





# 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.

# Lofrans' Now



windlasses built in 1966

The intensive research of new anchoring solutions having the ability to operate in the marine environment, has lead 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 3 16 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.

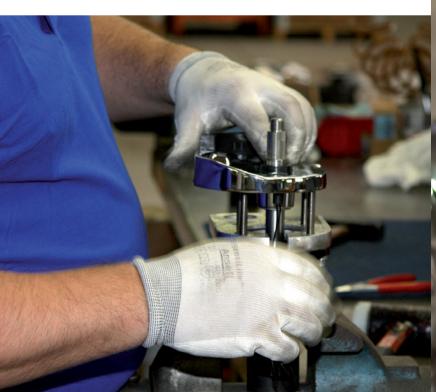
During the production process in our factory, we carry out several dimensional tests on components and final products by use of our 3D co-ordinate measuring machine, as well as marine corrosion tests in a special marine environment chamber, which simulates the harshest of marine environments.

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.







# CONTENTS

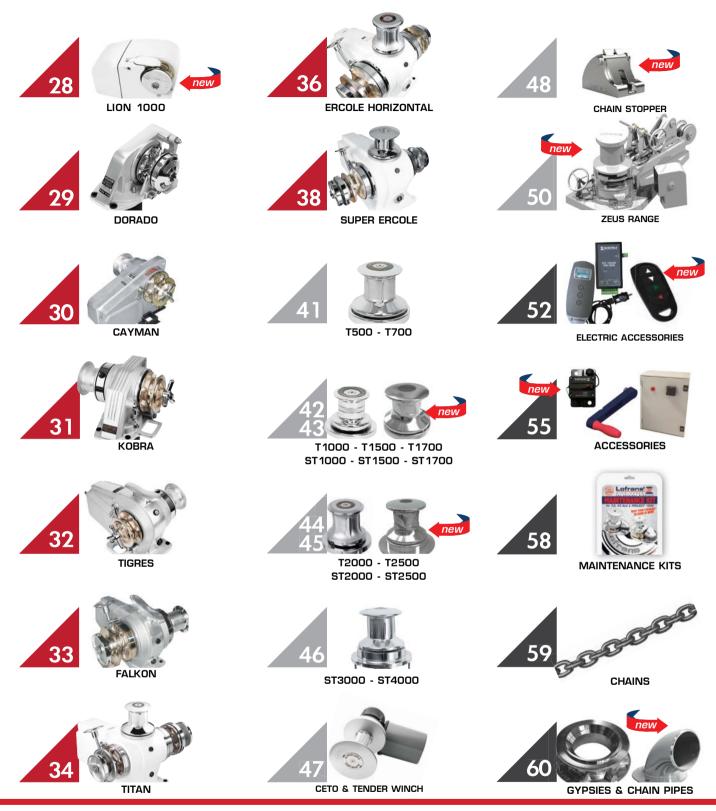


# Why is it necessary to install an anchor windlass?

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.



# X Series & SX Series VERTICAL WINDLASSES

The X & SX vertical windlass range series is designed to provide anchoring solutions for sail and motor boats from 18 to 100 feet. The X series as standard, comes in mirror polished marine bronze produced by hot forging and it is made up by the following models: X1, X2, X3, X4 and Ercole Vertical. All X series windlasses are available in standard version with drum and in low profile version.

The SX Series is the new, round base vertical windlass and consists of the models SX1, SX2, SX3, SX3.5, SX4 and SX5. The SX Series is constructed with marine stainless steel AISI 316L to make sure the windlass is corrosion free. In addition the round base designs offers

a more compact structure. All SX series windlasses are available in standard version with drum and in low profile version, except the SX1 (only low profile).

All models are available in different motorization to meet all customers' requirements.

The ranges X4 to Ercole Vertical, from X Series, and SX4 to SX5, from SX Series, have been designed to be installed in yachts with a length of more that 55ft. These yachts require well-designed professional equipment, with a high mechanical performance and a high level of reliability.

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.

#### **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.

 $\bullet$  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.

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## 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

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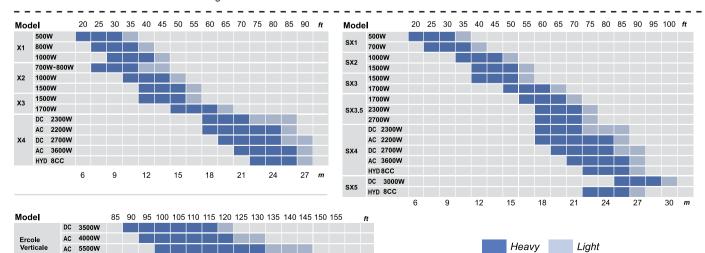
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The steps to select a vertical or horizontal windlass are:

- 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%.







# Stainless Steel Vertical Windlass 500W / 800W





# Low profile

## Main features

- Compact round base design
- Marine AISI 3 16L Stainless Steel construction
- Indepent Gypsy and drum operation
- Manual chain release
- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

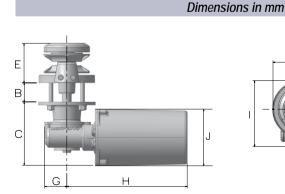
Construct	ion	Stainles	ss Steel	
Motor size	9	500 W	800 W	
Power Su	pply (V)	12	12	
Maximum	Pull (kg)	630	700	
Working lo	oad (kg)	95	100	
Amps at V	Vorking Load (A)	75	80	
Line Spee	d at Working Load (m/min)	23	25	
Max Line S	Speed (m/min)	26	28	
Net Weigh	t Low Profile (kg)	11	13	
Net Weigh	it with Drum (kg)	12	14	
Circuit Bre	eaker (available separately)	636087 636088		
Control Bo	X	Included in	n package	
SX1	6069600	Code	Code	
Low	6 mm, ISO 4565 / DIN 766	636279	636281	
Profile	8 mm, ISO 4565 / DIN 766	*	636280	

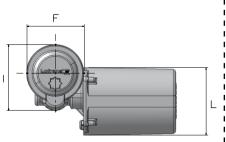
# **Compatible Gypsies**



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

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





Model	В	С	E	F	G	Н	I	J	L
500W	10-30	111	77	128	56	236	110	105	132
800W	10-30	150	77	128	62	236	110	134	165

# **Optional Accessories**



# Lofrans'

- Vertical Windlass





# Low profile

# Main features

- Luxury chrome bronze base and drum
- With drum or Low profile
- Indepent Gypsy and drum operation
- Rope and chain combination Gypsy
- Manual chain release
- Rope chain management by the spring loaded arm

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- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

Construction	Aluminium	Chromed bronze					
Motor size	500 W	500 W	800 W	1000 W			
Power Supply (V)	12	12	12	12			
Maximum Pull (kg)	630	630	700	900			
Working load (kg)	95	95	100	125			
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	0000000		Code	Code	Code	Code
With	6 mm, ISO 4565 / DIN 766	10-12 mm, 3-strand	409558	472881	473207	*
Drum	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	*	187270	473003	600092
Low	6 mm, ISO 4565 / DIN 766	10-12 mm, 3-strand	409557	472880	473217	*
Profile	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	*	187269	473002	600093

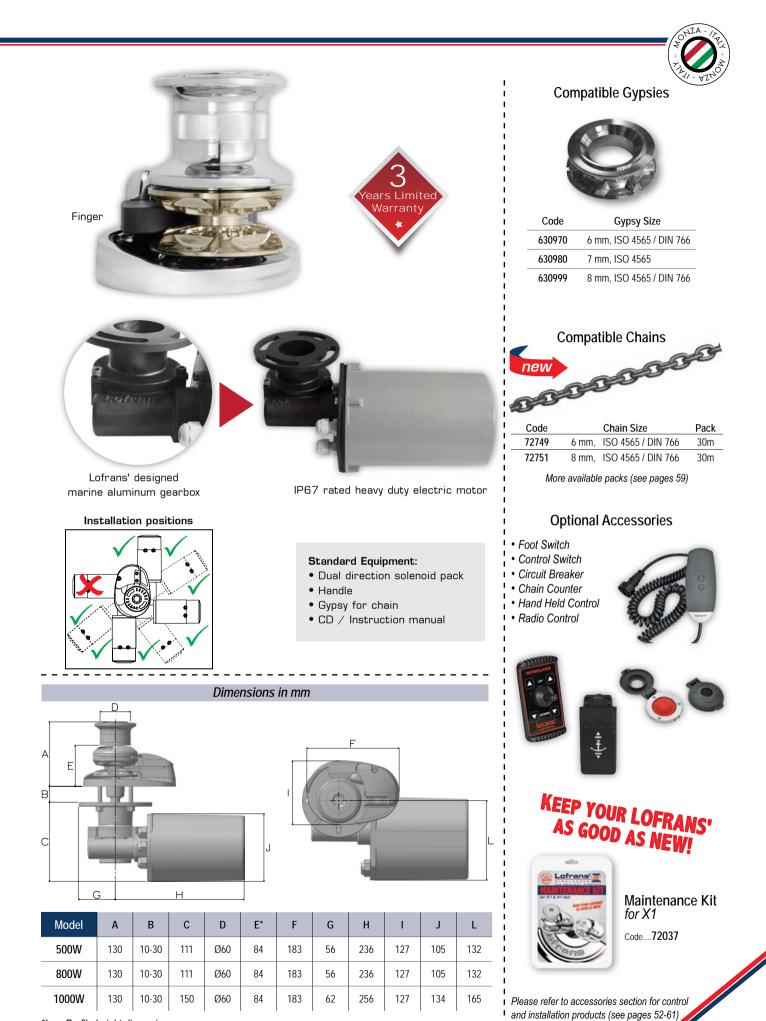
\*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

WINDLASS

# With Drum

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\*Low Profile height dimensions.







