

Installation Guide

For DC Electric Windlass Models MAXI 31, 32, 34D, 34G, 40, 43, 44



SLEIPNER MOTOR AS

P.O. Box 519 N-1612 Fredrikstad Norway www.sleipnergroup.com DOCUMENT ID: 2916
REVISION: 9

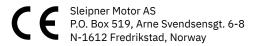
DATE: 2023

LANGUAGE: EN



Contents

Installation Manual Windlass Measurements 4 - 6 Installation Preparation 8 - 9 Anchor Brackets ______10



MC_0020

Responsibility of the Installer

MC_0038

The installer must read this document to ensure necessary familiarity with the product before installation.

Instructions in this document cannot be guaranteed to comply with all international and national regulations. It is the responsibility of the installer to follow all applicable international and national regulations when installing Sleipner products.

The recommendations given in this document are guidelines ONLY, and Sleipner strongly recommends that advice is obtained from a person familiar with the particular vessel and applicable regulations.

This document contains general installation instructions intended to support experienced installers. If you are not skilled in this type of work, please contact professional installers for assistance.

If required by local regulation, electrical work must be done by a licensed professional,

Appropriate health and safety procedures must be followed during installation.

Faulty installation of Sleipner products will render all warranties given by Sleipner Motor AS.

Ensure appropriate access to Sleipner products during installation planning for service, inspection and component replacement.

General Installation Consideration and Precaution Guidelines

MC 0440

For Windlass systems

MC 0307

Never use a windlass close to somebody in the water, an unexpected drop of the anchor can cause serious injuries.

It is the owner/ captain/ other responsible parties full responsibility to assess the risk of any unexpected incidents on the vessel.

- Keep your distance to the windlass, the anchor line, anchor and anchor brackets during operation.
- · While operating the anchor maintain observation of the rope or chain during handling.
- Ensure anyone using the windlass knows how to operate it.
- Be aware when the anchor are raised as it can bring unwanted debris up from the bottom, potentially damaging your boat. (NB: If the windlass is straining as the anchor is raised, stop for a few seconds and let the boat gain up momentum before continuing the raise.)
- If the anchor is stuck, release some anchor line/chain and attach it to a cleat before using the boat to pull the anchor free. The windlass is not designed for loads beyond the specified pull capabilities.
- The anchor MUST ALWAYS be secured to the boat while under way. Use the security line or other means to prevent unintentional anchor drop.
- · Children must not operate the windlass.
- Careless use can cause damage or injury!
- Keep the engine running during windlass operation to ensure good battery capacity.
- Sleipner Motor AS is not responsible for damage or injury caused by the use of our windlass systems.
- · While dropping anchor, do not push the "UP" button until the anchor is resting at the seabed.

For MAXI windlass systems

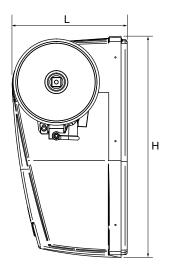
MC_0317

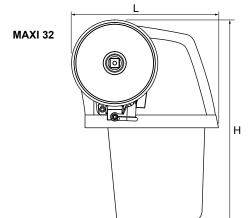
Sleipner MAXI windlasses are a generic term for Sleipner windlass with 1000 or 1500 W, 12 or 24V. Some of the models are suitable for mounting stern, some on the bow and some both stern and bow. Sleipner MAXI is intended for boats larger than approx. 25 feet. These windlasses are true free-fall windlasses, it means that the anchor falls out and down to the bottom immediately after the switch to "drop anchor" (down) has been pressed. It is the anchor's weight on the outside of the anchor bracket that determines how quickly it falls out. It is therefore important to avoid unnecessary friction between the ropes and hull, rolls or rope guides.

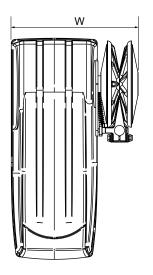
Measurement	Measurement description		(I 31
code			inch
Н	Total Height	396	15.6
W	Total width	300	11.8
L	Total length	200	7.9

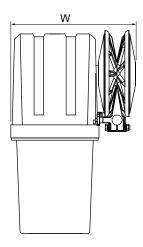
Measurement	Measurement description		(1 32
code			inch
Н	Total Height	386	15.2
W	Total width	230	9.1
L	Total length	255	10

MAXI 31



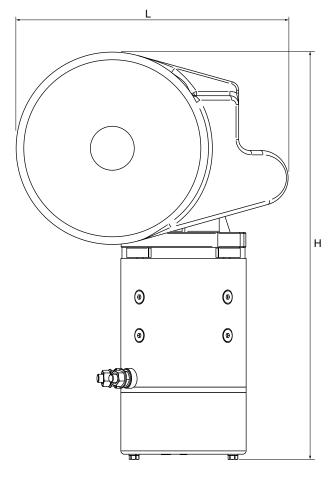


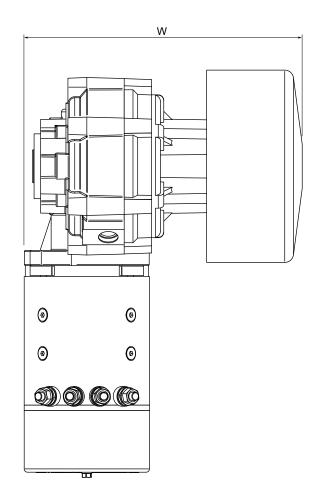




Measurement	Measurement description		34-G	MAX	34-D
code			inch	mm	inch
Н	Total Height	283	11	283	11
W	Total width	255	10	250	10
L	Total length	370	14.6	250	9.8

