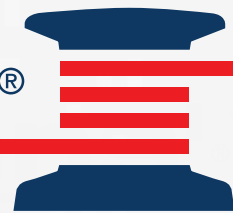


Lofrans!®



W I N D L A S S E S

T H E O R I G I N A L W I N D L A S S



2016

Lofrans[®]

W I N D L A S S E S

T H E O R I G I N A L W I N D L A S S

Quality, Safety & Reliability
since **1966**



Lofrans was founded in 1966 in Monza and since the beginning has focused its attention on a single product range: the anchor windlass.

During this period of 50 years, all human and technical resources have focused on a specific target, to design and create a product of the highest quality and performance.



One of first anchor windlasses
built in 1966



Lofrans' Now

The intensive research of new anchoring solutions having the ability to operate in the marine environment, has led us to build up a strong relationship with a group of carefully selected suppliers, whose long term co-operation has helped us in the construction of the components for our anchor windlasses.

This synergy gave us the ability to produce top level products in terms of quality and performance. We have been rewarded by the market which considers us the leader of this product.



With the latest CATIA CAD software, our engineers are constantly developing ideas and innovative solutions with regards to product evolution. The integration of these designs to our CAM system ensures that the switch from a conceptual idea to the actual produced component is achieved in a flawless manner.

Being one of the most weatherbeaten and mechanically challenged equipment on the deck, a windlass could not stand anything else than premium materials. Our products utilize only specific marine materials, able to withstand marine corrosion and treated in such way so as to increase their mechanical strength.



At Lofrans, we believe that durability and performance start with an extremely stringent selection of components: only AISI 316 L stainless steel, marine grade metals and electric motors designed to deliver high torque in all conditions.

Most of our components are produced by hot pressing, a technology which guarantees minimal porosity in the metal and superior mechanical features.

The most exposed components are then chemically treated in order to slow down and minimize the process of marine corrosion.

Today our anchor windlasses and capstans are able to cover the needs for vessels with a length from 6 up to 50 meters, from a range consisting of more than 25 different models.

The production is carried out in our 5000 sqm factory in Monza, where our team of designers, technicians and qualified employees are located together with our finished stock and spare parts warehouse.

During the production process in our factory, we carry out several dimensional tests on components and final products by use of our 3D co-ordinate measuring machine, as well as marine corrosion tests in a special marine environment chamber, which simulates the harshest of marine environments.

Our products meet the requirements of the most important classification societies such as RINA, BV, DNV and several others.

An important part of the Lofrans' organization is the sales and the service, which are guaranteed through a worldwide network of more than forty official distributors in the most important marine markets.

The success of Lofrans products is testified by the fact that our products are installed as standard on vessels of the most important and well reputed OEMs globally.

Since the beginning of 2013, great amounts have been invested to ensure that longevity, evolution, quality and control are guaranteed for the further development of Lofrans'. Major investments included the installation of the SAP ERP, the installation of a WMS (Warehouse Management System) integrated with hand held scanner order picking, additional Product Quality Assurance systems and Distributor order automation via an in-house B2B ordering tool.



Why is it necessary to install an anchor windlass?

There are two main reasons: Safety and Utility. The anchor windlass on your vessel allows you to handle different anchoring situations, even the most critical, always under complete safety. Every anchoring operation will be extremely simple, fast and firm under your control. No more fear of failing to recover your anchor and every anchoring will be a pleasure. No more heavy and complicated operations. Installing an anchor windlass means making an investment on the safety of your crew and your vessel.

And what about a capstan?

Capstans are normally installed on the stern of the boat for mooring maneuvers. They are equally suitable for recreational boats, fishing and commercial vessels. One or two capstans -depending on boat size and displacement- are installed on the boat in conjunction with an anchor windlass. Capstans are monitored by a set of foot switches, leaving your hands free for rope handling. The range of Lofrans' capstans is designed for boats from 6 to 45 m (18 to 150').

Why choose a Lofrans' anchor windlass?

The strong point of every successful manufacturer is the quality, the reliability and the support they provide for their products.

- Does the product work properly as was stated by the manufacturer?
- Is the product worth the price paid for it?
- Is the product still reliable after years of use?
- Is there a reliable after sales support organization, able to directly respond to end-user requests from anywhere around the world?

If the product is a Lofrans', the answer to these questions is definitely YES.

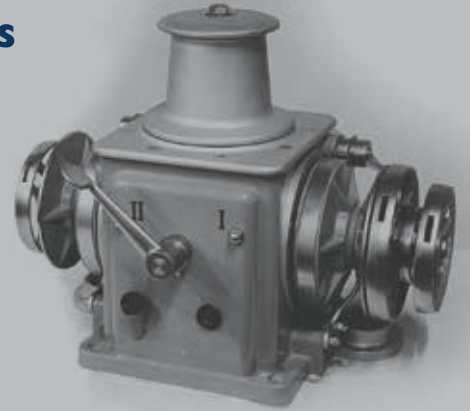
We do not say this by ourselves, but it is said by the thousands and thousands of our satisfied customers all over the world who chose our products, making Lofrans' today the most popular manufacturer of anchor windlasses.

This important result is more than anything a testimony of the quality of our product and the great reputation of the Lofrans' brand globally.



Lofrans®

WINDLASSES
THE ORIGINAL WINDLASS

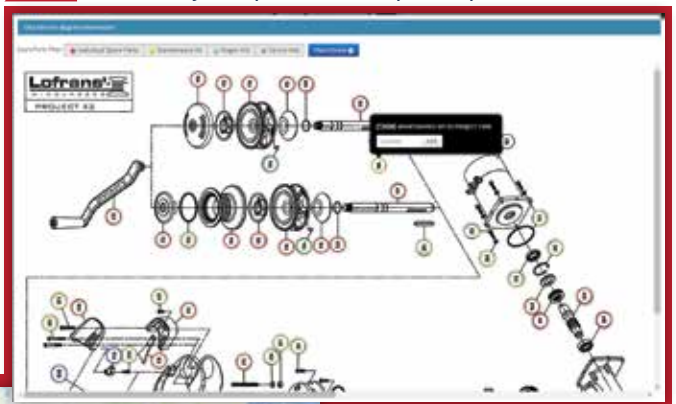


We have been making boating safer & easier since 1966

We have revived & reinvented customer satisfaction since 2013



Easy web ordering & next day dispatch of spare parts



Global Network



Fast worldwide delivery 5 main logistics hubs:

- USA
- Dubai
- Belgium
- Greece
- Italy

INNOVATION

WHY CHOOSE LOFRANS'



Designing and producing windlasses for more than 50 years has made us gain a lot of experience about our products. This knowledge and experience has been evolving constantly year after year. We fully understood that to give real quality to our product, we would need to take care of all the details as they would make the final difference in a product that is considered a market leader.

In Lofrans we look at the quality in two directions:

- The quality that comes from the perception of the product by the end user, which has pushed us to design and build an attractive product.
- The quality in terms of engineering reliability and performance, which lead us to conceive and create a product able to withstand the extreme marine conditions and yet would be simple to install, operate and maintain.

Always at the cutting edge of technique in electro-mechanics, Lofrans was often a pioneer and created solutions which have now become standard.

We were the first to introduce to the market products and solutions, such as the AUTOMATIC FREE FALL, the CONTROL BOX, and last but not least, the PROJECT versions of our X range, a last generation "PLUG&PLAY" anchor windlass, with a built-in solenoid motor and rich of other innovations, which have succeeded in merging technology and function to give the end user the maximum reliability and safety.

Using this configuration, the installation of the product was made faster, easier and the reliability of the chain-counter system greatly improved. This motor was initially installed on our Project 1000, which received the DAME award, and was then subsequently installed on models Project 1500 and Project 2000.

Our anchor windlass for vessels over 60 feet have a transmission made by planetary-worm screw gears, which is very compact in size but at the same time is able to reach high ratio, necessary for vessels of these dimensions.

All Lofrans' products are engineered, designed and built focusing on the marine environment. Our know-how, which comes from our huge 50 years experience, is placed at the customers' disposal.

We are able to propose and supply custom designed-and-built products which meet each customer's individual requirements. The quality of our products is also certified by their own long lasting reliable performance.

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▲ HORIZONTAL

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GYPSIES

X SERIES & PROJECT

INNOVATIVE SOLUTIONS

- Watertight stainless steel ball bearings in the base, in order to have maintenance-free top performance functionality.
- Clutch consisting of two conical discs, fitted on to the main shaft by two flat parallel planes on the shaft, thus avoiding the use of keys and spreading the load on a wider surface.
- The X series as standard is provided with a pre-fitted sensor in the base and a magnet in the Gypsy, in order to be connected to an optional chain counter system.
- Models X1, X2 and X3 have a Gypsy designed to manage both rope and chain
- Independent drum rotation from Gypsy, for warping operation.
- Manual override, enabling the windlass to recover the chain and anchor in the event of electrical failure. The manual override mechanism is within the gearbox, made up by a spring loaded ratchet, whose secondary function is to provide a safety mechanism so that chain jams do not damage the deck.

VERTICAL WINDLASSES

The X vertical windlass range series is designed to provide anchoring solutions for sail and motor boats from 18 to 100 feet. The X series is made up by the following models: X1, X2, X3, X3.5, X4 and X5 all available in standard version with drum and in low profile version. The Project versions have a built-in control box within the motor casing. All models are available in different motorization to meet any customers' requirements.

The X range, as standard, comes in mirror polished marine bronze produced by hot forging.

X3.5 - Low profile



VERTICAL		20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	ft	
X1	500W	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	700W		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	1000W			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
X2	700W			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	1000W				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
X3	1500W					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	1700W						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
X3,5	1700W							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	2300W								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Project 1000	1000W									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	1500W										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■



X1 - Vertical Windlass

500W / 700W / 1000W



With Drum



Low profile

Main features

- Luxury chrome bronze base and drum
- With drum or Low profile
- Independent Gypsy and drum operation
- Rope and chain combination Gypsy
- Manual chain release
- Rope chain management by the spring loaded arm
- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

Construction	Aluminium		Chromed bronze	
	500 W	500 W	700 W	1000 W
Motor size				
Power Supply (V)	12	12	12	12
Maximum Pull (kg)	630	630	700	900
Working load (kg)	70	70	80	120
Amps at Working Load (A)	75	75	80	120
Line Speed at Working Load (m/min)	23	23	25	18
Max Line Speed (m/min)	26	26	28	30
Net Weight Low Profile (kg)	10	11	13	16
Net Weight with Drum (kg)	11	12	14	17
Circuit Breaker (available separately)	187331	187331	187332	187333
Control Box	Included in package			

X1			Code	Code	Code	Code
With Drum	6 mm, ISO 4565 / DIN 766	10-12 mm, 3-strand	409558	472881	473207	*
	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	*	187270	473003	600092
Low Profile	6 mm, ISO 4565 / DIN 766	10-12 mm, 3-strand	409557	472880	473217	*
	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	*	187269	473002	600093

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.



Finger



Compatible Gypsies



Code	Gypsy Size
630970	6 mm, ISO 4565 / DIN 766
630980	7 mm, ISO 4565
630999	8 mm, ISO 4565 / DIN 766



Lofrans' designed marine aluminum gearbox



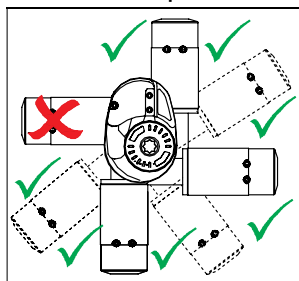
IP67 rated heavy duty electric motor

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



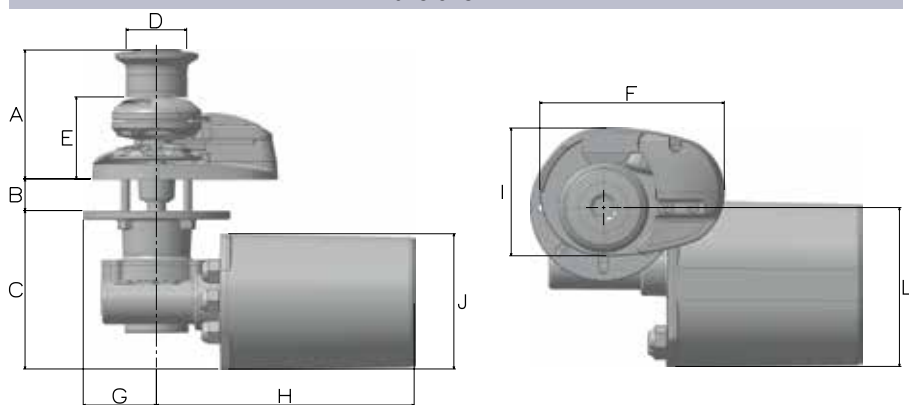
Installation positions



Standard Equipment:

- Dual direction solenoid pack
- Handle
- Gypsy for chain
- CD / Instruction manual

Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	L
500W	130	10-30	111	Ø60	84	183	56	236	127	105	132
700W	130	10-30	111	Ø60	84	183	56	236	127	105	132
1000W	130	10-30	150	Ø60	84	183	62	256	127	134	165

*Low Profile height dimensions.

KEEP YOUR LOFRANS' AS GOOD AS NEW!



Maintenance Kit for X1

Code....72037

Please refer to accessories section for control and installation products (see pages 49-56)



X2 - Vertical Windlass

700W / 1000W / 1500W



Main features

- Luxury chrome bronze base and drum
- Special watertight stainless steel ball bearing in the base
- With drum or Low profile
- Independent Gypsy and drum operation
- Rope and chain combination Gypsy
- Manual chain release
- Manual override available for chromed bronze models only
- Rope chain management by the spring loaded arm
- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

With Drum

Construction	Aluminium						Chromed bronze					
	700W		1000 W		1500 W		700W		1000 W		1500 W	
Motor size	12	24	12	24	12	24	12	24	12	24	12	24
Power Supply (V)	12	24	12	24	12	24	12	24	12	24	12	24
Maximum Pull (kg)	750	750	1000	1060	1200	1250	850	850	1000	1060	1200	1250
Working load (kg)	80	80	165	165	190	190	80	80	165	165	190	190
Amps at Working Load (A)	90	45	135	70	150	75	90	45	135	70	150	75
Line Speed at Working Load (m/min)	26	26	20	23	17	19	26	26	20	23	17	19
Max Line Speed (m/min)	35	35	40	40	40	40	35	35	40	40	40	40
Net Weight Low Profile (kg)	18	18	19	23	24	24	21	21	23	23	24	24
Net Weight with Drum (kg)	19	19	20	24	25	25	23	23	24	24	25	25
Circuit Breaker (available separately)	187332	187331	187333	187332	187333	187332	187332	187331	187333	187332	187333	187332
Control Box	Included in package											

X2			Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code
With Drum	6 mm, ISO 4565 / DIN 766	-	600044	*	600049	*	*	*	600046	601022	600997	*	*	*
	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	472735	*	472751	472750	600057	600061	472862	601024	473212	473255	*	*
	10 mm, DIN 766	-	*	*	*	*	*	601068	*	*	602096	473227	187274	187276
	10 mm, ISO 4565	-	*	*	600053	*	600056	600060	*	*	472863	*	601013	601044
Low Profile	6 mm, ISO 4565 / DIN 766	-	600045	602111	600050	*	*	*	600047	601016	600989	*	*	*
	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	472558	*	472557	*	*	601065	472861	601018	473213	600054	*	*
	10 mm, DIN 766	-	*	*	*	*	601055	601067	*	*	602097	473226	187273	601041
	10 mm, ISO 4565	-	*	*	57450	*	601054	601066	*	*	472864	478642	601008	602529

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

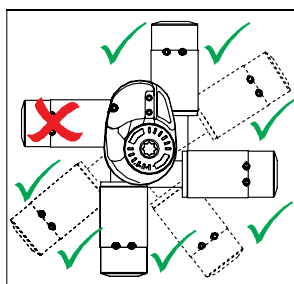


Low profile

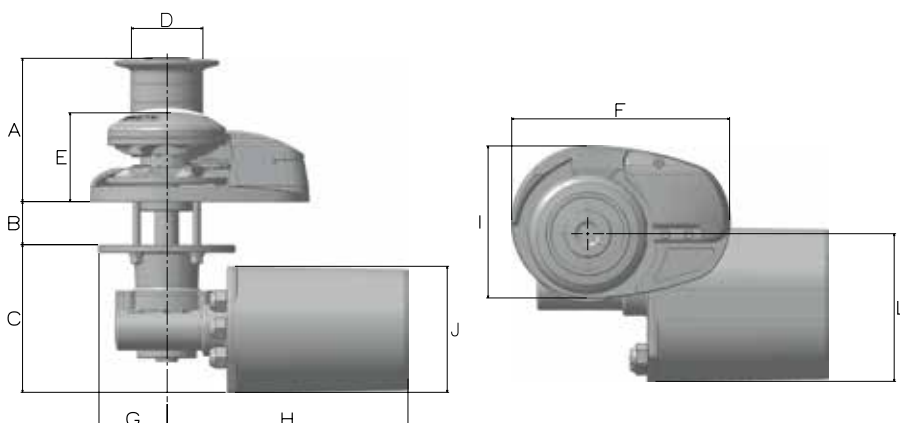
Standard Equipment:

- Dual direction solenoid pack
- Handle
- Gypsy for chain
- CD / Instruction manual

Installation positions



Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	L
700W	153	25-40	155	Ø76	95	232	73	260	162	134	165
1000W	153	25-40	155	Ø76	95	232	73	260	162	134	165
1500W	153	25-40	155	Ø76	95	232	73	260	162	134	165

*Low Profile height dimensions.

Compatible Gypsies



Code	Gypsy Size
630953	6 mm, ISO 4565 / DIN 766
630949	8 mm, ISO 4565 / DIN 766
630951	10mm, ISO 4565
630955	10mm, / DIN 766

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



KEEP YOUR LOFRANS' AS GOOD AS NEW!



Maintenance Kit for X2

Code....72038

Maintenance Kit for X2 ALU

Code....72039



Please refer to accessories section for control and installation products (see pages 49-56)

PROJECT 1000





Main features

- Luxury chrome bronze base and drum
- Special watertight stainless steel ball bearing in the base
- With drum or Low profile
- Independent Gypsy and drum operation
- Rope and chain combination Gypsy
- Manual chain release
- Manual override
- Rope chain management by the spring loaded arm
- Chain counter magnet pre-installed as standard
- Heavy duty two speed built in solenoids IP67 rated electric motor
- Anodised marine aluminium gearbox

With Drum

Construction	Chromed bronze	
	1000 W	
Motor size		
Power Supply (V)	12	24
Maximum Pull (kg)	1000	1060
Working load (kg)	165	165
Amps at Working Load (A)	135	70
Line Speed at Working Load (m/min)	22	25
Max Line Speed (m/min)	50	50
Net Weight Low Profile (kg)	22	22
Net Weight with Drum (kg)	24	24
Circuit Breaker (available separately)	187333	187332
Control Box	Build in	

PROJECT 1000			Code	Code
With Drum	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	220159	478645
	10 mm, DIN 766	-	602092	471023
	10 mm, ISO 4565	-	428419	*
Low Profile	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	220153	*
	10 mm, DIN 766	-	602093	473280
	10 mm, ISO 4565	-	471022	*

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.



