PARTS & ACCESSORIES









- 3

OUR MAIN GOAL IS TO OFFER AN AGILE, RAPID AND QUALITY SERVICE. OUR FACILITIES, OUR STOCK AND AN EFFICIENT MANAGEMENT SYSTEM GUARANTEE THIS SERVICE.





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GANTRY CRANES

GENERAL CHARACTERISTICS

CERTIFICATION

The gantry cranes are delivered with the corresponding instruction manual and CE marking.

IDENTIFICATION

From the first stage of manufacturing, the equipment is identified by a serial number marked on the material. Once the product is finished, the gantry crane is delivered with an identification plate listing its specifications and characteristics.



STANDARD GANTRY CRANES

Standard steel and hollow profile gantry cranes mounted on swivel wheels, making it possible to lift loads in places where there are no overhead cranes.

BASIC CAPABILITIES





Up to 8 m Other capacities and spans are available upon request



Up to 6 m





CONSTRUCTION

- Mechanically-welded construction, built in three pieces and with wheels made of white polyamide.
- Protected with RAL 1028 three-layer polyurethane paint.
- The PORTC type gantry crane is supplied with a load-carrying trolley and a power supply line.
- Optionally, they can be supplied with locking wheels, with swivel wheels, with a different RAL, with power supply and switch, designed for outdoor use (only the PORT type), etc.

USAGE

Maximum lifting speed of 8 m/min and 10 m/min travel.

- PORT type: gantry crane that can be moved with the load as long as the ground is smooth and clear. For both indoor and outdoor use.
- PORTC type: gantry that cannot be moved if it is loaded and for indoor use only.

ALUMINIUM GANTRY CRANES

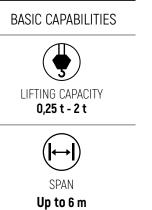
Aluminium gantry cranes are Ideal for applications that require lightness.

They are characterised by three features:

• Low weight

10

- $\boldsymbol{\cdot}$ Quick assembly and dismantling
- High mobility



Other capacities and spans are available upon request



HEIGHT Adjustable up to 4 m



CONSTRUCTION

- Lightweight construction using bolts. A total of 8 bolts for an easy assembly of the bridge and sides.
- Depending on the model, the assembly can be carried out by 1 to 3 people, while the height adjustment can be carried out by a single person.
- Can be assembled in three parts, with folding legs for easy transport.
- With white polyamide wheels, two of which are lockable.

USAGE

- Maximum lifting speed 8 m/ min.
- Very suitable for cold rooms in the food industry, hospitals, etc., or for situations where temprorary dismantrling is needed.

OPTIONS

- There are a numerous assembly options in addition to the case specified.
- Possibility of fitting power line by cable, non-rotating wheels, rubber wheels, etc.





SEE VIDEO OF ASSEMBLY

MOTORISED GANTRY CRANES

Many manufacturers already provide this type of product, but this is distinguished by its ability to move a load of up to 6.3 t by reeling and rotating in all directions directly on the floor thanks to a push-button or radio control.

BASIC CAPABILITIES





SPAN Up to 10 m

Other capacities and spans are available upon requestn



HEIGHT Up to 6 m



USAGE

Motorised gantry crane for interior and exterior use

- Use on clean and smooth floors
- Assembly using screws and nuts
- 2 non-swivel motorised polyurethane wheels Electrical switchgear with
- independent push-button control (48V control voltage)
- 2 travel speeds, 10 m/min and 20 m/min, with variable speed drive
- Rotation of the gantry by reversal of the motors
- · Rotation at low speeds
- Direction reversal from push-button control
- 4 full stop cells
- · Protection: 3 coats
- RAL 1028 yellow finish
- Max. lifting speed = 16 m/min
- Max. travel speed = 10 m/min









OPTIONS

<u>Reel</u>

The reel allows you to cover a larger area, without having to worry about cables. It can be assembled with a collector in order to be able to rotate 360° with the gantry.

Remote control

With the remote control you can control all the movements of the gantry crane as well as those of the trolley and the hoist.

Batteries

The batteries make this gantry crane totally independent, allowing you to carry the load where you need it.

<u>Full Stop</u>

Bumpers are fitted as standard, but can also be ordered separately.

JIB CRANES

GENERAL CHARACTERISTICS

It is the most effective accessory when an easy flow of materials, easy handling and movements of parts are required in one place.

CERTIFICATION

The jib cranes are delivered with the corresponding instruction manual and CE marking.

CONSTRUCTION

Protected by 3-layer painting, with a polyurethane finish in RAL 1028 yellow.

USAGE

The maximum lifting speed must not exceed 8 m/min for any of the wall-mounted jib cranes. Not to be used for loads greater than those specified.

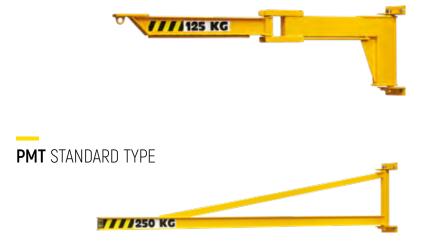
OPTIONS

The jib cranes are normally supplied in the standard model, although they can be supplied with various extras, according to customer requirements:

- Cable wall switch.
- Electric power supply line for hoist (PMA, PMT and PMI models).
- Rotation retarder (device without mechanical intervention or welding).
- Rotation retention stops to be welded on the assembly.
- 1 or multi-position rotation locking device.
- Designed and manufactured for outdoor use.

WALL-MOUNTED JIB CRANES

PMA ARTICULATED TYPE



PMTC HOLLOW PROFILE TYPE



PMI INVERTED TYPE



COLUMN JIB CRANES

PRT TYPE WITH FULL ROTATION	PFTC TRIANGULAR HOLLOW SECTION TYPE
	U U
PFT TRIANGULAR STANDARD TYPE	
	PFA ARTICULATED TYPE
PFI INVERTED TYPE	
A ASOO NC	

WALL-MOUNTED JIB CRANES

The wall-mounted jib crane is the most economical solution provided a sturdy pillar or wall is available close to the work area.

BASIC CAPABILITIES







SAFETY

The usual way of anchoring is directly to the flange of the beam on which it is to be installed.

The profile of the beams that are going to support the crane should be checked in relation to the RH and RV values estimated by the applicable coefficients.



The column jib crane is the most economical and ideal solution when lifting and transferring the load through high turning angles.

BASIC CAPABILITIES









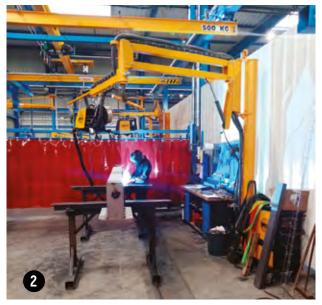
SAFETY

The floor on which it is going to be installed should be checked in order to ensure that it provides sufficient support according to the RH and RV values estimated by the applicable coefficients.

There are two possibilities for anchoring: direct to existing floor, by means of chemical anchoring, or anchoring by means of a concrete footing. This second option is the most recommended and It is used in those cases where the floor does not meet the necessary requirements to anchor the jib crane directly.

SPECIAL JIB CRANES













LIGHTWEIGHT PROFILES

A lightweight crane system is the best solution for relatively low capacity jobs in certain workstations. Thanks to their modular concept and lightweight design, they can be manufactured up to capacities of 2000 kg.

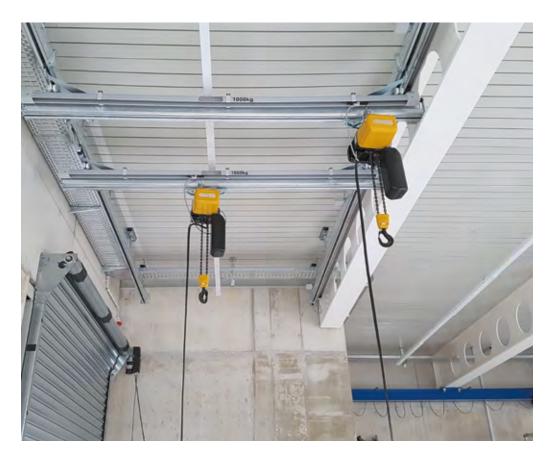
BASIC CAPABILITIES





Up to 10 m.

Other capacities and spans are available upon request



CERTIFICATION

They comply with the machinery directive 98/37/EC.

IDENTIFICATION

They have CE marking and load plate, which identifies the MWL of the section.

SAFETY

It provides the operator with improved ergonomics, increasing productivity by avoiding unnecessary overexertion in use.

CONSTRUCTION

Modular concept, based on two optimised steel sections. They can handle up to a maximum suspended load of 1600 kg, although as an option they can reach a MWL of 2000 kg. Easy to install as all the components are bolted. The sections have a maximum length of up to 8 metres and are delivered with a grey primer (RAL 7035).

With various suspension options, adaptable to every practical requirement: short or long, rigid or tilting, adjustable, etc. Manual or electric crane/trolley movement, with a low noise level thanks to the plastic guide rollers.

USAGE

Versatile solution for the movement of loads. If the system is already installed, it can be extended or reconfigured at any time to adapt to changing conditions.



MODULAR AND FLEXIBLE

HANDLING OF GOODS IN THE WORK AREA

Depending on the load capacity, the bridge width and the transport flow of the goods, different section sizes can be chosen, which can be combined with each other both in the runways and crane girders. The travel of the carriage and the bridge can be carried out manually or electrically and continuously. The trolleys with plastic wheels guarantee the easy and noiseless movement of the load.



ELECTRICAL POWER SUPPLY

The following options are available for the electrical supply, both transverse and longitudinal.





Flat hose Standard version



C-Rail With flat hose



Shielded line Exterior



Hose/cable reel Various power supplies

LIGHTWEIGHT PROFILES

LINEAR HANDLING OF GOODS

Monorails allow a linear transport for the connection of several workstations. Through changes of track, curved sections, interlocking and rotating platforms, the material can be transferred to the next manufacturing process.



TROLLEYS

GISKB cross-travel trolleys and end carriages -rolling apparatuses- are designed, ont he one hand, for an easy movement of the load and, on the other hand, to guarantee the stability of the run.





HOISTS

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HA 151



HOISTS

ELECTRIC Chain Hoists

GENERAL CHARACTERISTICS

GH Electric Chain Hoists are the result of the extensive experience of the company in the world of lifting.

Backed by more than 50 years manufacturing cranes, this hoist is universally used for industry, agriculture, commerce, etc..



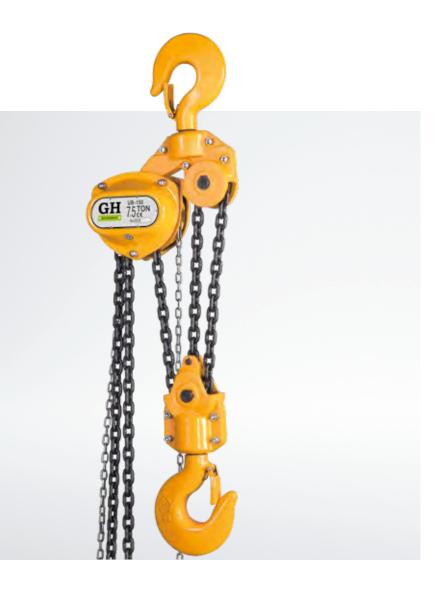
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MANUAL Hoists

GENERAL CHARACTERISTICS

Manual Chain Hoists are a maximum efficiency and costeffective tool requiring minimum maintenance.

Their use is specially advantageous in those places where there is no power supply for the maintenance of industrial equipment or machinery.



CROSS-TRAVEL TROLLEYS

GENERAL CHARACTERISTICS

They are the perfect complement to electric chain hoists, operating in a very small space under the beam. Depending on the type of cross-travel required, the trolley can be either **manual or electric**.



MANUAL CROSS-TRAVEL TROLLEY





GH HIGH PRODUCTION ELECTRIC CHAIN HOIST

BASIC CAPABILITIES









2 Legs

GH-2B up to 250 kg with 1 leg

GH-2C up to 500 kg with 1 leg

GH-2E up to 1000 kg with 2 legs

GH-3C up to 1600 kg with 2 legs

GH-3D up to 2000 kg with 2 legs

GH-4D up to 3200 kg with 2 legs



CERTIFICATION

The chain is sized taking into account the UNE 58915/4 standard and the hooks according to DIN-15400 and DIN-15401.

The built-in motors have been developed according to the DIN-40050 standard.

SAFETY

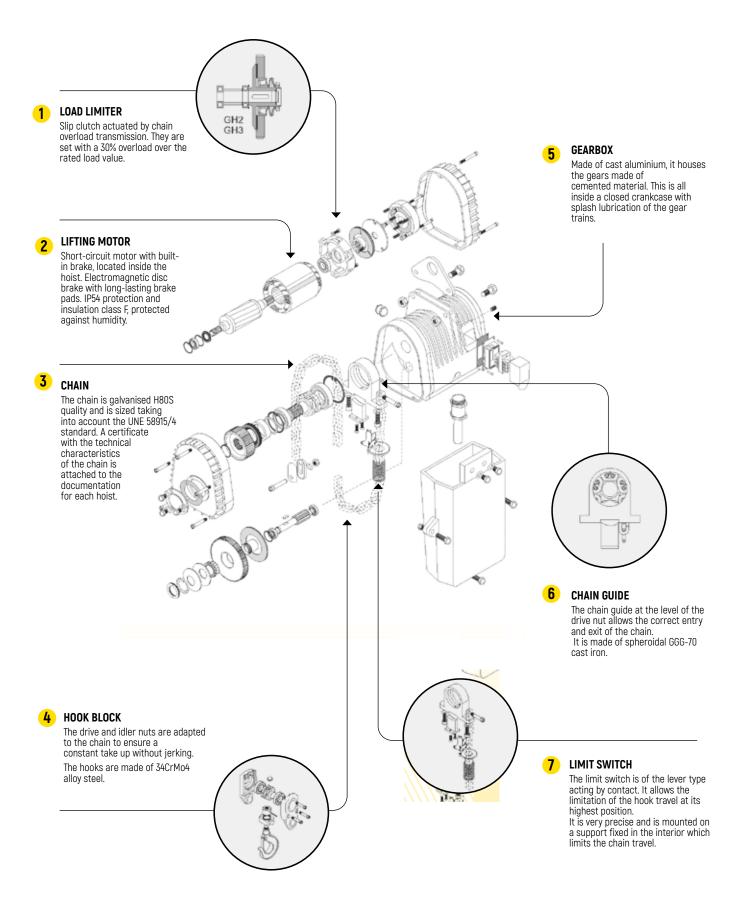
IP54 motor protection. It has a generously dimensioned front electromagnetic disc brake ensuring very efficient stopping. The lifting chain is calibrated and galvanised and is made of high quality, age-resistant round section steel.

CONSTRUCTION

The exterior surface of the chain links is tempered to resist wear. The chain guide ensures correct winding/unwinding of the chain. It has a built-in friction clutch, resistant to wear and easy to adjust, performing the function of overload limiter.

The motor of these hoists has been designed for high operating frequencies. The reducer gears are made of high-quality material, automatically cut by machine and treated against wear, and their operation is very smooth and quiet.

ELECTRIC CHAIN HOISTS







BASIC CAPABILITIES







CERTIFICATION

In accordance with the machinery directive 2006/42/EC and the directives for electromagnetic compatibility and low voltage. Each hoist is supplied with its instruction manual and corresponding declaration of conformity.

IDENTIFICATION

Each hoist incorporates an identification plate showing its characteristics.

SAFETY

It has a double clutch, which makes it up to five times safer than current regulations require. Safety is maximised because the position of the brake is posterior to that of the clutch.

IP65 protection as standard. It has a low voltage control device in the control panel (42 V).

CONSTRUCTION

The end of the chain is attached to the body of the hoist.

The limit switch is always included and it is adjustable up to 120 metres of elevation.

Both the body and the housings are made entirely of aluminium. The chain is guided both in the interior and exterior, preventing it from jamming.

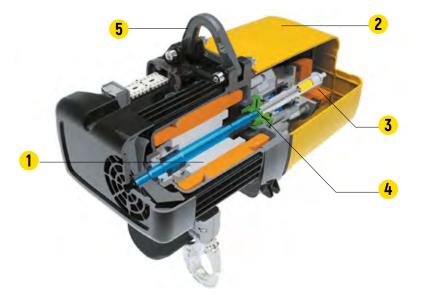
USAGE

Manufactured for industrial use, covering a wide range of weights and speeds, which makes it an ideal machine for lifting loads. It is the ideal complement to the lightweight profiles.