# Main features

- Compact round base design
- Marine AISI 3 16L Stainless Steel construction
- With drum or Low profile
- Indepent Gypsy and drum operation
- Manual chain release
- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

# With Drum

Construction	Stainless Steel			
Motor size	10	1000 W		00 W
Power Supply (V)	12	24	12	24
Maximum Pull (kg)	1000	1060	1200	1270
Working load (kg)	150	160	165	175
Amps at Working Load (A)	135	70	150	75
Line Speed at Working Load (m/min)	20	23	17	19
Max Line Speed (m/min)	40	40	40	40
Net Weight Low Profile (kg)	19	23	24	24
Net Weight with Drum (kg)	20	24	25	25
Circuit Breaker (available separately)	636089	636088	636090	636088
Control Box	Included in package			

SX2	DOG DOG	Code	Code	Code	Code
With Drum	8 mm, ISO 4565 / DIN 766	636283	*	*	636285
Low Profile	8 mm, ISO 4565 / DIN 766	636282	*	*	636284

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

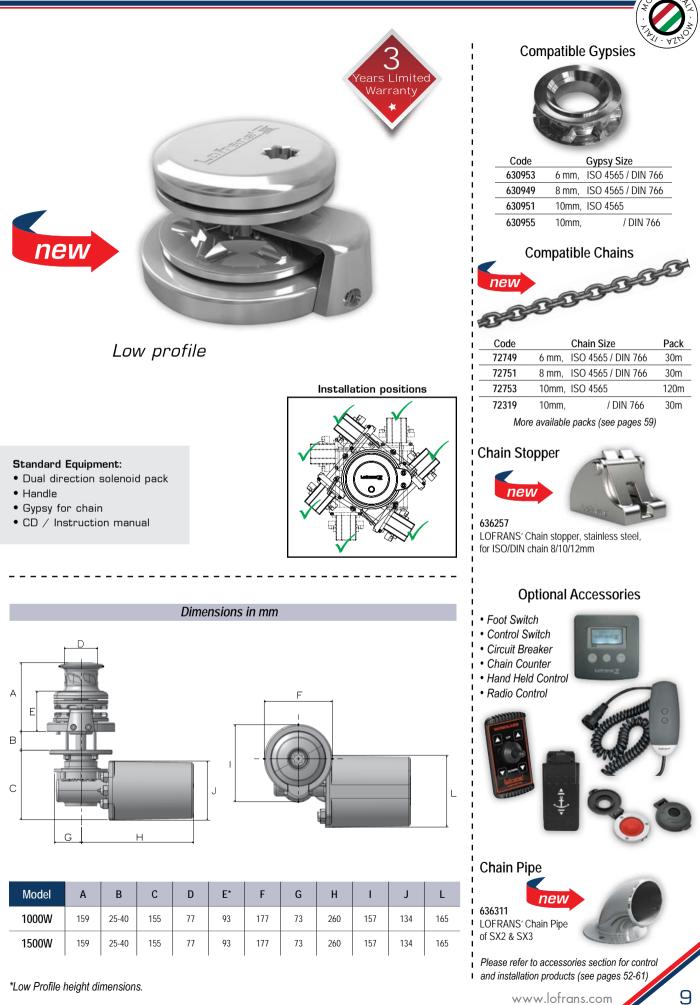
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X2 - Vertical Windlass



# Main features

- Luxury chrome bronze base and drum
- Special watertight stainless steel ball bearing in the base
- With drum or Low profile
- Indepent 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						
Motor size	700W	800W	100	0 W	150	o W	700W	800W	100	0 W	150	0 W
Power Supply (V)	24	12	12	24	12	24	24	12	12	24	12	24
Maximum Pull (kg)	750	850	1000	1060	1200	1270	750	850	1000	1060	1200	1270
Working load (kg)	105	115	150	160	165	175	105	115	150	160	165	175
Amps at Working Load (A)	45	90	135	70	150	75	45	90	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)	187331	187332	187333	187332	187333	187332	187331	187332	187333	187332	187333	187332
Control Box	Included in package											

X2	000000		Code											
	6 mm, ISO 4565 / DIN 766	-	*	600044	600049	*	*	*	601022	600046	600997	*	*	*
With Drum	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	*	472735	472751	472750	600057	600061	601024	472862	473212	473255	*	*
	10 mm, DIN 766	-	*	*	*	*	*	601068	*	*	602096	473227	187274	187276
	10 mm, ISO 4565	-	*	*	600053	*	600056	600060	*	*	472863	*	601013	601044
	6 mm, ISO 4565 / DIN 766	-	602111	600045	600050	*	*	*	601016	600047	600989	*	*	*
Low Profile	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	*	472558	472557	*	*	601065	601018	472861	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.

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\*Low Profile height dimensions.

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# Main features

- Compact round base design
- Marine AISI 3 16L Stainless Steel construction
- With drum or Low profile
- Indepent Gypsy and drum operation
- Manual chain release
- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

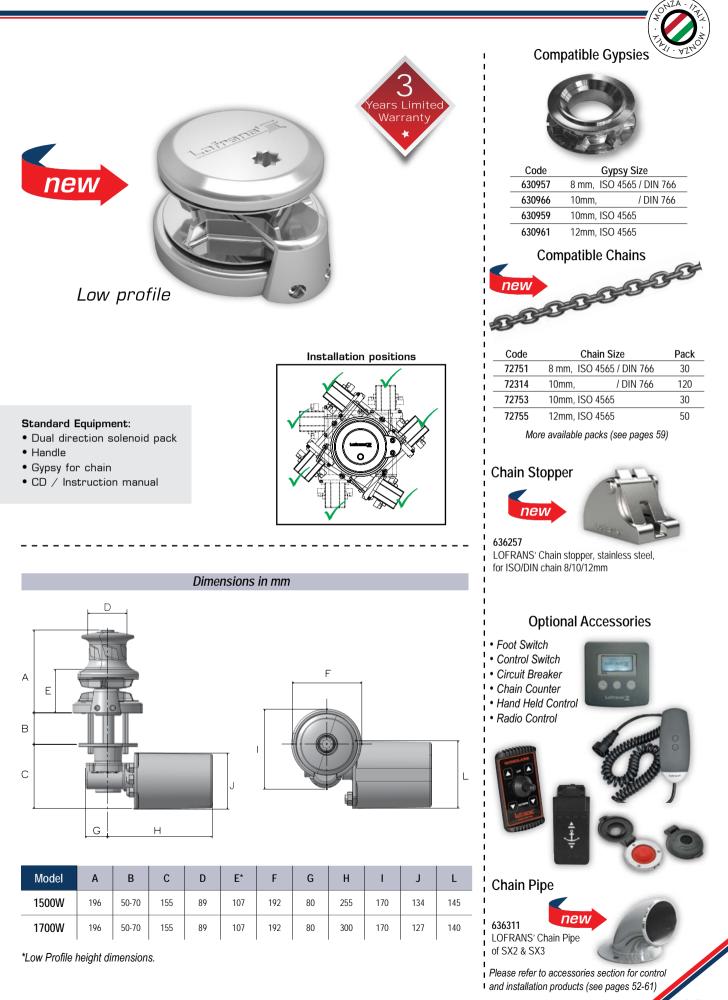
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# With Drum

Construction	Stainless Steel				
Motor size	1500W	1700 W			
Power Supply (V)	12	12 24			
Maximum Pull (kg)	1200	1600 1695			
Working load (kg)	165	200	215		
Amps at Working Load (A)	150	180	90		
Line Speed at Working Load (m/min)	17	14	15		
Max Line Speed (m/min)	40	32	32		
Net Weight Low Profile (kg)	32	35	35		
Net Weight with Drum (kg)	35	38	38		
Circuit Breaker (available separatly)	636089	89 636091 636088			
Control Box	Included in package				

SX3	DOG NOTION	Code	Code	Code
With	10 mm, DIN 766	*	*	636288
Drum	12 mm, ISO 4565 / 13mm, DIN 766	*	*	636287
Low	10 mm, ISO 4565	636289	*	*
Low Profile	12 mm, ISO 4565 / 13mm, DIN 766	*	*	636286

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



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#### Main features

- Luxury chrome bronze base and drum
- With drum or Low profile
- Indepent 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

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Construction	Aluminium		Chromed bronze				
Motor size	1700W	1500W	170	00 W			
Power Supply (V)	12	12	12	24			
Maximum Pull (kg)	1600	1200	1600	1695			
Working load (kg)	200	165	200	215			
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 separatly)	187334	187333	187334	187332			
Control Box		Included in package					

X3	00000000		Code	Code	Code	Code
	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	57451	601079	600064	600068
With	10 mm, DIN 766	16 mm, 3-strand	57452	*	602101	602103
Drum	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
	8 mm, ISO 4565 / DIN 766	14 mm, 3-strand	601128	601070	600065	*
Low	10 mm, DIN 766	16 mm, 3-strand	*	*	602102	602104
Profile	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.

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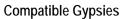
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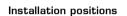
# Low profile

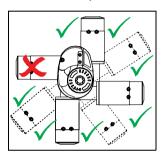




Code	Gyps	y Size
630957	8 mm, ISO 4	565 / DIN 766
630966	10mm,	/ DIN 766
630959	10mm, ISO 4	565
630961	12mm, ISO 4	565



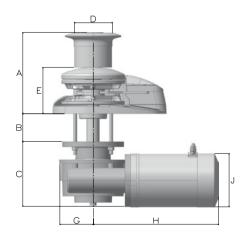


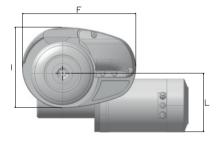


# Standard Equipment:

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

# Dimensions in mm





Model	А	В	С	D	E*	F	G	Н	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.

# Chain Stopper

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

# **Optional Accessories**

• Foot Switch Control Switch

Circuit Breaker

Chain Counter







Maintenance Kit for X3, X3ALU

Code....72040

Please refer to accessories section for control and installation products (see pages 52-61)







# Stainless Steel - Vertical Windlass 1700w / 2300w / 2700w / Hydraulic

## Main features

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

# With Drum

Construction		Stainless Steel						
Motor size	170	1700 W		2700W	Hydraulic - 8cc			
Power Supply (V)	12	24	24	24	-			
Maximum Pull (kg)	1700	1700	1900	2000	2500			
Working load (kg)	270	270	330	400	650			
Amps at Working Load (A)	185	95	180	210	-			
Line Speed at Working Load (m/min)	15	16	16	16	16			
Max Line Speed (m/min)	37	37	35	35	16			
Net Weight Low Profile (kg)	50	50	60	60	55			
Net Weight with Drum (kg)	48	48	58	58	60			
Hydraulic Pressure (bar)	-	-	-	-	200			
Hydraulic Flow (It/min)	-	-	-	-	32			
Circuit Breaker (available separatly)	187334	187332	187333	187333	-			
Control Box	Included in package -							

SX3.5	0000000	Code Code		Code	Code	Code
	10 mm, ISO 4565	600084	600085	*	*	*
With Drum	12 mm, ISO 4565 / 13mm, DIN 766	600086	600087	600088	*	*
	14 mm	*	*	*	600090	*
Low	12 mm, ISO 4565 / 13mm, DIN 766	635984	635985	635986	636099	*
Profile	14 mm	*	*	*	*	636208

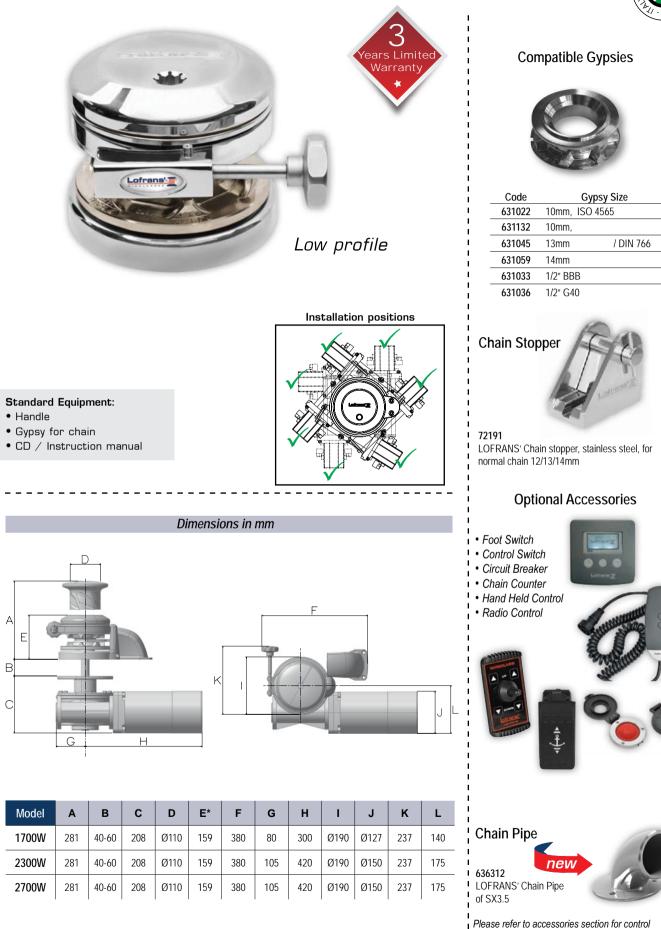
\*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table on next page.