- Vertical Windlass

1000W

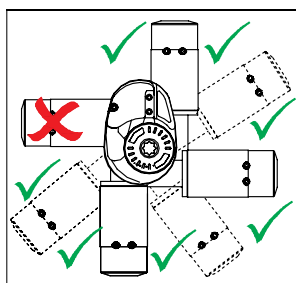


Low profile

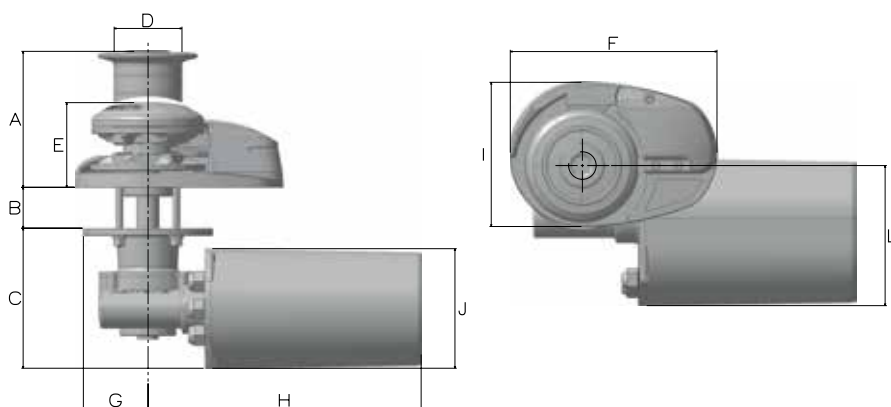
Standard Equipment:

- Handle
- Gypsy for chain
- CD / Instruction manual

Installation positions



Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	L
1000W	153	25-40	155	Ø76	95	232	73	306	162	134	165

*Low Profile height dimensions.

Compatible Gypsies



Code	Gypsy Size
630953	6 mm, ISO 4565 / DIN 766
630949	8 mm, ISO 4565 / DIN 766
630951	10mm, ISO 4565
630955	10mm, / DIN 766

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



KEEP YOUR LOFRANS' AS GOOD AS NEW!



Maintenance Kit for Project 1000

Code....72038

Please refer to accessories section for control and installation products (see pages 49-56)



X3 - Vertical Windlass

1500W / 1700W



With Drum

Main features

- Luxury chrome bronze base and drum
- With drum or Low profile
- Independent Gypsy and drum operation
- Rope and chain combination Gypsy
- Manual chain release
- Manual override available for chromed bronze models only
- Rope chain management by the spring loaded arm
- Chain counter magnet pre-installed as standard
- IP66 rated heavy duty electric motor
- Anodised marine aluminium gearbox

Construction	Aluminium		Chromed bronze	
	1700W	1500W	1700 W	
Motor size				
Power Supply (V)	12	12	12	24
Maximum Pull (kg)	1600	1200	1600	1695
Working load (kg)	270	190	270	270
Amps at Working Load (A)	180	150	180	90
Line Speed at Working Load (m/min)	14	17	14	15
Max Line Speed (m/min)	32	40	32	32
Net Weight Low Profile (kg)	32	32	35	35
Net Weight with Drum (kg)	35	35	38	38
Circuit Breaker (available separately)	187334	187333	187334	187332
Control Box	Included in package			

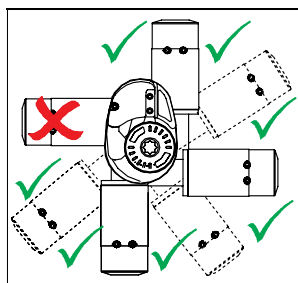
X3			Code	Code	Code	Code
With Drum	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	57451	601079	600064	600068
	10 mm, DIN 766	16 mm, 3-strand	57452	*	602101	602103
	10 mm, ISO 4565	16 mm, 3-strand	*	472865	473208	473252
	12 mm, ISO 4565 / 13mm, DIN 766	18 mm, 3-strand	57453	601084	473004	473005
Low Profile	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	601128	601070	600065	*
	10 mm, DIN 766	16 mm, 3-strand	*	*	602102	602104
	10 mm, ISO 4565	16 mm, 3-strand	601129	472866	473209	473256
	12 mm, ISO 4565 / 13mm, DIN 766	18 mm, 3-strand	*	601075	472842	473006

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.



Low profile

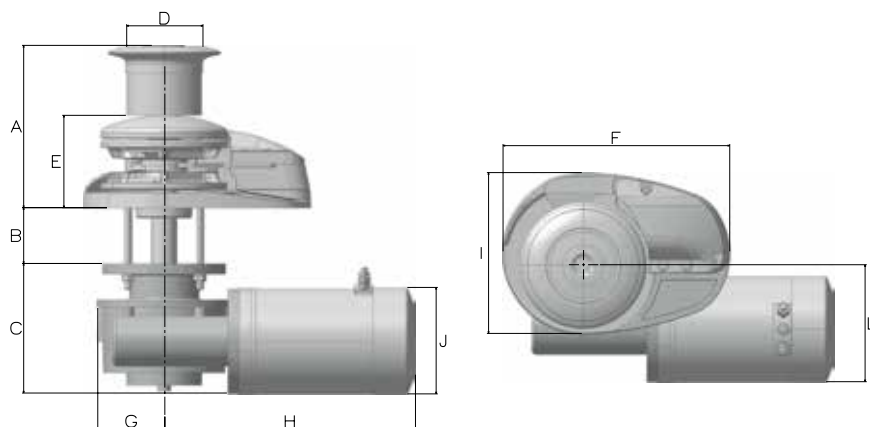
Installation positions



Standard Equipment:

- Dual direction solenoid pack
- Handle
- Gypsy for chain
- CD / Instruction manual

Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	L
1500W	195	50-70	155	Ø92	110	270	80	255	192	134	145
1700W	195	50-70	155	Ø92	110	270	80	300	192	Ø127	140

*Low Profile height dimensions.

Compatible Gypsies



Code	Gypsy Size
630957	8 mm, ISO 4565 / DIN 766
630966	10mm, / DIN 766
630959	10mm, ISO 4565
630961	12mm, ISO 4565

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



- Chain Stopper



72191
LOFRANS' Chain stopper, stainless steel, for normal chain 12/13/14mm



Maintenance Kit
for X3, X3ALU

Code....72040

Please refer to accessories section for control and installation products (see pages 49-56)

PROJECT 1500





Main features

- Luxury chrome bronze base and drum
- With drum or Low profile
- Independent Gypsy and drum operation
- Rope and chain combination Gypsy
- Manual chain release
- Manual override
- Rope chain management by the spring loaded arm
- Chain counter magnet pre-installed as standard
- Heavy duty two speed built in solenoids IP66 rated electric motor
- Anodised marine aluminium gearbox

With Drum

Construction	Chromed bronze	
Motor size	1500 W	
Power Supply (V)	12	24
Maximum Pull (kg)	1600	1695
Working load (kg)	270	270
Amps at Working Load (A)	180	90
Line Speed at Working Load (m/min)	14	15
Max Line Speed (m/min)	32	32
Net Weight Low Profile (kg)	36	36
Net Weight with Drum (kg)	39	39
Circuit Breaker (available separately)	187333	187332
Control Box	Build in	

PROJECT 1500			Code	Code
With Drum	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	187312	600593
	10 mm, DIN 766	16 mm, 3-strand	602094	602091
	10 mm, ISO 4565	16 mm, 3-strand	472400	187314
	12 mm, ISO 4565 / 13mm, DIN 766	18 mm, 3-strand	600588	187316
Low Profile	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	187311	600591
	10 mm, DIN 766	16 mm, 3-strand	602095	602090
	10 mm, ISO 4565	16 mm, 3-strand	472401	187313
	12 mm, ISO 4565 / 13mm, DIN 766	18 mm, 3-strand	474003	187315

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

- Vertical Windlass

1000W

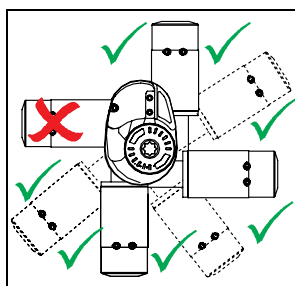


Low profile

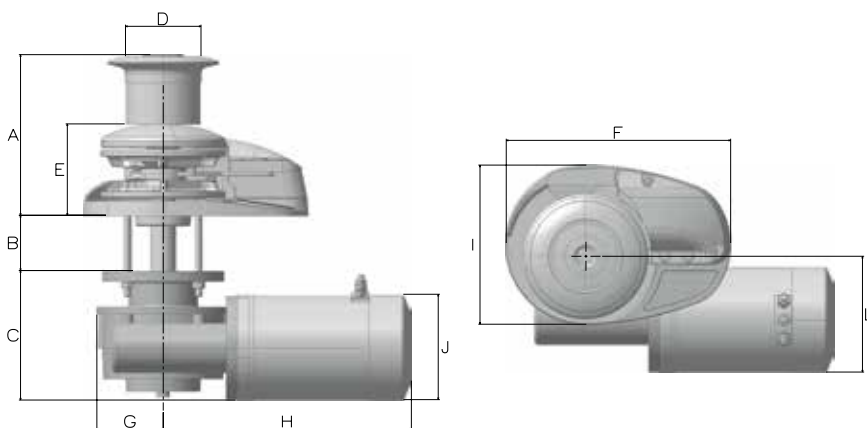
Standard Equipment:

- Handle
- Gypsy for chain
- CD / Instruction manual

Installation positions



Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	L
1500W	195	50-70	155	Ø92	110	270	80	365	192	Ø127	145

*Low Profile height dimensions.

Compatible Gypsies



Code	Gypsy Size
630957	8 mm, ISO 4565 / DIN 766
630966	10mm, / DIN 766
630959	10mm, ISO 4565
630961	12mm, ISO 4565

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



- Chain Stopper



72191
LOFRANS' Chain stopper, stainless steel, for normal chain 12/13/14mm



Maintenance Kit
for Project 1500

Code...72040

Please refer to accessories section for control and installation products (see pages 49-56)



X3.5 - Vertical Windlass

1700W / 2000W / 2300W / 2700W




With Drum

Main features

- Luxury stainless steel base and drum
- With drum or Low profile
- Independent Gypsy and drum operation
- Manual chain release
- Chain counter magnet pre-installed as standard
- Anodised marine aluminium gearbox
- Heavy duty electric motor

Construction	316 L Stainless Steel			
	1700 W		2300 W	2700W
Motor size				
Power Supply (V)	12	24	24	24
Maximum Pull (kg)	1700	1700	1900	2000
Working load (kg)	270	270	330	400
Amps at Working Load (A)	185	95	180	210
Line Speed at Working Load (m/min)	15	16	16	16
Max Line Speed (m/min)	37	37	35	35
Net Weight Low Profile (kg)	50	50	60	60
Net Weight with Drum (kg)	48	48	58	58
Circuit Breaker (available separately)	187334	187332	187333	187333
Control Box	Included in package			

X3,5		Code	Code	Code	Code
With Drum	10 mm, ISO 4565	600084	600085	*	*
	12 mm, ISO 4565 / 13mm, DIN 766	600086	600087	600088	*
	14 mm	*	*	*	600090
Low Profile	12 mm, ISO 4565 / 13mm, DIN 766	635984	635985	635986	*



*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

new

3
Years Limited
Warranty

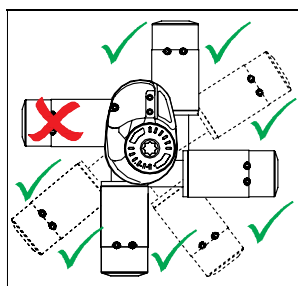


Chain pipe



Low profile

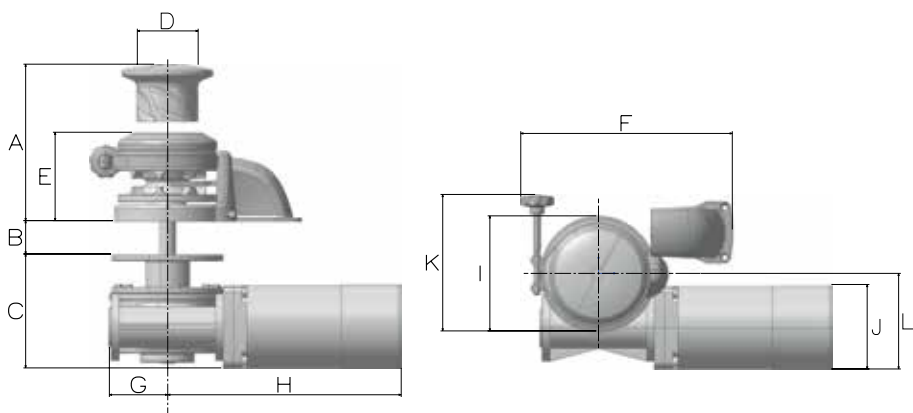
Installation positions



Standard Equipment:

- Handle
- Gypsy for chain
- CD / Instruction manual

Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	K	L
1700W	281	40-60	208	Ø110	160	380	80	300	Ø210	Ø127	236	140
2300W	281	40-60	208	Ø110	160	380	105	420	Ø210	Ø150	236	175
2700W	281	40-60	208	Ø110	160	380	105	420	Ø210	Ø150	236	175

*Low Profile height dimensions.

Compatible Gypsies



Code	Gypsy Size
630996	8 mm, ISO 4565 / DIN 766
631022	10mm, ISO 4565
631132	10mm,
631045	13mm / DIN 766
631059	14mm
631033	1/2" BBB
631036	1/2" G40

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



- Chain Stopper



72191
LOFRANS' Chain stopper, stainless steel, for normal chain 12/13/14mm

Please refer to accessories section for control and installation products (see pages 49-56)

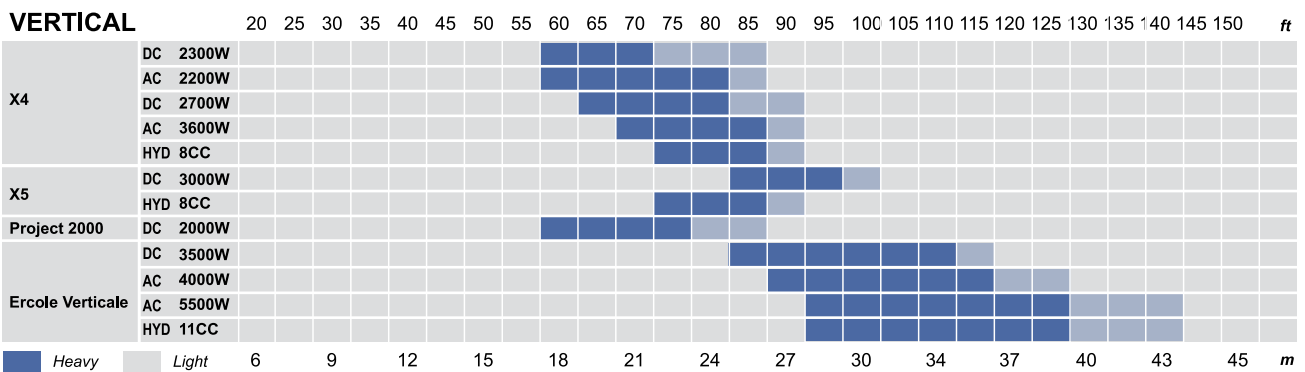


X4 to Ercole Vertical

This part of the range of vertical anchor windlasses has been designed to meet requirements of vessels over 55 feet of length. These vessels require well-designed professional equipment, with a high mechanical performance and a high level of reliability.

The windlasses are constructed using chromed bronze for the X4 and AISI 316L stainless steel for the rest of the models in this part of the range. With a purpose-built gearbox design, giving them top performance in terms of maximum pull and speed, these models are a reference point in their category.

Lofrans' has achieved an excellent reputation for these specific anchor windlasses, which are installed on the most prestigious yachts throughout the world.



DC, AC OR HYDRAULIC?

The windlass can be supplied in three different ways of motorization: direct current, alternate current and hydraulic.

- D.C. motorization is the most popular for reliability. The maintenance is very limited and this kind of electric motor is used for vessels up to 90 feet of length.
- A.C. motorization is the choice for boats from 90 up to 120 feet of length which have generators on board. A.C. motors offer good torque; they need a simple installation and limited maintenance.
- Hydraulic motorization gives the advantage of supply a constant torque while the load changes. They are very popular on boats of over 120 feet length. They need a specific installation.

MAX PULL AND WORKING LOAD

Max pull is the maximum pull that the windlass is able to supply for a few seconds.

Working Load is a load which simulates the operating conditions. This load is the reference for ampere drawing and the speed data indicated in the catalogue.

PROPER WINDLASS SELECTION

The steps to select a vertical or horizontal windlass are:

- Select the proper model checking the chart - windlass model length of the boat.
- Calculate the ground tackle which is made by anchor weight, total chain and rope weight on board.
- Ground tackle not to exceed the working load with a tolerance + 10%.

