



smart lifting solutions



elebia will boost the safety and productivity of your cranes

elebia, the unique automatic hook that allows you to attach and release the load remotely











...and elevates the load



The patented elebia automatic hook is equipped with a magnet in its lower section. When the magnet is close to the load, it attracts and correctly positions the sling. The operator pushes the control button, the safety hook closes, catches the ring and lifts the load without any additional handling. The lifting hook works with cable slings, chains slings, master links, textile slings and even big bags. With the unique elebia automatic crane hook, you will be able to pick up and release loads remotely, avoiding any handling and moving, minimising risks, enhancing safety and increasing productivity.

elebia, the automatic hook of the future



AUTOMATIC HOOKS



Small, Compact, Light & Tough

We have created an automatic hook that is lighter, smaller and more compact but equally as strong.

Top Link

The system that links the automatic hook with the crane can be customized in order to adapt itself to any kind of situation.

Swivel with Bearings

The bearings allow the hook to rotate freely.

Swivel with Lock

The operator can lock it at every 90° position.

Efficient

3 hour charge - 5,000 cycles / 250 hours in standby mode. With the new Eink charge status display system and new electronics, autonomy and consumption are optimized.

Clutch Protected

Motor protected by slip clutch.

Automatic Latch

The latch retracts automatically while the hook opens. This way, it remains hidden and protected.



POSITION ENCODER

The evo2 incorporates an innovative position encoder. This allows the user to know the exact position of the hook, allowing better control. This results in longer motor life and safer operations.

The sensor is contactless: No wearings and zero maintenance.





AUTOMATIC HOOKS evo5 to evo25 MAIN FEATURES









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REGULATORY STANDARDS | evo2 to evo25



- EN 10204 3.1.B

- UNE-EN 60204-1:2007

- UNE-EN 1050

- UNE-EN 1677-1:2001+A1:2009

- UNF-FN 1677-2.2001+A1.2008

- UNE-EN 61000-6-4:2007

- UNE-EN 61000-6-2:2006

- UNF-FN ISO 12100.2012

- D89/654/EEC

- D89/391/EEC

- D89/655/EEC
- D89/656/EEC
- D92/58/EEC 9a

- Directive on machine safety. (D2006/42/EC)
- Assurance of production quality in accordance with ISO 9001.
- DNV 2.22 Certified (evo5 / evo10 / evo20)
- Each mechanism is delivered with the CE stamp and a declaration of CE conformity.
- elebia» is a member of F.E.M. (European Federation of Materials Handling)
- 100% of the hooks are load tested at 125% WLL and magnetic particles inspected.



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HOW DOES IT WORK?

recording all the activity of the hook.

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The automatic safety hook lifts and releases the load remotely. The remote crane hook generates a magnetic field that attracts and orients the sling, masterlink or rigging gear. The operator then presses the "close" button on the remote control to automatically close the hook, without any manual intervention, operating remotely from a safe distance, minimising risks, enhancing safety and increasing productivity.





release limit. It is also clutch protected

from overloads.

up to 5,000 cycles or 250 hours in

standby mode.

structural steel body. Class T and class V forged hook.



MAGNETIC SYSTEM

The elebia automatic hooks are designed with a unique magnetic system, formed by 32 neodymium permanent magnets placed in a precise configuration that generate an oriented magnetic field with 3 functions: attract, center and orient the masterlink. This basic component, which is present in all our automatic hooks, is what allows the remote engage of any load.



Other setting options are also available



RECOMMENDED FOR

Applications where it is difficult to see the lifting point. Automated processes, as the magnet sensor info can be used by the PLC controlling the crane.

9 | www.elebia.com

FAIL-SAFE DESIGN

The elebia automatic hook was devised to enhance safety and increase productivity. It is designed under a fail-safe principle. The automatic hook CAN NOT drop a suspended load. This is a feature of all our designs, geometrically fail-safe, without any sensors or electric components.

To release the load, the motor must rotate or turn the hook, lifting the load contained therein. The motor's torque is not powerful enough to open the hook when a load is suspended. Gravity is what avoids the opening of the safety hook if there's a suspended load.