MAXI 34-G/ 34-D

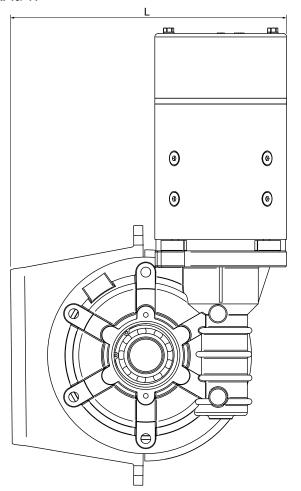


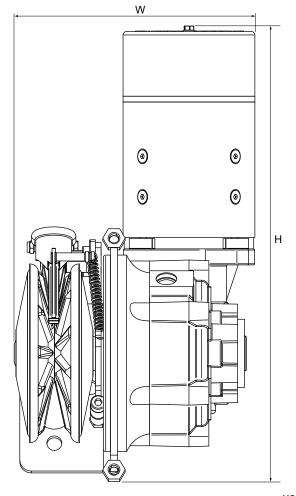


Measurement			MAXI 43		MAXI 44	
code	Measurement description	mm	inch	mm	inch	
Н	Total Height	393	15.5	393	15.5	
W	Total width	219	8.6	219	8.6	
L	Total length	238	9.4	238	9.4	

MAXI 43/ 44

6





Windlass Specifications

Description	MAXI
Available DC System (v)	12v & 24v
No-Load current (v)	
Power Consumptions	10-200A during normal operation
Typical Boat Size (m * ft)	>23ft
Pulling power (Electronically governed)	Rope windlasses: 1000 W, up to approx. 500 kg 1500 W, up to approx. 650 kg Chain windlasses: up to approx. 850 kg
Pulling speed	20–25 m/min with a load of approx. 40 kg
Weight (kg * lbs)	Aprox. 20 kg * 44.1 lbs
Minimum Battery Capacity	12V/100Ah 24V/75 Ah
Rope	Woven lead rope: dia. 16 mm. Breaking strain: 4000 kg Woven lead rope: dia. 14 mm. Breaking strain: 3300 kg Length: 50 m, weight, 21.7 kg 75 m, weight, 32.0 kg 100 m, weight, 43.0 kg
Chain (Chain windlasses)	6.5 mm, short link Norwegian std. Breaking strain: 2300 kg 8 mm DIN 766 std. Breaking strain: 4000 kg
Auto Stop	Yes (NB: Only for rope windlass)
Anchor/ weight	Sleipner / Bruce / Spade /10–30 kg

IMPORTANT

- Make sure to have all necessary tools ready
- Unpack and organize all components
- Prepare and control the areas where all the different parts can be
- Follow the mounting instructions
- When winching the rope for the first time after mounting, make sure the rope is tight, so the rope is pulled inn correctly.

Placing the parts

You must plan the placement of the following parts:

- Winch/motor
- Brackets for anchor and windlass
- Cables

- Switch panel
- Control-box
- Line guide

Main switch/ miniature circuit breaker

General

The windlass should be positioned as high as possible to allow maximum space for the rope that will be stored below the windlass. The height from the bottom of the wall where the rope is stored to the bottom edge of the line wheel should be at least 50 cm, and the area should be at least 40 x 40 cm to allow room for 50 m x 12 mm anchor rope. This will prevent the rope from bunching under the windlass and assure sufficient friction between the line wheel and the rope.

(NB: Remember to attach the end of the rope somewhere inside the boat.)

Anchor bracket

Fit the windlass so that the rope is wound up in line with the anchor bracket (see pictures 1 and 2) - a numerous different models are available. The anchor bracket is working as a guide for the rope when the anchor is on the seabed and as a "seating point" for the anchor once it has been raised.

Use of anchor bracket

The bracket for the rope must be installed with the rollers outside the platform.

Standard platform roller or hinged platform roller

If the windlass is fitted low in relation to the bathing platform, so the angle between the bathing platform and the rope is too small ,and if you are using a Bruce anchor, you should use an Side-Power Engbo hinged platform roller.

Hull conduit / Line guide

It will often be necessary to install a hull conduit with a roller that guides the rope with low friction through the hull.

Side-Power Engbo supplies original woven anchor rope with a lead core . It is supplied in various lengths and dimensions.

Safety line

Once the anchor is seated in the anchor bracket, it must be secured with the safety line supplied.

Auto Stop

Side-Power MAXI winches for anchor lines feature an advanced electronic auto stop switch that stops the windlass automatically, twice. The first stop comes just before the anchor reaches the anchor bracket. The windlass can then only be operated at low speed until it stops for the second time once the anchor is seated correctly in its bracket – ready to be dropped next time.

Anchor bracket



Hull conduit



Safety line



Rope



Auto Stop

- 9



MG 0357

General

Position the windlass as high as possible so that there is plenty of space for the rope under it. The bottom edge of the line wheel should be at least 50 cm above the surface on which the rope (or chain) is to lie. This will leave room for 50 m of 16 mm woven Rope line anchor rope or approx. 30 m of chain

If the height is less than 50 cm, check that the rope (or chain) does not bunch up against the underside of the windlass. If this is the case, use a shorter rope (or chain).