ELECTRIC CHAIN HOISTS

CHARACTERISTICS

- Integrated high power motor 1 (60°C in accordance with ISO M5/DIN EN 14492 A5) 2
- Casing and cover made of aluminium, modular and easy to build 3
- Reliable DC spring brake and reliable securing of the load 4
 - Dry running, low maintenance slip clutch
- 5 Easy to install articulated bolt suspension ring





MOTOR

- Powerful integrated motor with high power reserve • Optimal cooling through external ventilation
- Three-phase and single-phase

GEARS

- Silent operation
- Three-stage helical gear
- Permanent lubricant · Self-contained gear unit



LIMIT SWITCH

- Precise and easy adjustment of the end position of the load hook · Available with two optional
- emergency stop contacts

IP65 PROTECTION CLASS

- Against dust
- Against water jets Ideal for outdoor use and in dusty environments

PENDANT CONTROL

- · Ergonomic and impact resistant
- · Safe operation
- Low voltage 42 V
- · External anti-traction steel cable





PROFILED STEEL CHAIN

- · Hardened and manganese phosphate coated
- · Less wear, longer life
- Minimum chain safety factor 8:1
- (ISO M5/DIN EN 14492 A5)
- Corrosion resistant

LOAD AND SUSPENSION HOOKS

- · Skeletto load and uspension hooks
- Hook with safety catch

POLYGONAL CONNECTIONS

- · All shaft-hub connections are integrated in a self-centring polygonal design
- Optimal power transmission
- · Quick assembly and dismantling

MAINTENANCE

- Low maintenance
- Easy access to wearing parts

SPECIAL PRODUCTS

- Corrosion resistant
- Explosion proof
- · With frequency inverter
- · Handy portable and telescopic models Synchronised hoist
- Reduced height version
- Quick and easy part replacement · No special tools are required









HOISTS THAT COMPLETE THE RANGE

LOAD CAPACITY



HOISTS MAKING MAXIMUM USE OF HEIGHT

- Special solution for all types of industry with low ceilings.
- Chain guide head reduced in size and adjusted to the ceiling.
- · Variable hook distance based on modular sections.



HOISTS WITH SYNCHRONISED LIFTING

- Solution to optimise handling of pieces that are curved or of special length.
- Guaranteed safety of work in parallel with two or four hooks.
- Adjustable hook distance.
- Modular development for use in low places.
 Individually adjustable hook position with gears
- Individually adjustable hook position with gears operating on the limit switch.
- Fully automatic installation with external control.

ELECTRIC CHAIN HOISTS



KG LOAD CAPACITY Up to 1250 kg



"HANDY" **HIGH PRECISION** MANUAL HOISTS

- · The switch is fitted in a comfortable and efficient position.
- It allows a fast and efficient movement of goods.
- Standard use with left and right hand.

CORROSION-RESISTANT HOISTS

- · Food industry, chemical, pharmaceutical industry, waste water treatment plants and outdoor use.
- Casing with cataphoresis treatment.
- Corrosion-resistant rounded steel chain. .
- Corrosion-resistant suspension. .
- All parts in contact with the chain (retrofit parts such as nut, . load hooks and bolts) in a corrosion-resistant version.
- IP65 protection class.
- Special grease for use in the food industry.
- Optional overpressure valve. .
- Optional manual trolley or motorised trolley in corrosion-• resistant version.

"TELESCOPIC HANDY" HIGH PRECISION RIGID HOISTS

- Exact and safe positioning with the switch and telescopic guide . system.
- Allows the control and perfect handling of all kinds of goods (especially liquids).
- Standard use with the left and right hand. Safe lifting up to 250 kg capacity. •
- •
- Seguridad de elevación hasta 250 kg de capacidad. •



MANUAL Chain Hoist

BASIC CAPABILITIES





LEVER HOIST

With very similar characteristics to the standard chain hoist, the main difference being the fact that the lever hoist is designed to handle lifting and dragging loads from any angle, both horizontally and obliquely in any position. It is an ideal tool for work in confined spaces and belongs to the range of low-priced devices.

In accordance with the machinery directive 2006/42/EC all equipment

CERTIFICATION

directive 2006/42/EC, all equipment is supplied with an operating and parts manual for the user, a test certificate and a CE declaration of conformity from the manufacturer.

SAFETY

It has a brake mechanism that, regardless of the type of load (light or heavy), acts as soon as the operation stops. The material used guarantees a long life.

As an additional safety feature, double ratchet triggers are used. In the event of breakage of one of the triggers, the other still continues to operate.



CONSTRUCTION

Both the upper and lower hooks are hot forged and rotating. They are also equipped with a safety latch to ensure correct securing of the load.

They are equipped with a galvanised chain according to DIN and ISO standards.

With a double casing to protect the control chain and the brake from moisture and dirt.

USAGE

It is a highly recommended equipment for loading and unloading stations and agricultural machinery maintenance and it is the ideal crane for mechanical workshops.

Suitable for working in temperatures up to 80°C.

MANUAL AND CHAIN CROSS-TRAVEL TROLLEYS

GIS trolleys are often used by our customers because of their good handling characteristics and long service life as components for end carriage of underhung overhead cranes.

BASIC CAPABILITIES

LIFTING CAPACITY 0,5 t - 5 t



MANUAL



BEAM CLAMPS

Beam clamps are a fast and safe system for the suspension of manual and lever hoists (differentials) when the transfer of the load is not necessary. Easy to install, they can be attached to a wide range of steel profiles, such as IPN and IPE etc., resulting in a secure attachment by means of a locking threaded shaft.



SUSPENSION EQUIPMENT

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ELECTRONIC WEIGHING

BASIC CAPABILITIES





GENERAL

For many operations involving product entry and exit control, storage control and stock verification, a weighing system is required. There are many options for this. A number of different pieces of equipment are shown with a common denominator: electronic weighing.

CERTIFICATION

All the equipment is supplied with a user manual and CE declaration of conformity by the manufacturer.

CONSTRUCTION

Each product range and model is based on appropriate manufacturing standards in terms of functions, protection, the size of the digits, etc. All of them can be increased with a series of optional extras in order to adapt to the real needs of the customer.

USAGE

Although the specifications are defined for each piece of equipment, the working temperature of these devices must be between -10°C and 50°C, and their precision is less than 0.1% (depending on the model and capacities).

ELECTRONIC WEIGHING



ELECTRONIC WEIGHING PALLET JACK







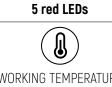
WEIGHING PULLEY

AMR MACRO DISPLAYS

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CHARACTERISTICS

BB DIGITS



WORKING TEMPERATURE -20⁰C + 60⁰C



FUNCTIONS On, Off, Tare, Sum, Total and Delete (by remote control



IP55 protection (IP65 optional)





AMR-60 MACRO DISPLAY



AMR-240 MACRO DISPLAY



AMR-130 MACRO DISPLAY

GENERAL

The macro displays are designed to work on mobile structures with a high degree of vibration, such as bridge cranes, jib cranes, truck cranes, tower cranes, lifting winches, etc.

Due to the size and luminosity of the digits, it is possible to read them both indoors and outdoors from a considerable distance away. This macro display can incorporate various options such as: Load limiter, emission and capture of the weight via radio, computer output, operation by radio control, etc.

The aluminium structure and completely flat design make the macro displays light and accessible with the aim of facilitating maintenance work.





SPREADER BEAMS

GENERAL CHARACTERISTICS

Ideal accessory for use in lifting loads with a wide span. The spreader beam holds the load at its ends and facilitates its lifting in a horizontal position and in the most stable way possible.

PALF SINGLE BEAM FIXED TYPE

Suitable for handling standard loads. 1000 KG PALR SINGLE BEAM ADJUSTABLE TYPE Suitable for handling NON-standard loads, where they can vary in length. 1000 KG PALH SINGLE BEAM FIXED TYPE Suitable for handling standard and bulky loads. PALHR SINGLE BEAM FIXED TYPE Suitable for handling nonstandard loads, where the bulk to handle is unusual. 111 10000 KG

/////////

STANDARD SPREADER BEAMS

BASIC CAPABILITIES

LIFTING CAPACITY 1t - 10 t



Up to 6 m

Other capacities and spans are available upon request



CERTIFICATION

They are manufactured according to the NFE 52210 standard. Each spreader beam is delivered with its CE conformity certificate and the user manual.

IDENTIFICATION

From the first stage of manufacturing, the equipment is identified by a serial number marked on the material. Once the product is finished, it is delivered with an identification plate listing its specifications and characteristics.

SAFETY

Safety factor 4. Work Group FEM5. They are normally supplied equipped with articulated and swivel hooks, with safety latches.

CONSTRUCTION

Made without load bearing welds. With antioxidant paint and a high resistance RAL 1028 yellow polyurethane finish. In the adjustable length models, the hooks are adjusted from the top, usually in steps of 100 mm.

USAGE

For a maximum lifting speed of 16 m/min.

It allows the lifting of normally bulky loads in a stable way. It is possible to fit more lifting points and even at higher positions of suspension.



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<u>ALUMINIUM</u>

Aluminium spreader beams, lighter than conventional ones, are defined using the same variables as standard models. There is a complete range of both fixed and adjustable single beam spreader beams and H-shaped spreader beams, also fixed and adjustable.

All of them are equipped with swivel hooks with a latch. Designed with a safety factor of 4 and in accordance with the EN 13155 standard, the Work Group is FEM5.







<u>CUSTOMISED</u>

In those cases where it is necessary to go beyond the "standard" requirements for lifting and transporting loads, special spreader beams can be designed according to the specific needs of the customer. All of them are designed and built taking into account safety and risk of breakage factors, in addition to passing the corresponding quality controls prior to their dispatch.



INDUSTRIAL GRIPPERS

GENERAL CHARACTERISTICS

Located at the end of a mechanical arm, industrial grippers are components used to pick up parts with different dimensions and geometries.

VERTICAL LIFTING OF SHEETS



HORIZONTAL LIFTING OF SHEETS



SCREW CLAMPS



LIFTING OF DRUMS



LIFTING OF **PIPES** AND **ROUND** SECTIONS

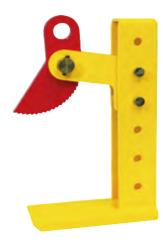


OTHER MODELS

In addition to those shown above, there are also other models:

ADJUSTABLE TYPE FOR HORIZONTAL LIFTING OF SHEETS

For lifting, handling and transporting individual steel packages and sheets they should always be used in pairs (or multiple pairs)





Gripper that DOESN'T LEAVE MARKS with two special synthetic pads. The gripper can be used to lift, handle and transport sheets of (stainless) steel, aluminium, wood and marble. The grippers do not leave a mark after lifting and handling.



HORIZONTAL LIFTING OF PIPES AND ROUND SECTIONS

For horizontal lifting and transport of steel and concrete pipes. The surface is covered with a special plastic. Supplied in pairs. Easy to change plastic cover.



HORIZONTAL LIFTING OF SHEETS WITH POSSIBLE BUCKLING

For lifting and transporting thin sheets that bend when lifted. Compact design and relatively low weight, with a high lifting capacity. They should always be used in pairs (or multiples of two)



VERTICAL LIFTING OF PIPES AND ROUND SECTIONS

For vertical lifting and transport of concrete pipes and hollow sections. The grippers should always be used in pairs or with three grippers. The adjustable side is equipped with a special high pressure plastic surface.



SCREW CLAMPS FOR SPECIAL SECTIONS

To be used as a temporary lifting point wherever HP sections are used, such as parts for sections of ships or boat engine rooms. The gripper is used for HP-100 up to HP-240.



INDUSTRIAL GRIPPERS

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BASIC CAPABILITIES





CERTIFICATION

Industrial grippers that meet all kinds of standards and requirements, including Australian and American standards. They also comply with the European standard EN 13155 and the European machinery directive 2006/42/EC. All the grippers are supplied with an original certificate from the manufacturer in addition to the certificate for the test carried out.

SAFETY

The grippers are designed with a safety factor 5 times the value of the safe working load. Standard lifting grippers have a minimum safe working load which corresponds to 10% of the maximum safe working load inscribed on the body of the gripper.

CONSTRUCTION

Compact and lightweight design. Very high quality and finish. They are made of the highest quality steel, which guarantees a compact design, a high lifting capacity, a high level of use and a long life.

With a simple construction, allowing quick and easy repair. All grippers are factory tested twice to verify their maximum safe working load (MWL).

USAGE

For the lifting and movement of steel sheets, structures, steel and concrete drums, and steel beams of all kinds.

It is advisable to always read the instructions before using a gripper. Designed to work in normal atmospheric conditions with temperatures between -40°C and +100°C.

Never overload a gripper and avoid sharp jerking of the load. Always use the full depth of the gripper. Never lift more than one sheet at the same time unless the gripper has been designed for this.

Any welding on the gripper is prohibited. This can influence its hardness and strength.

EYE BOLTS AND **LIFTING POINTS**

BASIC CAPABILITIES





CERTIFICATION

The eye bolts comply with the European standard EN 1677-1. In addition, as a guarantee of quality, sample breakage tests are carried out on each batch along with the WLL x 2.5 proof load test in accordance with the applicable European standards. All eye bolts are supplied with a CE declaration of conformity by the manufacturer according to the manufacturing number.

IDENTIFICATION

All eye bolts are marked with the manufacturer's identification, part name, maximum working load, thread size and type of material from which it is made.

SAFETY

The minimum safety factor for all eye bolts is 4:1, although in many cases the safety factor is 5. Safety can be increased with the centring option, which improves the strength of the screw studs when the eye bolt is used laterally. The centring option consists of increasing the amount of steel in the weakest point of the eye bolt, which is the base of the shaft. A manual is supplied with each eye bolt with instructions for correct use and maintenance.

CONSTRUCTION

Made of fatigue resistant alloy steel, forged and treated (quenched and tempered). A flush internal surface is ensured during the manufacturing process.



For difficult lifting and rotating of heavy loads.

This equipment has been designed for use in temperatures between -20° and +200°C. Avoid use in aggressive and/or sandy environments.



AUTOMATIC Hooks

48

BASIC CAPABILITIES







CERTIFICATION

Designed to work in the toughest conditions (steel works, ports, work at extreme temperatures) and manufactured with the very best materials. Forged T or V-type hook with high strength steel WELDOX body.

SAFETY

The elebia automatic hook has been designed to increase safety and productivity. It is designed based on the "fail-safe" principle, which means that it CANNOT RELEASE suspended loads. It is a characteristic feature that is achieved without the need for sensors or electrical components.

CONSTRUCTION

The new motor makes it possible to release loads of up to 20 kg so there are no problems releasing heavy slings. Thanks to the electronic control, the load release limit can be adjusted, protected by a clutch so that overloads or impacts do not damage the motor. It has a high capacity battery to improve its life after each charge and thus reduce the energy consumption of the automatic hook. It charges in three hours and allows up to 5000 cycles or 250 hours of standby time.

USAGE

The hooks in the patented range are equipped with a powerful magnet in the lower part and when they approach the load, they attract and position the ring. Thanks to the remote control, the worker gives the order and the elebia hook closes and catches the sling, and the crane lifts the load without any additional manipulation, which reduces the manoeuvring time while increasing safety for the operator.



MANUAL LEVER MAGNETS

Magnetic equipment is very useful for handling both flat and cylindrical iron pieces.

BASIC CAPABILITIES





GENERAL

Recommended applications for manual or lever magnets are as follows:

- Loading and unloading of machinery in workshops.
- Lifting of panels and structures on construction sites.
- Handling of panels and round sections in warehouses.



CERTIFICATION

The magnets comply with the machinery directive 2006/42/EC and the harmonised standards UNE EN 292-1 and UNE EN 292-2. All equipment is supplied with a user manual, test certificate and CE declaration of conformity from the manufacturer.

SAFETY

All the pieces of equipment have a security lock.

The separation force required when it is active is at least 3 times the rated lifting capacity. For round materials, the lifting capacity is 50% of that defined for flat materials. Avoid use in aggressive and/or sandy environments.

IDENTIFICATION

Each piece of equipment incorporates an identification plate and instructions for use.

CONSTRUCTION

Robust, low-maintenance magnetic equipment and slim design. Extremely compact and lightweight. They have a high lifting capacity thanks to neodymium magnets even on uneven and rough surfaces.

They have a large upper ring for use with a bridge crane.