In addition, our automatic hooks incorporate a Security Torque Limit (STL). An electronic device that controls the motor's torque and cancels the operation if an overload is detected. If the order to open the hook is mistakenly sent while the load is suspended, the operation is interrupted and inverted (the hook closes automatically).



SAFETY LATCH

Another crucial security element of the hook is the safety latch. There are two options:

Spring Loaded Latch

Spring loaded latch which impedes the sling from accidentally unleashing from the hook.



This option is for more extreme operations (marine, offshore), where constant movement can contribute to the unleashing of the slings from the hook if using the spring loaded latch.







LOAD CELL / WEIGHING SCALE

DESCRIPTION:

The complete range of automatic hooks can be upgraded with a load cell to weigh the load that is being lifted. This load cell is precise, reliable, compact and fully integrated into the hook, representing no increase in weight or dimensions of the unit. The load cell is highly recommended for preventing overloads and for load control. Load cells can also be retrofitted into older models of our hooks.

The load cell in combination with the eMAX remote control transforms all of our hooks into a precise weighing scale with advanced features.



SPECIFICATIONS	evo2	evo5	evo10	evo20	evo25	
	REF.: OPTION LC2	REF.: OPTION LC5	REF.: OPTION LC10	REF.: OPTION LC20	REF.: OPTION LC25	
	Compression	Compression	Compression	Traction	Traction	
Load Cell Type	/ flexion ring	/ flexion ring	/ flexion ring			
Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	
Protection	IP67 (EN60529)	IP67 (EN60529)	IP67 (EN60529)	IP67 (EN60529)	IP67 (EN60529)	
Nominal Capacities (Ln)	2,500	5,000	10,000	20,000	25,000	
Precision Class	0.2	0.2	0.2	0.2	0.2	
Minimum Dead Load	0	0	0	0	0	
Service Load	120	120	120	120	120	
Ultimate Load	500	500	500	400	400	
Total Error	< ±0.2	< ±0.2	< ±0.2	< ±0.2	< ±0.2	
Repeatability Error	< ±0.04	< ±0.06	< ±0.08	< ±0.08	< ±0.08	
Temperature Effect:						
on zero	< ±0.01	< ±0.01	< ±0.01	< ±0.01	< ±0.01	
on sensivity	< ±0.01	< ±0.01	< ±0.01	< ±0.01	< ±0.01	
Creep Error (30min)	< ±0.03	< ±0.03	< ±0.03	< ±0.03	< ±0.03	
Temperature Compensation	-20 °C to 50 °C	-20 °C to 50 °C	-20 °C to 50 °C	-20 °C to 50 °C	-20 °C to 50 °C	
Temperature Limits	-30 ℃ to 70 ℃	-30 °C to 70 °C	-30 °C to 70 °C	-30 °C to 70 °C	-30 °C to 70 °C	
Nominal Sensivity (Sn)	2 ±0.25%	2 ±0.25%	2 ±0.25%	1 ±0.25%	1 ±0.25%	
Nominal Input Voltage	10	10	10	10	10	
Maximum Input Voltage	15	15	15	15	15	
Input Impedance	800 ±30	800 ±30	800 ±30	800 ±30	800 ±30	
Output Impedance	700 ±5	700 ±5	700 ±5	700 ±5	700 ±5	
No Load Input	< ±2	< ±2	< ±2	< ±2	< ±2	
Insulation Resistance	>5,000	>5,000	>5,000	>5,000	>5,000	
Maximum Deflection (at Ln)	0.4	0.4	0.4	0.3	0.3	

SPECIAL ENVIRONMENTS

The standard automatic hook units are rugged, designed and built to work in almost every industry.