LOFRANS' Chain stopper, stainless steel, for normal chain 12/ 13/ 14mm



Code....72191

LOFRANS' Chain roller-stopper with tensioner, stainless steel, for chain 14/ 16mm



for studlink chain 14/ 16mm

Code....72192

for normal chain 14/ 16mm

Code....72193

Model	72191	72192	72193
X1 - Vertical Windlass			
X2 & Project 1000 - Vertical Windlass			
X3 & Project 1500 - Vertical Windlass	√		
X3.5 - Vertical Windlass	√		
X4 & Project 2000 - Vertical Windlass	√		
X5 - Vertical Windlass	√		
Ercole Vertical - Vertical Windlass	√	√	√

* The chain line need to be parallel to the chain stopper

X4 - Vertical Windlass

2300W / 2700W / 3000W / Hydraulic - 8cc

With Drum




Main features

- Luxury chrome bronze base and drum
- With drum or Low profile
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Chain counter magnet pre-installed as standard
- Anodised marine aluminium gearbox
- Heavy duty electric motor

Standard Equipment:

- Dual direction solenoid pack
- Handle
- Gypsy for chain
- CD / Instruction manual

Construction	Chromed bronze		
Motor size	2300 W	2700W	Hydraulic - 8cc
Power Supply (V)	24	24	-
Maximum Pull (kg)	2100	2500	2500
Working load (kg)	500	530	650
Amps at Working Load (A)	160	170	-
Line Speed at Working Load (m/min)	13	13	16
Max Line Speed (m/min)	25	28	16
Net Weight Low Profile (kg)	72	75	55
Net Weight with Drum (kg)	82	85	60
Hydraulic Pressure (bar)	-	-	200
Hydraulic Flow (lt/min)	-	-	32
Circuit Breaker (available separately)	187333	-	-
Control Box	Included in package		-

X4		Type**	Code	Code	Code
With Drum	10 mm, ISO 4565	cw	600073	*	*
	12 mm, ISO 4565 / 13mm, DIN 766	cw	473007	600075	602361
	14 mm	cw	*	472849	602362
	12 mm, ISO 4565 / 13mm, DIN 766	ccw	600074	*	602363
	14 mm	ccw	*	*	602364
Low Profile	12 mm, ISO 4565 / 13mm, DIN 766	ccw	601142	601159	*

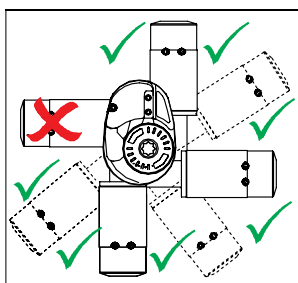
*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

** cw: the windlass pulls clockwise ccw: the windlass pulls counter clockwise



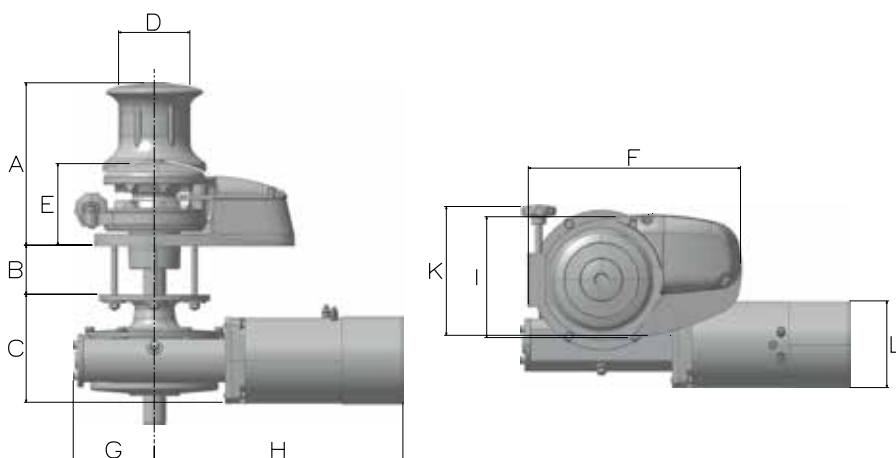
Low profile

Installation positions



72191
LOFRANS' Chain stopper, stainless steel, for normal chain 12/13/14mm

Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	K	L
2300W	285	60-130	200	Ø125	150	380	140	449	220	Ø152	240	190
2700W	285	60-130	200	Ø125	150	380	140	449	220	Ø152	240	190
3000W	285	60-130	200	Ø125	150	380	140	449	220	Ø152	240	190

* Low Profile height dimensions.

** For Hydraulic version dimensions please see page 61

Compatible Gypsies



Code	Gypsy Size
630996	8 mm, ISO 4565 / DIN 766
631022	10mm, ISO 4565
631132	10mm, / DIN 766
631031	12mm, ISO 4565 / 13mm, DIN 766
631059	14mm
631033	1/2" BBB
631036	1/2" G40 HT

Kits

Code	Description
474013	KIT A - Seals
474012	KIT B - Screws
474011	KIT C - Pins
474010	KIT D - Circlips

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



Please refer to accessories section for control and installation products (see pages 49-56)

PROJECT 2000




With Drum

Main features

- Luxury chrome bronze base and drum
- Special watertight stainless steel ball bearing in the base
- With drum or Low profile
- Independent Gypsy and drum operation
- Manual chain release
- Manual override available for chromed bronze models only
- Chain counter magnet pre-installed as standard
- Anodised marine aluminium gearbox
- Heavy duty two speed built in solenoids electric motor

Construction	Chromed bronze
Motor size	2000 W
Power Supply (V)	24
Maximum Pull (kg)	2100
Working load (kg)	500
Amps at Working Load (A)	160
Line Speed at Working Load (m/min)	13
Max Line Speed (m/min)	25
Net Weight Low Profile (kg)	76
Net Weight with Drum (kg)	86
Circuit Breaker	187333
Control Box	Build in

PROJECT 2000		Code
With Drum	12 mm, ISO 4565 / 13mm, DIN 766	472749
	14 mm	473010
Low Profile	10 mm, DIN 766	600599
	10 mm, ISO 4565	600598
	12 mm, ISO 4565 / 13mm, DIN 766	472748

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

- Vertical Windlass

2000W

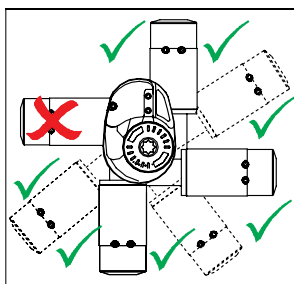


Low profile

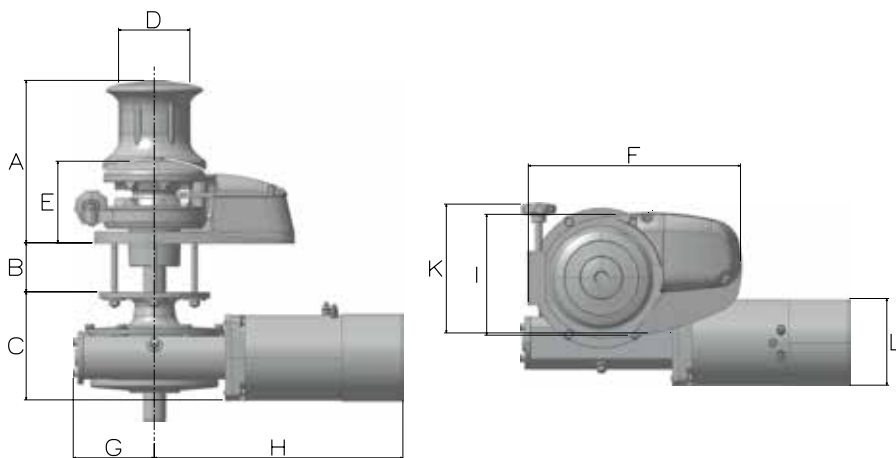
Standard Equipment:

- Handle
- Gypsy for chain
- CD / Instruction manual

Installation positions



Dimensions in mm



Model	A	B	C	D	E*	F	G	H	I	J	K	L
2000W	285	60-130	200	Ø125	150	380	140	499	220	Ø152	240	190

*Low Profile height dimensions.

Compatible Gypsies



Code	Gypsy Size
630996	8 mm, ISO 4565 / DIN 766
631022	10mm, ISO 4565
631132	10mm, / DIN 766
631031	12mm, ISO 4565 / 13mm, DIN 766
631059	14mm
631033	1/2" BBB
631036	1/2" G40 HT

Kits

Code	Description
474013	KIT A - Seals
474012	KIT B - Screws
474011	KIT C - Pins
474010	KIT D - Circlips

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



- Chain Stopper



72191
LOFRANS' Chain stopper, stainless steel, for normal chain 12/13/14mm

Please refer to accessories section for control and installation products (see pages 49-56)



X5 - Vertical Windlass


3000W / Hydraulic



Main features

- Luxury stainless steel base and drum
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Chain counter magnet pre-installed as standard
- Anodised marine aluminium gearbox
- Heavy duty electric motor

Construction	316 L Stainless Steel	
	3000 W	Hydraulic - 8cc
Motor size	3000 W	Hydraulic - 8cc
Power Supply (V)	24	-
Maximum Pull (kg)	2700	2700
Working load (kg)	550	650
Amps at Working Load (A)	210	-
Line Speed at Working Load (m/min)	17	21
Max Line Speed (m/min)	33	21
Net Weight with Drum (kg)	100	85
Hydraulic Pressure (bar)	-	200
Hydraulic Flow (lt/min)	-	32
Control Box	Included in package	

X5		Code	Code
With Drum	12 mm, ISO 4565 / 13mm, DIN 766	600089	602389
	14 mm	600091	602390

**Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.*



Chain pipe

Chain Stopper



72191
LOFRANS' Chain stopper, stainless steel, for normal chain 12/13/14mm

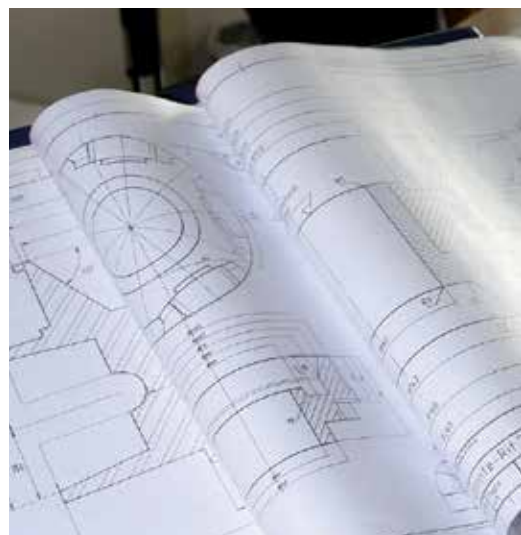
Standard Equipment:

- Dual direction solenoid pack
- Handle
- Gypsy for chain
- CD / Instruction manual

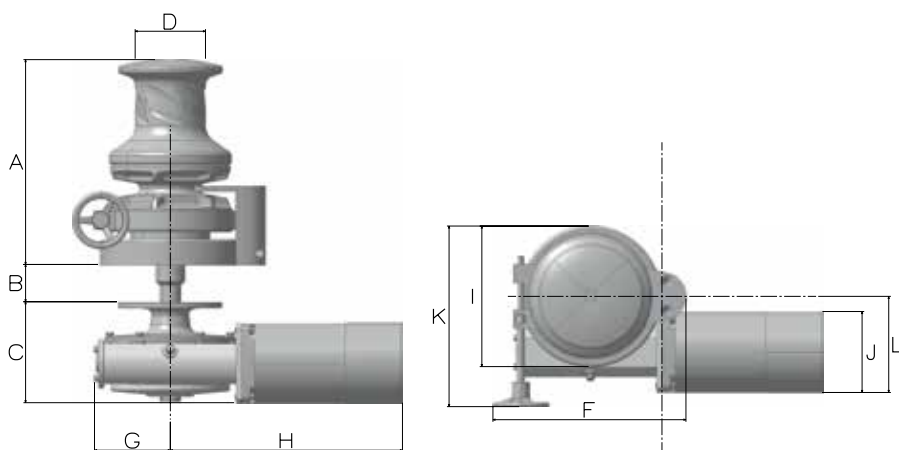
Compatible Gypsies



Code	Gypsy Size
631039	12mm, ISO 4565 / 13mm, DIN 766
631065	14mm



Dimensions in mm



Model	A	B	C	D	F	G	H	I	J	K	L
3000W	385	60-90	200	Ø132	365	152	449	264	Ø152	339	190

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



Please refer to accessories section for control and installation products (see pages 49-56)

* For Hydraulic version dimensions please see page 61

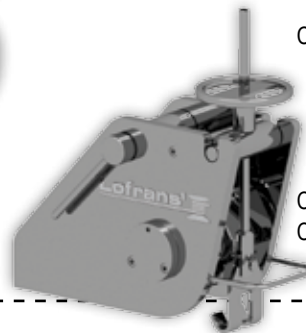
ERCOLE VERTICAL

3500W / 4000W / 5500W / Hydraulic - 11cc



Chain pipe or roller

Chain stopper



Code...72191



Code...72192
Code...72193

See pages 49

Construction	316 L Stainless Steel			
	3500 W	4000 W	5500 W	Hydraulic - 11cc
Motor size	3500 W	4000 W	5500 W	Hydraulic - 11cc
Power Supply (V)	24	230-400	230-400	-
Maximum Pull (kg)	4500	4500	5000	5000
Working load (kg)	1000	1000	1200	1200
Amps at Working Load (A)	240	-	-	-
Line Speed at Working Load (m/min)	12	13	13	14
Max Line Speed (m/min)	20	13	13	14
Net Weight with Drum (kg)	180	180	200	165
Hydraulic Pressure (bar)	-	-	-	200
Hydraulic Flow (lt/min)	-	-	-	40
Control Box	Included in package	Switchboard available separately		-

ERCOLE VERTICALE		Type**	Code	Code	Code	Code
With Drum	14 mm	cw	600080	600082	*	602523
	16 mm	cw	*	*	600409	602525
	14 mm	ccw	600081	600083	*	602524
	16 mm	ccw	*	*	600408	602526

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

** cw: the windlass pulls clockwise ccw: the windlass pulls counter clockwise

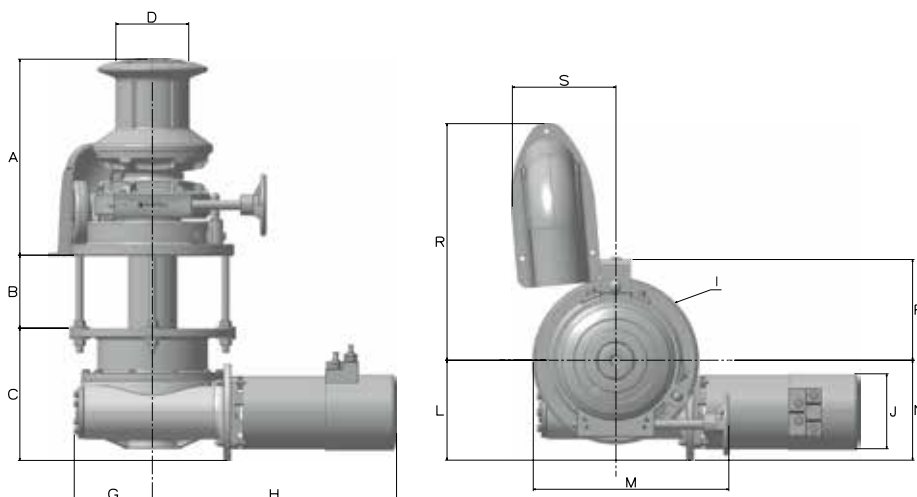
Main features are:

- Under-deck compact dimensions.
 - Construction in mirror polished AISI 316L stainless steel.
 - High torque latest generation electric motor able to provide the power needed in all marine conditions.
 - Band brake to assist in chain control, thanks to an easy-to-manage large hand-wheel.
 - Special high-grip drum with independent rotation from the Gypsy, for warping function.
 - Independent Gypsy and drum operation
 - Manual chain release
 - Manual override to recover the chain and anchor in case of electrical failure.
 - Internal ratchet to prevent chain jams into the chain cocker which could damage the deck.
 - Chain counter support integrated by the sensor inserted in the base and the magnet in the Gypsy.
 - Available also in counter clockwise rotation.
 - High efficiency Lofrans planetary - worm screw gearbox made in anodized black aluminium with gears made in high mechanical strength material.
 - Heavy duty electric motor
 - Power: DC, AC and hydraulic
 - Available in custom versions.
- Please contact us for additional detailed documentation.

Standard Equipment:

- Dual direction solenoid pack (only for 24V version)
- Handle
- Gypsy for chain
- CD / Instruction manual

Dimensions in mm



Model	A	B	C	D	G	H	I	J	L	M	N	P	R	S
3500W														
4000W	400	150	272	150	160	502	340	Ø158	205	405	220	205	min 490 - max 600	min 200 - max 230
5500W														

* For Hydraulic version dimensions please see page 61

Compatible Gypsies



Code	Gypsy Size
631019	10mm, ISO 4565
631039	12mm, ISO 4565 / 13mm, DIN 766
631065	14mm
631085	13mm. / DIN 764
631082	16mm
631088	16mm, / DIN 766
631101	18mm
631095	18mm, / DIN 766
631113	20mm
630989	14,5mm, UNI4417
631068	14 STUD LINK
631092	16 STUD LINK
631098	17,5 STUD LINK
631053	1/2" STUD LINK
631056	13 ITALMET

Kits

Code	Description
418428	KIT A - Seals
418475	KIT B - Screws
418499	KIT C - Pins
418556	KIT D - Circlips

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



Please refer to accessories section for control and installation products (see pages 49-56)

HORIZONTAL

WINDLASSES



STANDARD EQUIPMENT:

- Dual direction solenoid pack
- Handle
- Gypsy for chain
- CD / Instruction manual

The range of horizontal windlasses is suitable for boats from 18 up to 150 feet offering the best in performance and functionality, when there is adequate deck space or if the chain locker has limited size or accessibility. They are simple, reliable, with their classic and timeless style making them perfect for many vessels, especially for the charter business.

Material and finish, marine grade aluminium alloy: Our horizontal anchor windlasses are produced using marine grade aluminium alloy. The body is polished and anodised. Most of the components are made by hot forging. The horizontal models are available as standard in anodized aluminium. Some models are available with a painted white polyester coating.

High performance motors: The horizontal windlasses' electric motors have been designed to supply high torque in all working conditions. They are available in 12 or 24 Volt DC current and 230-440 V three phase AC current. Most of the motors have an IP66 rating with a galvanized body painted with a polyester coating. Our electric motors are specified to provide the necessary power for long run time. They are also designed to operate at an increased speed and so reducing operating time. Titan, Ercole and Super Ercole are also available in hydraulic motor versions.

Lofrans gearboxes: Most of our horizontal windlasses use a Lofrans-made high efficiency worm screw gearbox. It is non-reversible with the gears produced with specific material able to withstand high-load strain. All gearboxes are oil lubricated in order to minimize working noise. The models for superior boats use a special Lofrans planetary - worm screw gearbox which allows them to have a high efficiency to dimension ratio.

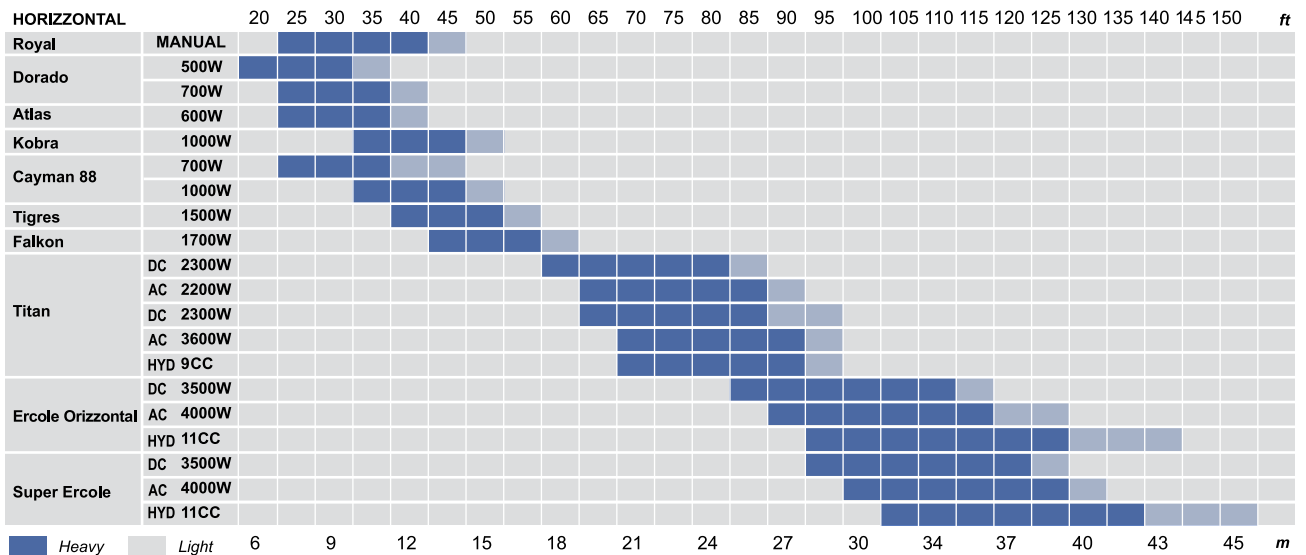
Manual override: Most of the Lofrans horizontal windlasses are supplied with manual override which makes the windlass capable of chain recovery in the event of electrical failure. The manual override has the secondary function to provide a safety mechanism so that chain jams do not damage the deck.