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\*Low Profile height dimensions.

\*\* For Hydraulic version dimensions please see page 64

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and installation products (see pages 52-61)

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# Stainless Steel Stainless Steel Vertical Windlass 2300W / 2700W / Hydraulic - 8cc



## Main features

- Compact round base design
- Marine AISI 3 16L Stainless Steel construction
- With drum or Low profile
- Indepent Gypsy and drum operation
- Manual chain release
- Chain counter magnet pre-installed as standard
- IP67 rated heavy duty electric motor
- Anodised marine aluminium gearbox

# With Drum

Construction		Stainless Steel		
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 (It/min)	-	-	32	
Circuit Breaker (available separatly)	636090	636091	-	
Control Box	Included	in package	-	

SX4	996 VOID	Type**	Code	Code	Code
With Drum	12 mm, ISO 4565 / 13mm, DIN 766	CW	636290	636291	636295
Low Profile	12 mm, ISO 4565 / 13mm, DIN 766	CCW	636292	639293	639294

\*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





# - Vertical Windlass



# Main features

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

# With Drum

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 (It/min)	-	-	32
Circuit Breaker (available separatly)	187333	187334	-
Control Box	Included in	-	

X4	0000000	Type** Code		Code	Code
	10 mm, ISO 4565	CW	600073	*	*
	12 mm, ISO 4565 / 13mm, DIN 766	CW	473007	600075	602361
With Drum	14 mm	CW	*	472849	602362
Bruin	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





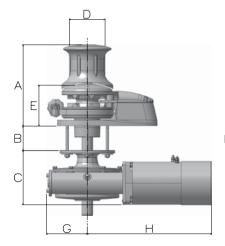
# Low profile

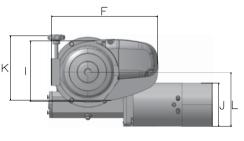
Installation positions

# Standard Equipment:

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

Dimensions in mm





Model	А	В	С	D	E*	F	G	Н	I	J	К	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 64

# **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

# **Chain Stopper**



72191 LOFRANS' Chain stopper, stainless steel, for

# normal chain 12/13/14mm

# **Optional Accessories**







ofrans

## Main features

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

With [	Drum
--------	------

Construction			316 L Stainless Steel		
Motor size			3000 W	Hydraulic - 8cc	
Power Supply	(V)		24	-	
Maximum Pul	l (kg)		2800	2500	
Working load	(kg)		760	680	
Amps at Worl	king Load (A)		210	-	
Line Speed at	Working Load (m/min)		17	21	
Max Line Spee	ed (m/min)		33	21	
Net Weight wi	th Drum (kg)		100	85	
Hydraulic Pres	ssure (bar)		-	200	
Hydraulic Flow	v (It/min)		-	32	
Control Box			Included in package		
SX5	0000000	Type**	Code	Code	
With	12 mm, ISO 4565 / 13mm, DIN 766	CW	600089	602389	
Drum	14 mm	CW	600091	602390	
Low Profile	12 mm, ISO 4565 / 13mm, DIN 766	CW	636296	*	

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

22 THE ORIGINAL WINDLASS





Construction			316 L Stainless Steel					
Motor size			3500 W	4000 W	5500 W	7500 W	Hydraulic - 11cc	
Power Supply (	V)		24	230-400	230-400	400	-	
Maximum Pull (	(kg)		4500	2200	6500	7500	6500	
Working load (k	(g)		705	565	1550	2000	1550	
Amps at Worki	ng Load (A)		240	-	-	-	-	
Line Speed at V	Norking Load (m/min)		12	13	13	13	14	
Max Line Speed	d (m/min)		20	13	13	13	14	
Net Weight with Drum (kg)		180	180	200	225	165		
Hydraulic Pressure (bar)		-	-	-	-	200		
Hydraulic Flow (It/min)			-	-	-	-	40	
Control Box		Included in package	600096	600693	600699	-		
ERCOLE VERTICALE	0000000	Type**	Code	Code	Code	Code	Code	
	14 mm	CW	600080	600082	*	*	602523	
	16 mm	CW	*	*	600409	*	602525	
With Drum	17,5 STUD LINK	CW	*	*	*	636078		
	14 mm	CCW	600081	600083	*	*	602524	
	16 mm	CCW	*	*	600408	*	602526	
	17,5 STUD LINK	CCW	*	*	*	636079		

\*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 3 16L 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 handwheel.

• Special high-grip drum with independent rotation from the Gypsy, for warping function.

• Indepent 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.

Dimensions in mm

- Heavy duty electric motor
- Power: DC, AC and hydraulic
- Available in custom versions.

Please contact us for additional detailed documentation.

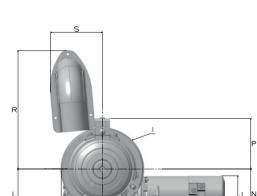
#### Standard Equipment:

• Dual direction solenoid pack (only for 24V version)

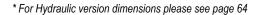
• Handle

E

- Gypsy for chain
- CD / Instruction manual



G H									i	М				
Model	А	В	С	D	G	Н	I	J	L	М	Ν	Р	R	S
3500W														
4000W	400	150	272	150	160	502	340	Ø158	205	405	220	205	min 490 -	min 200 -
5500W	400	150	212	150	100	502	340	100	200	405	220	205	max 600	max 230
7500W														





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

# Chain Stopper





Code....72191 See pages ???

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# **Optional Accessories**



Please refer to accessories section for control and installation products (see pages 52-61)



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 husiness.

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.

# HORIZONTAL WINDLASSES

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.

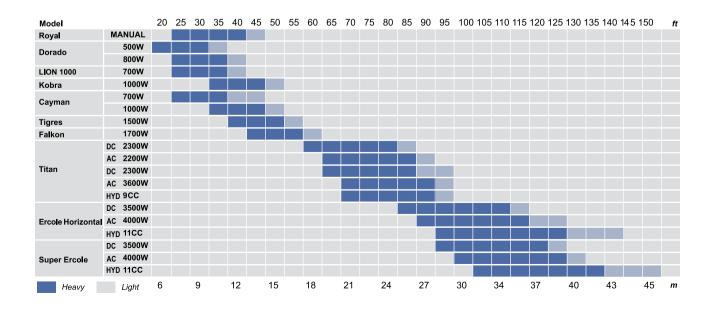
Automatic free fall: Models KOBRA and CAYMAN can optionally have a device installed named AUTOMATIC FREE FALL. This device allows disengaging the clutch automatically by pushing the "Down" button of the remote control unit. Disengaging the clutch, the Gypsy rotates freely and the weight of the anchor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

Rope and chain management: Models DORADO and LION 1000 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.

#### STANDARD EQUIPMENT:

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





# ROYAL - Horizontal Windlass





# Main features

- Marine alluminim anodised body
- Indepent Gypsy and drum operation
- Manual chain release
- Manual override

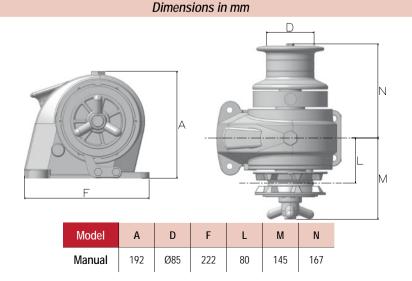
Constructio	on	Anodised Aluminium
Motor size		MANUAL
Power Sup	ply (V)	-
Maximum F	Pull (kg)	400
Working loa	ad (kg)	50
Amps at W	orking Load (A)	-
Line Speed	at Working Load (m/min)	-
Max Line S	peed (m/min)	-
Net Weight with Drum (kg)		10
ROYAL	0000000	Code
	6 mm, ISO 4565 / DIN 766	187323
	7 mm, ISO 4565	600625
With Drum	8 mm, ISO 4565 / DIN 766	404725
Diam	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				





Maintenance Kit for ROYAL

Code....72046

27

Please refer to accessories section for control and installation products (see pages 52-61)

# Lofrans<sup>,</sup>

LION 1000 - Horizontal Windlass

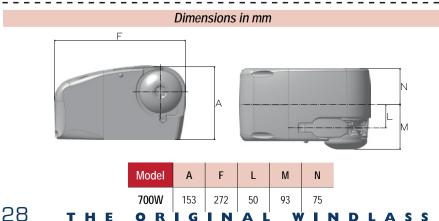
# Verseweighter version version

Construction	Anodised Aluminium
Motor size	700 W
Power Supply (V)	12
Maximum Pull (kg)	575
Working load (kg)	105
Amps at Working Load (A)	60
Line Speed at Working Load (m/min)	23
Max Line Speed (m/min)	26
Net Weight Low Profile (kg)	11
Control Box	Included in package

LION 1000	000000		Code
	6 mm, ISO 4565	10-12 mm, 3-strand	636214
Low Profile	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	636215
	6 mm, ISO 4565	10-12 mm, 3-strand	636216*
	8 mm, ISO 4565 / DIN 766	12 mm, 3-strand	636217*

\*with automatic free fall installed

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



# Main features

# • Automatic free fall available (optional)\*

- White painted aluminium body
- Manual chain release

• Rope chain management by the spring load arm

- Chain counter magnet pre-setting as standard
- Heavy duty rated IP66 electric motor
- Control Box included in package

# **Compatible Gypsies**



	Code	Gypsy Size
	631005	6 mm, ISO 4565 / DIN 766
	631007	7 mm, ISO 4565
	631009	8 mm, ISO 4565 / DIN 766
	Co	mpatible Chains
1	new	65

10	00	D.	BORN					
	Code		Chain Size	Pack				
	72749	6 mm,	ISO 4565 / DIN 766	30m				
	72751	8 mm,	ISO 4565 / DIN 766	30m				
	Mara available sealer (see sease 50)							

More available packs (see pages 59)