For special environments, you have the following options:

MARINE REF.: OPTION M	DNV REF.: OPTION DNV	ATEX / IECEX REF.: OPTION EX	HEAT SHIELD REF: OPTION HS	
C5M Painting and AISI components.	DNV 2.22 certification for Offshore lifting appliances.	Units with IECEx certification for zones 1 & 21 according to European Directive	Heat shield that protects the automatic hook and its electronic components	
RECOMMENDED FOR	inteng appliances.	2014/34/EU and IECEx international	from radiated heat and extended	
Marine Environments	RECOMMENDED FOR	standards. IECEx certification to work	temperature working range.	
	Offshore Operations	on sites classified as zone 1 & zone 21		
INDUSTRIES		according to the European Directive	RECOMMENDED FOR	
Offshore Wind Turbines, Onboard	INDUSTRIES	99/92/EC and IECEx international	Operations where the automatic hooks	
Cranes, Buoys	Offshore Wind Turbines, Onboard	standards.	are subject to extremely elevated	
	Cranes	RECOMMENDED FOR	temperatures and radiated heat	
		Operations in potentially explosive	INDUSTRIES	
		atmospheres	Foundries	
	(dE3)			
•••	alabia 🔛 co 📰	Oil & Gas, Mining		
		& Chemical		
	DNV	TECEX 65		
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REMOTE CONTROLS MAIN FEATURES

elebia produces different remote controls tailored to customer needs. All of them allow simple, flexible, precise and reliable control in a failsafe way. One remote control can be paired with one automatic hook or many, and one automatic hook can be controlled by many remotes. We call it: One to One / One to Many / Many to One



GENERAL SPECIFICATIONS

Available Code Combinations	
Detection of Errors in Transmission ———	2 CRC bytes + Forward Error Correction
Frequency Selection	1
Frequencies ———	868MHz/915MHz (custom frequency on demand)
Communication	Bidirectional return of receiver battery status
Certification Standards	EN 300 220 Telecommunications
	EN 301 489 Electromagnetic Compatibility
	EN 60730 Low Voltage

Radiated Power	under 5 dBm
Antenna	 Printed circuit
Consumption at Rest / Transmission Operation Working Temperature	
Range (Range can be increased up to 650 metres / 2,1	



eMINI (REF.: eMINI)

The eMINI is a small and compact remote control. It can be integrated into a glove or used with a wrist band to wear it as a watch. With the eMINI remote control, the operator can open and close the automatic hook and control its battery level. The eMINI also informs of the hook's annual inspection and displays sensor information and maintenance messages. The eMINI is a small but powerful remote control for crane hooks, compatible with all cranes and other remotes.



INSTALLABLE (REFS.: elnst24 / elnst48)

All elebia automatic hooks can also be controlled using a free channel of the crane's master control. The installable remote control simply has to be placed in the crane relay cabinet, where only a simple wiring is needed. Compatible with all cranes and other remotes.



Power Supply	24 V DC or 48 V DC
Buttons	2
Dimensions	80 x 140 x 45 mm / <i>3.15 x 5.51 x 1.77 in</i>

eMAX (REF.: eMAX)

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The eMAX is our most advanced remote control, able to control the automatic hooks with load cell/weighing scale. It displays all the info in a big high-resolution screen and a high profile keypad, yet remains handy and lightweight.









The eMAX remote control can manage and display up to 24 automatic hooks simultaneously. The high resolution display adapts itself and all the data to the number of automatic hooks in use.





(••) USER 12:42		
INFO CENTER Hook SN 5,554		
Position: 2		
Weight Limit: 5.000Kg		
Birth: 02/07/2013		
Overloads: 1		
Max Overload: 5.300kg		
Actual Date: 16/10/2014 Cycles: Total 93.342 / Partial 324		
Maintenance:		
Maintenance.		
GO BACK		

eMAX remote control with load cell

The load cell in combination with the eMAX remote control transforms all of our safety hooks into a precise weighing scale with advanced features.

- · Capture weight
- \cdot Preset tares or capture tare
- · Alarm in case of overload

(visual, buzzer and vibration. Info of overload value, user, date and time recorded into the log file).

- · Alarm in case of unbalance
- (when 2 or more automatic hooks are in use).

• Log events file with real time clock (open, close, load, overload alarm, maintenance)

· Export log file via USB to spreadsheet



SPECIFICATIONS





Weight: 200 g / 7.05 oz

BATTERY / CHARGERS evo5 to evo25

BATTERY (REF.: evo 1700)



No connectors. No wires. No cover. Push to insert. Pull to remove. Simple. Lock system to prevent the battery from falling in case of impact. ON/OFF button. Ergonomic rubber handle to pull and carry the battery. You'll always know the level of the battery thanks to 4 high brightness LEDs. Save battery when the automatic hook is not in use. High capacity: 3 hour charge - 5,000 cycles / 250 hours in standby mode.