Independent drum from the Gypsy: Horizontal models give the choice of utilizing the drum for warping operations independently from the Gypsy.

Automatic free fall: Models KOBRA and CAYMAN 88 can optionally have a device installed named AUTOMATIC FREE FALL. This device allows disengaging the clutch automatically by pushing the "Down" button of the remote control unit. Disengaging the clutch, the Gypsy rotates freely and the weight of the anchor releases the chain into the water.

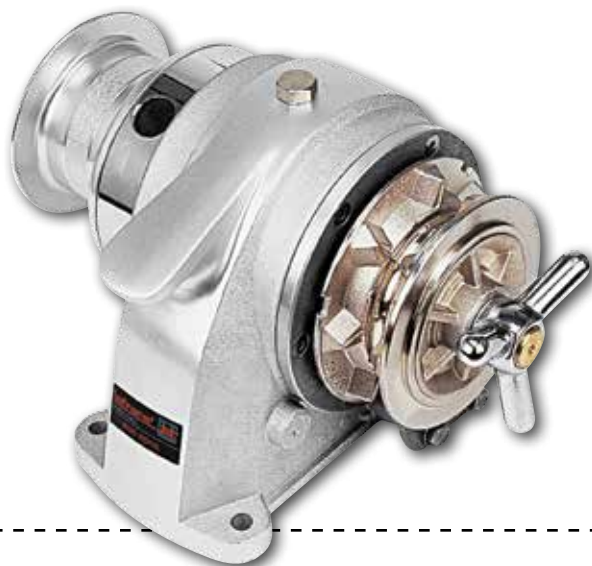
Rope and chain management: Models DORADO and ATLAS are able to manage rope and chain by use of a special spring loaded tension arm called a finger, which pushes the rope deeply inside the Gypsy teeth.

CUSTOM PRODUCT: Models TITAN, ERCOLE and SUPER ERCOLE are available in six versions in order to meet all customer requirements.



ROYAL - Horizontal Windlass


Manual



Main features

- Marine alluminium anodised body
- Independent Gypsy and drum operation
- Manual chain release
- Manual override

Construction	Anodised Aluminium
Motor size	MANUAL
Power Supply (V)	-
Maximum Pull (kg)	400
Working load (kg)	70
Amps at Working Load (A)	-
Line Speed at Working Load (m/min)	-
Max Line Speed (m/min)	-
Net Weight with Drum (kg)	10

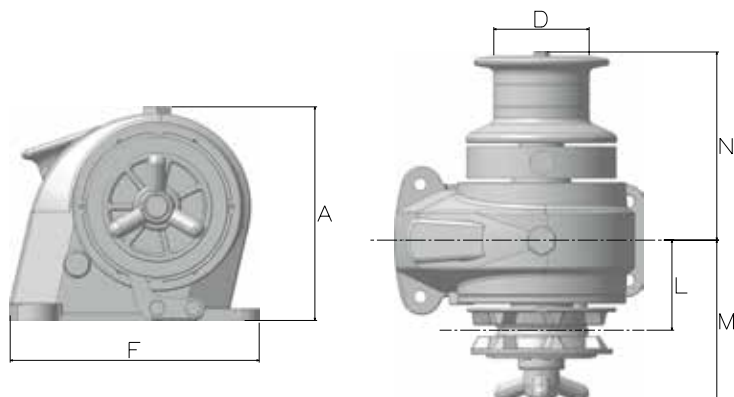
ROYAL		Code
With Drum	6 mm, ISO 4565 / DIN 766	187323
	7 mm, ISO 4565	600625
	8 mm, ISO 4565 / DIN 766	404725
	10 mm, DIN 766	600079
	10 mm, ISO 4565	220002

Compatible Gypsies



Code	Gypsy Size
630968	6 mm, ISO 4565 / DIN 766
630978	7mm, ISO 4565
630994	8 mm, ISO 4565 / DIN 766
631118	10mm, DIN 766
631011	10mm, ISO 4565
631077	5/16 HT
631120	3/8 BBB
631122	3/8 PC

Dimensions in mm



Model	A	D	F	L	M	N
Manual	192	Ø85	222	80	145	167



Maintenance Kit for ROYAL

Code....72046

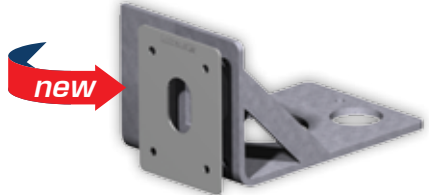
Please refer to accessories section for control and installation products (see pages 49-56)

DORADO - Horizontal Windlass

500W / 700W



Stern windlass support, SS316, with roller & flange



Code...72204

Main features

- Marine alluminium anodised body
- Manual chain release
- Rope chain management by the spring load arm
- Heavy duty rated IP66 electric motor
- Automatic free fall available as option

Compatible Gypsies



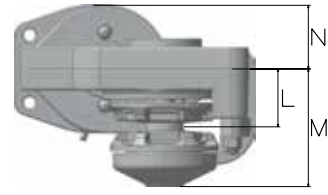
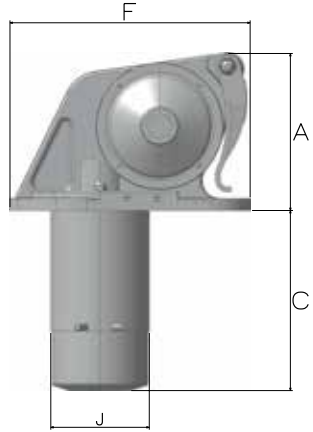
Code	Gypsy Size
630974	6 mm, ISO 4565 / DIN 766
630984	7mm, ISO 4565
631003	8 mm, ISO 4565 / DIN 766

Construction	Anodised Aluminium	
	500 W	700 W
Motor size	500 W	700 W
Power Supply (V)	12	12
Maximum Pull (kg)	600	650
Working load (kg)	70	80
Amps at Working Load (A)	65	80
Line Speed at Working Load (m/min)	18	20
Max Line Speed (m/min)	24	25
Net Weight Low Profile (kg)	10	11
Circuit Breaker (available separately)	187331	187332
Control Box	Included in package	

DORADO			Type	Code	Code
Low Profile	6 mm, ISO 4565	10-12 mm, 3-strand	Port	409568	600048
	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	Port	*	409569

**Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table*

Dimensions in mm



Model	A	C	F	J	L	M	N
500W	130	150	200	Ø82	48	98	53
700W	130	150	200	Ø94	48	98	53

Optional Accessories

- Foot Switch
 - Control Switch
 - Circuit Breaker
 - Chain Counter
 - Hand Held Control
 - Radio Control
-



Maintenance Kit for DORADO
Code....72047

Please refer to accessories section for control and installation products (see pages 49-56)

ATLAS - Horizontal Windlass

600W



Low profile



White Polyester Coating

Main features

- Marine alluminium anodised body
- Available in white polyester coating
- Manual chain release
- Rope chain management by the spring load arm
- Chain counter magnet pre-setting as standard
- Heavy duty rated IP66 electric motor

Compatible Gypsies



Code	Gypsy Size
631005	6 mm, ISO 4565 / DIN 766
631007	7 mm, ISO 4565
631009	8 mm, ISO 4565 / DIN 766

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control

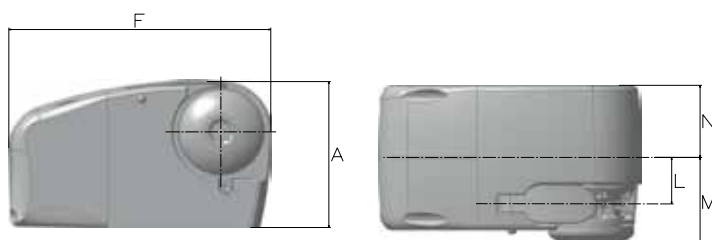


Construction	Anodised Aluminium
Motor size	600 W
Power Supply (V)	12
Maximum Pull (kg)	575
Working load (kg)	80
Amps at Working Load (A)	90
Line Speed at Working Load (m/min)	16
Max Line Speed (m/min)	28
Net Weight Low Profile (kg)	11
Circuit Breaker (available separately)	187332
Control Box	Built in

ATLAS			Code
Low Profile	6 mm, ISO 4565	10-12 mm, 3-strand	600023
	7 mm, ISO 4565	12 mm, 3-strand	600024
	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	600025

*Non-standard configuration optional gypsies can be supplied separately.
Please refer to compatible gypsies table

Dimensions in mm



Model	A	F	L	M	N
600W	153	272	50	93	75



Maintenance Kit for ATLAS

Code....72045

Please refer to accessories section for control and installation products (see pages 49-56)

CAYMAN - Horizontal Windlass

700W / 1000W



Main features (CAYMAN & KOBRA)

- Marine alluminium anodised body
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Heavy duty rated IP66 electric motor
- Automatic free fall available as option

Construction	Anodised Aluminium		
	700 W	1000 W	1000 W
Motor size			
Power Supply (V)	12	12	24
Maximum Pull (kg)	1000	1250	1325
Working load (kg)	100	170	170
Amps at Working Load (A)	110	150	80
Line Speed at Working Load (m/min)	21	16	17
Max Line Speed (m/min)	32	32	33
Net Weight with Drum (kg)	24	25	25
Circuit Breaker (available separately)	187332	187333	187332
Control Box	Included in package		

Optional Accessories

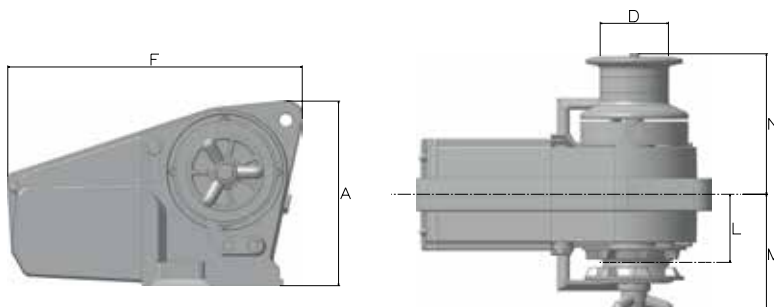
- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



CAYMAN		Code	Code	Code
With Drum	6 mm, ISO 4565 / DIN 766	600043	*	*
	8 mm, ISO 4565 / DIN 766	220273	220279	*
	10 mm, ISO 4565	*	419732	*
	10 mm, DIN 766	*	600165	600180

**Non-standard configuration optional gypsies can be supplied separately.
Please refer to compatible gypsies table*

Dimensions in mm



Model	A	D	F	L	M	N
700W	230	Ø85	370	85	150	175
1000W	230	Ø85	370	85	150	175

KOBRA - Horizontal Windlass

1000W

Compatible Gypsies



Code	Gypsy Size
630968	6 mm, ISO 4565 / DIN 766
630978	7 mm, ISO 4565
630994	8 mm, ISO 4565 / DIN 766
631118	10 mm, / DIN 766
631011	10 mm, ISO 4565
631120	3/8 BBB
631122	3/8 PC
631077	5/16 HT

KEEP YOUR LOFRANS' AS GOOD AS NEW!



Maintenance Kit for CAYMAN & KOBRA

Code....72048

Please refer to accessories section for control and installation products (see pages 49-56)

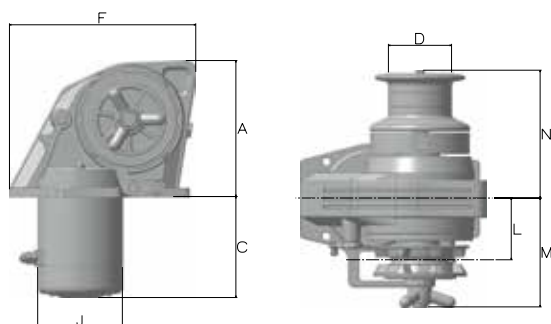


Construction	Anodised Aluminium	
Motor size	1000 W	
Power Supply (V)	12	24
Maximum Pull (kg)	1250	1325
Working load (kg)	170	170
Amps at Working Load (A)	150	80
Line Speed at Working Load (m/min)	16	17
Max Line Speed (m/min)	32	33
Net Weight with Drum (kg)	21	21
Circuit Breaker (available separately)	187333	187332
Control Box	Included in package	

KOBRA		Code	Code
With Drum	6 mm, ISO 4565 / DIN 766	600051	600513
	8 mm, ISO 4565 / DIN 766	220260	600514
	10 mm, DIN 766	600052	471734
	10 mm, ISO 4565	428747	220420

*Non-standard configuration optional gypsies can be supplied separately.
Please refer to compatible gypsies table

Dimensions in mm



Model	A	C	F	D	J	L	M	N
1000W	184	136	250	Ø85	Ø114	83	147	172

TIGRES - Horizontal Windlass

1500W



Main features


- Marine alluminium anodised body
- Available in white polyester coating
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Heavy duty rated IP66 electric motor
- Automatic free fall available as option



Compatible Gypsies

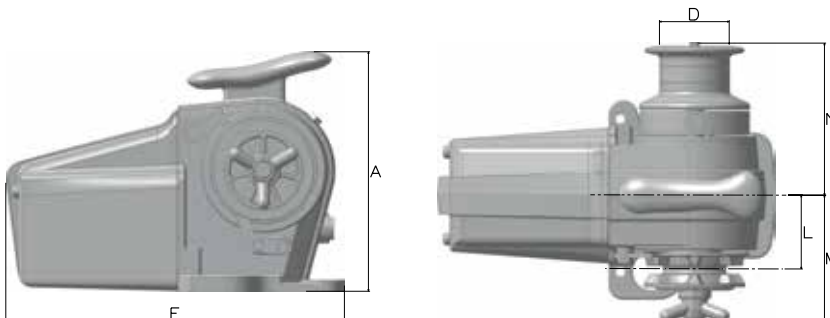
Code	Gypsy Size
630968	6 mm, ISO 4565 / DIN 766
630978	7mm, ISO 4565
630994	8 mm, ISO 4565 / DIN 766
631118	10 mm, / DIN 766
631011	10 mm, ISO 4565
631120	3/8 BBB
631122	3/8 PC
631077	5/16 HT

Construction	Anodised Aluminium	
Motor size	1500 W	
Power Supply (V)	12	24
Maximum Pull (kg)	1350	1400
Working load (kg)	195	195
Amps at Working Load (A)	160	90
Line Speed at Working Load (m/min)	14	16
Max Line Speed (m/min)	33	33
Net Weight with Drum (kg)	28	28
Circuit Breaker (available separately)	187333	187332
Control Box	Included in package	

TIGRES		Code	Code
With Drum	8 mm, ISO 4565 / DIN 766	418407	418409
	10 mm, DIN 766	600055	600059
	10 mm, ISO 4565	470060	220290

**Non-standard configuration optional gypsies can be supplied separately.
Please refer to compatible gypsies table*

Dimensions in mm



Model	A	D	F	L	M	N
1500W	290	Ø85	415	90	155	185

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control



Maintenance Kit for TIGRES

Code....72050

Please refer to accessories section for control and installation products (see pages 49-56)

FALKON - Horizontal Windlass

1700W



Main features

- Marine alluminium anodised body
- Available in white polyester coating
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Heavy duty rated IP66 electric motor



Compatible Gypsies

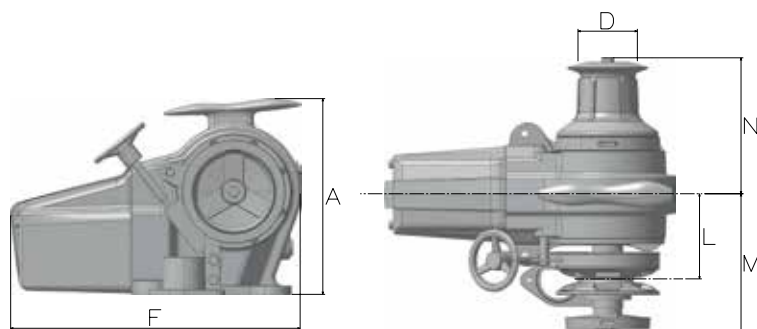
Code	Gypsy Size
630996	8 mm, ISO 4565 / DIN 766
631132	10 mm, / DIN 766
631022	10 mm, ISO 4565
631031	12mm, ISO 4565 / 13mm, DIN 766
631050	13mm, / DIN 764
631059	14mm
631033	1/2" BBB
631036	1/2" G40
631124	3/8" G40
631129	5/16" HT
630992	7/16" HT

Construction	Anodised Aluminium	
Motor size	1700 W	
Power Supply (V)	12	24
Maximum Pull (kg)	1700	1800
Working load (kg)	290	290
Amps at Working Load (A)	210	100
Line Speed at Working Load (m/min)	14	15
Max Line Speed (m/min)	33	33
Net Weight with Drum (kg)	55	55
Circuit Breaker (available separately)	187334	187332
Control Box	Included in package	

FALKON		Code	Code
With drum	10 mm, DIN 766	600063	600067
	10 mm, ISO 4565	220293	418511
	12mm ISO 4565 / 13mm DIN 766	404732	404733

*Non-standard configuration optional gypsies can be supplied separately.
Please refer to compatible gypsies table

Dimensions in mm



Model	A	D	F	L	M	N
1700W	340	Ø104	500	147	240	235

Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control
- Chain Stopper



Maintenance Kit for FALKON

Code....72051

Please refer to accessories section for control and installation products (see pages 49-56)

TITAN - Horizontal Windlass

2300W / 3600W / Hydraulic




Main features

- Marine alluminium anodised body
- Available in white polyester coating
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Heavy duty rated IP66 electric motor