USAGE

Very easy to use due to the ON/OFF connection. Neither the temperature of the load nor the environment must exceed 80°C.

OPTIONS

The 300, 600 and 1000 kg models can be supplied with a lifting boom for the 90° turning of parts and are highly recommended for horizontal loading and unloading in machining centres or lathes. The lifting booms are adjustable to accommodate a wide range of diameters and widths.

50

MAGNETIC EQUIPMENT

<u>SPECIAL</u> <u>APPLICATIONS,</u> <u>BATTERY-</u> <u>POWERED AND</u> <u>OTHERS</u>

For those cases where an electrical power source is not available and manual magnetic equipment is required, batteryoperated magnetic equipment is available. This avoids the need for any electrical cables for handling parts.

They are powered by a builtin 12 V battery, and work for approximately 8 hours. This means portable and easy to handle equipment.



The wide range of electromagnetic equipment includes different shapes and customised equipment, covering greater load capacities.





VACUUM EQUIPMENT

It is a below-the-hook solution that acts as a securing component by means of a vacuum, to facilitate the handling of a large number of industrial parts (stone, wood, metal and plastic sheets etc.).



CERTIFICATION

All of this equipment has CEE (energy eficiency) certification. It is supplied with the corresponding instruction manual. This includes: CE declaration of conformity sheet, indicating the corresponding directives in each case; safety information; description of the equipment by parts; electrical diagram; pneumatic diagram; assembly instructions; instructions for use; safety systems; technical data; identification plate; maintenance and verification; diagnosis and troubleshooting; hand signals for handling loads; and guarantee certificate.

IDENTIFICATION

All the pieces of equipment have an identification label located on the control panel of the suction cup. It clearly indicates the number of the equipment and all its characteristics: manufacturer information, maximum loads, number and year of manufacture.

CONSTRUCTION

The vacuum equipment specifications are calculated and documented, taking into account the safety margins established by the directives. The materials used are: Steel, aluminium, plastic and rubber. 9 and 12 volt batteries. Heavy loads.

SAFETY

All equipment complies with the EU safety regulations. They have a reserve tank and a pressure gauge divided by safety zones into three colours (red, yellow and green), which indicate the level of vacuum existing at any time inside the suction cups. They incorporate an acoustic alarm, powered by a battery independent from the electrical network, which is automatically activated when the vacuum level enters the danger zone.

The EN-1315 draft European Standard and the EN-292 (parts 1 and 2) and EN-1050 European Standards related to lifting loads by vacuum have been taken into account in the design and manufacture of the cup as well as for the elaboration of the manual. Similarly, since the handling of this suction cup includes controls for electrical components, it also meets the low voltage requirements 73/23/EEC and those involving electromagnetic conformity specified in directive 89/336/EEC.

SUCTION CUPS









CONSTRUCTION SECTOR

Laying of pavements and fitting of facades

 Multipurpose equipment for construction site assemblies, with the possibility of exchanging different types of suction cup so that we adapt to any size and weight of the parts to be handled.

Cladding of buildings

• Facilitates work in any place and position.

Street furniture

• Handling of all types of street furniture. Ideal for working with finished materials.

METAL SECTOR

Loading and unloading of machines

- Set of suction cups for handling light sheets up to 1000 kg.
- Independent or compact system.

Assisting bending machines

Small sized suction cup with high load capacity to work with large-sized sheets, avoiding buckling and deformation.

Multiple suction pad for heavy loads up to 20 t.

PANEL SECTOR

Suction cups for handling sandwich panels

- · For the vertical and horizontal handling of panels.
- Free tilting, inclination of the load as required.
- · Load capacity 400 kg (optional 800 kg).
- · Special suction cups for panel reliefs.
- · Blocking for fitting panels on vertical façades.
- · Detachable telescopes for delicate panels..

WOOD SECTOR

Universal suction cup

Used to transport vertically, horizontally, rotate, turn over, assemble with precision, etc., all without damaging the materials.

Linear suction cup

For large boards

Multiple suction cup

For handling very delicate materials. Firmly holds the boards that have a high risk of breakage after manufacture.



54



from 15 to 60 mm



GENERAL

Clamps for lifting marble, granite, stone, synthetic materials, porcelain, etc.

Compact, safe, powerful and delicate for use with stone. They reduce the distances when lifting the slabs.

METALWORKING CLAMPS

C HOOK

Clamps and hooks used in the metalworking sector, used for the handling of sheet metal coils, coils of wire etc. These are special clamps tailored to the customer's requirements.



GENERAL

The C hook is the ideal tool for handling sheet metal coils, coils of wire and hollow round objects. With a very robust construction, it is ideal for working in extreme conditions.

Each hook is adapted to the actual needs of the customer, depending on the dimensions of the reel to be handled. With this information, different variables are defined such as with counterweights, with or without latches, etc.

IMPLEMENTS

1000 kg folding crane, controlled by a very easyto-use manual pump. Very strong and forged swivel hook. CE Marking. Pallet carrier with fixed or mobile grippers, perfect for transporting all goods on pallets, using a self-balancing crane that balances itself according to the weight.

SLINGS AND CHAINS

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GRADE 80 SLINGS AND CHAIN COMPONENTS

CHARACTERISTICS











CERTIFICATION

Slings and chain components according to the standard EN 818-2 or ISO 3076. All slings and components are supplied with the corresponding CE declaration of conformity from the manufacturer. In the case of the complete sling, the CE marking corresponds to the serial number of each sling.

IDENTIFICATION

All slings have an identification plate which is attached to the upper ring by a cable with an aluminium sleeve. The technical data shown on the plate helps the user to use the sling correctly. The thickness of the chain, the number of legs, the angle of inclination and the limit load are all specified.

SAFETY

The safety factor for chain slings is 4:1. As standard, the slings are specified with safety hooks (model CLS). If shortening is required, the shortening hook with direct access to the chain (model VHG) is specified. However, any of these components can be substituted for similar models.

Chain slings should be inspected at least once a year.

USAGE

For use at extremely high temperatures it must be taken into account that it can be reduced by up to 75%.

POLYESTER SLINGS

CHARACTERISTICS

WORKING TEMPERATURE -40°C - 100°C





CERTIFICATION

The polyester slings comply with the machinery directive 2006/42/ EC and the EN 1492 standard. All slings are supplied with a CE declaration of conformity from the manufacturer.

IDENTIFICATION

This accessory has a durable blue label affixed directly to each sling, where all detailed information about the sling is legibly and indelibly marked.

A section of the label, with a duplicate of all the information, remains inside the seam, to ensure good traceability.

SAFETY

They have a safety factor of 7:1. Depending on the type of work, type of load and intended uses, there are different models of slings to better suit requirements.

CONSTRUCTION

Made of 100% high strength polyester.

The loops are reinforced to ensure proper securing.

The slings are wrapped in shrink plastic for protection against dirt before their first use.

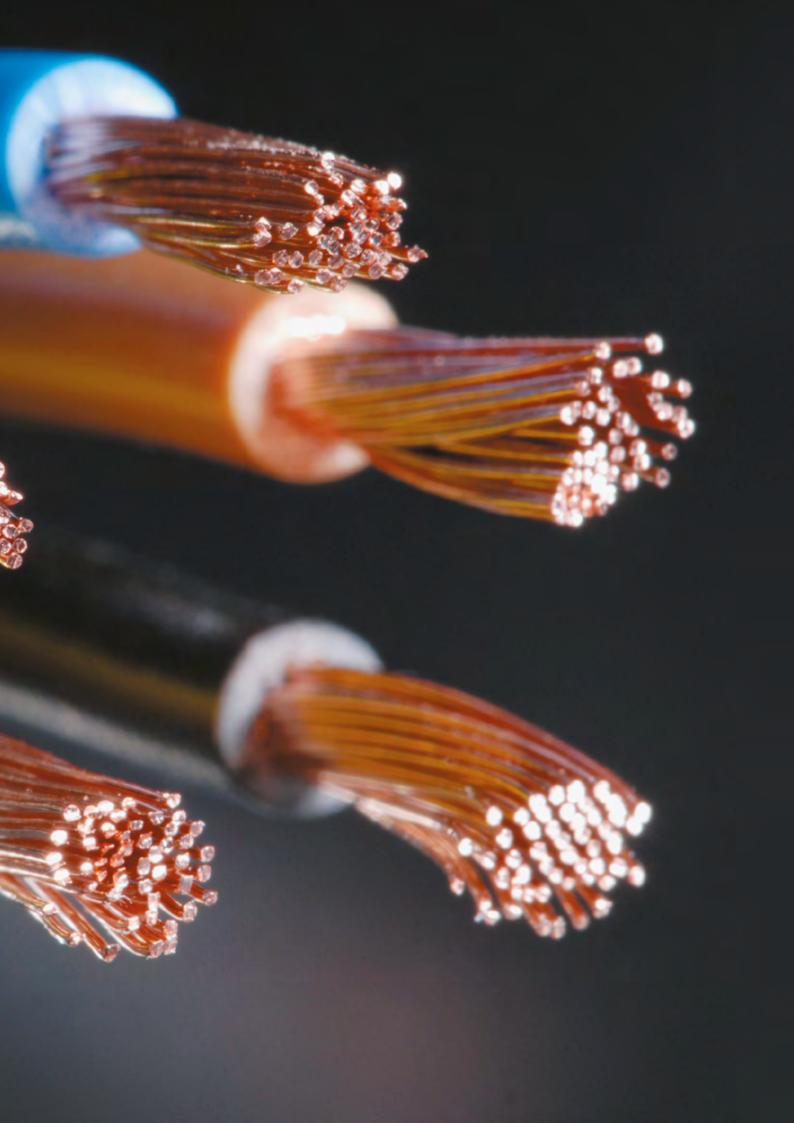
USAGE

All slings must have an identification tag with their working load (MWL). If the sling does not have an identification tag it should not be used.



POWER SUPPLY ELECTRIC

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62

RADIO CONTROL FOR BRIDGE CRANES

This is the ideal option for radio control of machinery in general, for both fixed and mobile applications.

A typical application is industrial lifting (bridge cranes or tower cranes for construction).



OPTIONS

LCD screen

2 x 12 character LCD screen for information feedback from the receiver, allowing safety control and the operation of manoeuvres.

Proportional push-button control

This manual device has highly sensitive proportional push-button control. This allows more precise control of each operation.

Removable SIM EEPROM module

Removable memory card. Quick and easy restoration of service with a replacement unit in the event of transmitter or receiver failure. If the transmitter is damaged, the replacement can copy the EEPROM from the receiver.

Range limiter

The remote control can only be used when there is an infrared connection between the infrared transmitter and the radio receiver. This prevents risk situations caused by the activation of the remote control without a clear and safe view of the machine.

Twin synchro

The most compact TANDEM solution. A system based on a master transmitter. By means of radio signals, it controls the movements of two cranes that work in tandem mode simultaneously and in a synchronised way.

Systems with multiple receivers

Possibility of working with a single transmitter and several receivers at the same time.

Benefits

- Highly customizable
- Easy and fast maintenance
- High resistance to impacts
- Improved ergonomics
- Lithium batteries
- Screen display



ELECTRIC POWER SUPPLY

CONSOLE TYPE TRANSMITTERS

Ideal for industrial lifting applications, mobile applications, with \mbox{On}/\mbox{Off} control and/or proportional control. The following models are available:

<u>IK2, IK3, IK4</u>

The main characteristic of the i-KONTROL series is its ability to progressively grow with new functionalities and incorporate more powerful features than those supported by the T70 consoles as new electronic developments, including both hardware and software, become available.

The **IK2**, **IK3** and **IK4** consoles are equipped with externally removable EEPROM, offer high resistance to impacts, have handles with integrated anti-slip system, 3.5" TFT screen, traditional belt with buckles or integrated into the transmitter itself, side push-buttons, cable connection option, a built-in internal anti-condensation system and, in general, a more compact and lightweight design that makes handling easier.



TRANSMITTERS For Atex zones

ATEX push-button controls have obtained EX approval, which affects the use of this type of equipment in potentially explosive environments or atmospheres. They can therefore be installed in potentially explosive environments with both dust and gases. The only limitation on the degree of certification in environments with gases relates to acetylene and hydrogen.

The ATEX directive (94/9/EC) came into force on 1 July 2003 and since June 2006 it has been mandatory to replace any type of device, whether old or new, that does not comply with this regulation.



ATEX: Zones 1 and 2 / II 2 GD

IECEx: Zones 1 and 2 / IECEx II 2 GD



SAFETY POWER SUPPLY LINE

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GENERAL

This type of power supply line is suitable for indoor and outdoor installations, guaranteeing adequate protection against accidental contacts. Ideal for mobile equipment applications such as overhead cranes.

CERTIFICATION

It is manufactured according to VDE and European and international standards and regulations and accident prevention regulations.

IDENTIFICATION

With a grey colour and in rigid plastic with 4 or 5 copper conductors, it is easy to assemble and dismantle and a manual is provided for this.

SAFETY

It has protection against accidental contacts according to IP23. For socket trolleys, the protection against contacts is only valid when they are completely inside the conduit.



CONSTRUCTION

Designed for easy assembly or expansion if necessary, by adding new sections. It is even possible to replace sections of lines already installed without having to move the rest of the line.

4-metre standard length casing sections. Shorter sections can be ordered. It has expansion joints due to temperature changes and end caps, providing a closure that is resistant to accidental contacts.

USAGE

Operating temperature between -30°C and +60°C. The minimum distance between fixed and moving parts, such as rails, outlets and trailing arm is 0.5 m.

SPRING-DRIVEN CABLE REEL

LF KP EXTENSION CABLE

Low single-phase and three-phase power supply. Short sections, ideal for jobs that require power outlets for portable tools.

Save time with ready-to-use cables! No loops or knots!





GENERAL

A wide range of reels is available to cover any need for electrical, pneumatic or hydraulic power supply to hand tools, or to extend the life of the cables, and to ensure the safety of workers and their working conditions, including the provision of a power supply for low and medium power industrial mobile equipment.

The SR range of spring-driven cable reels stands out for being completely configurable. The type of reel necessary will be determined based on the different requirements of the customer, making room in the different drums to house the different types of cable, depending on the customer's needs.

APPLICATIONS

Although the applications can be very varied, these spring-driven reels have originally been designed to supply and service industrial mobile equipment, such as

- Bridge cranes
- Gantry cranes
- Mobile tables
- Buckets
- Electromagnets

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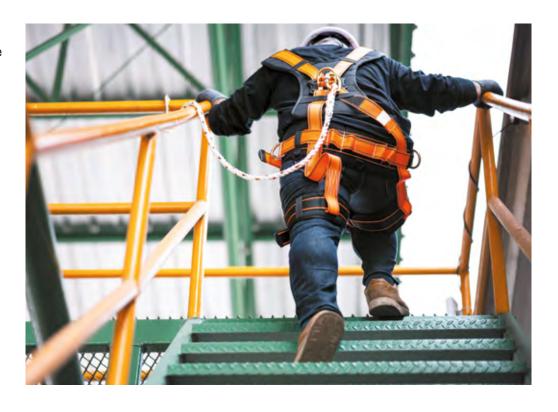
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HORIZONTAL AND VERTICAL LIFELINES

The lifeline is a product with a simple design, completely reliable and easy to use, which allows the user to feel totally safe and concentrate fully on the work to be done. With this system, the use of runners or special sliding parts is not necessary, and it is compatible with any type of carabiner on the safety harness, without the need for additional parts.

Secured vertically





GENERAL

Since 1997 it has been mandatory to put in place safety systems that comply with the UNE 795 standard (protection against falls from a height) so that people who carry out work in risk areas or work at heights are safer.

CERTIFICATION

Each line is supplied with an original manufacturer's certificate. It comes with a two-year manufacturer's guarantee of the material from the date of installation.

IDENTIFICATION

The lifeline has a 210x150 mm identification plate, on which the manufacturing serial number is engraved. It also has security seals that include the manufacturing serial number.

SAFETY

It is a system with an immediate safety connection for each user, at all points of the lifeline. All components are in accordance with the UNE 795 standard for personal fall protection equipment. Once assembled, a seal is placed on the tensioner to avoid any type of manipulation.

CONSTRUCTION

It allows the passage of intermediate points without having to disconnect at any time. The design excludes maintenance and deformation during use, and it adaptable to all types of roof and all types of structure.

The vertical lifeline is equipped with a 7x19 composition 8 mm galvanised cable. All other items in the range of anchoring accessories are made of stainless steel.