Temperature (Charge)	24.8 V DC 22.2 V DC 2.6 Ah DC Charge, Discharge, Overvoltage 6 A Thermal 70 °C / 158 °F Display ON 4 LED (25% - 50% - 75% - 100%) 0 °C to 45 °C / 32 °F to 113 °F
5	0 °C to 45 °C / 32 °F to 113 °F -20 °C to 50 °C / -4 °F to 122 °F
Weight	



Multiple Charger (REF.: chx10)



A charging station for 10 batteries is also available. Set In a rigid flight case, with a handle for transportation. Keep everything tidy and ready to work.

Technical Specifications

Dimensions Input voltage Charge indicator Charge complete indicator Main switch Charging indicator

655 x 305 x 230 mm / 25.78 x 12.01 x 100-240 V AC / 50-60Hz 0.15A (max Yes, by red LED Yes, by green LED



BATTERY / CHARGER

evo2 BATTERY (REF.: evo2 1700)



With the new Eink charge status display system and new electronics, autonomy and consumption are optimized. Save battery when the automatic hook is not in use. High capacity: 3 hour charge - 5,000 cycles / 250 hours in standby mode.

Technology Rechargeable Li-Ion Maximum Voltage ____ 12.4 V DC 10.95 V DC Nominal Voltage ____ Nominal Capacity 3.2 Ah DC Protection Circuit Charge, Discharge, Overvoltage Maximum Discharge Current ____ 6.4 A Heat Protection ____ Thermal 70 °C / 158 °F

 Charge Indicator
 Eink 14 Segment Display

 Temperature (Charge)
 0 °C to 45 °C / 32 °F to 113 °F

 -20 °C to 50 °C / -4 °F to 122 °F Temperature (Discharge)

Temperature (Idle)

Weight ____

-20 °C to 60 °C / -4 °F to 140 °F

– 150 g / 5.29 oz



Specifications	Technical Specifications
Input voltage	100-240 V AC / 50-60Hz 1.0A (max.)
Output	12.6 V DC / 1.2A
Charge indicator	No
Charge complete indicator	No



Multiple Charger (REF.: chx10 evo2)



Charging station for up to ten evo2 batteries. Rigid flight case with handle for easy transportation.

Technical Specifications

Dimensions	655 x 305 x 230 mm / 25.78 x 12.01 x 9.05 in
Input voltage	100-240 V AC / 50-60Hz 0.15A (max.)
Charge indicator	No
Charge complete indicator	No

ACCESORIES

BUMPER (REFS.: BMP1000NOR / BMP2000)

Meet the BUMPER, the latest accessory for our automatic hooks. The perfect absorber that protects your automatic hook from impacts, scratches and day-to-day wear.

Protect your hook and your load from scratches. Protect workers in case of impact. Extend product life. Reduce maintenance costs. Built from Polyurethane - PUR - (elastomeric).





HEAT SHIELD (REF.: HS)

The standard automatic hook is rugged, designed and built to work in almost every industry, in any situation. There are though, special environments that require special measures, and in case of radiated heat and elevated temperatures, there's the Heat Shield.

The heat shield protects the automatic hook and its electronic components from radiated heat and extremely elevated temperatures.

It is highly recommended for operations where the automatic hooks are subject to extremely elevated temperatures and radiated heat, especially in the foundry industry.







Made of ST 37-2 Steel

Galvanized surface treatment Compatible with the complete range of automatic hooks (except evo2). Approximate weight of 17 kg / *37.47 lb* Dimensions: 285 x 195 x 425 mm / *11.22 x 7.67 x 16.73 in*

FLIP-UP BELT

The Flip-up Belt has been designed to carry and store the eMAX remote control. The eMAX remote control is protected while it is not being used and the operator can move freely.

When necessary, the operator simply flips up the eMAX remote control, adjusting its position and orientation to monitor its activity while keeping his hands free.



BIG BAG

elebia has reinvented the Big Bag to improve its safety and productivity. This new design, along with the automatic hook, allows to remotely pick and release Big Bags avoiding any kind of manipulation from the operator.