We recommend side position of the windlass. Avoid any conflict between the anchor and the side wave that turns in directly behind the boat. (NB: Remember to attach the end of the rope somewhere inside the boat.)

Placing the platform roller

Fit the anchor bracket with the rollers beyond the edge of the platform so that the anchor/rope clears the platform when the anchor is raised.

Line guide in the stern

Check that the opening in the hull for the rope is correct in relation to the direction of the rope. To prevent unnecessary wear, the rope should not touch the edge of the opening either vertically or horizontally. The opening must be oval (from top to bottom) to accommodate the friction in the rope roller when the windlass is used.

Line guide

If it is difficult to lead the rope directly from the line wheel to the anchor roller, it is a good idea to use a hull conduit/line guide with rollers, for instance 39-76000 or the simple 39-79000 to lead the rope through the hull.

The line guide may be installed with studs as shown in picture.

Roller platform



Guide line



Guide line



MG_0362

Anchor Brackets



Standard platform roller, long



Hinged platform roller



Tilt bracket



Anchor davit

10

Fitting Maxi 31

The Maxi 31 is designed for fitting outside on the stern or inside on the stern side of a vertical bulkhead. The Maxi 31 has the line wheel on the right-hand side of the windlass, seen from behind.

(NB: Make sure to fit the windlass correctly in relation to the direction of rotation of the line wheel.)

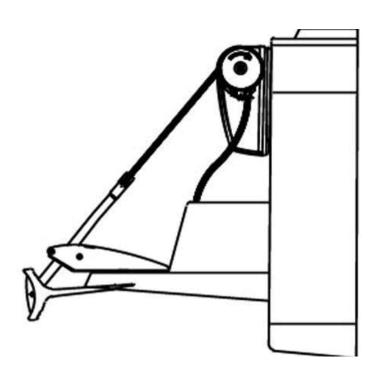
- 1. Position the windlass as high as possible on the stern. Draw around the windlass. Use the enclosed drilling template to mark the screw holes on the supporting surface. Use bolts to attach the windlass. If necessary, reinforce the inside of the hull with a plate.
- If the surface where the windlass is to be fitted is not even so the entire windlass rests against the hull/supporting surface, the surface must be evened out using an intermediate layer to prevent damage to the hull and/or the windlass when the fixing bolts are tightened.
- 3. Drill a hole for the cables and run these through the hull. Use MS polymer similar to seal the hole for the cables.
- 4. Run the rope via the line wheel on the windlass, down through the rope/chain guide and under the line wheel. Use the windlass to wind it up.

(NB: We recommend using an adapted container made of plastic or other weather-resistant material beneath the windlass to ensure that the rope is gathered up efficiently.)

IMPORTANT

When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.





Fitting Maxi 32

The Maxi 32 is designed for fitting outside on a rope box or outside/inside on a horizontal surface. The Maxi 32 has the line wheel on the right-hand side of the windlass, seen from behind.

(NB: Make sure to fit the windlass correctly in relation to the direction of rotation of the line wheel. (See sketch)

- 1. Remove the four 8 mm fixing bolts from the bottom of the windlass.
- 2. Mark the position of the holes for the fixing bolts, the hole for the part of the winch that is to pass through the deck, and the opening for the rope.
- 3. Align the winch and the roller to each other.
- 4. Then use four of the enclosed bolts to secure the windlass firmly in position.

IMPORTANT

When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.





Maxi 32 box

- 1. Drill a hole for the cables and run these through the hull. Use Sikaflex or similar to seal the hole for the cables.
- 2. Connect the cables according to the electrical connection diagram.
- 3. When fitting the fiberglass box, the open end must be fitted to the shape of the stern and fixed in position using through-and-through bolts to connect the angle bracket supplied directly to the hull. Adjust the brackets to the correct angle and fix them internally, at the top and bottom of the side panel of the box.
- 4. Run the rope via the line wheel on the windlass, down through the rope/chain guide and under the line wheel.
- 5. Use the windlass to wind it up.

IMPORTANT

When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.

(NB: Remember to secure the end of the rope/chain to the inside of the box. (Drill a hole through the bottom of the box and through the platform, and then fit the bracket supplied. Remember to drill holes in each of the lower stern corners for drainage purposes.)

Tilt bracket mounted on a box.

Tilt bracket 61-30006/61-30007

Fixed to the angled surface on the stern end of the box.









MG_0366

Fitting Maxi 34G

The Maxi 34-G is designed for fitting vertically on a longitudinal bulkhead with the line wheel outside and the windlass itself inside. The Maxi 34-G is available with the line wheel on the right or left-hand side of the windlass, as seen from the rear.