USAGE

It can be used in any type of environment with temperatures from -20°C to +50°C.

Different series are available to ensure the reliability of the accessory, taking into account whether it is for indor or outdoor use.

Whenever possible, the placement of the lifeline on a post/column, which allows working with greater comfort and safety, is the preferred option.

In the vertical lifeline, the innovative multipurpose flange solution adapts to a wide range of tubes and sections of different dimensions and shapes.

OTHER SAFETY EQUIPMENT

ABSORBERS

Although the absorber most commonly used by technicians is the one composed of a twisted rope, there is a great variety of equipment available, chosen according to the action to be carried out.

The options include:

- Double leg absorbers, to ensure that it is always secured
- Elastic webbing absorbers (single or double)





FALL ARREST DEVICES

The combination of a fall arrest harness with one of the three classes of fall arrest devices constitutes the rest of the fall arrest systems specified in the EN 363 standard. In many cases, although the PPE avoids the risk of death due to the user's fall, an accident can cause damage and injuries due to the force of the impact that the user suffers during the fall. For these cases, a wide range of different fall arrest devices is available. Among these, for lengths from 2.5 to 15 metres, the retractable lifeline, in both webbing and cable, stands out.

PERSONNEL CAGES

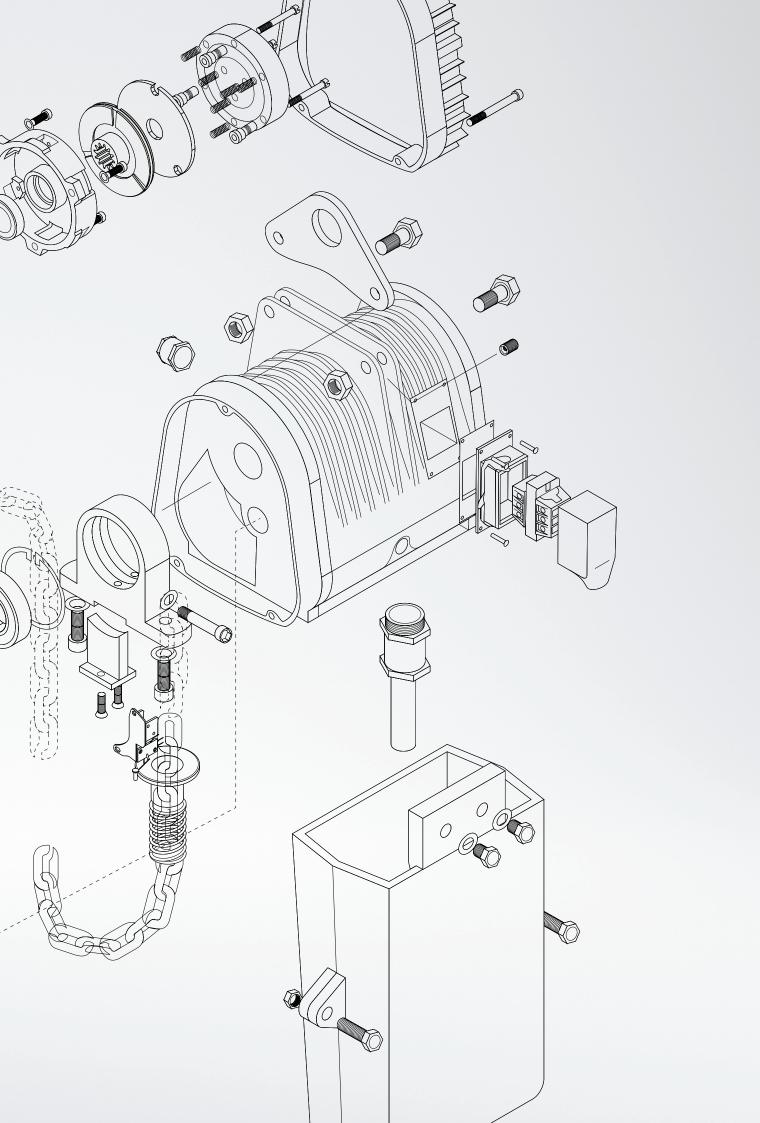
As a solution for specific cases, the forklift platform is useful for carrying out repairs and maintenance work in areas located at a certain height. Constructed of steel section with a non-slip work platform and protective railing.





TECHNICAL CHARACTERISTICS

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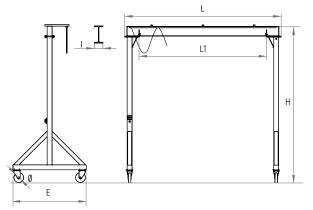
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GANTRY CRANES

PORT TYPE STANDARD GANTRY CRANE

74

Gantry cranes ideal for handling large loads, covering a range from 500 kg to 5 t. The table below shows all the standard measurements: for each MWL shown, the useful span (L1) and the height under beam (HSF) can vary between 2 and 8 metres and between 3 and 6 metres respectively.

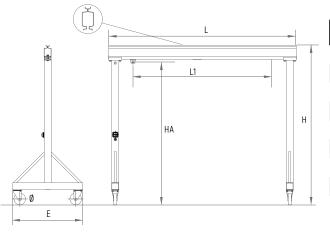


Load	Span	HSF m	H m	L m	L1 m	E m	Ø m	I	Weight kg	Reference
500	3500	3000	3180	3690	3090	1500	150	91	229	PORT05003530
500	3500	5000	5180	3720	2920	2250	150	91	450	PORT05003550
1000	3500	3000	3200	3200	2600	1500	200	100	292	PORT10003530
1000	3500	5000	5200	3740	2740	2250	200	100	504	PORT10003550
1600	3500	3000	3200	3720	2920	1500	200	100	305	PORT16003530
2000	3500	3000	3220	3750	2750	1500	200	110	430	PORT20003530
3200	3500	3000	3800	3780	2780	1500	250	150	471	PORT32003530
5000	3500	3000	3360	3800	2800	1500	300	170	670	PORT50003530

PORTC TYPE STANDARD GANTRY CRANE

Gantry cranes movable only if not loaded. Dimensions adapted to the needs of the customer. In standard dimensions they are available for loads between 500 and 2000 kg, for spans (L) varying between 2 and 5 metres and a useful height (HSF) of up to 3.5 metres as standard.

They are for indoor use only and include the power supply, hose trolley and load-carrying trolley.



Load	Span	ALH m	H m	HA m	L m	L1 m	E m	Ø m	Profile	Weight kg	Reference
500	3000	2000	2180	1960	3220	2390	1200	150	30	199	PORTC05003020
500	3000	3500	3680	3460	3220	2390	1500	150	30	229	PORTC05003035
1000	3000	2000	2180	1960	3220	2390	1200	150	30	218	PORTC10003020
1000	3000	3500	3680	3460	3220	2390	1500	150	30	251	PORTC10003035
1600	3000	2000	2220	1960	3220	2140	1200	200	40B	269	PORTC16003020
1600	3000	3500	3720	1460	3220	2140	1500	200	40B	311	PORTC16003035
2000	3000	2000	2220	1960	3220	2140	1200	200	40B	300	PORTC20003020
2000	3000	3500	3720	3460	3220	2140	1500	200	40B	348	PORTC20003035

GANTRY CRANES

ALUMINIUM GANTRY CRANE

Gantry cranes ideal for the handling of loads, covering a range from 250 kg to 2 t. Although not shown in the table, other standard measurements are available: depending on the MWL shown, the useful span can vary between 900 and 4900 mm and the useful height between 1500 and 4000 mm.

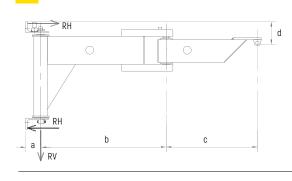
	L	
	HSF HSF	т
E E	U V V	

MWL	Total span	Useful span	HSF min.	HSF max.	HT min.	HT max.	E m	Weight kg	Reference
250	3000	1900	2150	3200	2285	3335	1520	97	PADC02503021
500	3000	1900	2150	3200	2335	3385	1520	99	PADC05003021
1000	3000	1900	2150	3200	2365	3415	1520	117	PADC10003021
1600	3000	1900	2150	3200	2365	3415	1520	162	PADC16003021
2000	3000	1900	2150	3200	2400	3450	1520	169	PADC20003021



WALL-MOUNTED JIB CRANES

PMA ARTICULATED TYPE



Wall-mounted jib crane for indoor use, which makes it possible to cover a larger work area with the hoist hook, by rotating its second boom through 300°. Among other standard dimensions not shown in the table, the total working radius can vary between 2 and 5 metres. It cannot be motorised.

Options include equipping with an electrical power supply line for the hoist and a single wall switch controlling multiple devices.

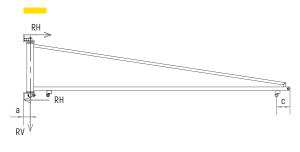
Load	Boom	D	imensio	ns (mm	ı)	RH	RV	CR	Weight	Reference
Luau	m	а	b	с	c d	daN	daN	daN.m	kg/un	Reference
125	3	100	1500	1500	150	887	334	674	144	PMA01253000
250	3	100	1500	1500	165	1497	483	1138	158	PMA02503000

PMTL TRIANGULAR ULTRA-LIGHTWEIGHT TYPE

PMT

TYPF

TRIANGULAR STANDARD



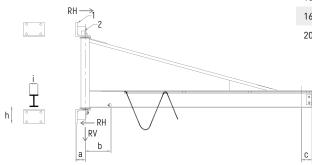
Wall-mounted jib crane for indoor use and reduced weight, ideal for lifting loads up to 100 kg. For jib cranes handling a load of 50 kg, the boom is available up to 5 metres in length. For other loads, see the attached table.

This boom cannot be motorised, nor does it allow the fitting of electric hoists. A load-carrying trolley is included.

Load	Boom	Dimens	ions (mm)	RH	RV	CR	Weight	Reference
Louu	m	а	с	daN	daN	daN.m	kg/un	Reference
50	2	80	100	180	94	229	34	PMTL0502000
50	3	80	100	270	101	347	41	PMTL0503000
80	2	80	100	287	130	297	34	PMTL0802000
80	3	80	100	428	137	448	41	PMTL0803000
100	2	80	100	358	154	343	34	PMTL1002000
100	3	80	100	534	161	516	41	PMTL1003000

Wall-mounted jib crane for indoor use without option to motorise. Ideal for lifting loads between 150 and 2000 kg, which makes it the most versatile on the market. The boom can have a length between 2 and 7 metres depending on the required load.

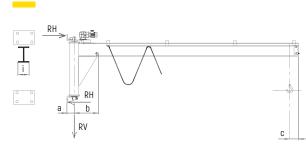
Load	Boom	Di	men	sions	(mn	ר)	RH	RV		Attachment		Reference
	m	а	b	С	h	i	daN	daN daN d	daN.m	No.	kg/un	
150	4,5	100	150	200	120	64	1411	313	1093	1	98	PMT01504500
250	4,5	130	150	300	120	82	2142	477	1661	1	152	PMT02504500
500	4,5	130	150	300	120	100	3850	772	3007	1	172	PMT05004500
1000	4,5	130	150	360	220	120	5652	1487	5869	2	236	PMT10004500
1600	3,5	130	150	400	220	120	6805	2174	6873	2	264	PMT16003500
2000	3	130	150	400	220	135	7300	2609	7681	2	209	PMT20003000



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WALL-MOUNTED JIB CRANES

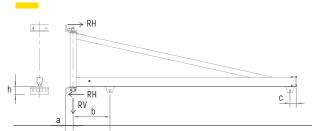
PMI INVERTED TYPE



Wall-mounted jib crane for indoor use with option to motorise. Ideal for lifting loads between 150 and 4000 kg, which makes it the most versatile on the market. The boom can have a length between 2 and 7 metres.

Load	Boom	Dime	ensio	ns (n	nm)	RH RV		CR	Attachment	Weight	Reference
Louu	m	а	b	с	i	daN	daN	daN.m	No.	kg/un	Reference
150	4,5	100	420	150	100	1566	378	1217	1	163	PMI01504500
250	4,5	130	420	150	120	2324	525	1817	1	200	PMI02504500
500	4,5	130	420	150	120	3952	799	3091	1	200	PMI05004500
1000	4,5	130	480	150	150	5768	1520	5994	2	320	PMI10004500
1600	4,5	180	630	150	170	6552	2376	9172	5	466	PMI16004500
2000	4,5	180	710	150	190	8278	3014	12053	5	614	PMI20004500

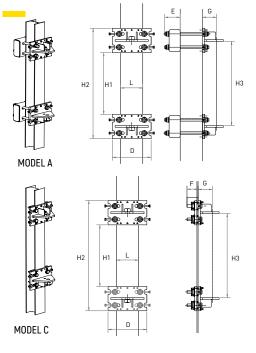
PMTC TRIANGULAR HOLLOW SECTION TYPE



Wall-mounted jib crane for indoor use without option to motorise. Both the hook block trolley and the electrical power line are included with the jib crane. The length of the boom can vary between 2 and 8 metres.

Load	Boom	Di		nsio m)		RH	RV		Attachment		•	Reference
	m	а	b	с	h	daN	daN	daN.m	No.	No.	kg/un	
150	3	100	80	350	120	842	288	744	1	20	73	PMTC01503000
250	3	100	80	350	120	1316	398	1054	1	20	73	PMTC02503000
500	3	130	120	455	120	2520	724	1967	1	30	124	PMTC05003000
1000	3	130	120	455	120	4855	1328	3845	1	30	128	PMTC10003000
1600	3	130	255	630	220	5837	2166	6114	2	40B	246	PMTC16003000
2000	3	130	255	525	220	7262	2611	7648	2	40B	211	PMTC20003000

ATTACHMENT SYSTEMS FOR WALL-MOUNTED JIB CRANES



There are different mounting kits for wall-mounted jib cranes. Suitable for the PMTC, PMT, PMI, PMA and PMTL models of jib crane. These kits are intended to be installed on existing jib cranes to simplify assembly, without having to drill holes in the post.

L mm	H1 mm	H2 mm	D mm	E mm	F mm	H3 mm	G mm	Weight Model A kg		Weight Model C kg	Reference
120 a 220	475	755	320	110	100	600	100	45	45	35	KF1 - * - 220
> 220 a 300	475	755	410	110	100	600	100	53	53	4	KF1 - * - 300
120 a 220	635	915	320	110	100	760	100	47	47	37	KF2 - * - 220
> 220 a 300	635	915	410	110	100	760	100	55	55	44	KF2 - * - 300
120 a 220	555	995	350	110	100	760	130	82	82	62	KF3 - * - 220
> 220 a 300	555	995	430	110	100	760	130	98	98	70	KF3 - * - 300
120 a 220	810	1250	350	140	100	1010	130	102	102	84	KF4 - * - 220
> 220 a 300	810	1250	430	140	100	1010	130	118	118	94	KF4 - * - 300
120 a 220	1200	1640	350	140	100	1400	155	108	108	90	KF5 - * - 220
> 220 a 300	1200	1640	430	140	100	1400	155	124	124	100	KF5 - * - 300

COLUMN JIB CRANES

PFT TRIANGULAR STANDARD TYPE

TITI INT XC

Column jib crane for indoor use, with a maximum rotation of 270°. This model of jib crane cannot be motorised. It is the most versatile on the market.

Standard models are available with a boom length of up to 8 metres, depending on the load.

Load	Boom m	HSF (h useful) m	HT (h total) m	Standard base No.	Solid m	Chemical anchoring option No.	Weight kg	CR daN m	Reference
150	4	2,5	3,3	4	1.2	SC 0.4	186	863	PFT01504000
250	4	2,5	3,3	4	1.3	SC 0.6	231	1466	PFT02504000
500	4	2,5	3,3	5	1.6	SC 0.8	374	2737	PFT05004000
1000	4	2,5	3,7	5	1.9	SC 1.0	558	5449	PFT10004000
1600	4	2,5	4,1	7	2.2	SC 1.5	641	8760	PFT16004000
2000	3	2,5	3,7	7	2.1	SC 1.5	595	8393	PFT20003000

PFTC TRIANGULAR HOLLOW SECTION TYPE

TEEESOD KG

Column jib crane exclusively for indoor use without option to motorise. Supplied with a hook block trolley as well as the power supply line.

The boom can have a length between 2 and 8 metres depending on the required load.