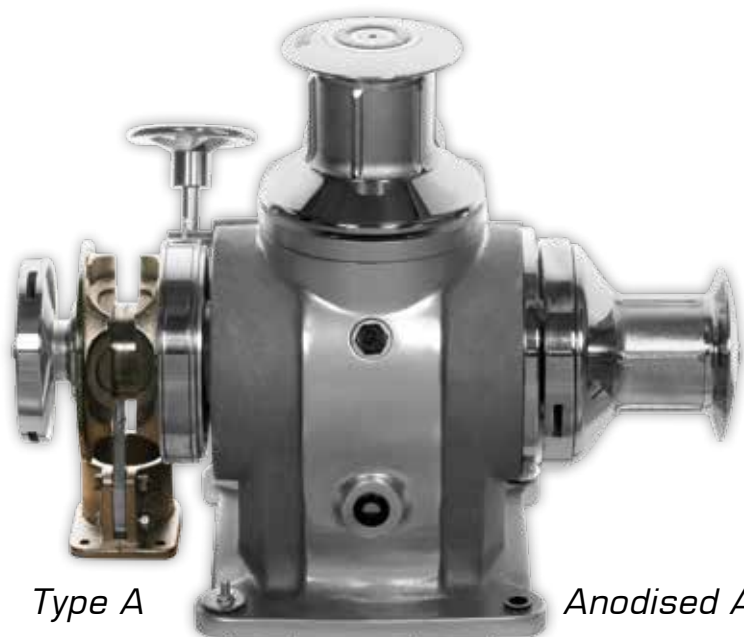
Type B - White Aluminium

Construction	Anodised Aluminium		White Aluminium	Anodised Aluminium
Motor size	2300 W	3600 W	3600 W	Hydraulic - 9cc
Power Supply (V)	24	230-400	230-400	-
Maximum Pull (kg)	2800	2800	2800	3400
Working load (kg)	550	650	650	700
Amps Work Load (A)	140	-	-	-
Amps at Working Load (A)	10	11	11	11
Line Speed at Working Load (m/min)	18	11	11	11
Net Weight with Drum (kg)	115	115	115	95
Hydraulic Pressure (bar)	-	-	-	200
Hydraulic Flow (lt/min)	-	-	-	32
Circuit Breaker (available separatly)	187333	-	-	-
Control Box	Included in package	Switchboard available separately		-

TITAN		Model**	Code	Code	Code	Code
With Drum	12 mm, ISO 4565 / 13mm, DIN 766	Type A	404724	*	600846	602423
			600072	600847	*	602424
	12 mm, ISO 4565 / 13mm, DIN 766	Type B	428938	*	*	602468
			426415	*	*	602469

****Available also in Type C, D...**

**Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table*

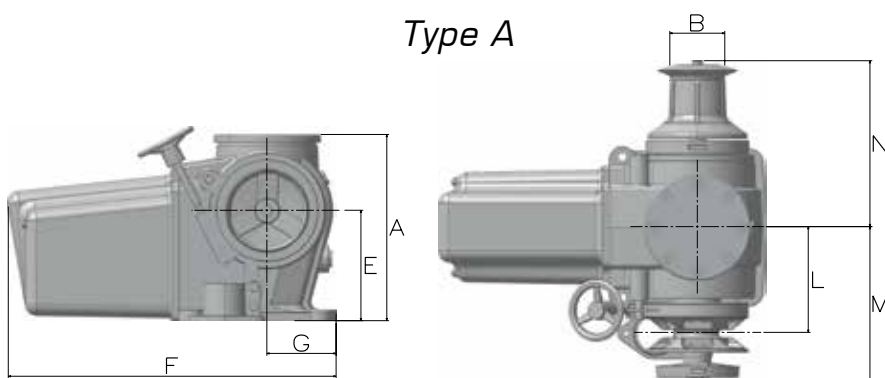


Type A

Anodised Aluminium

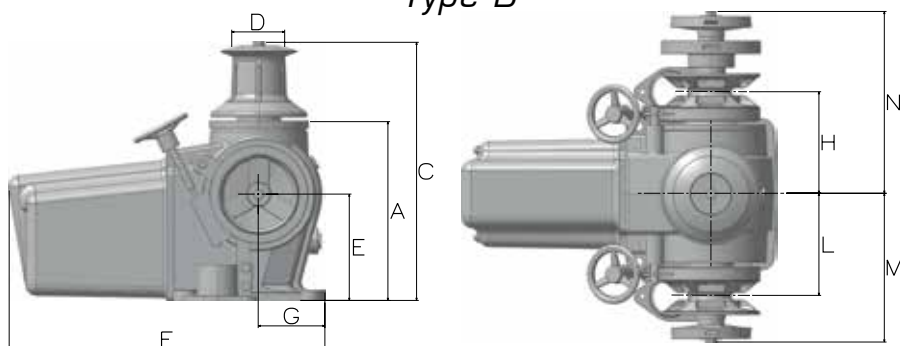
Dimensions in mm

Type A



Model	A	C	F	D	J	L	M	N
2300W	330	Ø104	193	590	120	185	270	290
3600W								
Hydraulic								

Type B



Model	A	C	D	E	F	G	H	L	M	N
2300W	330	465	Ø104	193	590	120	185	185	270	290
3600W										
Hydraulic										

Compatible Gypsies



Code	Gypsy Size
630996	8 mm, ISO 4565 / DIN 766
631132	10 mm, / DIN 766
631013	10 mm, ISO 4565
631031	12mm, ISO 4565 / 13mm, DIN 766
631059	14mm
631033	1/2" BBB
631036	1/2" G40
631124	3/8" G40

Kits

Code	Description
418403	KIT A - Seals
418457	KIT B - Screws
418493	KIT C - Pins
418553	KIT D - Circlips

Optional Accessories

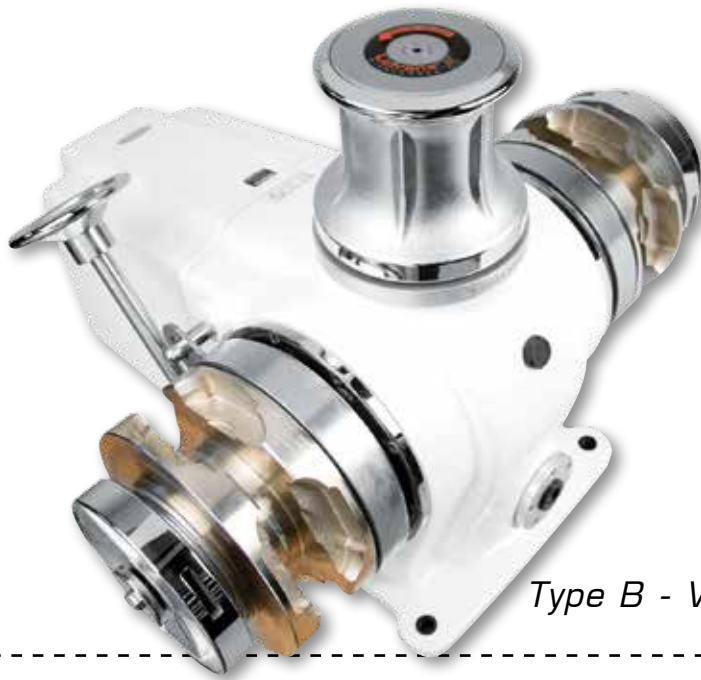
- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control
- Chain Stopper



Please refer to accessories section for control and installation products (see pages 49-56)

ERCOLE - Horizontal Windlass

3500W / 4000W / Hydraulic



Main features


- Available in white polyester coating
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Heavy duty electric motor

Type B - White Aluminium



Chain pipe included

Construction	White Aluminium	
	3500 W	Hydraulic - 11cc
Motor size	3500 W	Hydraulic - 11cc
Power Supply (V)	24	-
Maximum Pull (kg)	4500	5000
Working load (kg)	1000	1200
Amps at Working Load (A)	240	-
Line Speed at Working Load (m/min)	12	14
Max Line Speed (m/min)	20	14
Net Weight with Drum (kg)	200	180
Hydraulic Pressure (bar)	-	200
Hydraulic Flow (lt/min)	-	40
Control Box	Included in package	

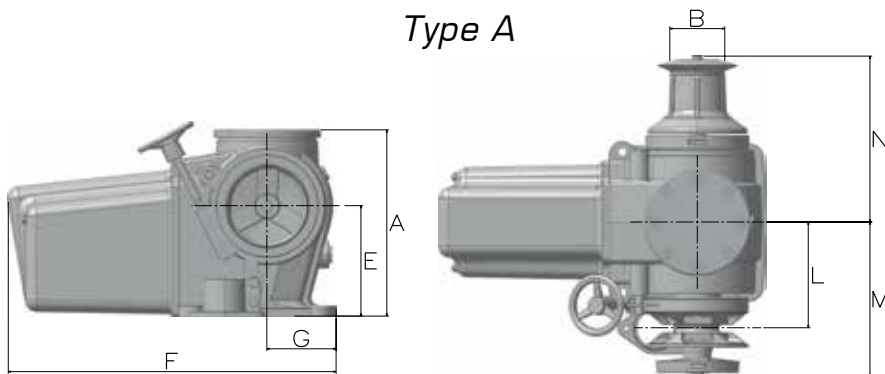
ERCOLE		Model	Code	Code
With Drum	14 mm	Type A	403615	602509
		Type B	220317	602512
		Type C	403614	602515

**Available also in Type D, E, F

*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table

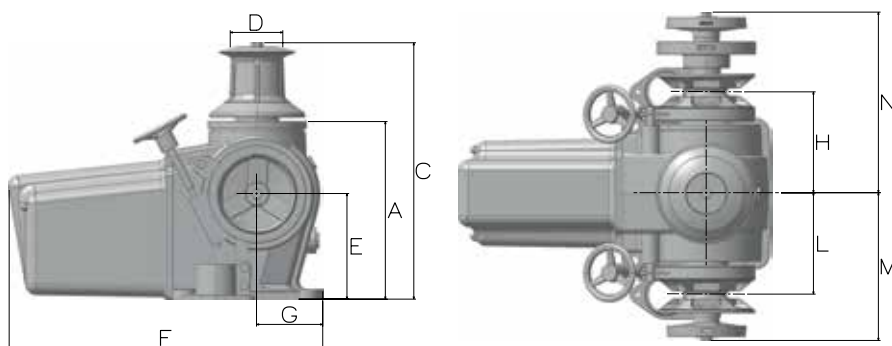
Dimensions in mm

Type A



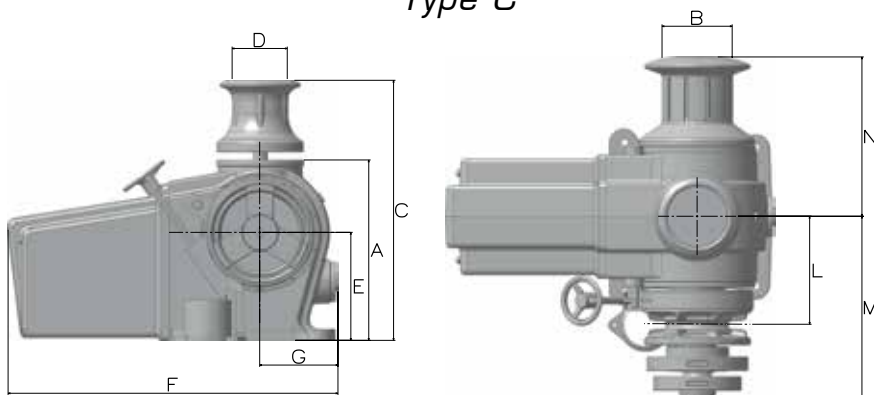
Model	A	B	E	F	G	L	M	N
3500W Hydraulic	390	Ø150	230	705	160	230-250	390	340

Type B



Model	A	C	D	E	F	G	H	L	M	N
3500W Hydraulic	390	555	Ø125	230	705	160	230-250	230-250	390	340

Type C



Model	A	B	C	D	E	F	G	L	M	N
2300W Hydraulic	390	Ø150	555	Ø125	230	705	170	230-250	390	339

Compatible Gypsies



Code	Gypsy Size
631019	10mm, ISO 4565
631039	12mm, ISO 4565 / 13mm, DIN 766
631065	14mm
631085	13mm. / DIN 764
631082	16mm
631088	16mm, / DIN 766
631101	18mm
631095	18mm, / DIN 766
631113	20mm
631068	14 STUD LINK
631092	16 STUD LINK
631098	17,5 STUD LINK
631104	19 STUD LINK
631110	20 STUD LINK
631053	1/2" STUD LINK
631056	13 ITALMET

Kits

Code	Description
418423	KIT A - Seals
418472	KIT B - Screws
418494	KIT C - Pins
418555	KIT D - Circlips

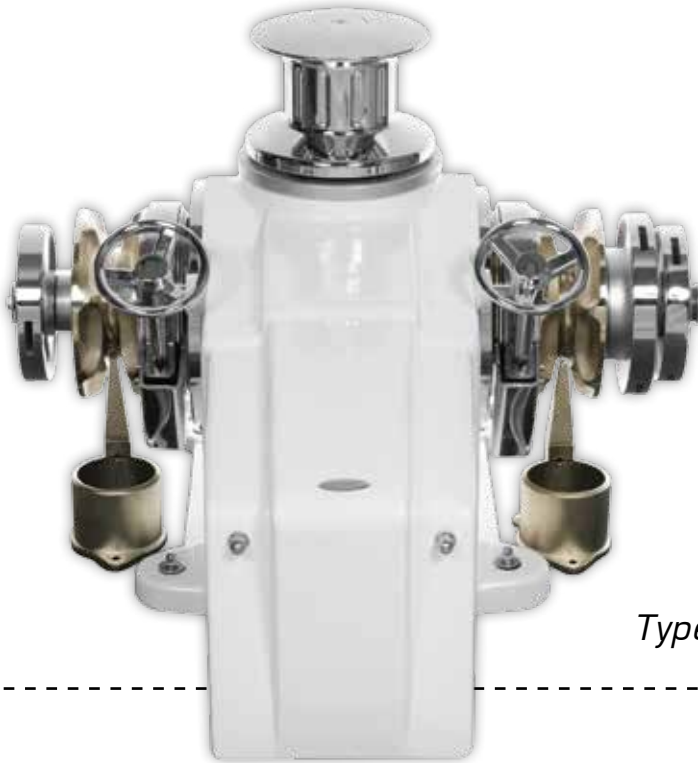
Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control
- Chain Stopper



Please refer to accessories section for control and installation products (see pages 49-56)

SUPER ERCOLE



Main features

- Available in white polyester coating
- Independent Gypsy and drum operation
- Manual chain release
- Manual override
- Heavy duty rated IP44 electric motor

Type B - White Aluminium

Construction	White Aluminium		
	3500 W	5500 W	Hydraulic - 11cc
Motor size	3500 W	5500 W	Hydraulic - 11cc
Power Supply (V)	24	230-400	-
Maximum Pull (kg)	5000	5500	6500
Working load (kg)	950	1200	1500
Amps at Working Load (A)	240	-	-
Line Speed at Working Load (m/min)	14	17	18
Max Line Speed (m/min)	28	17	18
Net Weight with Drum (kg)	235	235	215
Hydraulic Pressure (bar)	-	-	200
Hydraulic Flow (lt/min)	-	-	40
Control Box	Included in package	Switchboard available separately	-

SUPER ERCOLE		Model	Code	Code	Code
With Drum	16 mm	Type A	404957	602501	602488
		Type B	426414	602504	602491

****Available also in Type C, D, E, F**

*Non-standard configuration optional gypsies are supply separately. Please refer to compatible gypsies table on next page.

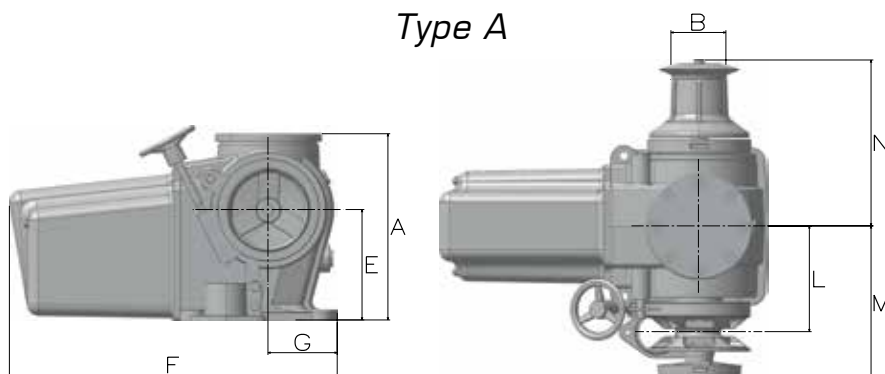
- Horizontal Windlass

3500W / 5500W / Hydraulic



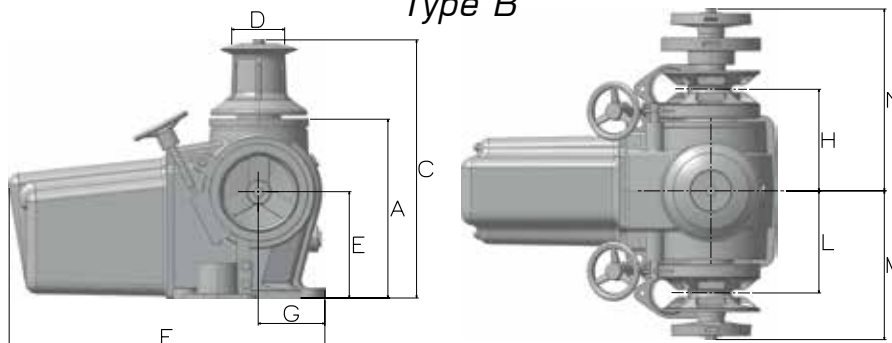
Dimensions in mm

Type A



Model	A	C	F	D	J	L	M	N
2300W	330	Ø104	193	590	120	185	270	290
3600W								
Hydraulic								

Type B



Model	A	C	D	E	F	G	H	L	M	N
2300W	330	465	Ø104	193	590	120	185	185	270	290
3600W										
Hydraulic										

Compatible Gypsies



Code	Gypsy Size
631019	10mm, ISO 4565
631039	12mm, ISO 4565 / 13mm, DIN 766
631065	14mm
631085	13mm. / DIN 764
631082	16mm
631088	16mm, DIN 766
631101	18mm
631095	18mm, DIN 766
631113	20mm
631068	14 STUD LINK
631092	16 STUD LINK
631098	18 STUD LINK
631104	19 STUD LINK
631110	20 STUD LINK
631053	1/2" STUD LINK
631056	13 ITALMET

Kits

Code	Description
427806	KIT A - Seals
418476	KIT B - Screws
418500	KIT C - Pins
418575	KIT D - Circlips

Optional Accessories



- Foot Switch
- Control Switch
- Circuit Breaker
- Chain Counter
- Hand Held Control
- Radio Control
- Chain Stopper

Please refer to accessories section for control and installation products (see pages 49-56)

CAPSTANS



The range of Lofrans capstans is designed for boats from 18 up to 150 feet. Capstans are normally installed on the stern of the boat for mooring operations and are used in recreational, fishing and commercial vessels.

