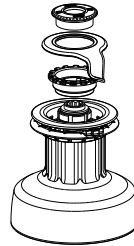
2.

Unscrew the top cover using the winch tool that was supplied with the winch.



3.

Remove the top-cover, the self-tailing arm and the locator bracket.



4.

Remove the drum.

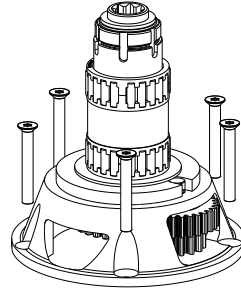


5.

Fit the winch with countersunk screws. Take measures to seal the interface between the hull and the winch to avoid water ingress. Recommended fasteners can be found under fastener recommendations on page 8.

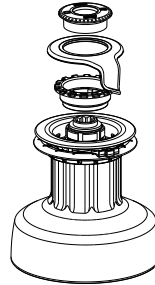


The hull and deck must be properly reinforced in the mounting area to keep its integrity with the provided tightening torques as well as withstanding the loads applied on the winch.



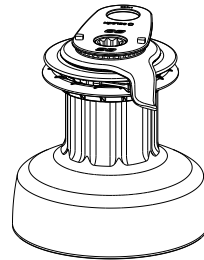
6.

Refit the drum, the top-cover, the self-tailing arm and the locator bracket. Adjust the self-tailing arm to have the line exiting the self-tailing jaws in the desired direction.



7.

Make sure that the line stripper is positioned in line with, and held captive by, the self-tailing arm before refitting the top cover. Tighten the top cover using the supplied winch tool.

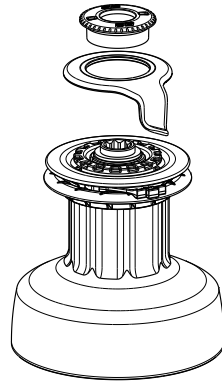


3.3 Adjusting the self-tailing arm

1.

The self-tailing arm can be adjusted to feed the line into the cockpit. To do this, unscrew the top cover and lift the self-tailing arm

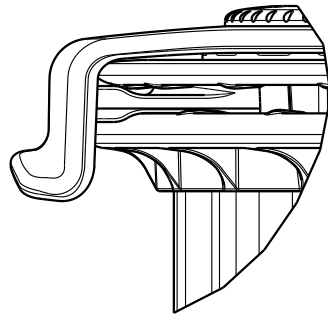
The self-tailing arm can now be rotated to allow the line to feed properly. Be sure to refit the self-tailing arm correctly to the grooves on the locator bracket.



2.

Make sure that the line stripper is positioned in line with, and held captive by, the self-tailing arm before refitting the top cover.

Tighten the top cover using the supplied winch tool.

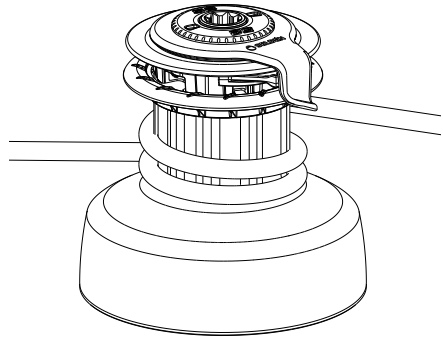


4 Operation

1.

Apply 2-3 turns on the winch drum and pull any slack in the line. Fewer or more turns may be required depending on the conditions.

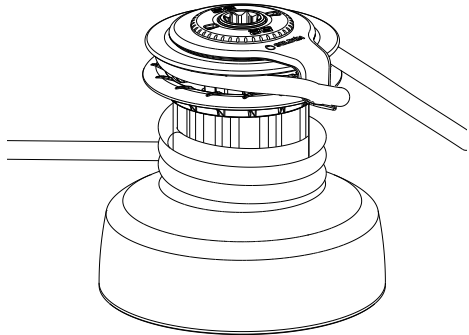
NOTE: More turns on the winch drum increases the risk of over-ride.



2.

Add more turns if required and then feed the line over the self-tailing arm and lock it in the self-tailing jaws.

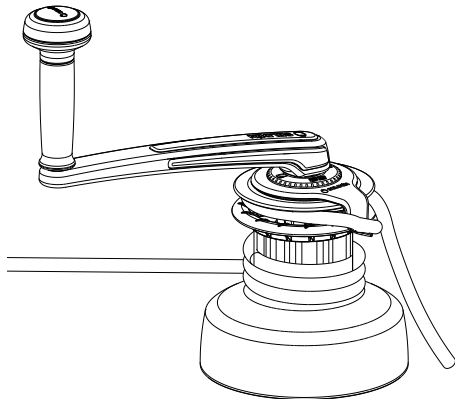
Pull any remaining slack in the line.