# **Optional Accessories**



Please refer to accessories section for control and installation products (see pages 52-61)



# DORADO - Horizontal Windlass





Stern windlass support, SS316, with roller & flange

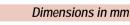


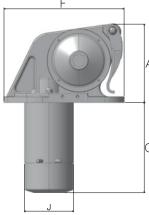
Code....72204

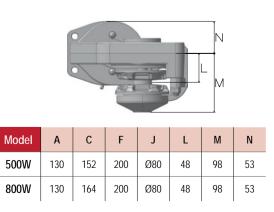
Construction	Anodised	Aluminium	
Motor size	500 W	800 W	
Power Supply (V)	12	12	
Maximum Pull (kg)	630	900	
Working load (kg)	95	125	
Amps at Working Load (A)	65	80	
Line Speed at Working Load (m/min)	18	20	
Max Line Speed (m/min)	24	25	
Net Weight Low Profile (kg)	10	11	
Circuit Breaker (available separatly)	187331	187332	
Control Box	Included	Included in package	

DORADO	0000000		Туре	Code	Code
Low Profile	6 mm, ISO 4565	10-12 mm, 3-strand	Port	409568	600048
LOW FIDILE	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







# Main features

- Marine aluminium 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

# **Optional Accessories**

Foot Switch
Control Switch
Circuit Breaker
Chain Counter











Maintenance Kit for DORADO

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Code....72047

Please refer to accessories section for control and installation products (see pages 52-61)

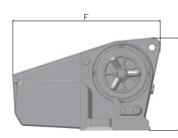
# CAYMAN - Horizontal Windlass



Construction	Anodised Aluminium			
Motor size	700 W	100	0 W	
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 separatly)	187332	187333	187332	
Control Box	Included in package			

CAYMAN	000 000	Code	Code	Code
	6 mm, ISO 4565 / DIN 766	600043	*	*
With Drum	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

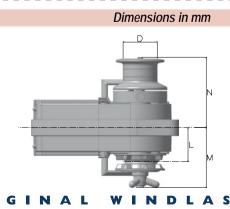


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OR

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S

#### Model D F L А М Ν 700W 230 Ø85 370 150 175 85 1000W 230 Ø85 370 85 150 175

# Main features (CAYMAN & KOBRA)

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

# **Optional Accessories**



More available packs (see pages 59)

# KOBRA - Horizontal Windlass

# **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			





Maintenance Kit for CAYMAN & KOBRA

Code....72048

Please refer to accessories section for control and installation products (see pages 52-61)



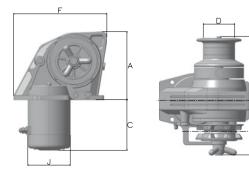


Construction	Anodised Aluminium		
Motor size	1000 W		
Power Supply (V)	12	24	
Maximum Pull (kg)	1250	1325	
Working load (kg)	170	170	
Amps at Working Load (A)	150	80	
Line Speed at Working Load (m/min)	16	17	
Max Line Speed (m/min)	32	33	
Net Weight with Drum (kg)	21	21	
Circuit Breaker (available separatly)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

KOBRA	0000000	Code	Code
	6 mm, ISO 4565 / DIN 766	600051	600513
With Drum	8 mm, ISO 4565 / DIN 766	220260	600514
With Drum	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	А	С	F	D	J	L	М	N
1000W	184	136	250	Ø85	Ø114	83	147	172

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# TIGRES - Horizontal Windlass 1500W



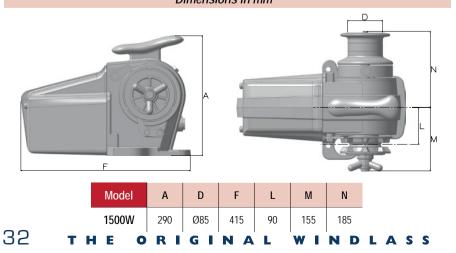
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Construction	Anodised	Anodised Aluminium		
Motor size	1500 W			
Power Supply (V)	12	24		
Maximum Pull (kg)	1500	1590		
Working load (kg)	190	200		
Amps at Working Load (A)	160	90		
Line Speed at Working Load (m/min)	14	16		
Max Line Speed (m/min)	33	33		
Net Weight with Drum (kg)	28	28		
Circuit Breaker (available separatly)	187333	187332		
Control Box	Included in package			

TIGRES	0000000	Code	Code
	8 mm, ISO 4565 / DIN 766	418407	418409
With Drum	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



# Main features

- Marine aluminium anodised body
- Indepent 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 76	6	
630978	7mm, ISO 4565		
630994	8 mm, ISO 4565 / DIN 766		
631118	10 mm, / DIN 76	6	
631011	10 mm, ISO 4565		
631120	3/8 BBB		
631122	3/8 PC		
631077	5/16 HT		

**Optional Accessories** 

# • Foot Switch

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





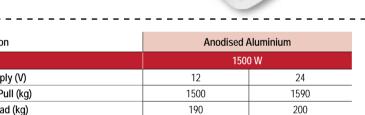




Maintenance Kit for TIGRES

Code....72050

Please refer to accessories section for control and installation products (see pages 52-61)





# FALKON - Horizontal Windlass

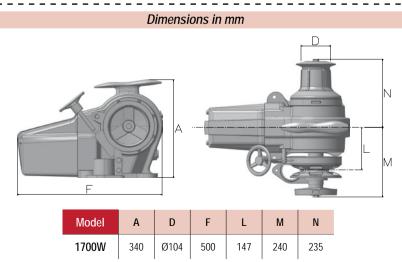




Construction	Anodised Aluminium		
Motor size	170	0 W	
Power Supply (V)	12	24	
Maximum Pull (kg)	1700	1800	
Working load (kg)	215	225	
Amps at Working Load (A)	210	100	
Line Speed at Working Load (m/min)	14	15	
Max Line Speed (m/min)	33	33	
Net Weight with Drum (kg)	55	55	
Circuit Breaker (available separatly)	187334	187332	
Control Box	Included i	n package	

FALKON	0000000	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



# Main features

- Marine aluminium anodised body
- Indepent 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		

# **Optional Accessories**



# TITAN - Horizontal Windlass 2300W / 3600W / Hydraulic

-

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# Main features

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

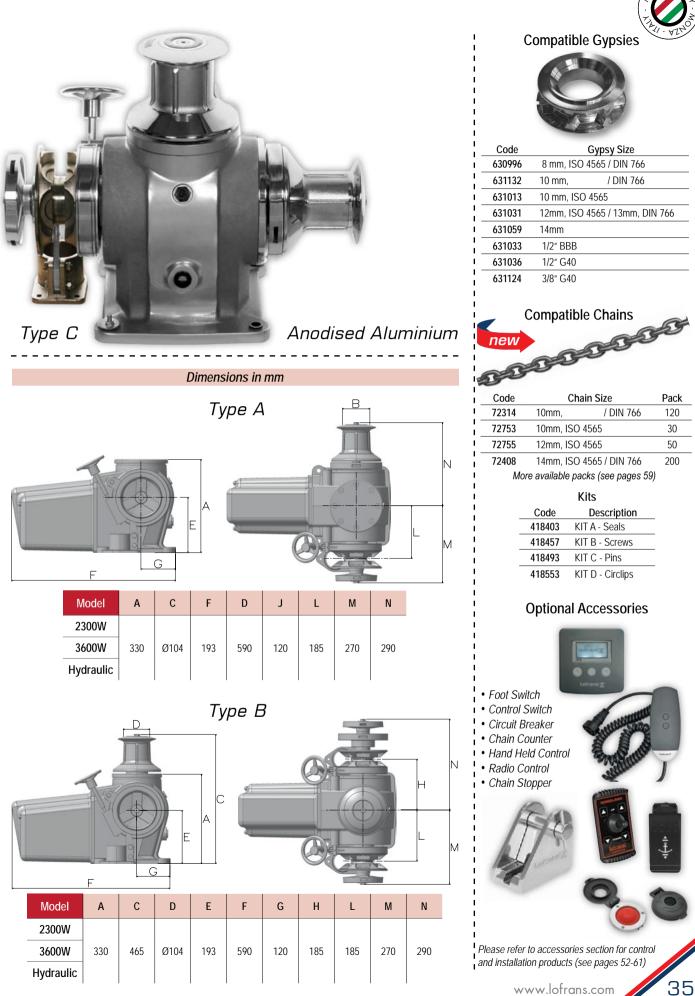
# Type B - White Aluminium

Construction	Anodised	Anodised Aluminium White Aluminium		Anodised Aluminium
Motor size	2300 W	3600 W	3600 W	Hydraulic - 9cc
Power Supply (V)	24	230 - 1 PH	230 - 1 PH	-
Maximum Pull (kg)	2700	3400	3400	3400
Working load (kg)	430	540	540	540
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 (It/min)	-	-	-	32
Circuit Breaker (available separatly)	187333	-	-	-
Control Box	Included in package	600	684	-

TITAN	0000000	Model**	Code	Code	Code	Code
/ 13mm, DIN 7	12 mm, ISO 4565 / 13mm, DIN 766	Туре А	404724	*	600846	602423
	14 mm, DIN 766		600072	600847	*	602424
Drum	12 mm, ISO 4565 / 13mm, DIN 766	Turne D	428938	*	*	602468
	14 mm, DIN 766	Туре В	426415	*	*	602469

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

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



# ERCOLE - Horizontal Windlass





#### Main features

- Available in white polyester coating
- Indepent Gypsy and drum operation

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

- Manual chain release
- Manual override
- Heavy duty electric motor

## Type B - White Aluminium



Chain pipe included

ofrans

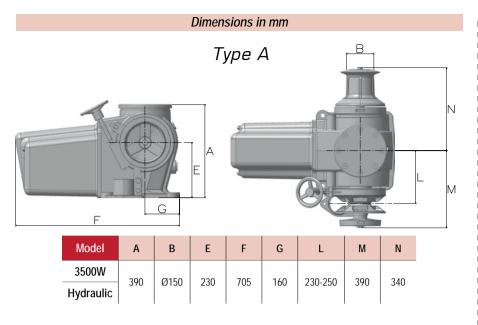
Construction	White Al	uminium
Motor size	3500 W	Hydraulic - 11cc
Power Supply (V)	24	-
Maximum Pull (kg)	4500	6500
Working load (kg)	810	1550
Amps at Working Load (A)	240	-
Line Speed at Working Load (m/min)	12	14
Max Line Speed (m/min)	20	14
Net Weight with Drum (kg)	200	180
Hydraulic Pressure (bar)	-	200
Hydraulic Flow (It/min)	-	40
Control Box	Included in package	-

ERCOLE	0000000	Model	Code	Code
	Drum 14 mm	Туре А	403615	602509
With Drum		Туре В	220317	602512
		Туре С	403614	602515

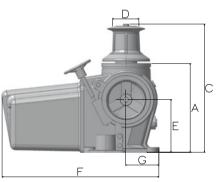
\*\*Available also in Type D, E, F ....