They are normally installed on the vessel in addition to the anchor windlass, with the number of capstan units depending on the length and displacement of the vessel.

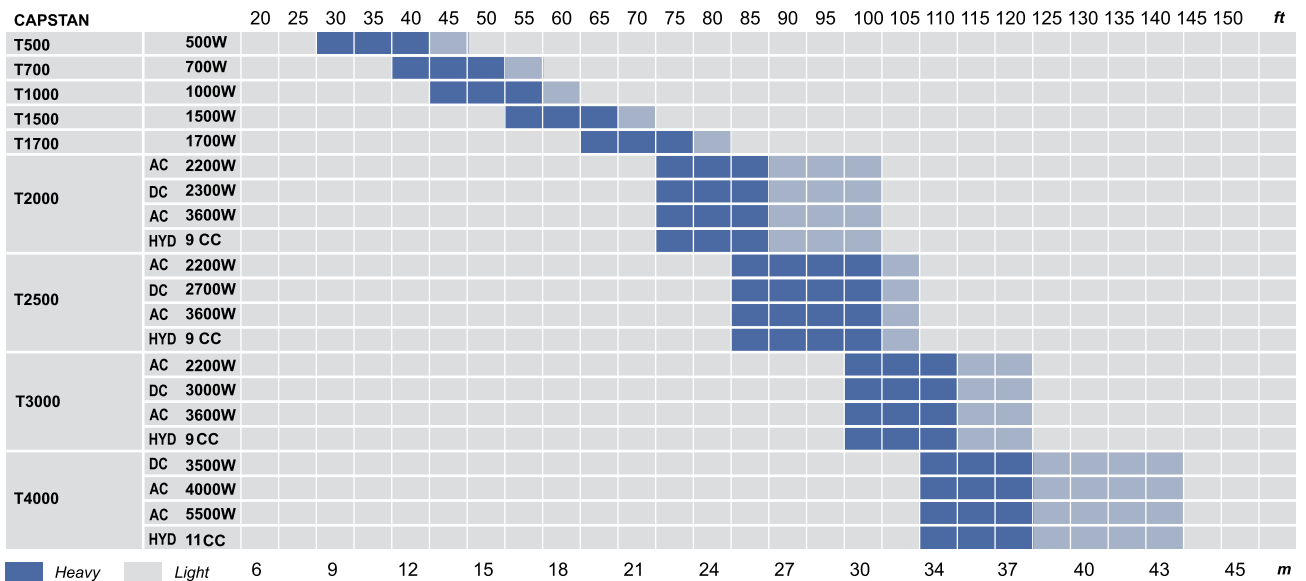
They are controlled by a pair of the foot switches close to the capstan, so that the operator can have his/her hands free for rope handling.

The construction is very similar to our vertical windlass range using the same mechanical components, giving strength and high performance by relying on Lofrans'- made worm screw gearbox.

The base is manufactured using chromed bronze, strong and long lasting, as are the drums, which have the proper surface to hold the rope and minimize wear.

Models T3000 and T4000 have base and drum in mirror polished AISI 316L stainless steel and the main structure of the gearbox is of a strong single-block construction, same as our big vertical anchor windlasses for vessels of superior dimension.

Available to operate with 12V DC, 24V DC as well as AC or hydraulic motors for the larger size/higher power models, they are designed to meet a wide range of user requirements.



T500-T700-T1000 - Capstan

Main features

- Luxury chrome bronze base and drum
- Heavy duty rated IP67 electric motor
- Anodised marine aluminium gearbox



Optional Accessories

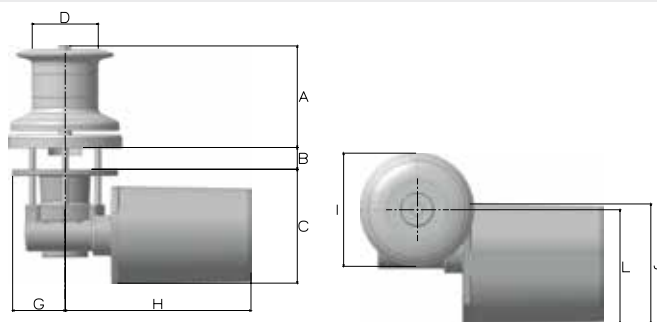
- Foot Switch
- Control Switch
- Circuit Breaker
- Hand Held Control
- Radio Control



Construction	Chromed bronze					Aluminium				
	T500	T700		T1000		T500	T700		T1000	
Model	500 W	700 W		1000 W		500 W	700 W		1000 W	
Motor size	500 W	700 W		1000 W		500 W	700 W		1000 W	
Power Supply (V)	12	12	24	12	24	12	12	24	12	24
Maximum Pull (kg)	630	850	900	1000	1060	630	850	900	1000	1060
Working load (kg)	70	115	115	165	165	70	115	115	165	165
Amps at Working Load (A)	75	110	50	135	70	75	110	50	135	70
Line Speed at Working Load (m/min)	23	20	23	20	23	23	20	23	20	23
Max Line Speed (m/min)	26	30	30	40	40	26	30	30	40	40
Net Weight with Drum (kg)	11	15	15	21	21	9	15	15	16	16
Circuit Breaker (available separately)	187331	187331	187332	187333	187332	187331	187331	187332	187333	187332
Control Box	Included in package									

Code	409130	220006	418159	417946	187324	409563	411129	600779	409564	409567
------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Dimensions in mm



Model	A	B	C	D	G	H	I	J	L
T500	90	18-30	111	Ø60	55	236	Ø115	110	121
T700	135	25-40	150	Ø92	62	256	Ø155	134	157
T1000	135	25-40	150	Ø92	62	256	Ø155	134	157

KIT A - SEALS

Code	For CAPSTANS
418410	T500
418411	T700 - T1000

KIT B - SCREWS

Code	For CAPSTANS
418446	T500
418410	T500

KIT C - PINS

Code	For CAPSTANS
418483	T500

KIT D - CIRCLIPS

Code	For CAPSTANS
418512	T500
418513	T700 - T1000

Please refer to accessories section for control and installation products (see pages 49-56)

T1500-T1700 - Capstan

Aluminium



Optional Accessories

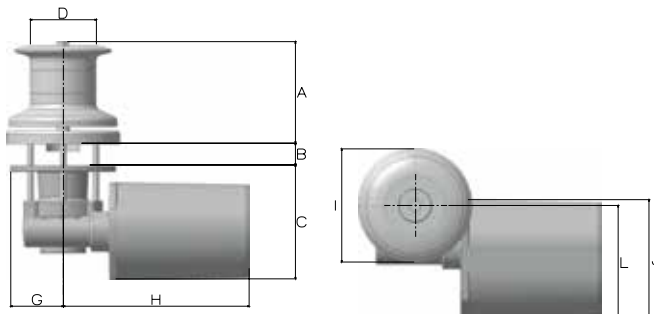
- Foot Switch
- Control Switch
- Circuit Breaker
- Hand Held Control
- Radio Control



IP67 rated heavy duty electric motor (T1500)

Construction	Chromed bronze				Aluminium			
	T1500		T1700		T1500		T1700	
Model	1500 W		1700 W		1500 W		1700 W	
Motor size	1500 W		1700 W		1500 W		1700 W	
Power Supply (V)	12	24	12	24	12	24	12	24
Maximum Pull (kg)	1200	1250	1600	1695	1200	1250	1600	1695
Working load (kg)	190	190	270	270	190	190	270	270
Amps at Working Load (A)	150	75	180	90	150	75	180	90
Line Speed at Working Load (m/min)	17	19	14	15	17	19	14	15
Max Line Speed (m/min)	40	40	32	32	40	40	32	32
Net Weight with Drum (kg)	27	27	30	30	18	18	25	25
Circuit Breaker (available separately)	187333	187332	187334	187332	187333	187332	187334	187332
Control Box	Included in package							
Code	220014	418161	472407	187326	600058	600062	600066	600069

Dimensions in mm



Model	A	B	C	D	G	H	I	J	L
T1500	162	50-70	160	Ø104	73	236	Ø191	165	157
T1700	162	50-70	165	Ø104	90	300	Ø191	Ø127	140

KIT A - SEALS

Code	For CAPSTANS
418422	T1500 - T1700

KIT C - PINS

Code	For CAPSTANS
418487	T1500 - T1700

KIT D - CIRCLIPS

Code	For CAPSTANS
418514	T1500 - T1700

T2000-T2500 - Capstan



Main features

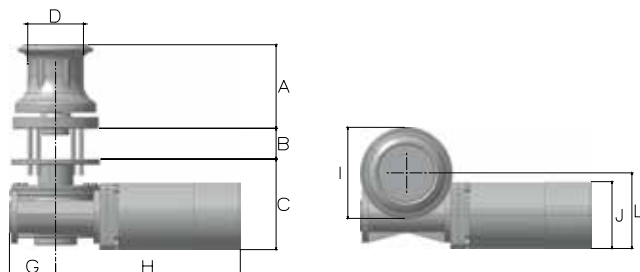
- Luxury chrome bronze base and drum
- Heavy duty electric motor
- Anodised marine aluminium gearbox



Construction	Chromed bronze						
Model	T2000				T2500		
Motor size	2200 W	2300 W		Hydraulic - 9cc	2200 W	2700 W	Hydraulic - 9cc
Type**	cw	cw	ccw	cw	cw	cw	cw
Power Supply (V)	230-400	24	24	-	230-400	24	-
Maximum Pull (kg)	2000	2000	2000	2300	2000	2200	2300
Working load (kg)	410	410	410	510	425	425	550
Amps at Working Load (A)	-	180	180	-	-	210	-
Line Speed at Working Load (m/min)	15	15	15	15	15	15	15
Max Line Speed (m/min)	15	31	31	15	15	31	15
Net Weight with Drum (kg)	52	52	52	40	52	53	40
Hydraulic Pressure (bar)	-	-	-	200	-	-	200
Hydraulic Flow (lt/min)	-	-	-	32	-	-	32
Control Box	Switchboard available separately	Included in package		-	Switchboard available separately	Included in package	-
Code	600071	404967	600729	602140	600070	476239	602168

** cw: the capstan pulls clockwise ccw: the capstan pulls counter clockwise

Dimensions in mm



Model	A	B	C	D	G	H	I	J	L
T2000	190	60-90	212	Ø125	105	420	Ø194	Ø152	176
T2500	191	90-130	212	Ø125	105	420	Ø230	Ø152	172

Kits

Code	Description	Code	Description
418399	KIT A - Seals	418488	KIT C - Pins
418451	KIT B - Screws	418515	KIT D - Circlips

Please refer to accessories section for control and installation products (see pages 49-56)

T3000-T4000 - Capstan



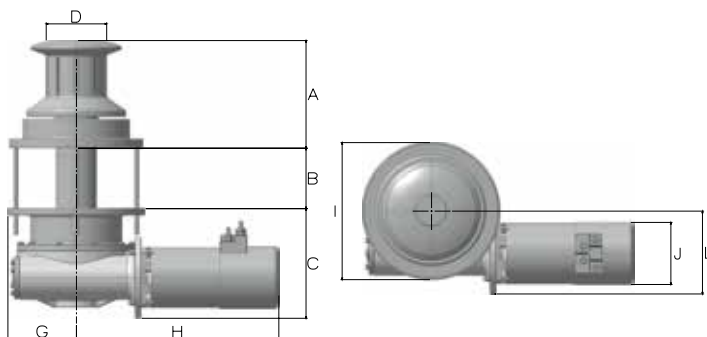
Main features

- Luxury stainless steel base and drum
- Heavy duty electric motor
- Anodised marine aluminium gearbox



Construction	316 L Stainless Steel						
Model	T3000				T4000		
Motor size	2200 W	3000 W	3600 W	Hydraulic - 9cc	3500 W	4000 W	5500 W
Power Supply (V)	230-400	24	24	-	24	230-400	230-400
Maximum Pull (kg)	2500	3000	3000	3000	4500	5000	5000
Working load (kg)	550	600	600	650	850	850	1200
Amps at Working Load (A)	-	210	210	-	215	-	-
Line Speed at Working Load (m/min)	16	14	14	17	10	10	11
Max Line Speed (m/min)	16	27	27	17	15	10	11
Net Weight with Drum (kg)	75	75	75	40	120	120	105
Hydraulic Pressure (bar)	-	-	-	200	-	-	200
Hydraulic Flow (lt/min)	-	-	-	32	-	-	40
Control Box	Switchboard available separately	Included in package	Switchboard available separately	-	Included in package	Switchboard available separately	
Code	600767	602187	602196	602189	600077	600771	423284

Dimensions in mm



Model	A	B	C	D	G	H	I	J	L
T3000	206	60-90	190	Ø150	142	436	Ø255	Ø152	190
T4000	267	150	272	Ø150	170	502	Ø340	Ø154	206

CETO - Recovery Capstan

The new CETO model is a unit built for the professional fishermen used for retrieving clam fishing baskets.

They are assembled using a heavy duty electric motor and gearbox, with the motor contained in an IP67 rated cover to be protected from humidity and sea water, and by a strong aluminum drum able to contain approximately 20 meters of fine rope.

They are available at a power rating of 1000W at 12V or 24V.

The drum is driven by use of a high torque worm gear box with the gear case made in black anodized marine aluminum. The gears are made of special bronze and steel in order to withstand the high stress during the intensive use of such an operation.

The top part is made by a simple construction of a anodized marine aluminum for the base and drum, and a stainless steel AISI 431 shaft.



IP67 rated heavy duty electric motor

Optional Accessories

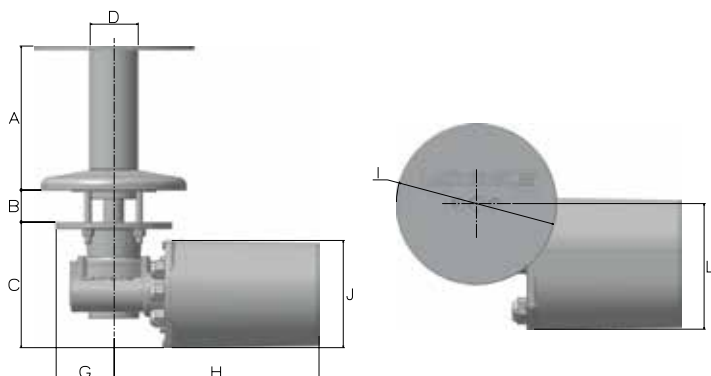
- Foot Switch
- Control Switch
- Circuit Breaker
- Hand Held Control



Please refer to accessories section for control and installation products (see pages 49-56)

Construction	Marine anodised aluminum
Motor size	1000 W
Power Supply (V)	12V
Maximum Pull (kg)	850
Working load (kg)	175
Amps at Working Load (A)	165
Line Speed at Working Load (m/min)	15
Max Line Speed (m/min)	15
Net Weight with Drum (kg)	16
Circuit Breaker (available separately)	187333
Control Box	Included in package
Code	635999

Dimensions in mm



Model	A	B	C	D	G	H	I	J	L
CETO	180	25-40	150	Ø60	72,5	256	Ø200	134	157

TENDER WINCH - Recovery Capstan



The Tender Winch models are units designed to recover a small tender or a jet ski. They are assembled using a heavy duty electric motor and gearbox, with the motor contained in an IP67 rated cover to be protected from humidity and sea water, and by a strong aluminum drum able to contain the necessary belt.

They are available at a power rating of 700W at 12V or 24V.

The drum is driven by use of a high torque worm gear box with the gear case made in black anodized marine aluminum. The gears are made of special bronze and steel in order to withstand the high stress during operation.

The top part is made by a simple construction of an anodized marine aluminum for the base and drum, and a stainless steel AISI 431 shaft.

Construction	Marine anodised aluminum		
	500W	700 W	
Motor size	500W	700 W	700 W
Power Supply (V)	12V	12V	24V
Maximum Pull (kg)	400	550	600
Working load (kg)	90	125	125
Amps at Working Load (A)	120	150	80
Line Speed at Working Load (m/min)	17	15	15
Max Line Speed (m/min)	20	20	20
Net Weight with Drum (kg)	9	9	9
Circuit Breaker (available separately)	187331	187332	187331
Control Box	Included in package		
Code	030054	602122	602123

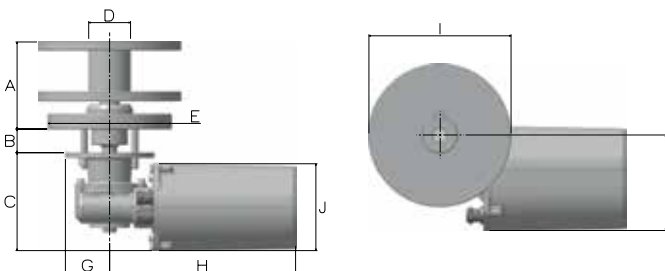
Optional Accessories

- Foot Switch
- Control Switch
- Circuit Breaker
- Hand Held Control



Please refer to accessories section for control and installation products (see pages 49-56)

Dimensions in mm

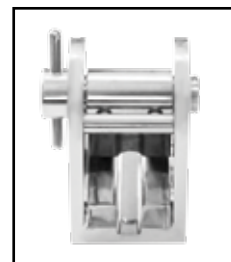


Model	A	B	C	D	E	G	H	I	J	L
500W	96	18-30	124	Ø40	Ø114	56	236	Ø145	110	121
700W	110	18-30	124	Ø53	Ø156	56	236	Ø180	110	121

CHAIN STOPPER

The **chain stopper** is installed between the windlass and the bow roller in order to take the load off the windlass, either when the yacht is anchored or tensioning the anchor chain when the anchor is stowed. Windlasses which have two gypsies or a gypsy and a drum, need the chain stopper in order to isolate the one gypsy and either work with the other gypsy or with the drum.

LOFRANS' Chain stopper, stainless steel, for normal chain 12/ 13/ 14mm



Code....72191

Chain stopper 14- 16mm Stud link

- Chain stopper is designed to be used with chain size 14mm or 16mm stud link chain and 16mm normal chain.
- This model provides an increased safety by holding and blocking the chain and the anchor at the same time.
- AISI 316L Stainless steel
- Integrated devil's claw for taking up the chain tension off the windlass.