(NB: Make sure to fit the windlass correctly in relation to the direction of rotation of the line wheel. (See sketch)

- 1. Place the enclosed template on the surface where the winch is to be fitted ideally as high as possible and mark the drilling holes.
- 2. Alternatively, you can use the windlass fixing plate as a template. If you choose to do so, remove the white plastic cover and remove the line wheel and spring so that the fixing plate is free of fitted parts. Remove the six screws that hold the fixing plate to the gear.
- 3. Place the fixing plate on the surface where the windlass is to be fitted and mark the screw holes, the centre hole for the gear, the hole for the auto stop switch (on the lower stern side edge of the fixing plate), and the run-through hole for the rope. The simplest way to position the run-through hole for the rope is to drill the fitting holes for the fixing plate and then use a couple of screws to fasten this plate temporarily to the boat. Position the plastic cover, make sure that the cover overlaps the hole by approx. 5 mm at the bottom, and then mark the lower edge of the cover on the fitting surface. Then make the holes with an appropriate drill and hole-cutter. Remember to round off the outside upper edge and the inside lower fore edge of the run-through hole to prevent the rope from catching on sharp edges.
- 4. Then fasten the fixing plate to the boat. Remember to draw the auto stop switch from the lower stern side hole of the fixing plate before fitting the gear. To prevent the rope becoming entangled with the motor on the inside of the boat, fit the gear so that the motor is pointing directly forward, facing slightly up or slightly down.
- 5. Then fit the anchor bracket and check that the anchor fit correctly on the rollers.
- 6. Fit the sheaves and covers, the rope guard, the rope guide and the spring (pos 52, 54 and 58). Then fit the auto stop switch in the hole in the rope guard and adjust it so that the reciprocal part sticks approx. 1 mm out from the outside of the bracket, towards the rope.
- 7. Then pull the rope through the hole in the cover and run it between the line wheel and the rope guide.
- 8. Put the white plastic cover in position. Mark the run-through hole for the rope in the cover. Make an oval hole approx. 40 mm vertical and 20 mm horizontal in the cover. (for instance, cut 2 holes in towards each other with a 20 mm hole-cutter. Then remove the material between the holes.)

IMPORTANT

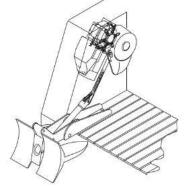
When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.

Drawing - Maxi 34-G - line wheel, rope guide, rope guard and fixing plate

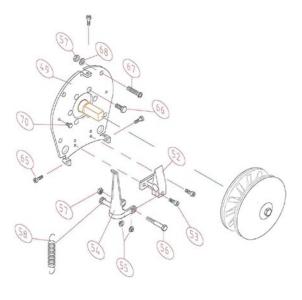
(NB: The bolt (pos 17) that attaches the line wheel to the axle must be secured with contact adhesive (e.g. Locktite or similar). Recommended torque for bolts, 20Nm.)











MG_0367

Fitting Maxi 34-D

The Maxi 34-D is designed for horizontal installation on the fore or aft deck.

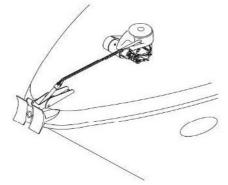
(NB: Make sure to fit the windlass correctly in relation to the direction of rotation of the line wheel. (See sketch)

- 1. Start by locating the correct position for the windlass, so that the direction of the rope is in line with the anchor bracket. Then mark the centre of the windlass.'
- 2. In most cases, it is easy to use the windlass fixing plate as a template. Remove the white plastic cover and remove the line wheel, rope guides and spring so that the fixing plate is "clean". Remove the six screws that hold the fixing plate to the gear.
- 3. Place the fixing plate on the boat and mark the screw holes, the centre hole for the gear, the hole for the auto stop switch (on the front port side edge of the fixing plate), and the run-through hole for the rope.
- 4. The easiest way to position the run-through hole for the rope is to drill the fitting holes for the fixing plate and then use a couple of screws to fasten this plate temporarily to the boat. Put the plastic cover on and mark the forward edge of the cover on the contact surface. Use an appropriate hole-cutter and make sure that the cover overlaps the outer edge of the hole by around 5 mm.
- 5. Then make the holes with an appropriate drill and hole-cutter. Remember to sand the upper aft edge and the lower fore edge of the run-through hole for the rope, to prevent the rope from catching on sharp edges.
- 6. Then screw the fixing plate firmly in place on the boat. Remember to draw the auto stop switch from the front port side hole of the fixing plate before screwing the gear firmly in place. To prevent the rope becoming entangled with the motor on the inside of the boat, fit the gear so that the motor is pointing directly forward, facing the port or starboard side.
- 7. Then fit the anchor bracket and check that the anchor fit correctly on the rollers.
- 8. Fit the sheaves and covers, the rope guard, the rope guide and the spring. Then fit the auto stop switch in the hole in the rope guard and adjust it so that the sensor face protrudes approx. 1 mm towards the rope.
- 9. Then pull the rope through the hole in the cover, run it between the line wheel and the rope guide and down below the deck. Finally, fasten the cover in place.

IMPORTANT

When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.







MG_0368

Fitting Maxi 40

The Maxi 40 is designed for fitting inside on the stern or on the bow side of a vertical bulkhead. The Maxi 40 has the line wheel on the left-hand side of the windlass, seen from behind.

(NB: Make sure to fit the windlass correctly in relation to the direction of rotation of the line wheel. (See sketch)

The drilling template (only applies to the Maxi 40) is designed to lie on the outside of the hull when you mark the holes. For marking inside, you must reverse the template so that the holes in the template match the windlass.