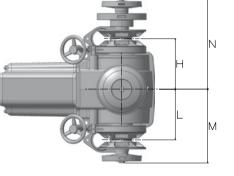
\*Non-standard configuration optional gypsies can be supplied separately. Please refer to compatible gypsies table





## Type B





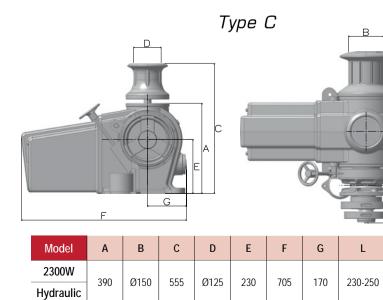
М

390

Ν

339

Model	А	С	D	Е	F	G	Н	L	М	N
3500W	390	555	Ø125	230	705	160	230-250	230-250	390	340
Hydraulic	390	000	0125	230	705	100	230-230	230-230	390	340



**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**



# SUPER ERCOLE



ofrans





#### Main features

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

## Type B - White Aluminium

Construction	White Aluminium									
Motor size	3500 W	5500 W	Hydraulic - 11cc							
Power Supply (V)	24	400	-							
Maximum Pull (kg)	5000	7000	7000							
Working load (kg)	870	1670	1670							
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 (It/min)	-	-	40							
Control Box	Included in package	600693	-							

SUPER ERCOLE		Model	Code	Code	Code
With Drum	16 mm	Туре А	404957	602501	602488
	16 mm	Туре В	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.

38 THE ORIGINAL WINDLASS



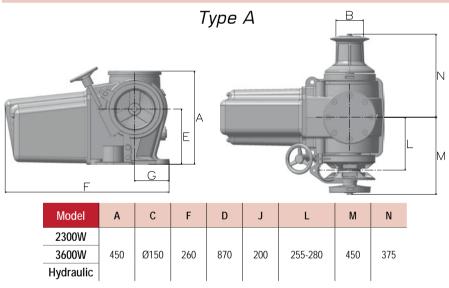
## **Compatible Gypsies**

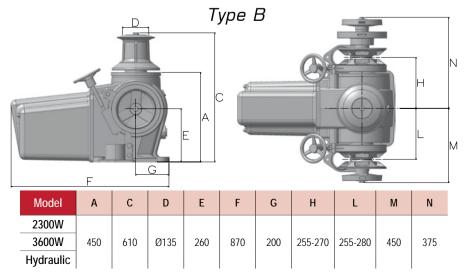
## - Horizontal Windlass

3500W / 5500W / Hydraulic



Dimensions in mm







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**





# 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.

The ST range has a base & a drum made in mirror polished AISI 3 16L stainless steel. The main structure of the gearbox is of a strong single-block construction, same as our big vertical anchor windlasses.

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.

CAPSTAN			20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100 1	05 11	0 115	120	125	130 1	135 1	40 1	45 1	50	ft
T500	:	500W																											
T700 / ST700		700W																											
T1000 / ST1000		1000W																											
T1500 / ST1500		1500W																											
T1700 / ST1700		1700W																											
		2200W																											
T2000 / ST2000		2300W																											
		3600W																											
	HYD																												
		2200W																	_										
T2500 / ST2500		2700W																	_										
		3600W																	_										
	HYD																		_										
		2200W																											
ST3000		3000W																			_								
		3600W																											
	HYD																												
		3500W																											
ST4000		4000W																											
		5500W																											
	HYD	11CC																											
Heavy	Li	ight	6		9		12		15		18		21		24		27		30	34		37		40		43		45	т



# **T500-T700** - Capstan

## Main features

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



Chromed Bronze

**Optional Accessories** 

### Foot Switch

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





Construction		Chromed bronze		Aluminium					
Model	T500	T7	/00	T500	T700				
Motor size	500 W	70	0 W	500 W	700 W				
Power Supply (V)	12	12	24	12	12	24			
Maximum Pull (kg)	670	850	900	630	850	900			
Working load (kg)	85	115	125	85	115	125			
Amps at Working Load (A)	75	110	50	75	110	50			
Line Speed at Working Load (m/min)	23	20	23	23	20	23			
Max Line Speed (m/min)	26	30	30	26	30	30			
Net Weight with Drum (kg)	11	15	15	9	15	15			
Circuit Breaker (available separatly)	187331	187331	187332	187331	187331	187332			
Control Box	Included in package								

Code	409130	220006	418159	409563	411129	600779

Dimensions in mm н С J Model А В D G Н T Т T500 90 18-30 111 Ø60 55 236 Ø115 110 121 T700 135 25-40 150 Ø92 62 256 Ø155 134 157

KIT A - SEALS **KIT B - SCREWS** For CAPSTANS For CAPSTANS Code Code 418410 T500 418446 T500 418411 T700 - T1000 418410 T500 **KIT C - PINS KIT D - CIRCLIPS** Code For CAPSTANS Code For CAPSTANS 418512 T500 418483 T500 418513 T700 - T1000

Please refer to accessories section for control and installation products (see pages 52-61)

www.lofrans.com

## T1000-T1500-T1700 - Capstan



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Aluminium



Chromed Bronze

IP67 rated heavy duty electric motor (T1500)

Construction			Chrome	d bronze					Alum	inium		
Model	T1	000	T1:	500	T1	700	T1(	000	T1	500	T17	700
Motor size	100	0 W	150	0 W	170	0 W	100	0 W	150	0 W	1700 W	
Power Supply (V)	12	24	12	24	12	24	12	24	12	24	12	24
Maximum Pull (kg)	1000	1060	1200	1270	1600	1695	1000	1060	1200	1270	1600	1695
Working load (kg)	150	160	165	165	200	215	150	160	165	165	200	215
Amps at Working Load (A)	135	70	150	75	180	90	135	70	150	75	180	90
Line Speed at Working Load (m/min)	20	23	17	19	14	15	20	23	17	19	14	15
Max Line Speed (m/min)	40	40	40	40	32	32	40	40	40	40	32	32
Net Weight with Drum (kg)	21	21	27	27	30	30	16	16	18	18	25	25
Circuit Breaker (available separatly)	187333	187332	187333	187332	187334	187332	187333	187332	187333	187332	187334	187332
Control Box						Included i	n package					
Code	417946	187324	220014	418161	472407	187326	409564	409567	600058	600062	600066	600069

Dimensions in mm н Model А В С D G Н Т J Т T1000 135 25-40 150 Ø92 62 256 Ø155 134 157 T1500 162 50-70 160 Ø104 73 236 Ø191 165 157 T1700 162 50-70 165 Ø104 90 300 Ø191 Ø127 140 Α SS

## KIT A - SEALS

**Optional Accessories** 

Foot Switch
Control Switch
Circuit Breaker

Hand Held Control
Radio Control

Code	For CAPSTANS
418411	T700 - T1000
418422	T1500 - T1700
К	IT C - PINS
Code	For CAPSTANS
418487	T1500 - T1700
KIT	D - CIRCLIPS
Code	For CAPSTANS
418513	T700 - T1000
418514	T1500 - T1700

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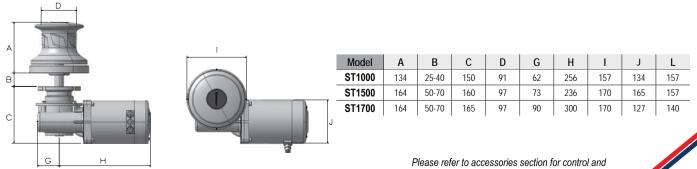




Marine AISI 316L Stainless Steel base & drum

Construction		Stainless Steel			
Model	ST1000	ST1500	ST1700		
Motor size	1000 W	1500 W	1700 W		
Power Supply (V)	24	24	24		
Maximum Pull (kg)	1060	1270	1695		
Working load (kg)	160	165	215		
Amps at Working Load (A)	70	75	90		
Line Speed at Working Load (m/min)	23	19	15		
Max Line Speed (m/min)	40	40	32		
Net Weight with Drum (kg)	21	27	30		
Circuit Breaker (available separatly)	636088	636088	187332		
Control Box	Included in package				
Code	636297	636298	636299		

## Dimensions in mm



installation products (see pages 52-61) www.lofrans.com

## T2000 - T2500 - Capstan



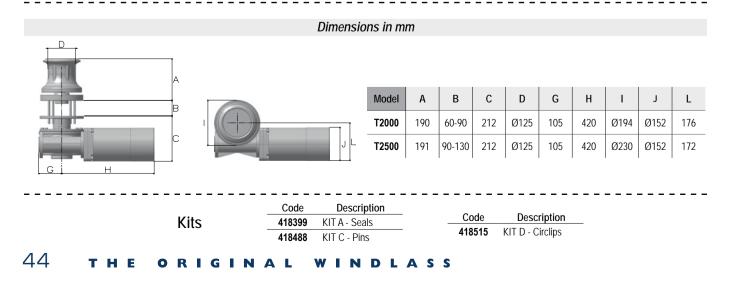
#### Main features

ofrans

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

Construction	Chromed bronze									
Model		T2	000		T2500					
Motor size	2200 W	23	00 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)	2200	2000	2000	2500	2200	2400	2500			
Working load (kg)	595	545	545	680	595	650	680			
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 (It/min)	-	-	-	32	-	-	32			
Control Box	600095	Included in package		-	600095	Included in package	-			
Code	600071	404967	600729	602140	600070	476239	602168			

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



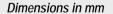


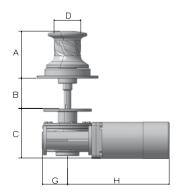


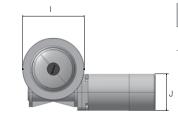
Construction		Stainless Steel								
Model	ST	2000		ST2500						
Motor size	23	2300 W		2700 W	Hydraulic - 9cc					
Туре**	CW	CCW	CW	CW	CW					
Power Supply (V)	24	24	230-400	24	-					
Maximum Pull (kg)	2000	2000	2200	2400	2500					
Working load (kg)	545	545	595	650	680					
Amps at Working Load (A)	180	180	-	210	-					
Line Speed at Working Load (m/min)	15	15	15	15	15					
Max Line Speed (m/min)	31	31	15	31	15					
Net Weight with Drum (kg)	52	52	52	53	40					
Hydraulic Pressure (bar)	-	-	-	-	200					
Hydraulic Flow (It/min)	-	-	-	-	32					
Control Box	Included	Included in package		Included in package	-					

Code	636300	636301	636302	636303	636304
* * cw: the capstan nulls clockwise _ ccw: the capstar	nulls counter clockwi	ise			

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







Model	Α	В	С	D	G	Н	I	J	L
ST2000	187	60-90	212	110	105	420	190	152	176
ST2500	194	60-90	212	110	105	420	255	152	172

## Stainless Steel ST3000 - ST4000 Capstan



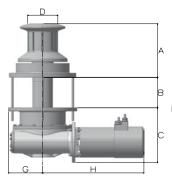
#### Main features

ofrans.