Load	Boom m	HSF (h useful) m	HT (h total) m	Profil N°	Standard base No.	Solid m	Chemical anchoring option No.	Weight kg	CR DaN m	Reference
150	4	2,5	3,3	20	4	1.2	SC 0.4	203	989	PFTC01504000
250	4	2,5	3,3	30	4	1.3	SC 0.8	286	1543	PFTC02504000
500	4	2,5	3,3	30	5	1.6	SC 0.8	385	2763	PFTC05004000
1000	4	2,5	3,7	30	5	1.9	SC 1.0	578	5422	PFTC10004000
1600	4	2,5	4,1	40B	7	2.2	SC 1.5	635	8699	PFTC16004000
2000	3	2,5	3,7	40B	7	2.1	SC 1.5	600	8357	PFTC20003000

PFA ARTICULATED TYPE

Column jib crane for indoor use. With a rotation of 180° for the first boom and 300° for the second boom, making it possible to cover a large work area. The span when both joints are aligned can have a length of up to 5 m. Designed for 150 kg or 250 kg.

Load	Boom m	HSF (h useful) m	HT (h total) m	Standard base No.	Solid m	Chemical anchoring option No.	Weight kg	CR daN m	Reference
150	2	3	3,2	4	0,9	SC 0.4	200	3	PFA01252000
150	5	3	3,2	4	1,35	SC 0.6	335	4	PFA01255000
250	2	3	3,2	4	1,00	SC 0.4	200	3	PFA02502000
250	5	3	3,5	5	1,45	SC 0.8	495	6	PFA02505000

PFI INVERTED TYPE

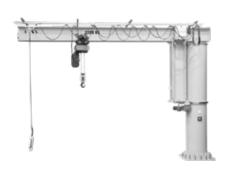
####\$900 KC

Column jib crane for indoor use. It cannot be motorised. The boom can have a length between 2 and 7 metres depending on the required load. It is the most versatile jib crane when there are height problems.

Load	Boom m	HSF (h useful) m	HT (h total) m	Standard base No.	Solid m	Chemical anchoring option No.	Weight kg	CR daN m	Reference
150	4	3	3,26	4	1,2	SC 0.6	234	1075	PFI01504000
250	4	3	3,26	4	1,35	SC 0.8	234	1543	PFI02504000
500	4	3	3,32	5	1,6	SC 0.8	431	2858	PFI05004000
1000	4	3	3,38	6	1,95	SC 1.0	592	5624	PFI10004000
1600	4	3	3,44	7	2,15	SC 1.5	773	8990	PFI16004000
2000	4	3	3,44	7	2,35	SC 1.5	1124	10060	PFI20004000

COLUMN JIB CRANES

PRT TYPE WITH FULL ROTATION



Column jib crane with a standard HSF of 3 metres. It is a triangular jib crane with a reverse boom. Rotation of 360°. The boom can have a length of up to 12 m.

It is highly advisable to use the anchor kits provided in order to guarantee absolute security of the anchoring. Motorisation is possible, with different options.

Load	Boom m	HSF (h useful) m	HT (h total) m	Standard base No.	Solid m	Chemical anchoring option No.	Weight kg	CR daN m	Reference
150	4	3	3,23	4	1,15	SC 0.6	269	1010	PRT01504000
250	4	3	3,29	4	1,30	SC 0.8	333	1546	PRT02504000
500	4	3	3,29	5	1,55	SC 0.8	446	2288	PRT05004000
1000	4	3	3,35	6	1,85	SC 1.0	641	5138	PRT10004000
1600	4	3	3,41	7	2,10	-	769	8137	PRT16004000
2000	4	3	3,41	7	2,25	-	1062	10057	PRT20004000

CONCRETE BASE FOR THE MOBILE VERSION

It can be moved by means of a mobile crane (transport ring) or a forklift truck.

1 CHEMICAL ANCHORING

This type of securing must be used with the utmost care, prudence and when the placement of a concrete footing is impossible. This solution requires a sufficient thickness and quality of concrete which must be verified according to the maximum moments indicated.

In any event, no liability is accepted regarding the placement of this type of anchoring. The plate is not to be removed from the post. The Maximum Moment for each jib crane is indicated in the table.

No.	ТхТ	NO. holes	Ø	ВхВ	Thick- ness	Maximum Moment
SC 0.3	300 x 300	4	20	250 x 250	12	250DaN.m
SC 0.4	400 x 400	8	20	350 x 350	15	1000DaN.m
SC 0.6	600 x 600	8	20	500 x 600	15	1500DaN.m
SC 0.8	800 x 800	12	20	700 x 700	20	3800DaN.m
SC 1.0	1000 x 1000	16	20	900 x 900	20	6000DaN.m
SC 1.2	1200 x 1200	16	25	1100 x 1100	20	8000DaN.m
SC 1.5	1500 x 1500	16	25	1400 x 1400	20	12000DaN.m



2. CONCRETE FOOTING

This is the standard system for anchoring this type of jib crane. The detail of the construction is shown in the figure, the dimensions shown being indicative for a pressure on the ground of 1 kg/cm². The civil engineer is responsible for verification according to the real configuration of the terrain.

No.	A x A	NO. holes	Ø for chemical anchoring	Thickness
4	400 x 300	6	330	20
5	500 x 500	8	430	20
6	600 x 600	8	530	20
7	700 x 700	12	630	20
8	800 x 800	14	730	25
9	900 x 900	16	830	30
10	1000 x 1000	20	930	30
11	1100 x 1100	24	1030	35
12	1200 x 1200	28	1130	35
13	1300 x 1300	32	1230	35

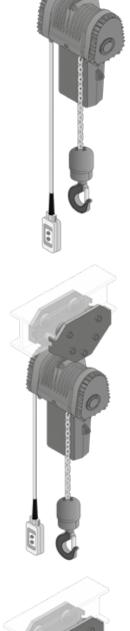
HOISTS

GH ELECTRIC CHAIN HOIST (HIGH PRODUCTION)

MANUAL

TROLLEYS

CROSS-TRAVEL



They come with the following features and options:

- Two speeds.
- Chain collector sized for the specific requirements of the customer.
- Fixed or suspended by hook.
- Coupled to a manual drive trolley.
- Coupled to an electric drive trolley.

With up to 5 t maximum capacity, the characteristics of the most common models are shown.

Load	Legs	Dimensions		Speed	Power	Voltage	Net	Travel type	
capacity	Lego	Α	В	С	m/min	kW	rottage	weight	havertype
500	1	500	360	215	3090	0.8/0.2		31	Manual
500	1	500	360	215	2920	0.8/0.2		31	Electric
1000	2	575	360	215	2600	0.8/0.2	220/380	33	Manual
1000	2	575	360	215	2740	0.8/0.2	F=50 Hz	33	Electric
2000	2	740	400	265	2920	2/0.5		56	Electric
3200	2	900	520	3750	370	2.4/0.6		92	Electric

Made up of sheets, rigidly joined with metal spacers. These spacers are adjustable to fit any type of beam given its flange width.

Adjustable to IPN runway beam with a flange width between 120 mm and 450 mm (depending on the type of hoist).

Load capacity	Travel speed	Dimensions D F		Min. curve radius	Adjustable to IPN	Power	Net weight kg
500	-	75	240	1000	120-300	-	12
1600	-	110	435	1500	180-400	-	50
2000	-	110	435	1500	260-400	-	50
3200	-	110	435	1500	220-450	-	55

ELECTRIC CROSS-TRAVEL TROLLEYS

Made up of sheets, rigidly joined with metal spacers. The drives of these trolleys can be with either one or two travel speeds, the standard being for two speeds of 20/10 m/min. Motors equipped with electromagnetic disc brake. Adjustable to IPN runway beam with a flange width between 120 mm and 450 mm (depending on the type of hoist).

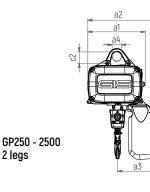
Load capacity	Travel speed	Dimer D	nsions F	Min. curve radius	Adjustable to IPN	Power	Net weight kg
							5
500	20/10	75	285	1000	120-300	0,1	90
1600	20/10	110	395	1500	180-400	0,36	90
2000	20/10	110	395	1500	260-400	0,36	90
3200	20/10	110	395	1500	220-450	0,36	95

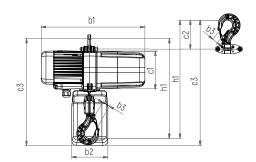
STANDARD MODEL ELECTRIC CHAIN HOIST

Standard model of the electric chain hoist.

It features a precise safety clutch, foolproof electrical connections and outstanding flexibility. The suspension of the modular hoist is by means of a ring, which can be attached to cross-travel trolleys or fixed points and can be replaced by a hook. Possibility of coupling the hoist to an electric or manual trolley, according to customer requirements. Available with up to 6.3 t capacity.

Туре						Di	imensi	ons (r	nm)					
2 legs	a1	a2	a3	a4	b1	b2	b3	c1	c2 ring	c2 hook	c3 ring	c3 hook	h1 ring	h1 hook
GP250	246	296	168	Ø40	444	155	24	162	49	124	462	537	432	506
GP500	246	296	175	Ø40	444	155	24	162	49	124	462	537	453	528
GP1000	246	385	235	Ø52	548	180	33	212	58	140	598	680	595	676
GP1600	380	452	306	Ø75	650	222	35	237	118	147	870	899	727	756
GP2500	380	452	313	Ø62	650	222	41	237	111	204	870	963	781	874



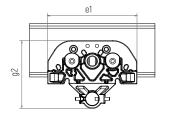


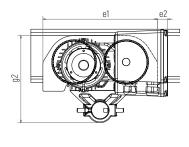


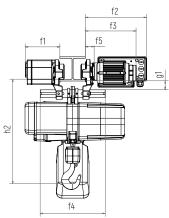
TROLLEYS

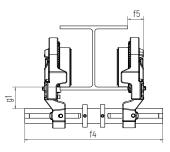
Possibility of coupling the hoist to a manual or electric trolley.

Turne							Dimen	sions	[mm)					
Туре	e1	e2	f1	f2	f3	f	4	f5	g1	g2		hź	2	
						70-140	70-240				GP250/1	GP250/2	GP500/1	GP500/2
GHF1250	239	-	-	-	-	186	286	38.5	48	179	454	480	462	501
GMF1250	239	49	175*	330	274.5	186	286	32	32 48 179		454	480	462	501
						88-200	88-300				GP500/2	GP1000/1	GP1000/2	
GHF2500	286	-	-	-	-	258	358	44.5 57 218		510	592	652		
GMF2500	286	26	190	336	280.5	258	358	38	57	218	510	592	652	
						91-200	91-300				GP1600/1	GP1600/2	GP2500/1	
GMF4000	341	-	-	338.5	282.5	268	368			241	690	758	730	
						91-200	91-300	D			GP2500/1	GP2500/2		
GHF6300	387	-	-	-	-	292	392	49.5 54.5 270		270	727.5	816.5		









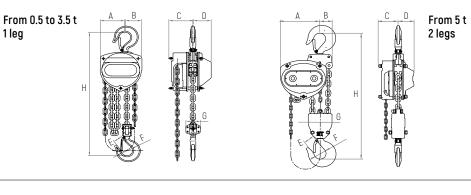
MANUAL **CHAIN** HOIST

MANUAL Lever

HOIST

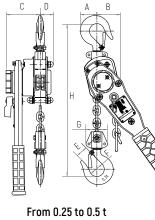
This type of hoist (or differential pulley) is a manual device that combines quality, safety and performance. A light and small tool with very simple handling and ideal for jobs where electrical power supply is not available. The hooks are made of steel and can rotate 360°.

Capacity	Standard			Force of	Weight	Hook		ľ	Main	dir	nen	sion	IS		
Load kg	height m	Chain mm	No. legs	control chain kg	with 3 m chain kg	opening mm	A	в	с	D	E	F	G	н	Reference
500	3	5 x 15	1	22	9	28	89	46	71	65	28	35	51	275	UMEDUB-050
1000	3	6,3 x 19	1	26	11,6	36	100	52	91	69	36	43	53	300	UMEDUB-100
1600	3	7,1 x 21	1	30	18	38	114	59	94	75	38	48	62	410	UMEDUB-160
2000	3	8 x 24	1	35	21	40	132	71	103	83	40	52	64	450	UMEDUB-200
3200	3	10 x 30	1	35	30	50	169	92	104	90	50	60	69	530	UMEDUB-300
5000	3	9 x 27	2	42	45	60	223	70	104	90	60	67	166	675	UMEDUB-500

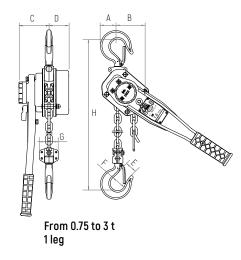


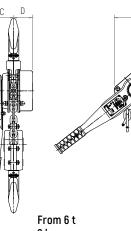
Low cost lever tool that allows the handling of loads in different directions, vertical and horizontal.

Capacity	Standard	Chain	No.	Maximum force on the	Weight	Hook		М	ain	dim	nens	sior	าร		
Load kg	height m	mm	legs	lever kg	with 3 m chain kg	opening mm	A	В	С	D	E	F	G	н	Reference
250	1,5	4 x 12	1	30	2,3	23	29	48	23	72	23	31	43	235	UMEDUL-025
500	1,5	5 x 15	1	38,5	3,5	28	32	62	26	88	28	35	51	275	UMEDUL-050
750	1,5	5,6 x 17	1	25	6,1	28	41	80	55	100	28	35	51	290	UMEDUL-075
1000	1,5	6,3 x 19	1	30	7	36	41	80	55	100	36	43	53	325	UMEDUL-100
1500	1,5	7 x 21	1	30	12	38	47	103	65	99	38	48	62	370	UMEDUL-150
3000	1,5	10 x 30	1	36	17,5	50	55	120	81	104	50	60	69	470	UMEDUL-300
6000	1,5	10 x 30	2	38	32	50	62	164	81	104	50	63	172	620	UMEDUL-600



1 leg





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MANUAL CROSS-TRAVEL TROLLEYS

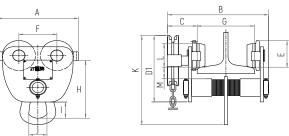
This trolley is the perfect option for a manual (or differential) hoist. Due to its shape and characteristics, it can be attached to the beam, occupying a very small space under it. Travel of the load is by pushing.

Capacity	Net	Min. curve					[Dime	nsio	ns						Reference
t	weight	radius	Α	В	С	D1	Е	F	Н	I	J	K	L	Μ	G	Reference
0,5	6,4	1 m	194	220	35	151	69	89	115	33	28	198	60	32	50-150	UMEDPT-050
1	10,6	1 m	217	227	39	167	78	100	124	35	31	218	70	29	75-150	UMEDPT-100
2	16,8	1,3 m	247	260	43	207	91	116	171	55	56	284	80	31	100-175	UMEDPT-200
3	25,8	1,5 m	270	300	50	239	103	130	215	79	60	253	90	35	100-200	UMEDPT-300
5	32,6	1,6 m	310	304	52	251	117	140	218	84	60	370	100	33	125-200	UMEDPT-500
				B	I		† 									

CHAIN CROSS-TRAVEL TROLLEYS

This trolley is the perfect option for a manual (or differential) hoist. Due to its shape and characteristics, it can be attached to the beam, occupying a very small space under it. Travel is by means of the chain, thus ensuring that it is steadier than in the previous case. The control chain is supplied as standard for 3 metres of travel, although it can be adjusted to the needs of the customer.

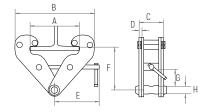
Capacity	Net	Min. curve						Dime	nsior	าร						Reference
t	t weight radius		Α	В	С	D1	Ε	F	Н		J	Κ	L	М	G	Reference
0,5	8,8	1 m	194	266	81	151	69	89	115	33	28	198	60	31	50-150	UMEDGT-050
1	13,5	1 m	217	273	84	167	78	100	124	35	31	221	70	30	75-150	UMEDGT-100
2	19,8	1,3 m	247	309	91	207	91	116	171	55	56	301	80	31	100-175	UMEDGT-200
3	30,3	1,5 m	270	346	96	239	103	130	215	79	60	355	90	35	100-200	UMEDGT-300
5	37	1,6 m	310	350	98	251	117	140	218	84	60	370	100	33	125-200	UMEDGT-500



CLAMPS

Perfect accessory for manual hoists, as long as horizontal movement of the load is not necessary. It is a clamping device that can be attached to a wide variety of types of steel sections.