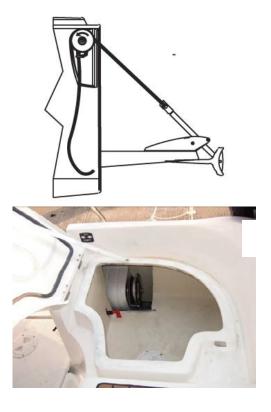
- 1. Make sure that the opening in the hull for the rope is positioned correctly in relation to the direction the rope takes out through the hull. To prevent unnecessary wear, the rope should not touch the edge of the opening either vertically or horizontally. The opening should be oval (top to bottom) to accommodate the vertical play in the rope when the windlass is used.
- Position the template correctly, so that the line wheel is on the correct side. Mark the position of the opening for the rope and then drill the hole.
 (NB: Make sure to position the windlass correctly in relation to the rope and anchor bracket so that the windlass line wheel and the roller are in line.)
- 3. Once you have made the opening for the rope in the stern, you can install the windlass.
- 4. Use a clamp or similar to fit the anchor bracket temporarily to the outside of the boat.
- 5. Run the anchor rope tightly between the external anchor bracket and the track of the windlass line wheel.
- 6. Hold the windlass in place inside the boat and adjust the position so that the rope is led correctly through the opening in the stern. Once you have found the correct position, mark around the windlass fixing plate before removing the windlass.
- 7. Place the drilling template so that it matches the mark you drew on the stern, and mark the holes for the fixing bolts. Use a 9 mm bit to drill the holes, and then fit the windlass. (NB: If you are to use a rope conduit/line guide with guide rollers (68-00008), you can use the internal frame of the conduit as the template for the opening.)
- 8. If necessary, use an intermediate panel between the windlass and the hull to adjust the windlass in relation to the direction of pull on the rope. After final adjustment of the windlass position, tighten the bolts.
- 9. Run the rope via the line wheel on the windlass, down through the rope/chain guide and under the line wheel. Use the windlass to wind it up.

IMPORTANT

When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.







MG_0369

Fitting Maxi 43/44

Maxi 43 is made to simplify the fitting process. The bracket can be turned 360 degrees. It can be mounted hanging, standing or vertically at the bulkhead. The rope guide can be turned separately to get maximum friction in the line wheel, and also get correct direction against the rope guide. If you want the line wheel on the left side seen from stern, it is a Maxi 44.

(NB: Make sure that the windlass is mounted in the correct direction regarding the direction of rotation of the line wheel.)

It is important that the hole pattern in the hull is correctly positioned relative to the direction of the rope through the hull. To avoid unnecessary wear and tear it should not touch the edges of the hole, either vertically or horizontally.

(NB: If the hull implementation with rollers is (39-76000) to be used, the bracket of the winch must be turned 180 degrees, use the hole template.)

When holes for pin bolts and the rope are made, the windlass is ready for mounting.

If you use a rope guide without a roller (39-74000) or rope guide with one roller (39-75000), you must at first mount the rope guide, then the first half of the mounting bracket and fasten it to the rope guide.

Lift/place now the windlass inside with the other half of the mounting bracket. Attach both parts with the included bolts, and just attach the bolts. The windlass is now in place and ready for adjustments.

Adjust now the windlass to your wanted/correct angel and tighten the bolts to the mounting bracket. (20NM, 8mm Hex wrench). The windlass is now mounted

Make sure the direction of the windlass compared to the anchor bracket is correct. The line wheel and anchor roller must be aligned. When everything is aligned fasten the anchor bracket temporarily with a clamp or similar.

Tighten the anchor rope between anchor bracket and in track of the line wheel of the winch. Then fasten the anchor bracket.

Run the rope in place through hull implementation/rope guide, around the line wheel and through the line guide, adjust then the rope with a minimum of 90 degrees around the line wheel. Then tighten the line wheel (6 NM) with a hex wrench (6mm). Then run the rope into the winch.

IMPORTANT

When pulling in the rope for the first time, you must keep the rope tight, so the rope run correctly.

Standard box roller (65-00001)

Fixed to the angled surface on the stern end of the box.

Fit the box roller with the angled side of the bracket down.

Tilt bracket 61-30006/61-30007

Fixed to the angled surface on the stern end of the box.











MG_0370

Autostopp

All Side-Power Engbo Maxi windlasses feature an electronic auto stop function. An electronic auto stop switch is positioned below the windlass line wheel and registers the brass wire indicators attached to the rope. When the first brass wire indicator passes the sensor, the windlass will stop. If you release the button on the control panel or remote control and then press it again, the windlass will continue to reel in the anchor at low speed until the second brass wire indicator passes the sensor. The windlass will then stop again.

Adjusting the auto stop switch

• This feature is normally correctly adjusted on delivery. The flat end should usually protrude approx. 1 mm from the holder towards the rope. If you need to adjust it, loosen the bolt that holds the auto stop switch in place and adjust it to the required position. Then tighten the bolt again.

(NB: Make sure that the anchor line cannot snag on the inductive sensor.)



