# S-SERIES WINCH E-SERIES WINCH



2-speed Self-tailing winches

530 540 546 552 560 566

**3-speed Electric winches** 

E40 E46 E52 E60 E66 POWERED BY SELVE BUS®





#### The mission

Develop a winch with a grip strong enough that the entire drum is not filled with turns. It must interact with the self-tailer to allow a slack sheet to be pulled easily with the line in the self-tailer. When releasing the sheet, it must slide out gently and silently. Sailors must be able to trust the grip and the release even under the hardest conditions. The surface of the drum must be kind to the line. The winch must be easy to install and to service. Both manual and electric versions with the manual winches being easy to upgrade to electric operation.

#### The solution



The perceived feeling of how a winch performs is very much based on the design of the drum. Preferences are very individual and depend on what function a specific winch is used for. A big challenge for any producer of winches.

Our conclusion after years of research is that the relationship between grip and release is critical. Two or three turns should provide enough grip and when releasing the line, you want it to slide out smoothly. Pulling the slack on an unloaded sheet should be possible without the risk of riding turns.



The drums we are using for our new manual and electric winches are forged and machined hard anodised aluminium with vertical ribs located in an asymmetric pattern. Any line under load will become slightly dented where it rests over a rib and if all ribs were located symmetrically, all dents would simultaneously jump to the next rib when releasing the line. And the next one, and the next one...

Ribs placed asymmetrical provide a strong grip and a harmonious release. This is ART.



# S-SERIES



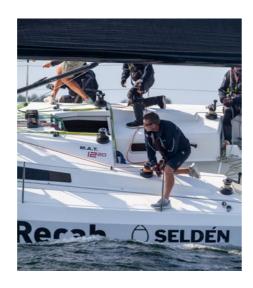
### **Tacking and gybing made easy**

The S-series simplifies the manoeuvre of tacking and makes the handling of a highly loaded sheet safer and quicker. The grip on the winch drum combined with a unique self-tailer enables the trimmer to pull the slack out of the sheet with the line sitting in the self-tailer and with the winch handle in position. A great advantage for the racing sailor who can pre-load the sheet into the self-tailer of the windward winch prior to tacking and then sheet home and set the trim of the jib instantly on the new tack. Simply pull in the slack and turn the handle a turn or two to get full tension. The cruising sailor will appreciate simpler and safer manoeuvres by not having to hand hold a tensioned sheet whilst trying to load it into the self-tailer and searching around for the winch handle.

#### **Technical specification**

						Powe	r Ratio	
Art. No	Description	Base diameter, ø mm	Height, mm	Weight, kg	Line size, ø mm	High gear	Low gear	Line entry height, mm
475-130-10	S30	139	150	2,9		12:1	30:1	60
475-140-10	S40	152	162	3,5	8-12		40:1	63
475-146-10	S46		186	5,8	8-14	13:1	46:1	
475-152-10	S52	184				15:1	52:1	75
475-160-10	S60		245 239	13		18:1	60:1	
475-166-10	S66	245		13,1	8-16	20:1	66:1	98

	Safe working load, (SWL, kN)	Type of bearings	Fasteners (countersunk screws)	
S30	8,4	Delrin® roller bearing	M6	
S40	11,2	+ plain bearing		
S46	12,9	Double Delrin® roller	M8	
S52	14,6	bearings		
S60	16,8			
S66	18,5		M10	



## Replace your old winches without drilling new holes in your boat

Optional adaptor plates with threaded and anodised holes for the Seldén S-winch are available. Use your old winch as a template to mark positions of your existing holes, drill, countersink the holes, apply grease to the bolts and fit the adaptor plate to deck. The Seldén winch fits on top with fasteners included in the kit. The plate is hard anodised black aluminium of the same diameter as the S-winch you are installing.

Art. No.	Adaptor plate for S-winch including fasteners	Thickness, mm
473-399-10	S30	7
473-499-10	S40	
473-599-10	S46/S52	9
473-699-10	S60/S66	13



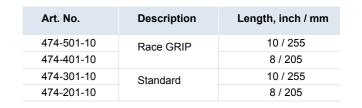
#### **Seldén Race GRIP**

The patented Race GRIP handle is designed with the most logical location of the locking mechanism - on the sides! Long release levers on the sides of the handle are pushed in as you grab the handle. This will turn the locking plate so that the handle can be engaged and disengaged rapidly.



#### **Standard**

The standard handles are featuring a thumb-switch and are available in lengths of 8 or 10 inches. Rigid crank arm and a low friction knob get the job done efficiently.



6 7





# E-SERIES

Operates with three velocities for precise and efficient sail handling. The high-speed mode is an electric overdrive and perfect when pulling the slack of for instance a long and unloaded genoa or Code 0 sheet.