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

Construction		316 L Stainless Steel									
Model		ST3	8000		ST4000						
Motor size	2200 W	3000 W	3600 W	Hydraulic - 9cc	3500 W	4000 W	5500 W				
Power Supply (V)	400	24	400	-	24	400	400				
Maximum Pull (kg)	3000	3000	3500	2500	5500	5000	5000				
Working load (kg)	815	600	950	680	690	850	1550				
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 (It/min)	-	-	-	32	-	-	40				
Control Box	600095	Included in package	600096	-	Included in package	600096	600093				
Code	600767	602187	602196	602189	600077	600771	423284				

### Dimensions in mm





Model	А	В	С	D	G	Н	I	J	L
ST3000	206	60-90	190	Ø150	142	436	Ø255	Ø152	190
ST4000	267	150	272	Ø150	170	502	Ø340	Ø154	206



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.

## TENDER WINCH

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 a anodized marine aluminum for the base and drum, and a stainless steel AISI 431 shaft.





IP67 rated heavy duty electric motor

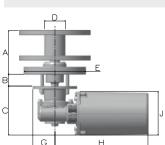
Construction	Marine anodised aluminum
Motor size	1000 W
Power Supply (V)	12V
Maximum Pull (kg)	850
Working load (kg)	175
Amps at Working Load (A)	165
Line Speed at Working Load (m/min)	15
Max Line Speed (m/min)	15
Net Weight with Drum (kg)	16
Circuit Breaker (available separatly)	187333
Control Box	Included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

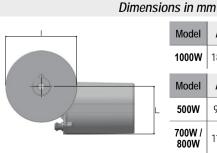
Construction	Marine	e anodised alur	minum			
Motor size	800 W	700 W	800 W			
Power Supply (V)	12V	24V	12V			
Maximum Pull (kg)	550	600	550			
Working load (kg)	125	125	125			
Amps at Working Load (A)	150	80	150			
Line Speed at Working Load (m/min)	15	15	15			
Max Line Speed (m/min)	20	20	20			
Net Weight with Drum (kg)	9	9	9			
Circuit Breaker (available separatly)	187332	187331	187332			
Control Box	Included in package					

030054

602123

Code





635999

Code

"													
	Model	Α	В	С	D	G	Н	I	J	L			
	1000W	180	25-40	150	Ø60	72,5	256	Ø200	134	157			
	Model	Α	В	С	D	Е	G	Н	I	J	L		
	500W	96	18-30	124	Ø40	Ø114	56	236	Ø145	110	121		
	700W / 800W	110	18-30	124	Ø53	Ø156	56	236	Ø180	110	121		
	www.lofrans.com												

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# 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 ISO/DIN chain 8/10/12mm

Code....636257

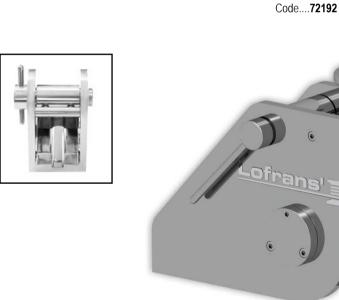


## LOFRANS' Chain stopper, stainless steel, for ISO/DIN chain 12/13/14/16mm

Code....72191

Lofrans'

Lofrans' Chain roller-stopper with tensioner, stainless steel, for ISO/DIN/studlink chain 14/16mm



#### Chain stopper 8-10-12 mm chains

- Chain stopper is designed to be used with chain size 8/10/12mm short link chain.
- This model provides an increased safety by blocking the anchor chain.
- AISI 3 16L Stainless steel

#### Chain stopper 12-13-14-16 mm chains

- $\bullet$  Chain stopper is designed to be used with chain size 12/13/14/16mm short link chain.
- This model provides an increased safety by blocking the anchor chain.
- AISI 3 16L Stainless steel

#### Chain stopper 14-16 mm chains

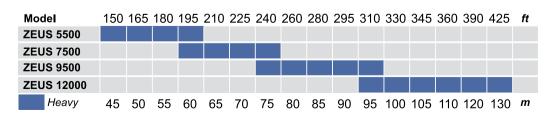
- Chain stopper is designed to be used with chain size 14 / 16 / 17.5 mm stud link chain and 16mm short link chain.
- This model provides an increased safety by holding and blocking the chain and the anchor at the same time.
- AISI 3 16L Stainless steel
- Integrated devils claw for taking up the chain tension off the windlass.



# **ZEUS RANGE** for Custom made solution for MEGA YACHTS

- Semi & Fully customized Vertical windlass, specially designed for above 45m yachts.
- AC or HYD, high torque, latest generation motors for marine use.
- ► High torque planetary gearbox.
- AISI 3 16L Stainless Steel visible parts.
- Independent Operation of gypsy and capstan.
- Up to 42mm stud-link chain & 12.000kgs maximum pull.





Notes: \* All ZEUS windlasses are subject to customized solution \*\* Mention that ZEUS range goes customized to 42mm STDL chain

ZEUS - Vertical Windlass



.ofrans'

Meets the specifications of:





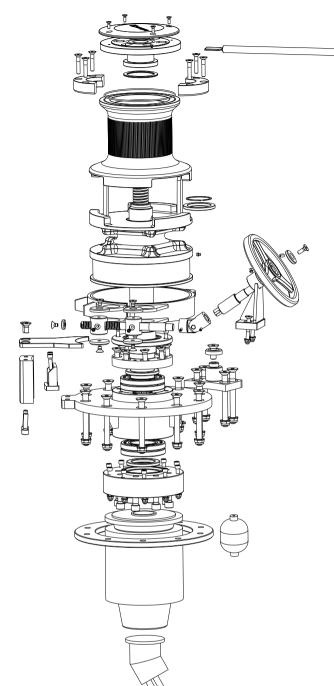




		Model Type ZEUS	Gypsy For Stud-link Chain	Control Box	Line Speed at W.L.	Max Line Speed	Maximum Pull	Working Load	Motor Size
_		5500 AC / HYD	20mm				5000 kg	2100 kg	5,5 kW
	1 20 1	5500 AC / HYD	22mm				5400 kg	3000 kg	7,5 kW
18		5500 AC / HYD	24mm				6000 kg	3600 kg	9 kW
-29-		7500 AC / HYD	24mm				7700 kg	5500 kg	11 kW
		7500 AC / HYD	26mm	Switchboard available 11 m/mii separately		19 m/min	8000 kg	5500 kg	11 kW
	7500 AC / HYD	28mm	11 m/min		8500 kg		7000 kg	15 kW	
	9500 AC / HYD	28mm			9200 kg		7000 kg	15 kW	
		9500 AC / HYD	30mm				9200 kg	7000 kg	15 kW
		9500 AC / HYD	32mm				10500 kg	9000 kg	18,2 kW
		12000 AC / HYD	32mm				12600 kg	10200 kg	22 kW
AC	HYD	12000 AC / HYD	34mm				12600 kg	10200 kg	22 kW
		*Code upon request							







## CUSTOM & SEMI CUSTOM SOLUTIONS

- Dedicated Project Manager
- Highly Skilled R&D Team
- Direct Communication
- All parts are custom made
- Entirely tailor made solution
- Lofrans' Legendary Quality & Endurance





The range of accessories consists of a large selection of productsto 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.

IRIS

# ECTRIC ACCESSORIES

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.





#### 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 - 24Vdc
Operative temperature	-10 : <del>6</del> 0
IP protection rated*	67
Max contacts amperage (A)	2
Weight (gr)	500
Dimension (mm)	110x105x15 (5 flat version)
* When installed	

#### 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)

Code	600013
Command transmission	Wire
Number of button	2
Voltage	12 - 24Vdc
Operative temperature	-10 : <del>6</del> 0
IP protection rated	66
Max contacts amperage (A)	2
Weight (gr)	580
Dimension (mm)	155x65x45



### 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

Code	600016
Command transmission	Remote
Number of button	3 (Transmitter)
Voltage	12 - 24Vdc (Receiver)
Operative temperature	-10:6-0
IP protection rated*	66 (Transmitter)
Max contacts amperage (A)	2 (Receiver)
Weight (gr)	480
Dimension (mm)	155x65x45 (Transmitter)

## 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.

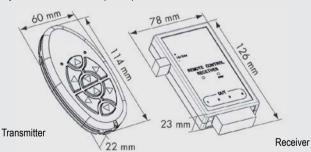
- Chain speed indicator / mooring length in meters or feet
- Voltage indicator
- Up alarm sensor
- Switch on button / Key tones adjustment
- High vision LCD display / Backlit display screen / Eight level of contrast
- Six language menu (IT, EN, FR, DE, ES, GR)
- Able to control free fall windlasses
-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

Code	600015
Command transmission	Wire
Number of button	3
Voltage	12 - 24Vdc
Operative temperature	-10: <del>6</del> 0
IP protection rated*	66
Max contacts amperage (A)	2
Weight (gr)	710
Dimension (mm)	155x65x45



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.

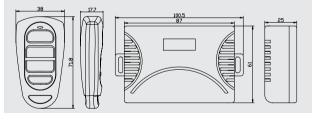
- Transmitter rated IP67
- Supports up to 8 independently controlled channels
- Each receiver can switch 4 channels (12/24 V 2 A)
- Each transmitter can handle 2 receivers (8 channels)
- Digital recognition avoids accidental activation of other system
- Zero power consumption when in standby mode (transmitter)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



Code	312976	312977		
Description	Transmitter & Receiver (EU)	Transmitter & Receiver (USA)		
Frequency	868 MHz 915 MHz			
Number of button	8 (Transmitter)			
Voltage	12 - 24Vdc (Receiver)			
Operative temperature	-10	: 🔂 0		
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.

- Easy to install and setup, simple to use.
- Small form factor makes it ideal to carry it anywhere on-board.
- Supports up to 4 independently control channels (12/24V 10A).
- Zero Power consumption when in standby (transmitter)
- Transmitter rated IP 67



Transmitter

Receiver

Code	636305		
Description	Transmitter & Receiver (EU/USA)		
Frequency	433 MHz		
Number of button	4		
Voltage	12 - 24V (Receiver) 3V (Transmitter)		
Operative temperature	-10:6-0		
IP protection rated	IP 67		
Max contacts amperage (A)	10		
Weight (gr)	31 (Transmitter) / 95 (Receiver)		
Dimension (mm)	71,8x38x17,7 (Transmitter) / 100,5x61x25 (Receiver)		



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. Availble in UP and DOWN version

Code	600012	600011	602121		
Description	Black / Grey	Red / Grey	Blue / WASH DOWN		
Voltage		12 - 24Vdc			
Operative temperature	-10 : <del>6</del> 0				
IP protection rated	67				
Max contacts amperage (A)	5				
Weight (gr)	100				
Dimension (mm)	80x95x20				



l imite



This device, made by marine stainless steel (INOX), is a switch that works simply by pushing the foot on the button.

new INOX Foot switch

Code	636075	636074			
Description	Black / INOX	Red / INOX			
Voltage	12 - 24	- 24Vdc			
Operative temperature	-10 : <del>6</del> 0				
IP protection rated	67				
Max contacts amperage (A)	5				
Weight (gr)	250				
Dimension (mm)	80x95x20				



## Control Box Solenoids for DC

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 depending on configuration and number of terminals (see page 63)

www.lofrans.com

ears Limited Warranty



#### Switchboard Up/Down 1Motor

The Lofrans' switchboards can cover all the Lofrans' AC motorized windlasses. They can be powered by 110V, 230V or 400V (single phase or three phase), for power up to 7.5 KW. Possibility of supplying low tension starters with inverter and special cabling.