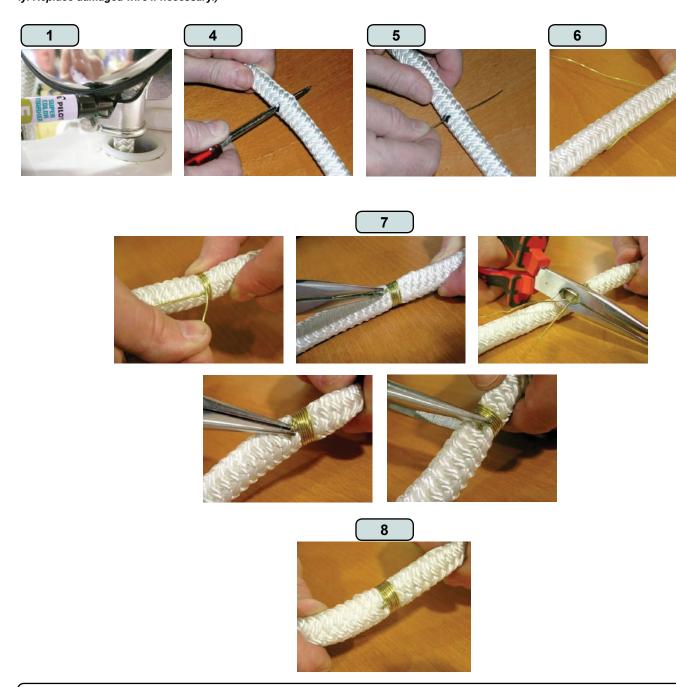


MG_0374

Auto stop - fitting the stop indicator/brass wire

- 1. An electronic auto stop switch is positioned below the rope guard. This switch triggers the auto stop function when the anchor has been raised. To activate the switch, two brass wire indicators are fitted to the rope to determine when the windlass is to stop. (Cut the enclosed brass wire in two).
- 2. To position the brass wire indicators in the correct places on the rope, raise the anchor until the thimble is approx. 30 cm below the anchor bracket (raise the anchor slowly during the last stretch) and mark the rope right next to the auto stop switch.
- 3. Then carefully raise the anchor completely and fit it in the bracket. Make a new mark on the rope by the sensor. Position the wire indicators by the marks.
- 4. Use an appropriate tool to pierce a hole through the rope.
- 5. Push the brass wire through the rope and fold it lengthwise along the rope.
- 6. Wind the free end of the brass wire five times around the rope and over the other end of the wire.
- 7. Wind the free ends together, cut the twist down to approx. 5 mm and bend it in under the wire wrap so it cannot snag on anything.
- 8. The outer diameter of the wire wrap should be almost the same as the outer diameter of the rope so that the inductive sensor can detect the brass wire

(NB: The brass wire indicators may become worn by the sheave – especially under heavy loads – and you must therefore check them regularly. Replace damaged wire if necessary.)



MG 0375

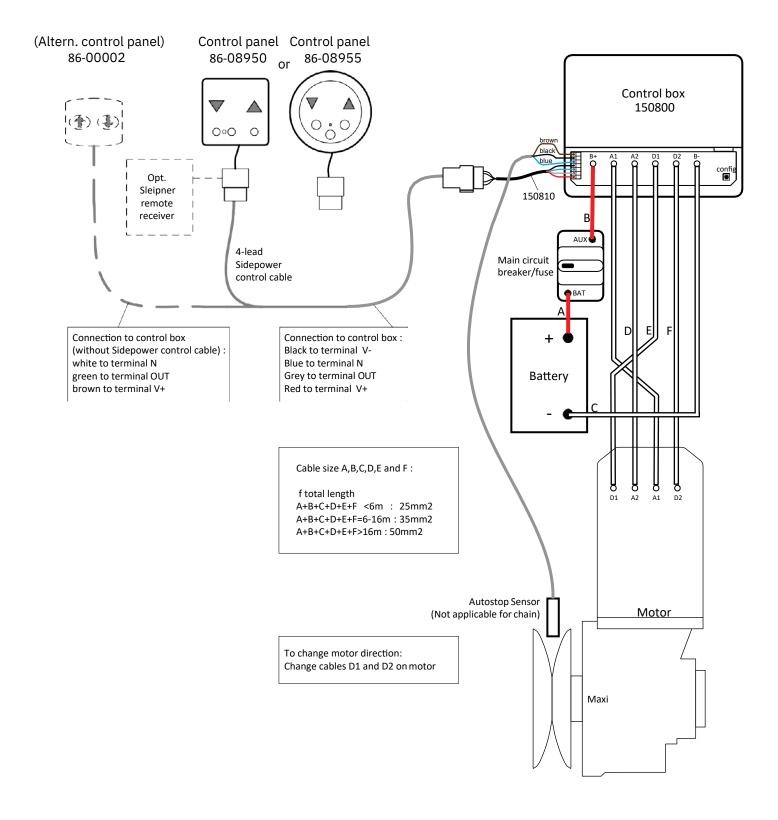
Visual Wiring Diagram

Connecting the motor and battery cables on Maxi windlass

- Connect the four motor cables to the terminals masked A1/A2/D1/D2.
- Connect supply cable from battery negative to the terminal marked B-.
- Connect supply cable from breaker/fuse to the terminal marked B+. Connect beaker/fuse to battery main switch.
- Tighten all terminals properly, with a maximum torque of 5Nm. Over-tightening may damage the terminals.
- Leave breaker/fuse disconnected until the installation is completed.

IMPORTANT

If motor runs in the wrong direction, swap cable D1 and D2 on the control unit.



2023

! Please refer to the graphic for special considerations relating to your model!