Capacity	H beam				Dime	ensio	ns m	m				Reference
kg	recommended	A max	B min	B max	C	D	Ε	F min	F max	G	Н	Reference
1000	75-200	260	180	360	85	4	215	102	155	25	22	UMEDBC-100
2000	75-220	260	180	360	92	6	215	102	155	25	22	UMEDBC-200
3000	100-270	315	235	490	125	8	260	140	225	45	24	UMEDBC-300
5000	80-320	354	235	490	110	10	260	140	225	45	28	UMEDBC-500
10000	80-320	365	320	505	120	12	270	170	235	50	40	UMEDBC-1000

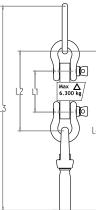


ELECTRONIC WEIGHING

WEIGHING HOOK MODEL GHP

84





Weighing hook designed to be suspended from the hook of the bridge or jib crane etc. from which it is going to work.

It has the option of backlighting and storing weighing results by incorporating an infrared remote control, as well as a range of equipment from the same family with greater versatility.

CHARACTERISTICS:

- Digits: 5 LCD 1.2" (Back-light option)
- Working temperature: -20°C to +60°C F
- Functions: On/Off, Zero, Tare
- Protection: IP55
- Power supply: 6V DC
- Accuracy: +/-0.1%

Capacity	Step	Di	mensi	ons m	ım	Total wei	ght kg	D.(
kg	kg	L1	L2	L3	L4	without acc.	with acc.	Reference
500	0,2	134	244	504	379	3,5	5,2	AIRGHP00500
1000	0,5	134	244	549	399	3,5	6,2	AIRGHP01000
2000	1	134	244	549	399	3,5	6,2	AIRGHP02000
3200	1	146	336	706	526	4,5	8,2	AIRGHP3200
5000	2	160	350	720	540	5,9	10,5	AIRGHP05000
6300	2	160	350	720	594	5,9	16,5	AIRGHP06300
10000	5	174	449	949	724	7,2	24	AIRHHP10000

WEIGHING HOOK MODEL **MINI-DIN 25**

00000

Designed for weighing from cranes with hoists, forklifts, etc.

They have advanced technology that allows us to provide high weighing precision as well as excellent reliability, repeatability and stability in weighing even in situations involving balancing.

As options there is the possibility of supplying red numbers, remote control, protection for foundries, RS-232 output, etc.

CHARACTERISTICS:

Π

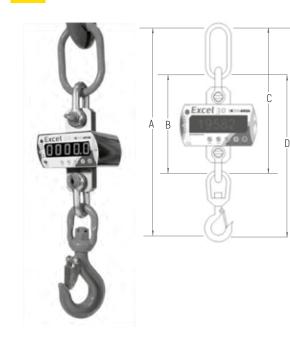
- Capacity from 300 to 10000 kg. - Large display with 25 mm digits on
- LCD (optional number in red)
- Accuracy: +/-0.05%
- Indicators: Tare, overload and low battery warnings.

Capacity	Resolution		Dimensi	ons mm		Weight
kg	kg	Α	В	С	D	kg
300	0,1	500	235	370	400	4
500	0,2	500	235	370	400	4
1000	0,5	500	235	370	400	4,5
2000	1	550	260	370	400	5
3200	1	570	265	440	430	5,5
5000	2	700	330	535	595	11
6300	2	770	335	535	600	14
10000	5	840	350	610	710	21

ELECTRONIC WEIGHING

- 85

WEIGHING HOOK MODEL EXCEL-30



The EXCEL models are specially designed with a stainless steel housing, which gives them great durability, even in the toughest working conditions. They have advanced technology that allows us to provide high weighing precision as well as excellent reliability, repeatability and stability in weighing even in situations involving balancing and jerking during the weighing of large bars.

There is the possibility of supplying red numbers, remote control, printer, maximum peak, protection for foundries and RS-232 outputs.

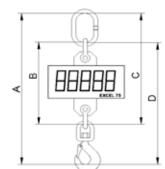
CHARACTERISTICS:

- Capacity from 500 to 25000 kg.
- Large display with 45 mm digits with red LEDs (available in LCD)
 Accuracy: +/-0.03%
- Stainless steel housing
- Indicators: Tare, overload and low battery warnings.

Resolution	n	Weight			
kg	Α	В	С	D	kg
0,1	500	235	370	400	4
0,1	500	235	370	400	4
0,2	500	235	370	400	4,5
0,5	550	260	370	400	5
0,5	570	265	440	430	5,5
1	700	330	535	595	11
1	770	335	535	600	14
2	840	350	610	710	21
	kg 0,1 0,2 0,5 0,5 1 1	kg A 0,1 500 0,1 500 0,2 500 0,5 550 0,5 570 1 700 1 770	kg A B 0,1 500 235 0,1 500 235 0,2 500 235 0,5 550 260 0,5 570 265 1 700 330 1 770 335	kg A B C 0,1 500 235 370 0,1 500 235 370 0,1 500 235 370 0,2 500 235 370 0,5 550 260 370 0,5 570 265 440 1 700 330 535 1 770 335 535	kg A B C D 0,1 500 235 370 400 0,1 500 235 370 400 0,2 500 235 370 400 0,5 550 260 370 400 0,5 5570 265 440 430 1 700 330 535 595 1 770 335 535 600

WEIGHING HOOK MODEL EXCEL-75





This MACRO-DIN model is the most robust in the range and is specially designed with a steel housing, which gives it great durability, even in the toughest working conditions.

It has advanced technology that allows us to provide high weighing precision as well as excellent reliability, repeatability and stability in weighing even in situations involving balancing and jerking during the weighing of large bars.

There is the possibility of supplying red numbers, remote control, printer, maximum peak, protection for foundries, and RS-232 and radio outputs.

CHARACTERISTICS:

- Accuracy: +/-0.03%.

- Capacity from 2000 to 50000 kg.
- Large display with 60 mm digits with red LEDs (available in LCD).
- Safety factor 5.
- Indicators: Tare, overload and low battery warnings.

Capacity	Resolution			Weight		
kg	kg	Α	В	С	D	kg
1000	0,2	500	235	335	400	6,7
2000	0,5	500	235	335	400	6,7
3150	0,5	570	260	400	430	8,6
5000	1	700	265	370	595	13,03
6300	1	770	330	500	600	16,4
9500	2	840	335	465	710	24,7
12000	5	900	350	540	710	27,56
15000	5	1050	360	635	775	44,87
22000	10	1300	580	890	990	71,8
25000	10	1375	580	890	1065	79,56
30000	20	1450	660	980	1130	106
31500	20	1450	660	980	1130	106
5000 6300 9500 12000 15000 22000 25000 30000	1 1 2 5 5 5 10 10 10 20	700 770 840 900 1050 1300 1375 1450	265 330 335 350 360 580 580 660	370 500 465 540 635 890 890 980	595 600 710 710 775 990 1065 1130	13,03 16,4 24,7 27,56 44,87 71,8 79,56 106

ELECTRONIC WEIGHING

WEIGHING PULLEY

86



The weighing pulley is a highly accurate electronic weighing system, designed to be adapted to any type of crane. The advantage offered by this system is that it allows the weight of the elevated load to be read instantly without having to move it to a fixed scale, with the special feature that it does not lose height in the lifting travel. This system is adaptable to load capacities from 2000 kg to 250000 kg.

CHARACTERISTICS:

- Removable viewer
- Height of digits: 26/45/60 mm (LCD or LED)
- Power supply by means of interchangeable batteries (2 batteries + charger)
- Functions: On, Off, Tare, push-buttons in the viewer
- Functions: Tare, Sum, Total, Delete and Off, via the remote control
- Accuracy: +/- 0.03 %
- Momentary overload permitted 150%
- Protection: IP54
- Temperature: -10°C to +50°C
- Humidity: 15% 85%

It has many other attachable options.

ELECTRONIC WEIGHING PALLET JACK



The weighing pallet jack is equipped with an electronic precision weighing system that makes it totally autonomous.

It avoids long and repetitive trips to the fixed scale, thus saving time.

The typical use of these pallet jacks is in dispatching, weighing of deliveries or

shipments to customers and suppliers, control of stocks, batches and formulas, filling of big-bags, control of containers, etc.

There is the possibility of supplying in stainless steel or galvanised or any combination of the two, with red numbers, remote control, printer, maximum peak, RS-232 or other outputs, 24-hour service. Ask us for any other option and we will study the possibility of incorporating it into the pallet jack in question.

CHARACTERISTICS:

- Capacity: up to 2000 kg.
- Divisions: 200 g
- Display with 6 high luminosity red digits of 30 mm.
- RS-232 output.
- Sound indicator for minimum and maximum weight limits.
- Accuracy: 0.05%
- Working temperature: -10°C to +50°C
- Ingress protection: IP55
- Tare, overload and low battery indicator.
- Long-lasting rechargeable battery power. External charger.



STANDARD SPREADER BEAMS

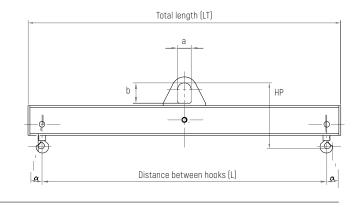
PALF SINGLE BEAM FIXED TYPE

Suitable for handling standard loads. All the standard models available are shown in the table: For each load the length between hooks can be between 1 and 6 m. This spreader beam model has exceptional qualities for intensive use.

Swivel hooks are included as standard, although they can be replaced according to customer needs.

Load kg	Distance between hooks	Total length (mm)	Height loss	а	b	Weight	Reference
1000	3000	3100	360	60	80	96	PALF013000
2000	3000	3100	420	80	120	115	PALF023000
3000	3000	3100	540	100	180	163	PALF033000
4000	3000	3100	560	100	180	190	PALF043000
5000	3000	3100	620	100	180	216	PALF053000
6000	3000	3100	640	100	180	250	PALF063000
8000	3000	3100	700	100	180	288	PALF083000
10000	3000	3100	740	100	180	345	PALF103000

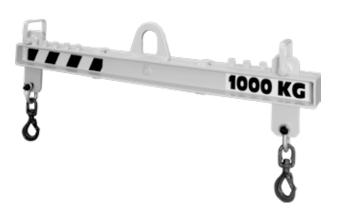


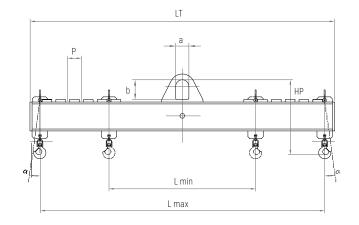


PALR SINGLE BEAM ADJUSTABLE TYPE

Suitable for handling NON-standard loads, where they can vary in length. For each load the length between hooks can be between 1 and 6 m. This model has exceptional qualities for intensive use. Swivel hooks are included as standard, although they can be replaced according to customer needs.

Distance between hooks Load Total length Height loss b Weight Reference а kg (mm) Maximum PALR013000 PALR023000 PALR033000 PALR043000 PALR053000 PALR063000 PALR083000 PALR103000





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STANDARD SPREADER BEAMS

PALH FIXED H-SHAPED TYPE

PALHR

TYPF

ADJUSTABLE

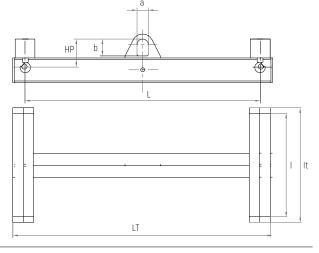
H-SHAPED

Suitable for handling standard and bulky loads. All the standard models available are included in the table: for each load capacity the length between hooks can be from 1 to 4 m in steps of 1 metre and the width between hooks is between 1 and 2 metres.

Swivel hooks are included as standard, although they can be replaced according to customer needs. Due to its design, the height loss is minimal.

Load	Between	hooks		Total					. (
kg	Length	Width	Total length	height	Height loss	а	b	Weight	Reference	
1000	3000	1000	3150	1100	240	60	80	142	PALH0130001000	
2000	3000	1000	3150	1100	270	80	120	161	PALH0230001000	
3000	3000	1000	3150	1100	350	100	180	210	PALH0330001000	
4000	3000	1000	3150	1100	350	100	180	245	PALH0430001000	
5000	3000	1000	3150	1100	390	100	180	272	PALH0530001000	
6000	3000	1000	3200	1100	390	100	180	318	PALH0630001000	
8000	3000	1000	3200	1100	430	100	180	358	PALH0830001000	
10000	3000	1000	3200	1100	430	100	180	427	PALH1030001000	





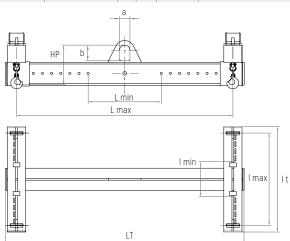
Suitable for handling non-standard loads, where the bulk to handle is unusual.

All the standard models available are included in the table: for each load capacity the length between hooks can be from 0.5 to 4 m and the width between hooks is between 0.5 and 2 metres.

Swivel hooks are included as standard, although they can be replaced with other tools according to customer needs.

Lood	В	etwee	n hoo	ks	Total						
Load kg	Ler	igth	Wi	dth	length	Total width	Height loss	а	b	Weight	Reference
9	Max.	Min	Max.	Min	tongti						
1000	3000	1000	1000	500	3200	1100	290	60	80	162	PALHR0130001000
2000	3000	1000	1000	500	3200	1100	320	80	120	181	PALHR0230001000
3000	3000	1000	1000	500	3200	1100	400	100	180	230	PALHR0330001000
4000	3000	1000	1000	500	3200	1100	400	100	180	275	PALHR0430001000
5000	3000	1000	1000	500	3200	1100	440	100	180	302	PALHR0530001000
6000	3000	1000	1000	500	3200	1100	440	100	180	348	PALHR0630001000
8000	3000	1000	1000	500	3250	1100	480	100	180	388	PALHR0830001000
10000	3000	1000	1000	500	3250	1100	480	100	180	457	PALHR1030001000





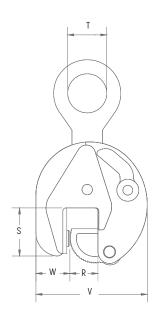
VERTICAL LIFTING OF SHEETS **FIXED GRIPPER**

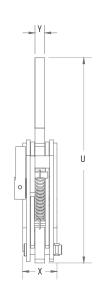
For vertical lifting and transport of steel plates and structures. The vertical lifting grippers are equipped with a safety mechanism that ensures that the gripper does not slip when applying lifting force and while lowering the load.

The gripper is locked in the closed position and in the open position.

The lifting capacity, ranging from 750 kg to 30000 kg, and opening of the gripper are clearly engraved on the body.

		Opening			Dim	ensions	;				
Load capacity kg	Туре	(R) mm	S mm	T mm	U mm	V mm	W mm	X mm	Y mm	Weight kg/un	Reference
750	0.75 TS	0-13	47	30	202	100	37	37	10	1,7	850000
1000	1 TSE	0-25	56	45	263	141	37	47	15	3,5	850880
2000	2 TSE*	0-35	78	64	336	183	56	56	16	7	850901
3000	3 TSEC	0-35	78	64	336	183	56	56	16	7	850331
4500	4.5 TS	0-25	85	70	423	203	60	77	20	15	850441
4500	4.5 TSE	0-45	85	70	425	228	60	78	20	16	850451
6000	6 TS	0-32	114	75	490	225	78	78	20	19	850301
6000	6 TSE	0-50	114	75	490	259	82	78	20	21	851411
7500	7.5 TS	0-40	111	75	530	246	76	82	20	24	850401
7500	7.5 TSE	0-55	111	75	522	267	70	86	20	26	851501
9000	9 TS	0-55	111	75	522	267	70	86	20	27	851551
12000	12 TS	0-52	148	85	617	295	100	94	44	37	915000
15000	15 TS	0-76	209	86	810	373	136	106	49	70	917000
17000	17 TS	0-76	209	86	810	373	136	106	49	71	920000
20000	20 TS	0-80	250	100	933	563	153	140	66	149	925000
25000	25 TS	5-85	250	100	925	563	148	140	66	149	930000
30000	30 TS	10-90	250	100	918	568	153	142	66	155,5	





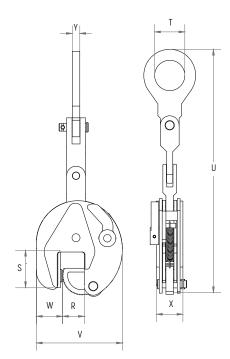
VERTICAL LIFTING OF SHEETS **POSITIONABLE GRIPPER**

Vertical fixed grippers are also available in this variation in which the lifting shackle features a triple-articulation design.