3.

Use a winch handle to trim the rest of the line until desired shape of the sail and/or tension of the sheet or halyard has been reached.

Rotating the winch handle anti-clockwise will engage the high speed. If more power is needed, rotating the winch handle clockwise will engage the low speed.



Emergency situations

Override:

In an override situation, secure the line on the load side to relief tension in the line around the winch. If this does not release the riding turns, fitting a secondary line may be required to acquire relief. Severe cases may require cutting the original line after the new line has been attached and pulled.

Winch malfunction, diverting the line:

If the winch stops working all together, diversion of the line to another winch may be required. Consider any forces that may cause further damage to the boat and/or any equipment and/or persons before attempting this strategy.

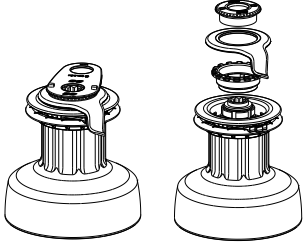
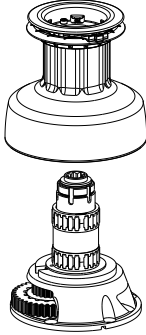
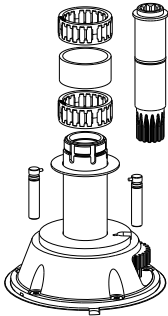
5 Trouble shooting

Problem	Problem cause	Action
Loss of self-tailing function	1. Line not properly seated in self-tailing jaws	1. Check line seating in self-tailing jaws.
	2. Too few turns on winch-drum	2. Add turns until self-tailing function is resumed.
Winch is not ratcheting	1. Faulty reassembly of ratchet gears	1. Flip ratchet gears to match pawl egegment.
	2. Winch is in need of service	2. Perform service.

6 Service and maintenance

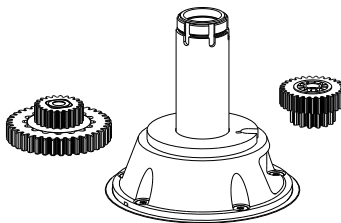
To maintain top performance and assure longevity for all parts of your self-tailing winch, it is recommended to rinse the winch thoroughly with freshwater after each use.

6.1 Yearly maintenance

<p>1.</p> <p>Unscrew the top cover using the Winch tool supplied with the winch.</p> <p>Remove top cover, self-tailing arm and locator bracket.</p>	 <p>The diagram illustrates the first step of maintenance. On the left, a winch drum assembly is shown with a top cover and a self-tailing arm attached. On the right, the same assembly is shown with the top cover and self-tailing arm removed, revealing the internal drum and spring mechanism.</p>
<p>2.</p> <p>Remove the drum assembly.</p>	 <p>The diagram illustrates the second step of maintenance. It shows the drum assembly being lifted away from the winch base, which is shown with its internal gear components exposed.</p>
<p>3.</p> <p>Remove drum washer, bearings, and drive shaft, followed by the two (2) gear axles. If needed, a small flat-head screwdriver can be inserted into the slot on either of the axles to ease removal.</p>	 <p>The diagram illustrates the third step of maintenance. It shows the drum assembly being disassembled into its individual components: a drum washer, two bearings, a drive shaft, and two gear axles. The winch base is shown with the gear axles being removed from the drum assembly.</p>

4.

Remove the main/drive- and secondary gear assemblies. Pay attention to the washers.

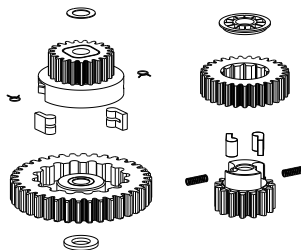


5.

Disassemble the gears and clean all parts thoroughly using white spirits. Inspect pawls and springs and replace if worn or damaged.

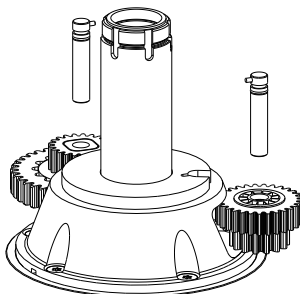
When clean, apply pawl oil on the pawls and apply a thin layer of grease to the cylindrical surface of the small hub.

Re-assemble the gears.