All kind of wiring and electrical fixing must be done with Main switch/ miniature circuit breaker turned OFF and no battery cables attached.

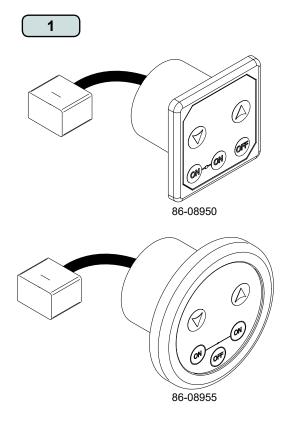
1. Connecting switch panel 86-08950 or 86-08955

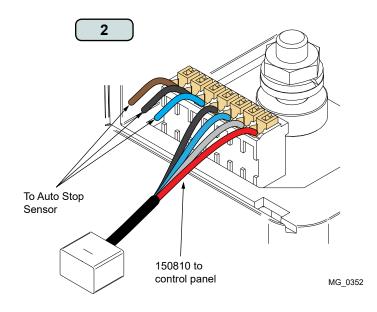
- 4-way Sleipner cable come in various lengths.
- 4-way Sleipner cable are easy attached to contacts on control box unit (150810).
- The cable must be attached to 150810 contact unit.
- See wiring diagram or control panel manuals for more details.
- Multiple panels can be fixed to the same control unit.

2. Connecting the auto stop sensor

Cables are connected like this:

- : Brown (BN)
- : Black (BK)
- : Blue (BU)





! Please refer to the graphic for special considerations relating to your model!

Fitting control unit 150800

The unit is not water resistant or splash proof and must be placed in a dry area close to the windlass motor.

Use M6 terminals for the selected battery cables.

Tighten the terminals to maximum 5Nm.

Pay attention to assemble the terminal spacers and washers in the correct order according to figure 1.

The unit has mounts that ensures space between the unit and it's mounting surface. This to avoid condensation to enter the unit. It also ensures proper ventilation of the enclosure.

The control unit must be mounted with the cables protruding downwards.

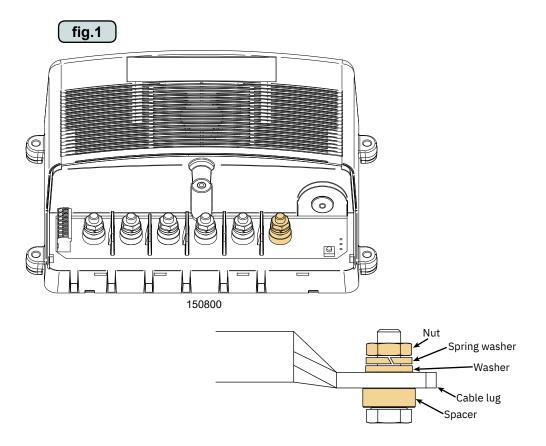
Connecting the motor and battery cables on Maxi

Motor for windlass type Maxi is delivered with cables fitted to the motor.

- Connect the four motor cables to the Terminals masked A1/ A2/D1/D2.
- Connect supply cable from battery negative to the Terminal marked B-.
- · Connect supply cable from beaker/fuse to the Terminal marked B+. Connect beaker/fuse to battery main switch.
- Tighten all terminals properly, with a maximum torque of 5Nm. Over-tightening may damage the terminals.
- Leave breaker/fuse disconnected until the installation is completed.

(NB: If motor runs in the wrong direction, swap cable D1 and D2 on the control unit.)

See control unit (150800) manual for configuring programming and more installation information.



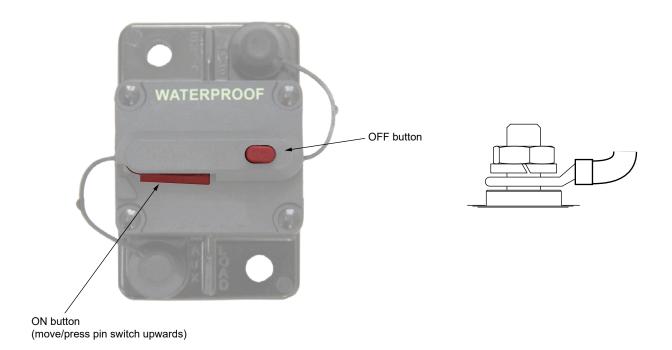
Main switch and circuit breaker

119-00004 (200-250A)

- MUST be used at all time in this installation
- Works as both MCB and main switch unit.
- The unit consists of one battery connection and one AUX connection. This is described on the unit. See wiring diagram for correct connection to battery and control box.
- Unit switched ON
- To switch ON, move/press pin switch upwards.
- Unit switched OFF.
- To switch OFF, press red the button.

WARNING

Improper use or incorrect connection of such high currents components will generate a lot of heat which in worst case can cause fire.



Post-Installation Checklist
□
□ All bolts holding the windlass components are tightened.
□ 2 x stop rings are attached to the anchor line.
□ Control unit (150800) terminal cables are tightened and configured for your product.
□ 'OUT' button runs the motor for approx. 2 sec, 'IN' button runs the motor constantly.
□ The end of the anchor line is attached to the boat.
□ Anchor safety line is in place and adjusted.
The Windlass has been installed as per the instructions in this manual and all points in checklist above have been controlled.
Signed:
Date:
Motor type:
Serial number:
The compartment for the product has been isolated from general bilge water and has no obvious or suspected risks for flooding:
Other comments by installer:

MC_0349

Find your local professional dealer from our certified worldwide network for expert service and support. visit our website www.sleipnergroup.com/support

Product Spare Parts and Additional Resources

MC 0024

For additional supporting documentation, we advise you to visit our website www.sleipnergroup.com and find your Sleipner product.