Instead of having the usual 4 corner loops, we've redesigned the traditional bulk bag to adapt it to our automatic hooks with two side handles and a central elebia sling which incorporates the metal wiring inside. This allows the automatic hook to attract and orient the central sling, needing just one unique lifting point to engage and elevate the load.

In addition, the elebia Big Bag allows you to easily load two bulk bags in each operation, increasing and enhancing your productivity. The elebia system is ideal for bulk material process plants, minimising handling from filling, internal transport, storage and dispatch.

The automatic hook and the especially redesigned and fitted elebia Big Bag allow for the manoeuvring operation to be a much faster, safer and comfortable experience.



Dimensions: 90 x 90 x 100 cm / 35.43 x 35.43 x 39.37 in It can also be produced to meet customer specifications

FLIGHT CASE (REF.: FC evo5 / FC evo20)



Transport your automatic hooks and accessories anywhere you need safely and comfortably with the customised flight cases.

We have designed rigid boxes customised for each safety hook, with a protected interior and specific departments for different accessories.

Transportation will be simple and ergonomic thanks to its wheels and handle.

Dimensions FC evo5 485 x 185 x 170 mm / 19.09 x 7.28 x 6.69 in

Dimensions FC evo10/evo20 670 x 255 x 165 mm / 26.37 x 10.03 x 6.49 in

SWIVEL LOCK (REFS.: B5 / B10 / B20 / B25)

The swivel lock allows you to block the top swivel at any desired position. It is ideal for applications when a fixed orientation of the hook is desired or necessary.

Available for the complete range of automatic hooks (except evo2*) * The swivel lock is a standard feature in the evo2 automatic hook

SLINGS

elebia slings are textile slings that incorporate a metal strip inside allowing the automatic hook to attract and orient the sling. The elebia slings are supplied on request. Manufactured in many lengths and capacities, to meet customer specifications.



TUBULAR SLING

Light and ultra-resistant nylon slings. This model is circular, with a wire rope running throughout the nylon-coated sling to ease engagement with the magnet of the elebia automatic hook. (Up to 3TN).



DOUBLE BAND SLING

Light and ultra-resistant nylon slings. The ends of this model are magnetized. A nylon-coated wire rope integrates the two sling handles to ease engagement with the magnet of the elebia automatic hook. (Up to 3TN).



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BIG BAG SLING

Light and ultra-resistant nylon slings. The sling is designed to attach the two handles of the Big Bags and ease their remote engagement. A wire rope is placed in the centre of the nylon-coated sling to ease engagement with the magnet of the elebia automatic hook. (Up to 1TN).



evo2 TOP LINKS (REFS.: UCO8 / UMP8 / UMS16 / UMS18)

The system that links the evo 2 automatic lifting hook with the crane can be customized in order to adapt itself to any kind of situation.

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evo2 PEAR SHACKLE

Alloy steel, grade10,

Finish: Painted Blue

Quenched and Tempered

Safety factor: MBL = 4xWLL

Certification: 2.1 / 2.2 / 3.1 / MPlb



evo2 OMEGA SHACKLE

Alloy steel, grade10, Quenched and Tempered Safety factor: MBL = 4xWLL Finish: Painted Blue Certification: 2.1 / 2.2 / 3.1 / MPIb / DGUV

Size chart (mm / inches)







evo2 OMEGA SHACKLE + MASTERLINK 3.15

Alloy steel, grade10,

Finish: Painted Blue

Quenched and Tempered

Safety factor: MBL = 4xWLL

Certification: 2.1 / 2.2 / 3.1 / MTCb



+ MASTERLINK 5.4

Certification: 2.1 / 2.2 / 3.1 / MPIC



evo2 OMEGA SHACKLE

Alloy steel, grade10, Quenched and Tempered Safety factor: MBL = 4xWLL Finish: Painted Blue

HOOK CONFIGURATOR

Visit our online configurator at www.elebia.com/configurator



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10,000 kg / 22,046 lb **B20** L10 REF.: OPTION L10 REF.: OPTION B20











23 | www.elebia.com



elebia collaborates with WeForest in reversing deforestation



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