For vertical lifting and transport of all types of steel plates and structures. If connected to a fixed loading arm with bearings (e.g. cylindrical bar) the gripper will retain its flexibility and no chain is required.

Due to the length of the triple link the clamp can be lowered even further between plates or vertical structures. The lifting capacity, available in a range from 750 kg to 25000 kg, and opening of the gripper are clearly engraved on the body.

l		0			Dimer	nsions				Mainh t	
Load capacity kg	Туре	Opening (R) mm	S mm	T mm	U mm	V mm	W mm	X mm	Y mm	Weight kg/un	Reference
750	0.75 TSMP	0-13	47	30	307	100	37	37	10	2	850010
1000	1 TSEMP	0-25	56	45	403	141	37	47	15	4,5	850818
2000	2 TSEMP*	0-35	78	64	516	183	56	56	16	8	850911
3000	3 TSEMP*	0-35	78	64	516	183	56	56	16	8	850221
4500	4.5 TSEMP	0-45	85	70	650	228	60	78	20	19	851401
6000	6 TSMP	0-32	114	75	760	225	78	78	20	24	850311
6000	6 TSEMP	0-50	114	75	760	259	82	78	20	25,5	851511
7500	7.5 TSMP	0-40	111	75	800	246	76	82	20	29	850411
7500	7.5 TSEMP	0-55	111	75	792	267	70	86	20	30,5	851510
9000	9 TSMP	0-55	111	75	792	267	70	86	20	31	851515



VERTICAL LIFTING OF SHEETS ARTICULATED GRIPPER

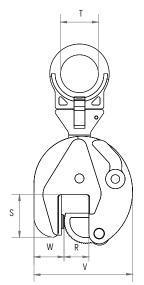
To lift and transport steel plates and structures in all positions (horizontal, vertical and lateral).

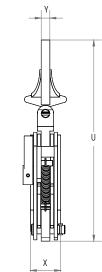
With articulated lifting shackle, these grippers are equipped with a safety mechanism that ensures that the gripper does not slip when applying lifting force and while lowering the load.

The gripper is locked in the closed position and in the open position.

The lifting capacity and opening of the gripper are clearly engraved on the body. Available for loads between 750 kg and 30000 kg.

Load		Opening	Dimensions								
capacity kg	Туре	(R) mm	S mm	T mm	U mm	V mm	W mm	X mm	Y mm	Weight kg/un	Reference
750	0.75 TSU	0-13	47	30	203	100	37	37	10	1,8	855000
1000	1 TSEU	0-25	56	50	292	141	37	47	15	3,8	865800
2000	2 TSEU*	0-35	78	70	372	183	56	56	16	8	855601
3000	3 TSEU*	0-35	78	70	372	183	56	56	16	8	865331
4500	4.5 TSU	0-25	85	70	429	203	60	77	20	16	865441
4500	4.5 TSEU	0-45	85	70	431	228	60	78	20	16,5	865301
6000	6 TSU	0-32	114	78	528	225	78	78	32	22	865401
6000	6 TSEU	0-50	114	78	527	259	82	78	32	24	865411
7500	7.5 TSU	0-40	111	78	567	246	76	82	32	27	865601
7500	7.5 TSEU	0-55	111	78	560	267	70	86	32	28	855400
9000	9 TSU	0-55	111	78	560	267	70	86	32	29	855405
12000	12 TSU	0-52	148	85	648	295	100	94	48	41	865901
15000	15 TSU	0-76	209	85	816	373	136	106	48	73	955150
17000	17 TSU	0-76	209	85	816	373	136	106	48	74	955170
20000	20 TSU	0-80	250	100	948	563	153	140	71	160	955200
25000	25 TSU	5-85	250	100	948	563	148	140	71	160	955250
30000	30 TSU	10-90	250	100	944	568	153	142	71	167	955300





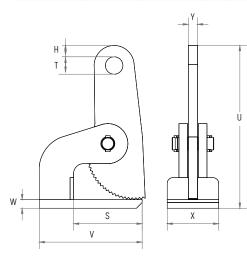
HORIZONTAL LIFTING OF SHEETS **TRACTION TYPE**

For the horizontal lifting and transport of steel sheets.

Compact and relatively light with a high lifting capacity, this capacity and the opening are clearly engraved on the body of the gripper.

They must always be used in pairs, up to a maximum capacity of 12000 kg.

				D)imen	sions	5		665			
Load capacity kg	Туре	Opening (R) mm	V mm	S mm	W mm	T mm	H mm	X mm	U mm	Y mm	Weight kg/un	Reference
1000	1 FHX	0-35	140	99	10	25	11,5	65	188	15	2,6	953100
2000	2 FHX	0-60	180	118	15	30,5	19,5	90	287	16	7	953200
3000	3 FHX	0-60	180	118	20	30,5	19,5	90	291	16	8	953300
4000	4 FHX	0-60	220	145	25	30,5	19,5	105	304	20	13	953400
6000	6 FHX	0-60	22	145	25	30,5	19,5	110	307	20	14	953600
8000	8 FHX	0-60	225	135	35	30,5	19,5	120	336	30	19	953800
10000	10 FHX	0-60	225	135	35	30,5	19,5	12	336	30	19	953010
12000	12 FHX	0-60	225	135	35	30,5	19,5	120	336	30	19	953012
15000	15 FHX	0-60	262	147	35	43	21,5	160	344	35	30	953015
25000	25 FHX	0-60	262	147	40	43	21,5	175	349	35	33	953025



LIFTING OF STAINLESS STEEL SHEETS ARTICULATED GRIPPER

For lifting and moving stainless steel sheets and structures. The pivot, ring and bolt are made of stainless steel and the body and safety mechanism are nickel plated to prevent corrosion due to carbon pollution.

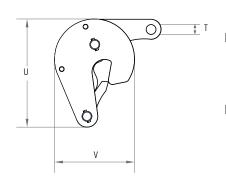
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Load		Opening (R)		Γ)imen	sions	5			Waight	
capacity kg	Туре	mm	S mm	T mm	U mm	V mm	W mm	X mm	Y mm	Weight kg/un	Reference
750	0.75 TS-R	0-13	47	30	202	100	37	37	10	1,7	861075
1000	1 TSE-R	0-25	56	45	263	141	37	47	15	3,5	861100
2000	2 TSE-R	0-35	78	64	336	183	56	56	16	7	861200
3000	3 TSE-R	0-35	78	64	336	183	56	56	16	7	861300
4500	4.5 TSE-R	0-45	85	70	425	228	60	78	20	16	861450
6000	6 TSE-R	0-50	114	75	490	259	82	78	20	21	861600
7500	7.5 TSE-R	0-55	111	75	522	267	70	86	20	26	861750

LIFTING OF DRUMS SAFETY GRIPPER





Y

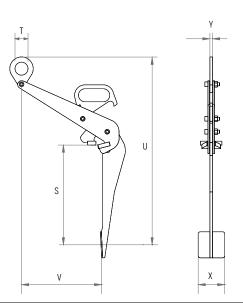
Gripper for the lifting and safe transport of drums that can be used on its own or in pairs.

Load		0		Din	nensior	ns		\ \ /_:	
capacity kg	Туре	Opening (R) mm	U mm	V mm	T mm	X mm	Y mm	Weight kg/un	Reference
500	TVK	0-17	121	96	12	28	15	1,3	828000

LIFTING OF DRUMS MANUAL GRIPPER

Gripper for handling, lifting and transporting drums that contain fluids and must be kept in a horizontal position. Capacity: 0.6 t

Load capacity kg	Туре	Opening (D)			Dimens	sions			Waight	
		Opening (R) mm	U mm	S mm	V mm	T mm	X mm	Y mm	Weight kg/un	Reference
600	түкн	0-25	765	434	305	50	100	10	7	828100

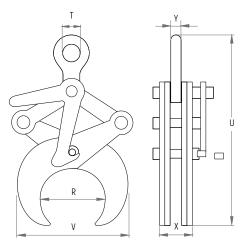


Gripper for the vertical lifting of tubes, bundles of pipes and solid round sections.

The gripper is locked in the open position. To lift, the operator must actuate the lever and hold it up until the eye bolt rises. When positioning the load on the ground, the gripper releases the load automatically.

LIFTING OF PIPES AND ROUND SECTIONS **HORIZONTAL LIFTING**

I and an active		0(D)		Dimens		Weight			
Load capacity kg	Туре	Opening (R) mm	V min-max mm	U min-max mm	T mm	X mm	Y mm	kg/un	Reference
500	0.5 TTL	48,3-114,3	146-207	300-400	45	47	15	4,9	800550
1000	1 TTL	114,3-219,1	225-320	430-615	45	47	15	9	801011
2000	2 TTL	219,1-368	490-610	670-955	64	56	16	31	802021
3000	3 TTL	368-508	590-710	875-1165	64	56	16	39	803036

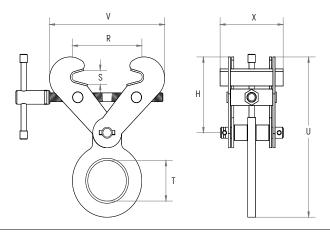


SCREW CLAMPS FIXED CLAMP

Gripper for lifting and horizontal transport of steel beams and structures, it can also be held upside down and used as a temporary lifting point.

It has the same opening and closing for both jaws, for a simple and fast assembly.

I		0			Dim	ensions			\ A /=:	
Load capacity kg	Туре	Opening (R) mm	S mm	T mm	V-max mm	U-max mm	H mm	X mm	Weight kg/un	Reference
1000	1 FSV	75-190	30	73,5	357	345	113-192	120	5	851400
2000	2 FSV	75-10	30	73,5	357	345	113-192	120	5	851500
3000	3 FSV	75-190	30	73,5	357	345	113-192	120	5	851600
4000	4 FSV	150-300	40	80	450	422	185-240	180	15	851700
5000	5 FSV	150-300	40	80	450	422	185-240	180	15	851800
10000	10 FSV	350-450	95	88	695	653	400-447	200	50	851110

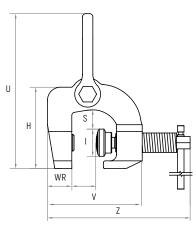


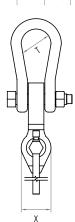
SCREW CLAMPS POSITIONABLE CLAMP

Gripper for both vertical and horizontal lifting and transport of a wide variety of steel structures as it has a clamping screw.

Equipped with an articulated hoist ring that guarantees an effective gripping force in any position.

1		Opening (R)				Dim		Mainh t					
Load capacity kg	Туре	mm	S mm	l mm	W mm	V mm	Z mm	U mm	H mm	T mm	X mm	Weight kg/un	Reference
500	0,5 TSCC	0-35	18	27,5	26	108	158	211	82	25	27	1	90000
1000	1 TSCC	0-40	29	42	40	150	220	232	140	46	46	3,6	901000
1500	1,5 SCC	0-40	29	42	40	150	220	232	140	46	46	3,8	901500
3000	3 TSCC	0-60	38	50	46	190	280	278	184	50	60	7,8	903000
6000	6 TSCC	0-100	60	63	70	296	446	390	249	100	75	22	906000
1000	1 TSCC-W	50-100	88	42	50	225	258	273	190	45	46	6,3	862711
3000	3 TSCC-W	25-75	76	49	60	215	250	291	191	50	54	7,8	862731





SPECIAL SECTIONS FOR PARALLEL FACES

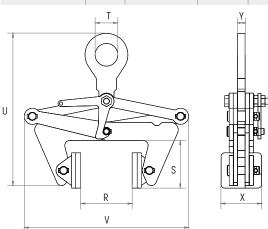
For vertical lifting and transport without marking products with parallel sides made of various materials such as steel, wood, plastic, concrete, marble, etc.

The clamp locks in the open position. To lift, the operator must actuate the lever and hold it while increasing the force on the hoist ring. When placing the load on the ground, the gripper opens automatically.

The pads are covered with a special plastic so as not to damage the load.

Available up to a maximum capacity of 3000 kg.

Load capacity		Opening (R)		Dimen	sions	mm			Weight	D afaaaaaa	
kg	Туре	mm	V min-max	U min-max	S	Т	Х	Y	kg/un	Reference	
500	0.5 TBLC	30-110	270-325	305-460	95	45	80(*70)	15	7	801005	
1000	1 TBLC	100-230	425-530	380-655	120	45	80(*70)	15	12,3	801010	
2000	2 TBLC	220-360	580-675	410-735	14	45	80(*70)	15	18	801020	
3000	3 TBLC	350-500	725-835	530-900	178	64	100(*90)	16	33	801030	



SPECIAL SECTIONS ROTATING CLAMP

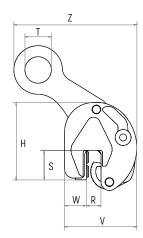
To lift and transport steel beams, sections and structures where the load must remain in position.

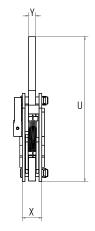
The special design of the lifting shackle places the centre of gravity of the beam to be lifted just below the shackle. This allows the beam to be balanced when raised and keeps the edges vertical, so the beam can be easily stacked or positioned.

Specially recommended for transporting and stacking steel beams (e.g. when sawing or stacking steel beams and building steel constructions).

The lifting capacity and opening of the gripper are clearly engraved on the body.

Load capacity	Туре	Opening (R)			Di	imens	sions	mm				Weight	Reference
kg	туре	mm	۷	W	S	Н	Т	Z	Х	U	Y	kg/un	Reference
1000	1 FBK	0-15	136	43	45	154	35	200	47	225	15	3	801010
1500	1.5 FBK	0-20	170	56	67	210	60	312	56	374	16	7	801020
3000	3 FBK	0-25	208	58	66	252	70	380	77	410	20	15	801030

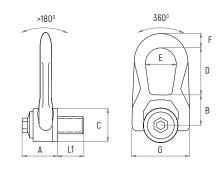




EYE BOLTS

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DOUBLE ARTICULATION EYE BOLTS CODE DSR

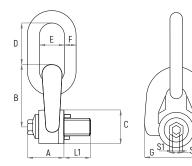


3D UNIVERSAL ROTATING EYE BOLTS CODE DSS

Dimensions D. of Weight

t	F5	thread	L	S	Α	В	С	D	E	F	G	kg/un	Reference
10,00	5	M36 (x4)	54	19	61	31	70	104	73	145	29	5,22	CODDSSM36
12,50	5	M42 (x4,5)	63	19	61	31	70	104	73	145	29	5,44	CODDSSM42
20,00	4	M48 (x5)	68	19	79	38	90	125	91	184	33	11,00	CODDSSM48
25,00	4	M56 (x5,5)	78	19	79	38	90	125	91	184	33	11,30	CODDSSM56
32,10	4	M64 (x6)	90	19	79	38	95	125	91	184	33	12,00	CODDSSM64

TRIPLE ARTICULATION EYE BOLTS CODE TSR



Its triple articulation allows the hook to move parallel to the bearing face of the ring with traction through 90°.

Outstanding characteristics include:

- · Safety factor of 4 or 5 depending on the proposed MWL
- · Steel class > 8
- · Its triple articulation allows it to align perfectly with the sling
- $\cdot\,$ Two options for tightening: either with a flat key or an Allen key
- From M8 to M56 as standard; for loads from 0.3 t up to 22 t

Load	FS	D. of thread				D	imen	sion	5				Weight	Reference
t	13	D. of thread	L1	S1	S 2	Α	В	С	D	Е	F	G	kg/un	Reference
0,30	5	M08 (x1,25)	14	8	16	33	56	30	41	25	10	58	0,43	CODTSRM08
0,60	5	M10 (1,50)	17	8	16	33	56	30	41	25	10	58	0,44	CODTSRM10
1,00	5	M12 (x1,75)	21	8	16	33	56	30	41	25	10	58	0,45	CODTSRM12
1,60	5	M16 (x 2)	27	8	20	45	76	45	56	37	14	79	1,14	CODTSRM16
2,50	5	M20 (x2,5)	30	8	20	45	81	45	56	37	14	79	1,19	CODTSRM20
4,00	5	M24 (x3)	36	14	24	62	105	60	80	45	20	106	2,84	CODTSRM24
6,30	5	M30 (x3,5)	45	14	24	62	105	60	80	45	20	106	3,05	CODTSRM30
10,00	5	M36 (x4)	54	19	30	81	140	80	111	71	30	148	7,57	CODTSRM36
12,50	5	M42 (x4,5)	63	19	30	84	146	80	111	71	30	148	7,77	CODTSRM42
20,00	5	M48 (x5)	68	19	30	100	178	110	135	90	42	180	17,53	CODTSRM48
22,00	5	M56 (x5,5)	78	19	30	104	184	110	135	90	42	190	18	CODTSRM56

Eye bolt specially designed to guarantee lifting with rotation. Its double articulation allows it to be perfectly in line with the sling.