Chain stopper 12- 13- 14 mm normal chain

- Chain stopper is designed to be used with chain size 12- 13- 14mm normal chain.
- This model provides an increased safety by blocking the anchor chain.
- AISI 316L Stainless steel

LOFRANS' Chain roller-stopper with tensioner, stainless steel, for chain 14/ 16mm



for studlink chain 14/ 16mm

Code....72192

for normal chain 14/ 16mm

Code....72193

Model	72191	72192	72193
X1 - Vertical Windlass			
X2 & Project 1000 - Vertical Windlass			
X3 & Project 1500 - Vertical Windlass	√		
X3.5 - Vertical Windlass	√		
X4 & Project 2000 - Vertical Windlass	√		
X5 - Vertical Windlass	√		
Ercole Vertical - Vertical Windlass	√	√	√
Royal - Horizontal Windlass			
Dorado - Horizontal Windlass			
Atlas - Horizontal Windlass			
Kobra - Horizontal Windlass			
Cayman - Horizontal Windlass			
Tigres - Horizontal Windlass			
Falkon - Horizontal Windlass	√		√
Titan - Horizontal Windlass	√		√
Ercole - Horizontal Windlass	√	√	√
Super Ercole - Horizontal Windlass	√	√	√

* The chain line need to be parallel to the chain stopper

ELECTRIC ACCESSORIES

The range of accessories consists of a large selection of products to control windlass operations. All products are designed and built to guarantee perfect and reliable operation in the marine environment. Lofrans' Accessories are manufactured to the highest quality for reliability and safety, conforming to EC regulations covering electromagnetic compatibility (89/336/CEE). They are tested by official organizations for compliance to regulations and are CE marked.

For a windlass to function properly you will need to install:

- The **control box** unit which is supplied as standard, is made up of two solenoids included in a watertight box with an IP56 rating. Connecting the remote control to the control box is easily done by simply plugging the wiring onto the control box
- The **circuit breaker**, which offers three functions:
 - Protection from short circuit
 - Protection of the electric motor from current overload
 - Voltage interruption when the anchor windlass needs to be switched off. The circuit breaker is installed on a panel and has an LED indicator.
- One or more electric controls which can be connected in parallel.



IRIS

CHAIN COUNTER



Panel Chaincounter IRIS

This fly bridge chain counter IRIS is technologically advanced instrument with an elegant and ergonomic design makes it suitable for all type of boat cockpits. IRIS is supplied with an evolved microprocessor, with different operations allowing an optimum anchoring.

- Chain speed indicator / mooring length in meters or feet
- Voltage indicator
- Up alarm sensor
- Switch on button / Key tones adjustment
- High vision LCD display / Backlit display screen / Eight level of contrast
- Six language menu (IT, EN, FR, DE, ES, GR)
- Able to control free fall windlasses
- Parallel connection

Code	600017
Command transmission	Wire
Number of button	3
Voltage	12 - 24V _{dc}
Operative temperature	-10 : +60
IP protection rated*	67
Max contacts amperage (A)	2
Weight (gr)	500
Dimension (mm)	110x105x15 (5 flat version)

* When installed

GALAXY 703

CHAIN COUNTER

GALAXY 503

CHAIN COUNTER



Radio Control Chaincounter GALAXY 703

Without cable ties, plug or panels and with load always perfect by rechargeable battery, the radio chain counter GALAXY 703 gives finally all the freedom of manoeuvres and the comfort of reading in the anchoring operations.

- Chain speed indicator / mooring length in meters or feet
- Voltage indicator
- Up alarm sensor
- Switch on button / Key tones adjustment
- High vision LCD display / Backlit display screen / Eight level of contrast
- Six language menu (IT, EN, FR, DE, ES, GR)
- Able to control free fall windlasses
- Parallel connection

Hand Held Remote Control Chaincounter GALAXY 503

This remote chain counter model GALAXY 503 has been specifically designed to give the full control in anchoring. It's a reliable and practical instrument, technologically advanced, specifically design for use in marine environments. The external casing, rated with IP66 and supplied with waterproof plug and socket rated IP67. The extending flexible cable (approximately 4 metres) gives the maximum freedom on board during anchoring manoeuvring. Provided with an evolved microprocessor that offers a series of advantages for full control of the anchoring.

- Chain speed indicator / mooring length in meters or feet
- Voltage indicator
- Up alarm sensor
- Switch on button / Key tones adjustment
- High vision LCD display / Backlit display screen / Eight level of contrast
- Six language menu (IT, EN, FR, DE, ES, GR)
- Able to control free fall windlasses
- Parallel connection

Code	600016
Command transmission	Remote
Number of button	3 (Transmitter)
Voltage	12 - 24V _{dc} (Receiver)
Operative temperature	-10 : +60
IP protection rated*	66 (Transmitter)
Max contacts amperage (A)	2 (Receiver)
Weight (gr)	480
Dimension (mm)	155x65x45 (Transmitter)

Code	600015
Command transmission	Wire
Number of button	3
Voltage	12 - 24V _{dc}
Operative temperature	-10 : +60
IP protection rated*	66
Max contacts amperage (A)	2
Weight (gr)	710
Dimension (mm)	155x65x45

GALAXY 102

HAND HELD CONTROL

Radio Remote Control



Hand Held Control GALAXY 102

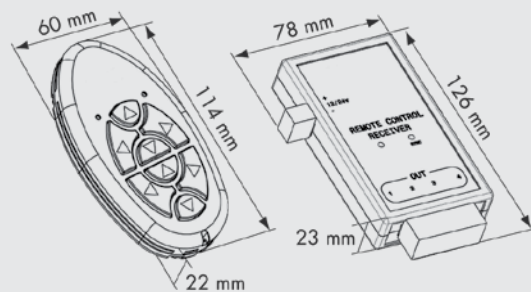
This hand held remote control model GALAXY 102 has an elegant and functional design. The soft rubber case, which covers sideways the remote control, allows a safe and handy taking under any condition.

This hand held remote control is rated with IP66 and supplied with waterproof plug and socket rated IP67. The extending flexible cable (approximately 4 metres) gives the maximum freedom on board during anchoring manoeuvring.

- Inversion polarity protection
- Parallel connection
- 2 buttons (up-down)

Lofrans' radio remote control is designed to work with our range of windlasses. The remote control can also be used to operate other onboard equipment such as thrusters, passerelles, cranes, etc.

- Transmitter rated IP67
- Supports up to 8 independently controlled channels
- Each receiver can switch 4 channels (12/24 V - 2 A)
- Each transmitter can handle 2 receivers (8 channels)
- Digital recognition avoids accidental activation of other system
- Zero power consumption when in standby mode (transmitter)
- Easy to install and set up, simple to use



Code	600013
Command transmission	Wire
Number of button	2
Voltage	12 - 24V _{dc}
Operative temperature	-10 : +60
IP protection rated	66
Max contacts amperage (A)	2
Weight (gr)	580
Dimension (mm)	155x65x45

Code	312976	312977
Description	Transmitter & Receiver (EU)	Transmitter & Receiver (USA)
Frequency	868 MHz	915 MHz
Number of button	8 (Transmitter)	
Voltage	12 - 24V _{dc} (Receiver)	
Operative temperature	-10 : +60	
IP protection rated	67 (Transmitter)	
Max contacts amperage (A)	2 (Receiver)	
Weight (gr)	310	
Dimension (mm)	114x60x22(transmitter) / 126x78x23(receiver)	

*** 868 MHz is the authorised frequency for Europe and Australia. 915 MHz is the authorised frequency for Canada and the USA. Retail sales and use of non-authorised frequency transmitters and receivers is prohibited. For all other countries please consult the local regulation in force.*

* When installed

Foot switch



This device is a switch which works simply pushing the foot on the button. The base is in stainless steel while the cover to prevent accidental engagement is in composite. The button is in special marine rubber able to withstand UV ray and the marine environment. Available in UP and DOWN version

Code	600012	600011	602121
Description	Black / Grey UP	Red / Grey DOWN	Blue / WASH DOWN
Voltage	12 - 24V _{dc}		
Operative temperature	-10 : +60		
IP protection rated	67		
Max contacts amperage (A)	5		
Weight (gr)	100		
Dimension (mm)	80x95x20		



Control Switch

TYPE "L"

This switch, usually installed on the cockpit, is made by a fixing plaque and by a three position switch (Up-Off-Down).



TYPE "C"

This rocker switch has a modern and practical design. It is reliable and watertight and it is supplied with the apposite case to make simple and sure the installation.

Code | 404728

Code | 187338

Circuit Breaker

The thermal circuit breaker is an essential component of the electric plant. It has three functions:

- protects from very dangerous short circuits
- protects the electric motor of the windlass
- interrupts tension to windlass when desired

In case of short circuit the intervention is immediate. Concerning the electric motor a specific intervention curve has been studied in cooperation with E-T-A Germany. It is possible to re-activate the circuit breaker at the end of the intervention. The thermal circuit breaker is supplied with an elegant plaque for fixing and a led light. This unit is in compliance with EEC regulations and homologated by Bureau, Veritas.



	35 A	40 A	70 A	80 A	100 A	125 A
Thermal	187331	-	187332	-	187333	187334
Hydraulic	-	600029	-	630616	600028	-

Control Box Direction Solenoids

The Control Box is an electric unit made up of two remote control switches enclosed inside a special container which protects it from marine corrosion. The entire unit has been designed with a view to simplifying and speeding up the various electrical connections. For this purpose there is no need to open and/or pierce the container, as all the terminals and the panel for the electrical connections are perfectly accessible from the outside. Outer construction in self-extinguishing polyester resin, resistant to shock and marine corrosion. Degree of protection IP 56 - protection against deckwater.

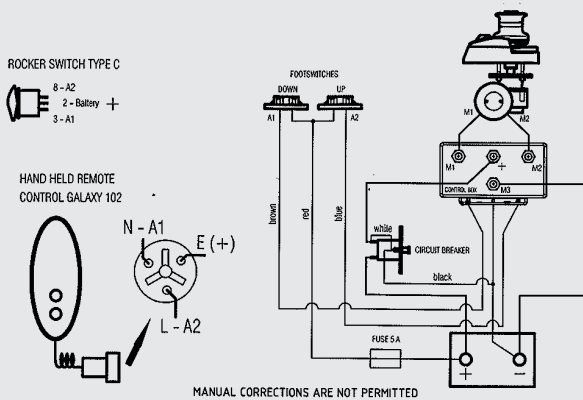


Code	600018	600019	600020	602590	600021	600022	602587
Number of terminals	3	3	3	4	4	4	4
Power	12 V	24 V	24 V	12 V	12 V	24 V	24 V
Motor Size	500-1700 W	500-1700 W	1700-2300 W	500-700 W	1000-1700 W	500-1700 W	3500 W

Wiring diagrams dependings on configuration and number of terminals

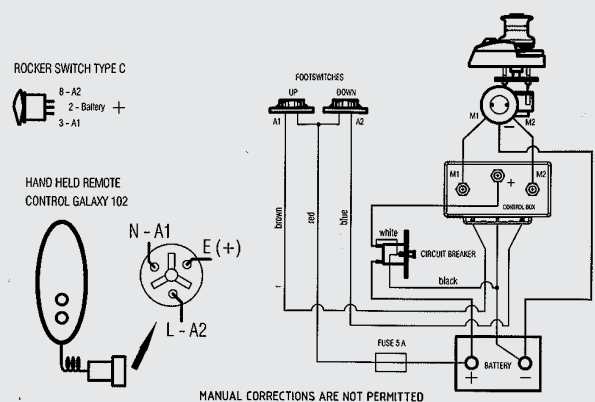
WIRING DIAGRAM - 2 TERMINALS ELECTRIC MOTOR

Control Box Code: 600021 - 600022



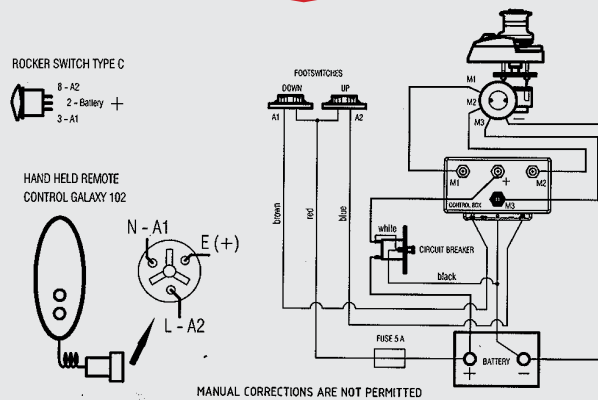
WIRING DIAGRAM - 3 TERMINALS ELECTRIC MOTOR

Control Box Code: 600018 - 600019 - 600020



WIRING DIAGRAM - 4 TERMINALS ELECTRIC MOTOR

Control Box Code: 600021 - 600022



Kits for big Models & Capstans

KIT A - SEALS		KIT B - SCREWS		KIT C - PINS		KIT D - CIRCLIPS	
Code	For WINDLASS	Code	For WINDLASS	Code	For WINDLASS	Code	For WINDLASS
474013	X4 & PROJECT 2000	474012	X4 & PROJECT 2000	474011	X4 & PROJECT 2000	474010	X4 & PROJECT 2000
418428	ERCOLE VERTICAL	418475	ERCOLE VERTICAL	418499	ERCOLE VERTICAL	418556	ERCOLE VERTICAL
418403	TITAN	418457	TITAN	418493	TITAN	418553	TITAN
418423	ERCOLE	418472	ERCOLE	418494	ERCOLE	418555	ERCOLE
427806	SUPER ERCOLE	418476	SUPER ERCOLE	418500	SUPER ERCOLE	418575	SUPER ERCOLE
418410	T500	418446	T500	418483	T500	418512	T500
418411	T700 - T1000	418410	X0 & T500	418487	T1500 - T1700	418513	T700 - T1000
418422	T1500 - T1700					418514	T1500 - T1700
418399	T2000 - T2500					418515	T2000 - T2500

KIT F - FINGERS		KIT S - MAGNETIC SENSORS	
Code	For WINDLASS	Code	For WINDLASS
474023	X1, X2 & PROJECT 1000	474053	X1, X2 & X3
474017	X3 & PROJECT 1500	600033	X4
601047	X2	474048	for all horizontal windlasses
602105	X3		
35036	DORADO		
632116	ATLAS		

Maintenance Kit

KEEP YOUR LOFRANS' AS GOOD AS NEW!

Code	For WINDLASS
72036	X0
72037	X1
72038	X2 & PROJECT 1000
72039	X2 ALU
72040	X3, X3 ALU & PROJECT 1500
72046	ROYAL
72047	DORADO
72048	KOBRA & CAYMAN
72050	TIGRES
72051	FALKON
72045	ATLAS



Exploded diagram

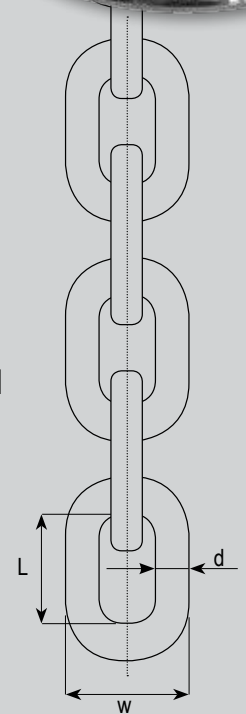
Please refer to our website for Kit Contents

GYPSIES



Code	Chain Size	For windlass
630953		X2 / PROJECT 1000
630968	6 mm ISO 4565 / DIN 766	KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
630970		X0 / X1 / X1 ALU
630974		DORADO
631005		ATLAS
630978	7mm ISO 4565	KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
630980		X1 / X1ALU
630984		DORADO
631007		ATLAS
630949	8mm ISO 4565 / DIN 766	X2 / PROJECT 1000
630957		X3 / PROJECT 1500
630994		KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
630996		FALKON / TITAN / PROJECT 2000 / X4 / X3.5
630999		X1
631003		DORADO
631009		ATLAS
630951		X2 / PROJECT 1000
630959	X3 / PROJECT 1500	
631011	10mm ISO 4565	KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
631013		FALKON / TITAN
631019		ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631022		FALKON / TITAN / PROJECT 2000 / X4 / X3.5
630955	10mm DIN766	X2 / PROJECT 1000
630966		X3 / PROJECT 1500
631132		FALKON / TITAN / PROJECT 2000 / X4 / X3.5
631118		KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
630961		X3 / PROJECT 1500
631039	12mm ISO 4565 13mm DIN 766	ERCOLE (Horizontal & Vertical) / X5
631031		FALKON / TITAN / PROJECT 2000 / X4 / X3.5
631045	12mm ISO 4565 13mm DIN 766	X3.5
631050	13mm DIN 764	FALKON
631085		ERCOLE (Horizontal & Vertical) / SUPER ERCOLE / X5
631065	14mm	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE / X5
631059		FALKON / TITAN / PROJECT 2000 / X4 / X3.5
631088		ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631082	16mm DIN766	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631095	16mm	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631095	18mm DIN766	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631101	18mm	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631113	20mm	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631033	1/2" BBB	FALKON / TITAN / PROJECT 2000 / X4 / X3.5
631120	3/8" BBB	KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
631036	1/2" G40	FALKON / TITAN / PROJECT 2000 / X4 / X3.5
631124	3/8" G40	FALKON / TITAN
631077	5/16" HT	KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
631129		FALKON
630992	7/16" HT	FALKON
631122	3/8" PC	KOBRA / CAYMAN / TIGRES / ROYAL / AIRON
631056	13 ITALMET	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631062	14 PITCH 42mm	TITAN
630989	14,5 UNI4417	ERCOLE VERTICAL
631053	1/2" STUDLINK	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631068	14 STUDLINK	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631092	16 STUDLINK	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631098	17,5 STUDLINK	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631104	19 STUDLINK	ERCOLE (Horizontal & Vertical) / SUPER ERCOLE
631110	20 STUDLINK	ERCOLE (Horizontal) / SUPER ERCOLE

CHAINS SECTION



CHAIN d	Inside Length L (mm)	Outside Width w (mm)
6 ISO	18	20
7 ISO	21	24
8 ISO	24	27
10 ISO	30	34
12 ISO	36	40
14 ISO	42	47
6 DIN 766	18.5	20
7 1/4" DIN 766	22	23
8 - 5/16" DIN 766	24	26
10 - 3/8" DIN 766	28	34
13 - 1/2" DIN 766	36	44

Code	Rope Size	For windlass
634877	12-14mm	DORADO

CUSTOMIZED SOLUTIONS



As part of the Lofrans' ability and capacity to deliver products for a wide range of vessels, the high end Mega Yacht demand for anchoring solutions could not be left unsupported.

Each yacht is considered as unique, as is the choice of anchoring equipment made by boat builders and naval architects around the world.

These products are almost always tailored to suit the individual requirements of yacht owners and operators, they are given special attention in all stages of their definition, design, manufacture, installation and commissioning.

A specific team of people, led by our Technical Manager, Mr. Luca Rivolta, focus on specific projects such as these, to be able propose products to yacht builders that exceed their needs in reliability, safety, look and engineering excellence.



In Lofrans', this has been our goal since 1966.

SELECTING THE WINDLASS

VERTICAL OR HORIZONTAL?

The space available on and under the deck is the main criteria to be considered when selecting a vertical or a horizontal windlass.

Vertical windlasses have main shaft rotation vertical to the deck and allowing a reduced use of space on deck while the electric motor and the gearbox are below deck, in the chain locker.

Horizontal windlasses are installed on deck and they have a rotation horizontal to the deck. They are recommended on vessels where there is a limitation to the chain locker space. The electric motor and the gearbox are protected by a cover and they are easily accessible for maintenance.