Warranty statement

MC_0024

- Sleipner Motor AS (The "Warrantor") warrants that the equipment (parts, materials, and embedded software of products) manufactured by the Warrantor is free from defects in workmanship and materials for purpose for which the equipment is intended and under normal use and maintenance service (the "Warranty").
- 2. This Warranty is in effect for two years (Leisure Use) or one year (Commercial and other Non-leisure Use) from the date of delivery/purchase by the end user, with the following exceptions;
 - (a) For demonstration vessels, or vessels kept on the water, the dealer is considered as the end user from 6 months after their launch of the vessel;
 - (b) The warranty period starts no later than 18 months after the first launch of the vessel.
 - Please note that the boat manufacturer and dealer must pay particular attention to correct maintenance and service both by the products manuals as well as general good practice for the location the boat is kept in the period the boat is in their care. In cases where the 6 and 18 months grace periods for boat builders and dealers are passed, it is possible to obtain a full warranty upon inspection and approval of the warrantor or such representative.
- 3. Certain parts, classified as wearable or service parts, are not covered by the warranty. A failure to follow the required maintenance and service work as described in the product manual render all warranty on parts or components directly or indirectly affected by this void. Please also note that for some parts, time is also a factor separately from actual operational hours.
- 4. This Warranty is transferable and covers the equipment for the specified warranty period.
- 5. The warranty does not apply to defects or damages caused by faulty installation or hook-up, abuse or misuse of the equipment including exposure to excessive heat, salt or fresh water spray, or water immersion except for equipment specifically designed as waterproof.
- 6. In case the equipment seems to be defective, the warranty holder (the "Claimant") must do the following to make a claim:

 (a) Contact the dealer or service centre where the equipment was purchased and make the claim. Alternatively, the Claimant can make the claim to a dealer or service centre found at www.sleipnergroup.com. The Claimant must present a detailed written statement of the nature and circumstances of the defect, to the best of the Claimant's knowledge, including product identification and serial nbr., the date and place of purchase and the name and address of the installer. Proof of purchase date should be included with the claim, to verify that the warranty period has not expired:
 - (b) Make the equipment available for troubleshooting and repair, with direct and workable access, including dismantling of furnishings or similar, if any, either at the premises of the Warrantor or an authorised service representative approved by the Warrantor. Equipment can only be returned to the Warrantor or an authorised service representative for repair following a pre-approval by the Warrantor's Help Desk and if so, with the Return Authorisation Number visible postage/shipping prepaid and at the expense of the Claimant.
- 7. Examination and handling of the warranty claim:
 - (a) If upon the Warrantor's or authorised service Representative's examination, the defect is determined to result from defective material or workmanship in the warranty period, the equipment will be repaired or replaced at the Warrantor's option without charge, and returned to the Purchaser at the Warrantor's expense. If, on the other hand, the claim is determined to result from circumstances such as described in section 4 above or a result of wear and tear exceeding that for which the equipment is intended (e.g. commercial use of equipment intended for leisure use), the costs for the troubleshooting and repair shall be borne by the Claimant;
 - (b) No refund of the purchase price will be granted to the Claimant, unless the Warrantor is unable to remedy the defect after having a reasonable number of opportunities to do so. In the event that attempts to remedy the defect have failed, the Claimant may claim a refund of the purchase price, provided that the Claimant submits a statement in writing from a professional boating equipment supplier that the installation instructions of the Installation and Operation Manual have been complied with and that the defect remains.
- 8. Warranty service shall be performed only by the Warrantor, or an authorised service representative, and any attempt to remedy the defect by anyone else shall render this warranty void.
- 9. No other warranty is given beyond those described above, implied or otherwise, including any implied warranty of merchantability, fitness for a particular purpose other than the purpose for which the equipment is intended, and any other obligations on the part of the Warrantor or its employees and representatives.
- 10. There shall be no responsibility or liability whatsoever on the part of the Warrantor or its employees and representatives based on this Warranty for injury to any person or persons, or damage to property, loss of income or profit, or any other incidental, consequential or resulting damage or cost claimed to have been incurred through the use or sale of the equipment, including any possible failure or malfunction of the equipment or damages arising from collision with other vessels or objects.
- 11. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country.

Patents

MC_0024

At Sleipner we continually reinvest to develop and offer the latest technology in marine advancements. To see the many unique designs we have patented visit our website www.sleipnergroup.com/patents

Notes	MC_003

© Sleipner Group, All rights reserved The information given in the document was right at the time it was published. However, Sleipner Group cannot accept liability for any inaccuracies or omissions it may contain. Continuous product improvement may change the product specifications without notice. Therefore, Sleipner Group cannot accept liability for any possible differences between product and document.

Learn more about our products at www.sleipnergroup.com



SLEIPNER GROUP

P.O. Box 519 N-1612 Fredrikstad Norway www.sleipnergroup.com