Code	Volt	Kw	PH	Hz
600095	400	2,2	3	50/60
600096	400	4,0	3	50/60
600676	440	2,2	3	50/60
600684	230	3,6	1	50/60
600688	440	4,0	3	50/60
600693	400	5,5	3	50/60
600698	230	2,2	3	50/60



CIRCUIT BREAKER

ON # PUSH - OFF PULL

Warranty

# **Circuit Breaker**

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

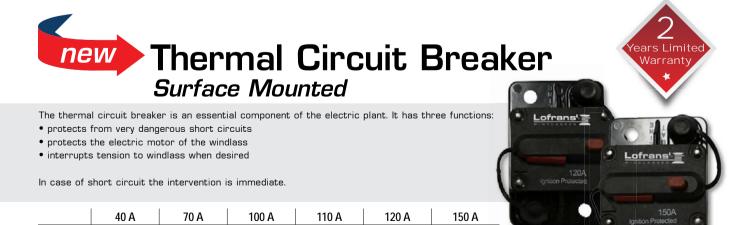
- protects from very dangerous short circuits
- protects the electric motor of the windlass
- interrupts tension to windlass when desired

Thermal

636087

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 braker 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	-



636091

636092

56	т	F	0	R	G	N	Δ	L.	w	N	D	L.	Δ	S	S
00															

636089

636090





## TYPE "L"

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

Code 404728







#### 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 187338



KIT A - SEALS		КІТ	B - SCREWS	к	IT 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			418487	T1500 - T1700	418513	T700 - T1000	
418422	T1500 - T1700					418514	T1500 - T1700	
418399	T2000 - T2500					418515	T2000 - T2500	

## **KIT F - FINGERS**

Code	For WINDLASS
474023	X1, X2 & PROJECT 1000
474017	X3 & PROJECT 1500
601047	X2
602105	X3
35036	DORADO
632116	ATLAS

## **KIT S - MAGNETIC SENSORS**

Code	For WINDLASS
474053	X1, X2 & X3
600033	X4
474048	for all horizontal windlasses

for all horizontal windla





## Maintenance Kit

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

Please refer to our website for Kit Contents

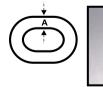
## KEEP YOUR LOFRANS' AS GOOD AS NEW!





## **CABO Rope for chain rode use** three strand with connection, Nylon, White







Code	72319	72320	72321	72322	72323	72324
Rope Diameter(mm)	12				16	
Length(m)	30	60	90	30	60	60
Ring Diameter - A(mm)	6				10	
Breaking load (kg)	2300			29	3640	

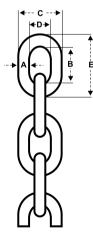


Grade 40 - tougher than Grade 30 - over 30% higher breaking load.

Extended quality tested on Lofrans' Windlasses.

Lofrans' Authenticity Check -"LFR" is engraved every thirty centimeters.

**Certificate of Analysis Included** 



Code	72312	723121	72749	72750	72313	723131	72751	72752	72314	723141	
Туре	IS	O 4565 / DIN	766		ISO 4565 / DIN 766				DIN 766		
A (mm)	6			8				10			
B (mm)	18,5			24				28			
C (mm)	20				27,5		34				
D (mm)	8				11,5	14					
E (mm)		30,5			40				48		
Weight / m (kg)		0,8			1,42				2,2		
Breaking load (kg)	2400				4300			6750			
Available Pack (m)	Carton Drum	Pallet box	Bag	Bag	Carton Drum	Pallet box	Bag	Bag	Carton Drum	Pallet box	
AVAIIADIE PACK (III)	120	400	30	50	120	400	30	50	120	300	

Code	72315	723151	72753	72754	72316	723161	72755	72408	72409	
Туре		ISO 4565			ISO 4565			ISO4565 / DIN 766		
A (mm)	10				12			14	16	
B (mm)	30				36			41,5	45	
C (mm)	34,5				39,6	47,4	54,6			
D (mm)	14,5				15,6	19,4	22,6			
E (mm)		50			60			69,5	77	
Weight / m (kg)		2,14			3,23			4,37	5,72	
Breaking load (kg)	6750			9700			13230	17280		
Available Dack (m)	Carton Drum	Pallet Box	Bag	Bag	Carton Drum	Pallet box	Bag	Carton Drum	Carton Drum	
Available Pack (m)	120	300	30	50	120	300	50	200	200	











Carton Drum

Pallet Box

Bag











## For Vertical Windlasses

For windlass	Chain Size	Gypsy Code
	6mm ISO4565/DIN766	630970
X1 & SX1	7mm ISO4565 - 1/4" G4O	630980
	8mm ISO4565/DIN766	630999
	6mm ISO4565/DIN766	630953
	8mm ISO4565/DIN766	630949
X2 & SX2	10mm ISO4565	630951
	10mm DIN766	630955
	8mm ISO4565/DIN766	630957
	10mm ISO4565	630951
X3 & SX3	10mm ISO4565	630959
	10mm DIN 766	630966
	12mm ISO4565 - 13mm DIN 766	630961
	10mm DIN766	631026
0)/0 5	10-3/8 HT (NICHELATO)	631024
SX3.5	12-13mm DIN 766	631045
	14mm	631074
	3⁄8' G40	631124
	7/6" HT	630992
	1/2" G40	631036
	10mm DIN 766 3/8' BBB	631132
X4 & SX4	10mm ISO4565 3/8' HT	631022
	12-13mm DIN766	631031
	13mm DIN764	631050
	14mm	631059
	1/2" STUDLINK	631053
	12-13mm DIN 766	631042
SX5	14mm	631065
	14STUDLINK	631071
	1/2" STUDLINK	631053
	12-13mm DIN 766	631035
	13ITALMET	631056
	13mm DIN 764	631085
	14mm	631065
	14STUDLINK	631068
Ercole Vertical	14.5 UNI4417	630989
	16mm ISO 4565	631082
	16mm DIN 766	631082
	16 STUDLINK	631092
	18STUDLINK	631092
	18mm ISO 4565	631101
	6mm ISO4565/DIN766	630953
	8mm ISO4565/DIN766	630953
Project 1000	10mm ISO4565	630951
	10mm DIN766	630955
	8mm ISO 4565 /DIN 766	(00055
		630957
Project 1500	10mm ISO 4565 10mm ISO 4565	<u>630951</u> 630959
Project 1500	10mm DIN 766	630966
	12mm ISO4565 - 13mm DIN766	630966
	5/16" HT	631129
	7/16" HT	
	1/2" G40	<u>630992</u> 631036
Draiget 2000		
Project 2000	10mm DIN 766 - 3/8' BBB	631132
	10mm ISO 4565 - 3/8' HT	631022
	12-13mm DIN 766	631031
	1 <i>4</i> mm	631059

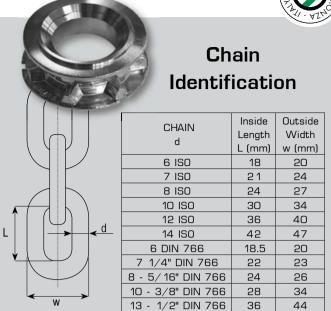
## For Horizontal Windlasses

For windlass	Chain Size	Gypsy Code
	5/16" HT	631077
	3/8" BBB	631120
	3/8' PC	631122
	6mm ISO4565/DIN 766	630968
Royal	7mm ISO4565 - 1/4" G4O	630978
	8mm ISO4565/DIN 766	630994
	10mm ISO4565 - 3/8' HT	631011
	10mm DIN 766	631118
	6mm ISO4565/DIN 766	631005
LION 1000	7mm ISO4565	631005
LION 1000		
	8mm ISO 4565 /DIN 766	631009
	6mm ISO4565/DIN 766	630974
Dorado	7mm ISO4565 - 1/4" G40	630984
	8mm ISO45657DIN 766	631003
	Only ROPE gypsy	634877
	5/16"HT	631077
	3/8" BBB	631120
	3/8" PC	631122
Cayman	6mm ISO45657DIN766	630968
Cayman	7mm ISO4565 - 1/4" G4O	630978
	8mm ISO 4565 /DIN 766	630994
	10mm ISO4565 - 3/8" HT	631011
	10mm DIN 766	631118
	5/16" HT	631077
	3/8" BBB	631120
	3/8" PC	631122
Kobra	6mm ISO45657DIN766	630968
Kodra	7mm ISO4565-1/4" G4O	630978
	8mm ISO4565/DIN766	630994
	10mm ISO4565-3/8" HT	631011
	10mm DIN 766	631118
	5/16" HT	631077
	3/8" BBB	631120
	3/8" PC	631122
	6mm ISO4565/DIN766	630968
Tigres	7mm ISO4565-1/4" G4O	630978
rigics	8mm ISO4565/DIN766	630994
	10mm ISO4565 - 3/8HT	631011
	10mm DIN 766	631118
	12mm ISO4565 - 13mm DIN766	631028
	5/16" HT	631129
	1/2" G4O	631036
	8mm ISO4565/DIN766	630996
Falkon		
	10mm ISO4565-3/8HT 10mm DIN 766 - 3/8' BBB	631022
		631132
	12-13mm DIN 766	631031
	3/8' G40	631124
	7/16"HT	630992
<b>T</b> ''	1/2" G40	631036
Titan	10mm ISO4565 - 3/8' HT	631022
	10mm DIN 766 - 3/8' BBB	631132
	12-13mm DIN 766	631031
	14mm	631059



## For Horizontal Windlasses

For windlass	Chain Size	Gypsy Code
	5/8' HT	630986
	12-13mm DIN 766	631039
	14mm	631065
	16mm ISO4565	631082
Super Ercole	16mm DIN 766	631088
Super Ercole	16 STUDLINK	631092
	18mm DIN 766	631095
	18STUDLINK	631098
	18mm ISO4565	631101
	19STUDLINK	631104
	1/2" STUDLINK	631053
	12-13mm DIN 766	631039
	13ITALMET	631056
	14mm	631065
Ercole Horizontal	16mm ISO4565	631082
	16mm DIN 766	631088
	16 STUDLINK	631092
	18STUDLINK	631098
	18mm ISO4565	631101

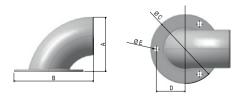


**Chain Pipes** for SX Series - Vertical Windlasses **Stainless Steel** 



Code	636311	636312	636313	636314
for windlass	SX2 & SX3	SX3,5	SX4	SX5

## Dimensions in mm



Model	Code	А	В	С	D	E
For SX2 & SX3	636311	86	127	Ø110	46	Ø8,5
For SX3,5	636312	114	165	Ø140	55	Ø10,5
For SX4	636313	125	163	Ø140	55	Ø10,5

Model	Code	А	В	С				
For SX5	636314	191	161,5	130				
		$\sim$	ww.lo	frans.c	om 61			

# SELECTING THE WINDLASS

## **VERTICAL OR HORIZONTAL?**

rans

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 underdeck 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.
- $\bullet$  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.