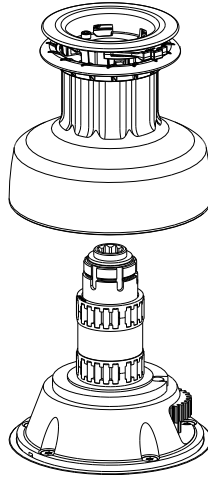
6.

Refit the gears and lock them in place with the gear-axles. Grease the axles.



7.

Re-fit bearings, drum washer and drive shaft. Apply grease to all gears and refit the drum.

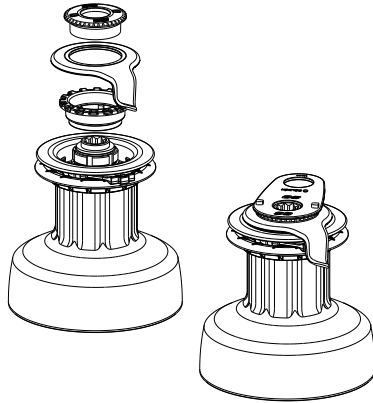


8.

Fit the locator bracket, the self-tailing arm and the top cover.

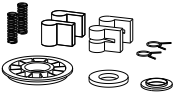
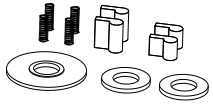


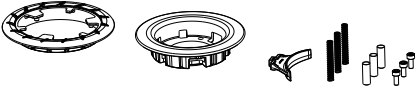

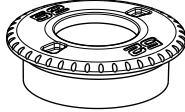
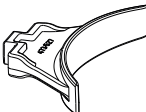
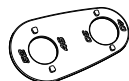
Make sure that the line stripper is positioned in line with, and held captive by, the self-tailing arm before refitting the top cover.

Tighten the top cover using the supplied winch tool.



7 Spare parts

The following parts can be purchased as spare parts for your Seldén winch:

Description		Art. No.		
Gear Service kit			 <p>470-029-11, -12</p>	 <p>470-005-11</p>
S30/40	470-029-11R			
S46/52	470-029-12R			
S60/66	472-005-11R			
Bearing kit			 <p>473-548-10</p>	 <p>473-547-10</p>
S30/40	473-548-10R			
S46/52	473-547-10R			
S60/66	473-549-10R			
Self-tailing jaws kit				
S30/40	473-429-10R			
S46/52	473-525-10R			
S60/66	473-625-10R			
Spring kit				
S30/40	308-000-10R			
S46/52	308-069-10R			
S60/66	308-069-10R			
Top cover				
S30	473-314R			
S40	473-414R			
S46	473-524R			
S52	473-514R			
S60	473-624R			
S66	473-614R			
Line stripper				
S30/40	473-427R			
S46/52	473-527R			
S60/66	473-627R			
Winch tool				
S30/40	473-010R			
S46/52				
S60/66				

8 Disposal



For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge. Alternatively, in some countries, you may be able to return your products to your local retailer upon purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

7 Warranty

Seldén Mast AB guarantees the Selden Series-S winch for 2 years. The guarantee covers faults arising from defective design, materials, or workmanship.

The guarantee is only valid if the product is assembled, operated, and maintained in accordance with this manual and is not subjected to loads more than those indicated in the brochure and on the Seldén website.

Complete shipment and warranty conditions are to be found on Seldén's website www.seldenmast.com. See Resources/Partners information/General information/General conditions of sale (595-546-E).

If the system is repaired or modified by anyone other than Seldén Mast AB or one of our authorized dealers, the guarantee ceases to be valid.

Seldén Mast AB reserves the right to alter the content and design without prior warning.

DINGHIESKEELBOATSYACHTS

*Seldén Mast AB, Sweden
Tel +46 (0)31 69 69 00
Fax +46 (0)31 29 71 37
e-mail info@seldenmast.com*

*Seldén Mast Limited, UK
Tel +44 (0) 1329 504000
Fax +44 (0) 1329 504049
e-mail info@seldenmast.co.uk*

*Seldén Mast Inc., USA
Tel +1 843-760-6278
Fax +1 843-760-1220
e-mail info@seldenus.com*

*Seldén Mast A/S, DK
Tel +45 39 18 44 00
Fax +45 39 27 17 00
e-mail info@seldenmast.dk*

*Seldén Mid Europe B.V., NL
Tel +31 (0) 111-698 120
Fax +31 (0) 111-698 130
e-mail info@seldenmast.nl*

*Seldén Mast SAS, FR
Tel +33 (0) 251 362 110
Fax +33 (0) 251 362 185
e-mail info@seldenmast.fr*

www.seldenmast.com

Dealer:

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