The Electric winches are manual 2-speed winches fitted to a SEL-Bus driven motor pack allowing for a third high-speed velocity. The back-up solution, in case you run out of power, is to put a winch handle in the socket and grind. This concept also allows you to upgrade your manual winches to electric at a later stage. The motor packs are powered up by Seldén's Power Supply Unit converting 12/24V to 42V which makes for an efficient and compact design of the motor assembly and thin 6 mm² power cables.



## **Technical specification**

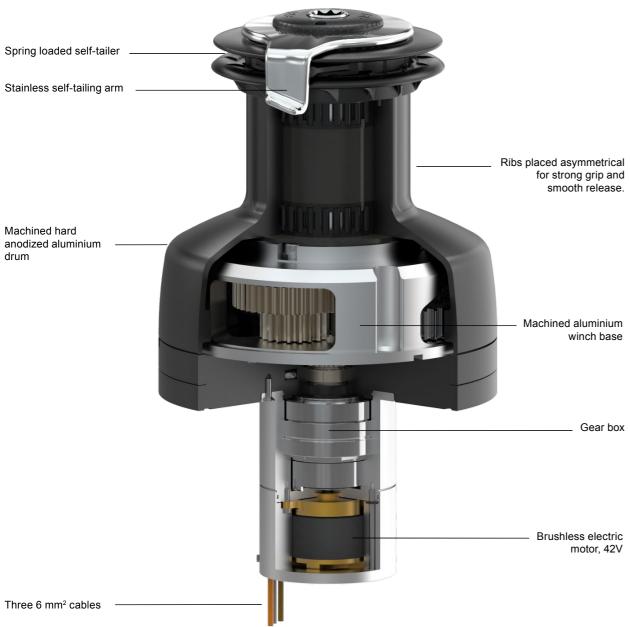
	Power ratio, manual operation		Protrusion below deck including cable clearance, mm	Motor/gearbox diameter, ø mm	Power consumption, W	Cable size, mm²	Voltage, V
E40	13:1	40:1					
E46/E52	13:1/15:1	46:1/52:1	145	99	1000	6	42
E60/E66	18:1/20:1	60:1/66:1					

	Safe working load (SWL), kN	Electric Cut-off load (ECL), kN	Max. line speed, m/min	Fasteners, S-winch to motor pack (included)	Fasteners, motor pack to boat. Not included. Use Socket head (HEX)
E40	11,2	6,7	54	M8	5 pcs M6
E46/E52	12,9/14,6	9,7	40	M8	5 pcs M8
E60/E66	16,8/18,5	14,7	28	M10	5 pcs M10

# **E-SERIES**

Watch the Self-tailing in action at full speed





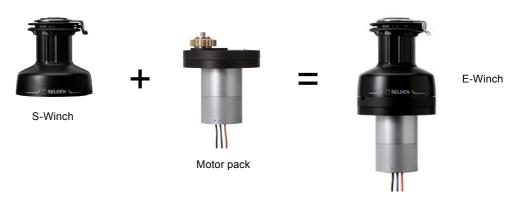
#### **Ordering your Seldén E-series winch**

Art. No (excl. SEL-Bus)	Description	Base diameter, ø mm	Drum diameter, ø mm	Height, mm	Line entry height, mm	Weight, kg	Line size, ø mm
475-740-10	E40	152	75	202	103	9,9	8-12
475-746-10	E46						
475-752-10	E52	184	90	226	115	13,2	8-14
475-760-10	E60				400		
475-766-10	E66	245	120	279	138	23,3	8-16

Contact an authorized Seldén dealer for a quote including SEL-Bus and Power Supply Unit. Technical information and part numbers are available at www.seldenmast.com/technical information.

## **Electric upgrades for S-winches**

If you wish to upgrade your S-winch to electric drive, just install the motor pack and fit your existing winch on top of it.



The motor packs are powered by Seldén's SEL-Bus system and a Power Supply Unit converting 12/24V to 42V allowing for an efficient and compact design.

Art. No.	Electric motor pack
473-430-10	Upgrades S40 to electric drive
473-530-10	Upgrades S46/S52 to electric drive
473-630-10	Upgrades S60/S66 to electric drive



#### Synchronized Main Furling - intelligence onboard

A unique interplay between the electric winch and Seldén's electric furling mast forms the ingenious Synchronized Main Furling (SMF). Press one button only and the winch will tension the outhaul simultaneously as the mast motor unfurls the sail from the mast.



10 11

# DINGHIESKEELBOATSYACHTS

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

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

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

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

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

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

www.seldenmast.com

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

Our well known brands are Seldén and Furlex.

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

Seldén, Furlex and SEL-Bus are registered trademarks of Seldén Mast AB.