To help stowing of the chain in the chain locker and for better performance of the windlass, the distance between the top of the heaped chain and the under-deck must be at least 300 mm.

DC, AC OR HYDRAULIC?

The windlass can be supplied in three different ways of motorization: direct current, alternate current and hydraulic.

- D.C. motorization is the most popular for reliability. The maintenance is very limited and this kind of electric motor is used for vessels up to 90 feet of length.
- A.C. motorization is the choice for boats from 90 up to 120 feet of length which have generators on board. A.C. motors offer good torque; they need a simple installation and limited maintenance.
- Hydraulic motorization gives the advantage of supply a constant torque while the load changes. They are very popular on boats of over 120 feet length. They need a specific installation.

MAX PULL AND WORKING LOAD

Max pull is the maximum pull that the windlass is able to supply for a few seconds.

Working Load is a load which simulates the operating conditions. This load is the reference for ampere drawing and the speed data indicated in the catalogue.

PROPER WINDLASS SELECTION

The steps to select a vertical or horizontal windlass are:

- Select the proper model checking the chart - windlass model length of the boat.
- Calculate the ground tackle which is made by anchor weight, total chain and rope weight on board.
- Ground tackle not to exceed the working load with a tolerance + 10%.

Eg sample on a boat of 42 feet

1. Calculation of the round tackle (anchor + rope + total chain)				
eg	Anchor	Chain 10 - 75mt - weight 2,2 kg/mt	Rope 25m/75ft	Ground tackle
	25g	165Kg	5Kg	190Kg

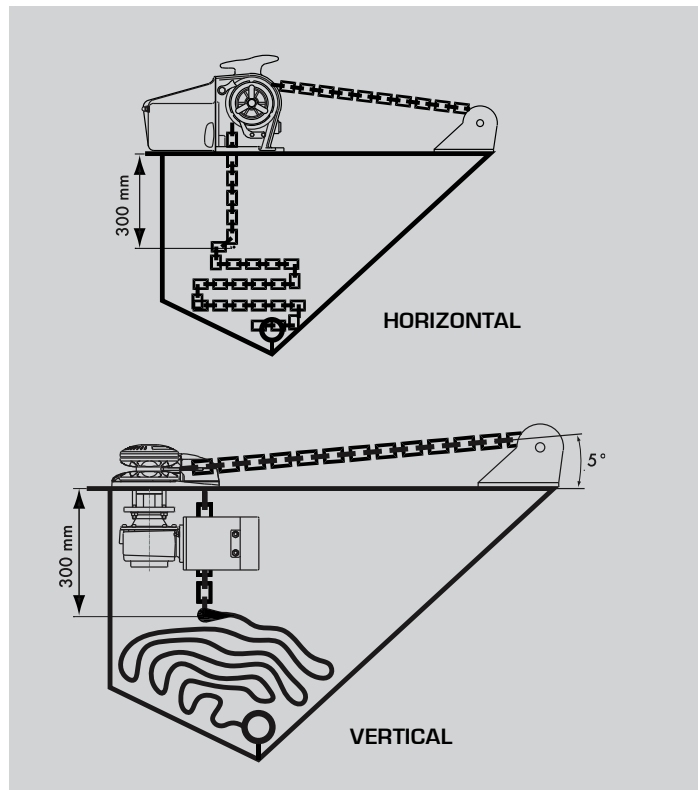
CIRCUIT BREAKER

The circuit breaker protects the electric motor and the cables of the windlass from current overload. It is installed on the power line and it trips automatically when the current is over the rated use following a specific time/ current curve. It is essential install this device for safety reasons.

The circuit breaker once tripped can be engaged again.

Choosing the proper circuit breaker is very important. You have to select the delayed time/current curve as the anchor windlass ampere drawing changes following the variable load.

Lofrans' does not recognize warranty in case of improper proper circuit breaker being installed.



SAFETY

The windlass is designed to lift the ground tackle but it is not designed to take the load of the whole boat. For this reason we strongly recommend the use of a chain stopper in order to spread the load and avoid to damage from overload on the structural components of the windlass.

MANUAL OVERRIDE

Most of the Lofrans' windlasses are supplied with manual override which makes the windlass able to recover the chain in case of failure of the electrics.

The manual override is inserted inside the gearbox and consists of a spring loaded ratchet which has the secondary function to make a sort of mechanical safety feature, in order to prevent chain jams in the chain locker from damaging the deck.

CLUTCH

In the Lofrans' anchor windlasses, the main shaft and the gipsy are connected by a pair of conical discs called clutches. They are normally engaged by screwing the top or side, star shaped nut. To engage or disengage the clutch you have to insert the supplied handle in this nut.

By disengaging the clutch, the gipsy is free to rotate and the weight of the anchor releases the rode into the water.

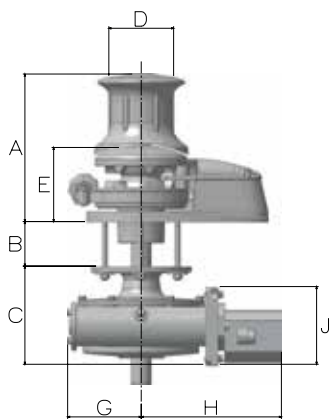
AUTOMATIC FREE FALL

On some horizontal anchor windlasses there is an installed optional device called AUTOMATIC FREE FALL. This device allows the user to disengage the clutch automatically simply by pushing the DOWN button of the remote.

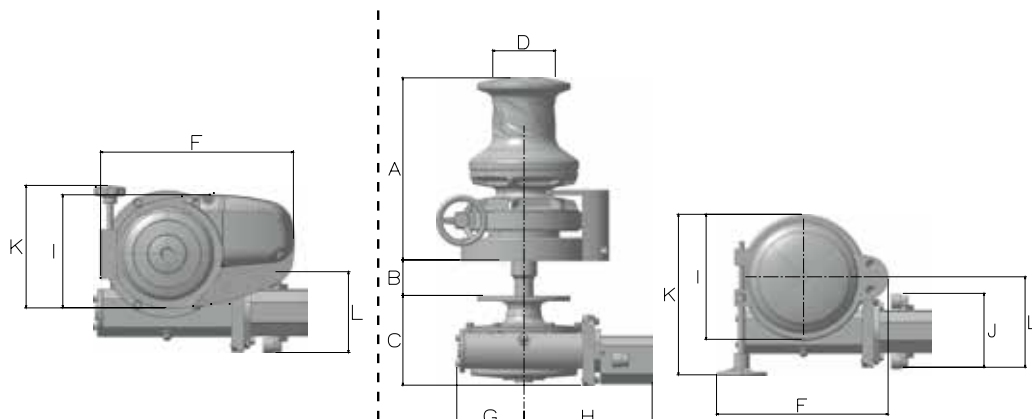
ROPE AND CHAIN MANAGEMENT

Most of the Lofrans anchor windlasses are able to manage rope and chain by a special spring load tension arm called finger which pushes the rope deeply inside the gipsy teeth.

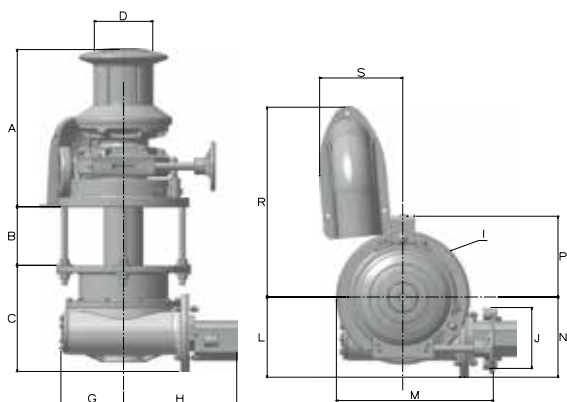
Hydraulic Models - Dimensions in mm



X4	A	B	C	D	E	F	G	H	I	J	K	L
Hydraulic 8cc	285	60-130	200	Ø125	150	380	140	270	220	150	240	156

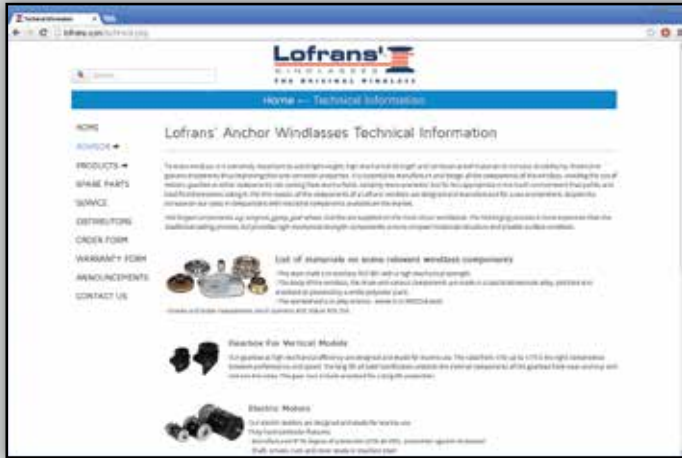


X5	A	B	C	D	F	G	H	I	J	K	L
Hydraulic 8cc	385	60-90	190	Ø132	365	142	270	264	156	339	190



Ercole Verticale	A	B	C	D	G	H	I	J	L	M	N	P	R	S
Hydraulic 11cc	400	150	272	150	160	290	340	156	205	405	205	205	min 490 - max 600	min 200 - max 230

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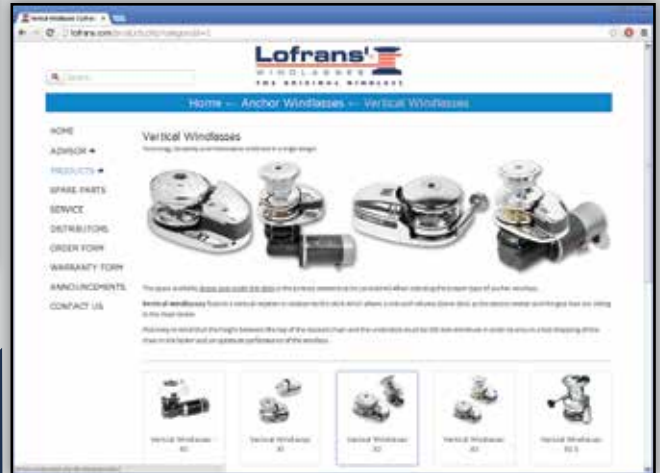


ADVISOR

Up-to-date technical information

PRODUCTS

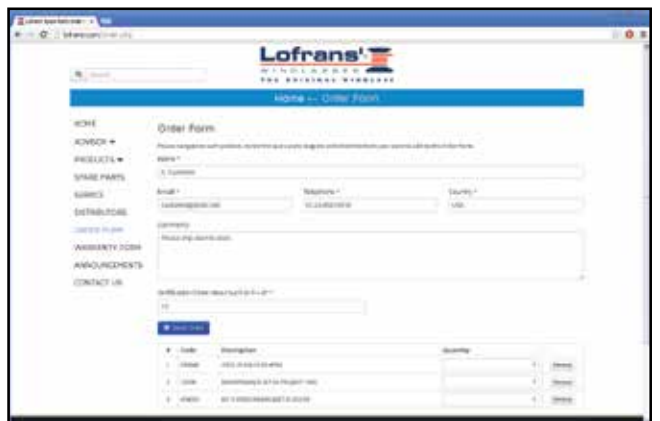
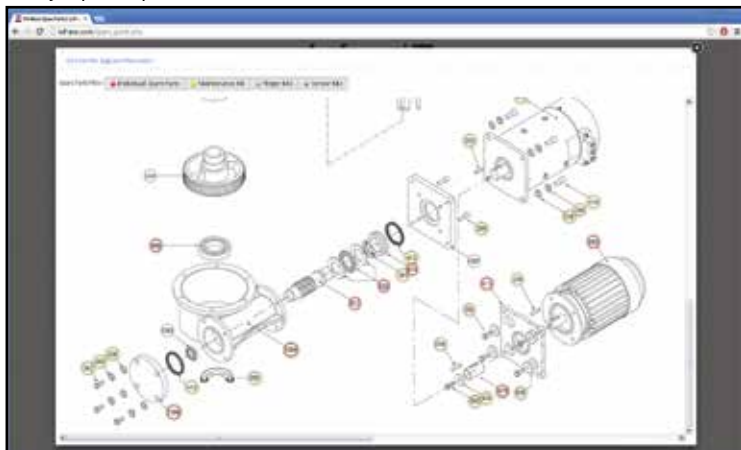
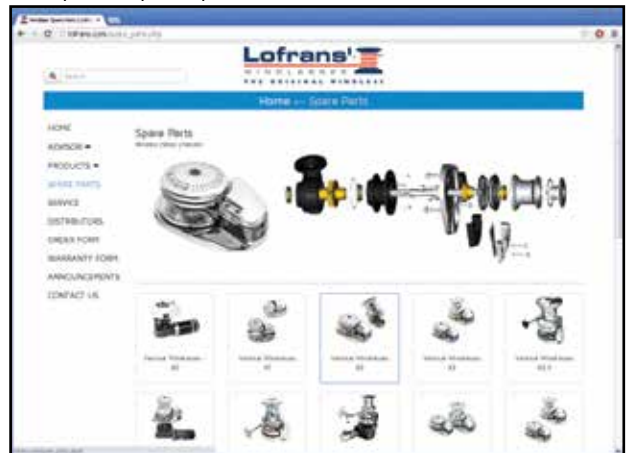
Comprehensive product selection



Complete spare parts information

SPARE PART ORDERING IN 2 STEPS

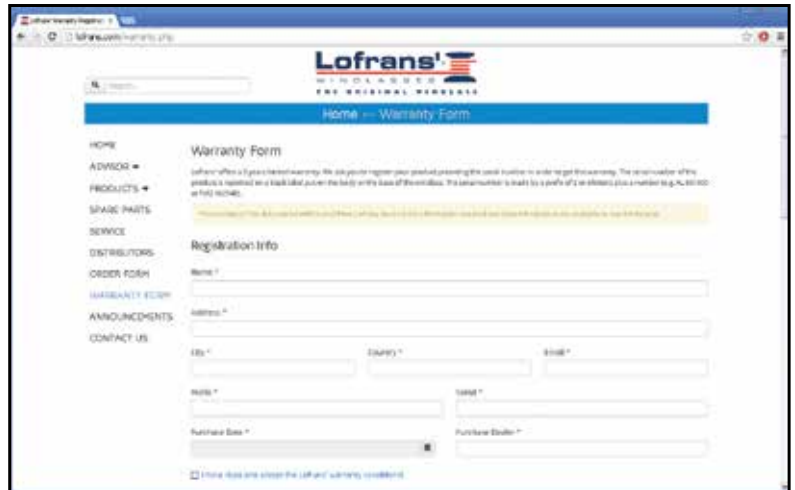
Easy spare part selection



To order spare parts, all is needed is an internet connection

WARRANTY

Take advantage of the 3 year warranty period



GLOBAL NETWORK

Lofrans' international representation



INTEGRATED HYDRAULIC SYSTEMS

MAX
POWER

As of 2013, a strong partnership has been built among Lofrans' and Max Power thrusters creating a synergy in yacht control and maneuvering solutions.

As a natural evolution from simple stand-alone independent units, Max Power is able to offer fully integrated hydraulic systems for sailing yachts. Whether running winches, windlasses, bow thrusters, stern thrusters, hydraulic davits or complex keel lifting mechanisms, our complete hydraulic solutions are used by many of the world's large sailing yacht manufacturers. Unique in their flexibility, Our systems are built using a common central line principle.

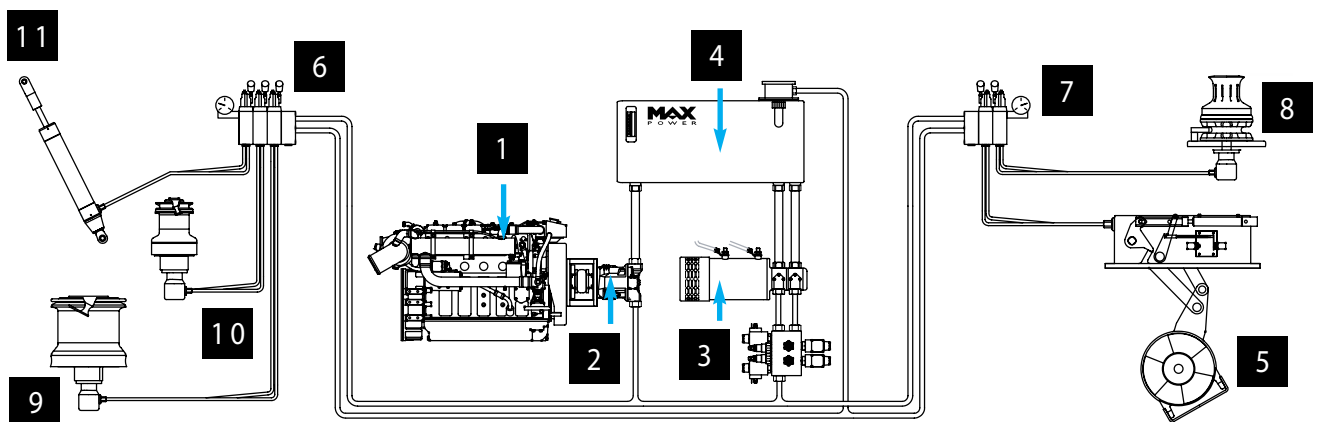


This means any function can be run from any power source thereby allowing a high level of user control. The use of load sensing pumps and valves ensures efficient and silent operation over a wide range of hydraulic flows and pressures. Our experience in designing and supplying complete solutions ensures that a Max Power-Lofrans' integrated system will be efficient, flexible and reliable.

Sailing yacht power systems typically include one or several generator mounted hydraulic pumps and in addition will require a DC power pack for silent sailing and light maneuvering. The PowerValve™ power pack range used in our systems, offers exceptional flexibility and power efficiency over a wide range of hydraulic flows.

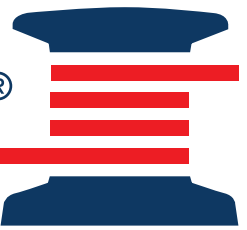
Available as single or twin motor units, each motor pump can deliver 3 flow ratings at two predetermined system pressures, thereby accommodating a wide variety of hydraulic functions.

From high pressure, low flow keel, to a powerful high flow windlass, each function only draws the amperage needed for that specific application.



- | | |
|--------------------------------------|------------------|
| 1 Generator with PTO | 7 Control Valve |
| 2 Variable displacement pump | 8 Windlass |
| 3 DC power pack | 9 Winch |
| 4 Oil tank with filtration and gages | 10 Winch |
| 5 Thruster | 11 Hydraulic ram |
| 6 Control Valve | |

Lofrans![®]



W I N D L A S S E S

T H E O R I G I N A L W I N D L A S S



A: Via Philips 5, 20900 Monza (MI), Italy

T: +39 039 200 1973 - 936

F: +39 039 2004299

E: contact@lofrans.com

W: www.lofrans.com