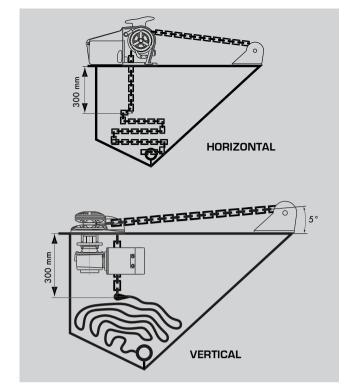
The circuit breaker once tripped can be engaged again.

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 gypsi 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 gypsi is free to rotate and the weight of the anchor releases the rode into the water.

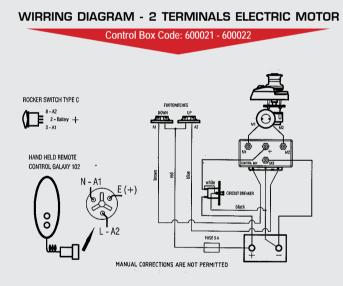
## **AUTOMATIC FREE FALL**

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.

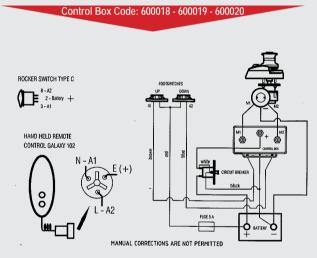
## **ROPE AND CHAIN MANAGEMENT**

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 gypsi teeth.

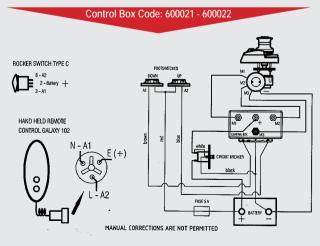
## Wiring diagrams depending on configuration and number of terminals



## WIRRING DIAGRAM - 3 TERMINALS ELECTRIC MOTOR

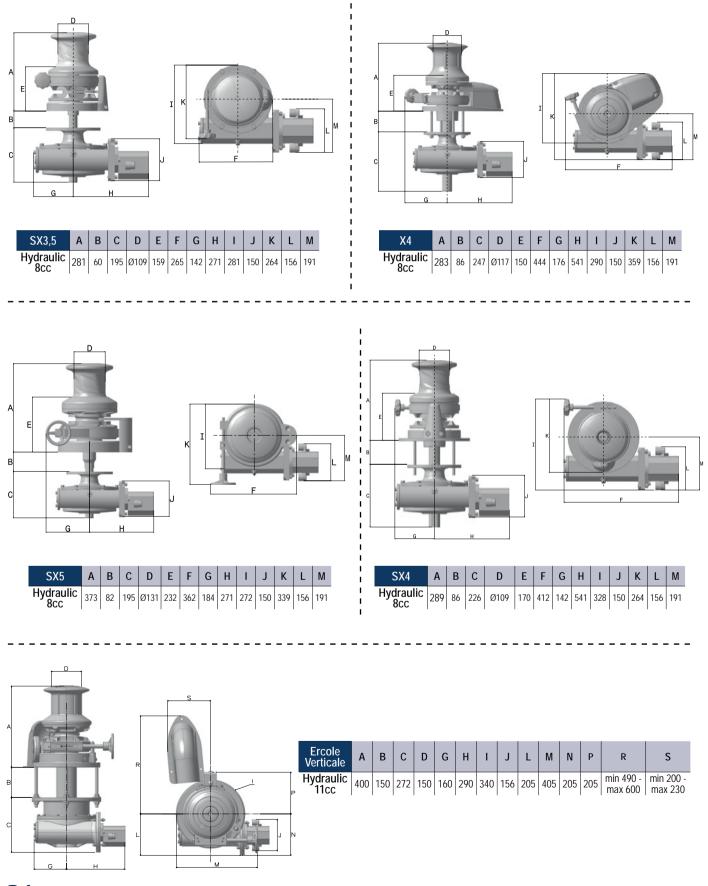


#### WIRRING DIAGRAM - 4 TERMINALS ELECTRIC MOTOR





## Hydraulic Models - Dimensions in mm



64 THE ORIGINAL WINDLAS



## **INTEGRATED HYDRAULIC SYSTEMS**



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 theirflexibility, Our systems are built using a common central line principle.

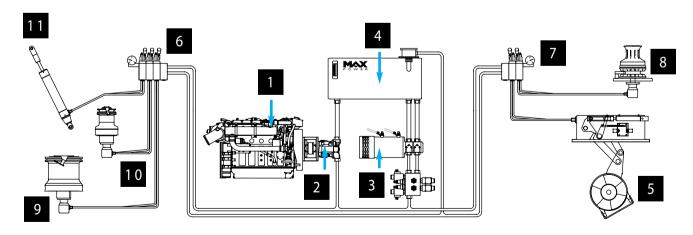


This means any function can be run from any power source thereby allowing a high level of user control. The use of load sensing pumps and valves ensures efficient and silent operation over a wide range of hydraulic flows and pressures. Our experience in designing and supplying complete solutions ensures 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<sup>™</sup> 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.

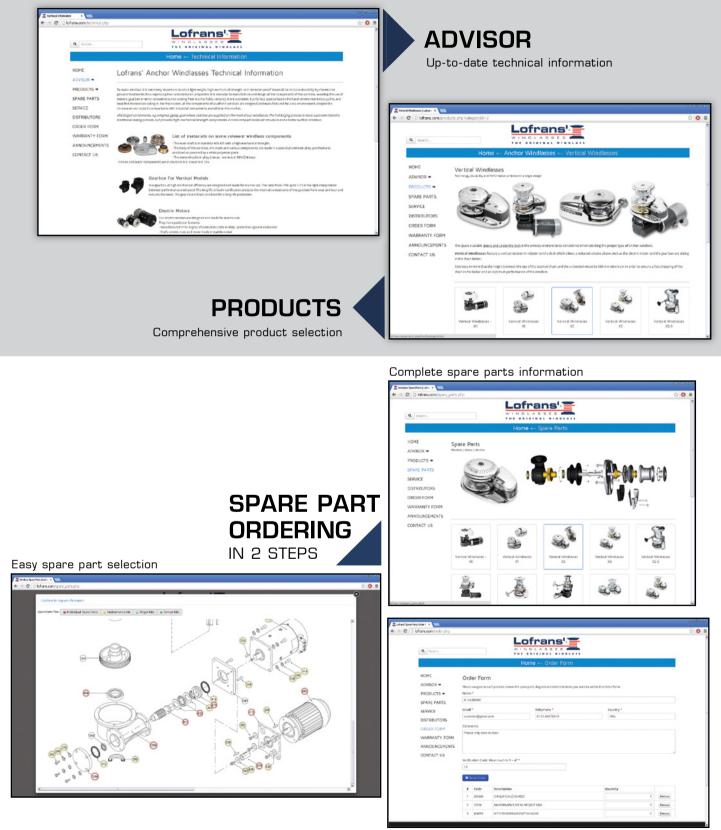


- **1** Generator with PTO
- 2 Variable displacement pump
- **3** DC power pack
- 4 Oil tank with filtration and gages
- 5 Thruster
- 6 Control Valve

- 7 Control Valve
- 8 Windlass
- 9 Winch
- 10 Winch
- **11** Hydraulic ram

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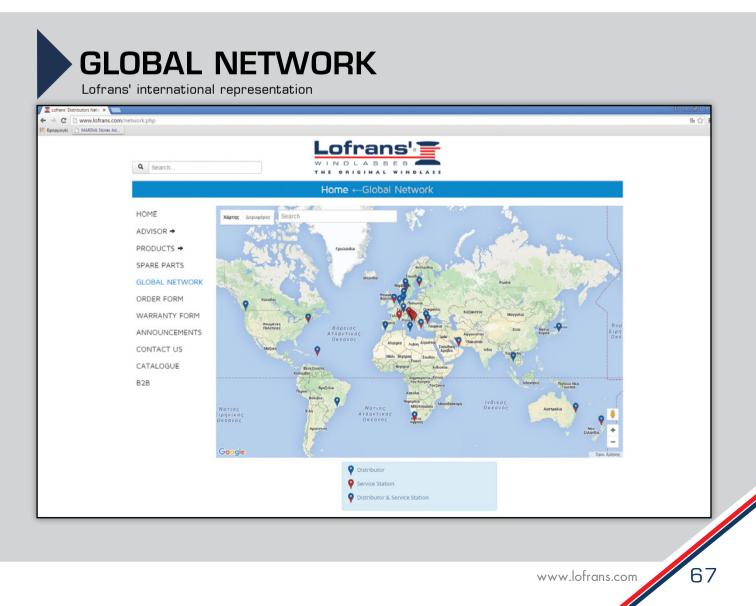
.ofrans<sup>ı,</sup>



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



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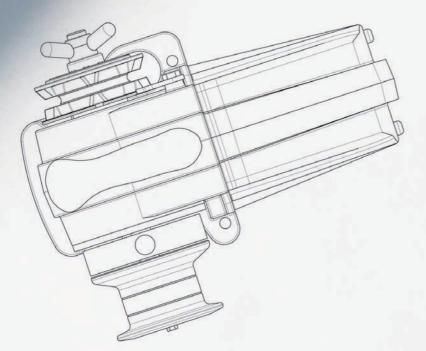


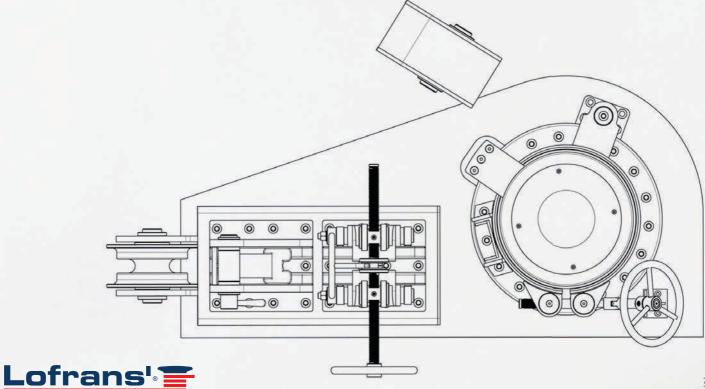


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We have revived & reinvented customer satisfaction







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