Also available in a stainless steel version, it can be used in wet, corrosive, chemical environments, etc. Outstanding characteristics include:

- · Safety factor of 5
- · High strength steel class > 8

• Two options for tightening: either with a flat key or an Allen key from M8 to M30 as standard; for loads from 0.3 t to 6.3 t.

Load	FS	D. of thread			D	imer	ision	5			Weight	Reference
t	13	D. Of theau	L1	Α	В	С	D	Е	F	G	kg/un	Reference
0,30	5	M08 (x1,25)	14	33	30	30	38	27	14	53	0,32	CODDSRM08
0,60	5	M10 (x1,5)	17	33	30	30	38	27	14	53	0,32	CODDSRM10
1,00	5	M12 (x1,75)	21	33	30	30	38	27	14	53	0,32	CODDSRM12
1,60	5	M16 (x2)	27	45	42	45	54	38	17	76	0,25	CODDSRM16
2,50	5	M20 (x2,5)	30	45	42	45	54	38	17	76	0,91	CODDSRM20
4,00	5	M24 (x3)	36	62	55	60	83	55	25	107	2,45	CODDSRM24
6,30	5	M30 (x3,5)	45	62	55	60	83	55	25	107	2,66	CODDSRM30

With a MWL of 50 t per eye bolt, it is specially designed for lifting and rotating heavy loads. The DSS eye bolt also has a very large shackle opening

Outstanding characteristics include:

- · Safety factor of 4 or 5 depending on the proposed MWL
- Its double articulation allows it to align perfectly with the sling
- · Compact and ergonomic
- · Tightening by means of Allen key

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ROTATING HOIST RINGS CODE SEB

The SEB rotating hoist ring is equipped with an automatic reversing system for optimal orientation in the direction of the sling. Offers a high MWL in all directions.

- The characteristics include:
- Tightening by means of Allen key
- Allows the hook to move parallel to the point of support of the hoist ring with traction through 90°
- $\cdot\,$ From M16 to M42 as standard; for loads from 1.6 t up to 12.5 t
- Other variations of securing shafts upon request
- There is also a female version

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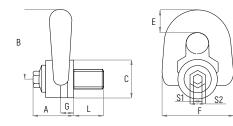
Load	FS	D. of thread			Dimensi	ions		Weight	Reference	
t	13	D. or thread	L1	S	Α	В	С	D	kg/un	Reference
1,60	5	M16 (x2)	27	8	38	45	90	78	0,80	CODSEBM16
2,50	5	M20 (x2,5)	30	8	38	4	90	78	0,83	CODSEBM20
4,00	5	M24 (x3)	36	14	58	70	134	115	2,53	CODSEBM24
6,30	5	M30 (x3,5)	45	14	58	70	134	115	2,62	CODSEBM30
10,00	5	M36 (x4)	54	14	88	94	190	166	8,00	CODSEBM36
12,50	5	M42 (x4,5)	63	14	88	94	190	166	8,10	CODSEBM42

LIFTING POINTS WITH DOUBLE ARTICULATION CODE DSP

The DSP double articulated lifting point offers the possibility to adapt to other lifting accessories: passage of a cable or rope, fitting of a large eye bolt for the use of hooks too large for the hoist ring, etc.

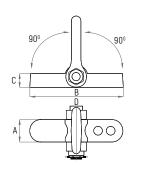
Outstanding characteristics are:

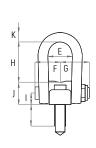
- Safety factor of 5
- $\cdot\,$ Its double articulation allows it to align perfectly with the sling
- Two options for tightening: either with a flat key or an Allen key
- From M8 to M20 as standard; for loads from 0.3 t up to 2.5 t



Load	FS	D. of	Dimensions									Weight	Reference
t	гэ	thread	L1	S1	S 2	Α	В	С	Е	F	G	kg/un	Reference
0,30	5	M08 (x1,25)	14	8	16	33	56	30	19	19	58	0,32	CODDSPM08
0,30	5	M10 (x1,5)	17	8	16	33	56	30	19	19	58	0,33	CODDSPM10
1,00	5	M12 (x1,75)	21	8	16	33	56	30	19	19	58	0,34	CODDSPM12
1,50	5	M16 (x2)	27	8	20	45	76	45	25	27	79	0,95	CODDSPM16
1,60	5	M20 (x2,5)	30	8	20	45	81	45	25	27	79	1,00	CODDSPM20

CENTRAL SAFETY RING **CODE CSS**



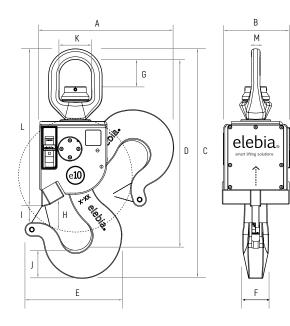


The central safety rings are designed to handle heavy loads. A single CSS hoist ring can lift up to 55 t.

- It has the following characteristics:
- Safety factor of 4
- High MWL: from 20 to 55 t
- · Ring that can be screwed designed for linear lift
- Very large shackle opening
- Easy to fit and use
- · Minimal dimensions

Load	d	ES					Dim	ensi	ons				Weight	Reference
t		13	Α	В	С	D	E	F	G	Н	J	Κ	kg/un	Reference
32,2													17	CODCSS

AUTOMATIC HOOKS



The evo family of automatic crane hooks increases crane safety and productivity. The patented evo automatic hooks can load from 2.5 t for the evo2 model up to 25 t and allow the hooking and unhooking of loads remotely.

	evo5	evo10c	evo10	evo20C	evo20	evo25
А	277	277	342	311	341	341
В	170	170	1 82,3	182,3	182,3	182,3
С	469	519,8	584	624	663	735
D	409	451,3	485	520	553	618
Е	194	194	246	226	246	246
F	43	43	66	66	66	66
G	48,5	68	68	105	105	138,5
Н	57,6	57,6	83	50	83	83
Ι	25	25	42	42	42	42
J	41	41	72	66	72	72
K	58	82	82	115	115	133
L	349	400,4	400,4	480	480	550
М	15	22	22	29	29	34

MAGNETS

LEVER MAGNETS



Good performance on surfaces that have not been machined with rust or flake. Unbeatable model for loading and unloading in machine tools. It is commonly found in industrial plants, machine shops, and warehouses.

Rated		Thickness	Diameter	D	imensions			
capacity Flat material	/ kg/un Round material	minimum mm	minimum maximum mm	Length mm	Width mm	Height mm	Weight kg/un	Reference
150	65	2	50/100	93	60	120	3	WALNEOL150
300	150	4	60/200	152	100	180	10	WALNEOL300
600	300	6	65/270	246	120	180	21	WALNEOL600
1000	500	10	100/300	306	146	236	40	WALNEOL1000
2000	1000	15	10/350	478	165	273	90	WALNE0L2000

MAGNETIC GRIPPERS



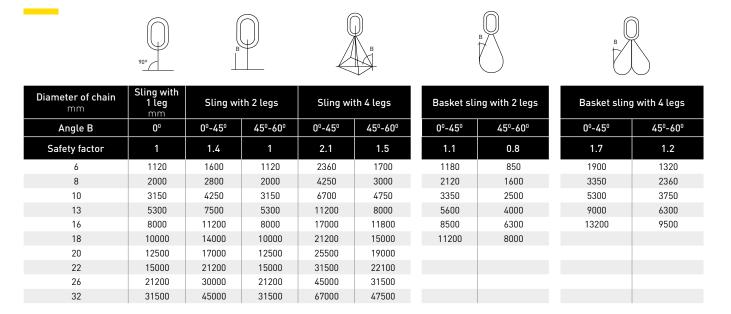
Magnetic grippers with handle to lift or drag sheets and any other flat piece. High lifting capacity of approximately 85 times its weight.

Lifting capacity	Dimensio	ns	Reference		
kg	Length mm	Width mm	. Weight kg/un	Reference	
60	160	150	1,4	WAL90.04.002	
160	230	160	2,9	WAL90.04.003	

SLINGS

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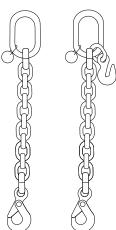
GRADE 80 Slings



SLING WITH **1 LEG**

Grade 80 single leg slings, suitable for lifting a well-balanced load from a single point. All these slings are made up of 1 master ring, 2 connecting hammerlocks and CLS hook. In the case of slings with shortener, this is the VHG type.

Link diame-	Capacity	Leg length	Weight	Reference	Weight	Reference
ter mm	kg	m		t shortener	with s	hortener
		1	3,2	BE081RSA1000	3,7	BE081RCA1000
8	2000	3	6,2	BE081RSA3000	6,7	BE081RCA3000
		5	9,2	BE081RSA5000	9,7	BE081R CA5000
		1	5,2	BE101RSA1000	6	BE101RCA1000
10	3150	3	9,8	BE101RSA3000	10,6	BE101RCA3000
		5	14,4	BE101RSA5000	15,2	BE101RCA5000
		1	9,8	BE131RSA1000	11,5	BE131RCA1000
13	5300	3	17	BE131RSA3000	18,7	BE131RCA3000
		5	24,2	BE111RSA5000	25,9	BE131RCA5000



With shortener

SLINGS

SLING WITH **2 LEGS**

Grade 80 slings with two legs. All these slings are made up of 1 master ring, connecting hammerlocks and CLS hooks. In the case of slings with shortener, this is the VHG type.

		Canad	c ity kg		Weight	Reference	Weight	Reference
	Link diameter mm	0°-45°	45°-60°	Leg length m		t shortener		n shortener
		0 40	40 00	1	5,9	BE082RSA1000	6,9	BE082RCA1000
	8	2800	2000	3	11,9	BE082RSA3000	12,9	BE082RCA3000
				5	17,9	BE082RSA5000	18,9	BE082RCA5000
				1	9,6	BE102RSA1000	11,2	BE102RCA1000
	10	4250	3150	3	19	BE102RSA3000	20,6	BE102RCA3000
				5	28,2	BE102RSA5000	29,8	BE102RCA5000
				1	17,6	BE132RSA1000	21	BE132RCA1000
	13	7500	5300	3	32,8	BE132RSA3000	36,2	BE132RCA3000
				5	48	BE132RSA5000	51,4	BE132RCA5000
Without shortener					With shortener			

SLING WITH **4 LEGS**

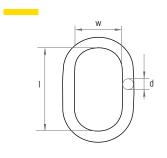
Grade 80 slings with four legs. All these slings are made up of 1 master ring, connecting hammerlocks and CLS hooks. In the case of slings with shortener, this is the VHG type. Under normal conditions, the MWL is as indicated for the sling, but in special cases it is advisable to restrict it to 80% of that indicated.

Link diameter	Сара	city kg	Leg length	Weight	Reference	Weight	Reference	
mm	0º - 45º	45 ^{0 -} 60 ⁰	m		out shortener	with shortener		
			1	13,1	BE084RSA1000	15,1	BE084RCA1000	
8	4250	3000				BE084RCA3000		
			5	37,1	BE084RSA5000	39,1	BE084RCA5000	
			1	21	BE104RSA1000	24,2	BE104RCA1000	
10	6700	4750	3	39,4 BE104RSA3000 42,6 BE104RCA3000	BE104RCA3000			
			5	57,8	BE104RSA5000	61	BE104RCA5000	
			1	38,9	BE134RSA1000	45,7	BE134RCA1000	
13	11200	8000	3	69,3	BE134RSA3000	76,1	BE134RCA3000	
			5	99,7	BE134RSA5000	106	BE134RCA5000	



GRADE 80 SLING COMPONENTS

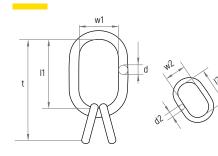
GRADE 80 SINGLE RING



Single suspension ring suitable for slings with both one and two legs.

		Ch	ain	Wire	Wire rope				Weight	
MWL kg	Reference	1 leg nominal dimensions	2 leg nominal dimensions	1 leg nominal dimensions	2 leg nominal dimensions		l mm	w mm	kg/ piece	Reference
2.120	A 16	8-8	7-8	8/10/12/14	8/10/12	16	110	60	0,5	BESRRA08
3.150	A 18	10-8	8-8	16/18	14/16	18	135	75	0,8	BESRRA010
5.300	A 22	13-8	10-8	20/22/24	18/20	22	160	90	1,6	BESRRA13
8.000	A 26	16-8	13-8	26/28	22	26	180	100	2,3	BESRRA16

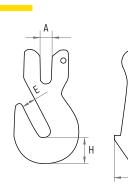
GRADE 80 Triple Ring For Chain



Triple suspension ring for slings with four legs.

MWL kg	Ø mm	d1 mm	l1 mm	w1 mm	d2 mm	l2 mm	w2 mm	t mm	Weight kg/piece	Reference
4.250	8-8	22	160	90	16	70	34	230	2,3	BETRD08
6.700	10-8	26	180	100	18	85	40	265	3,4	BETRD10
11.200	13-8	32	200	110	22	115	50	315	6,1	BETRD13
17.000	16-8	36	260	140	26	140	65	400	9,9	BETRD16

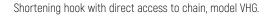
SHORTENER



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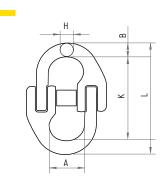
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MWL kg	Ø mm	E	A	н	w	L	Weight kg/piece	Reference
2.000	7/8-8	11,0	9,5	18,5	33,5	89,0	0,32	BEVHG08
3.150	10-8	13,0	12,5	29,0	46,0	126,0	0,73	BEVHG10
5.300	13-8	16,5	15,0	42,5	57,5	163,5	1,60	BEVHG13
8.000	16-8	19,0	18,5	47,0	74,0	183,5	2,80	BEVHG16

SLINGS

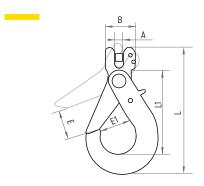
HAMMERLOCK



Detachable link.

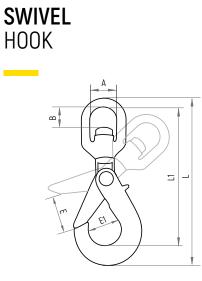
MWL kg	Ø mm	А	В	L	К	н	Weight kg/piece	Reference
2.000	7/8-8	18,0	9,5	79,5	60,5	8,5	0,146	BEVG08
3.150	10-8	25,0	12,0	90,5	68,0	11,5	0,30	BEVG10
5.300	13-8	29,0	15,0	117,0	87,0	15,0	0,65	BEVG13
8.000	16-8	34,5	19,8	148,0	108,4	19,8	1,15	BEVG16

HOOK WITH AUTOMATIC CLOSING



Compact CLG type safety hook.

MWL kg	Ø mm	A mm	B mm	E mm	E1 mm	L1 mm	L mm	Weight kg/piece	Reference
2.000	7/8-8	9,5	48,0	40	35,8	119,3	161,8	0,80	BECLG08
3.150	10-8	12,5	60,0	50	45,0	142,0	195,0	1,38	BECLG10
5.300	13-8	15,0	65,0	0	52,5	179,0	249,0	2,81	BECLG13
8.000	16-8	18,5	70,0	65	63,3	224,8	310,0	6,00	BECLG16

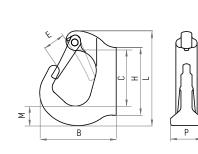


Swivel safety hook with CLW type automatic safety latch.

MWL kg	Ø mm	A mm	B mm	E mm	E1 mm	L1 mm	L mm	Weight kg/piece	Reference
2.000	7/8-8	36,0	29,5	48,0	38,0	189,0	228,0	1,15	BECLW08
3.150	10-8	42,0	35,0	60,0	48,0	224,0	270,0	1,86	BECLW10
5.300	13-8	50,0	41,0	73,5	52,5	267,0	324,0	3,51	BECLW13
8.000	16-8	69,0	56,8	80,0	63,3	340,0	410,0	7,33	BECLW16

SLINGS

WELDABLE HOOK



Hook for welding with forged latch.

MWL kg	B mm	C mm	E mm	H mm	M mm	P mm	L mm	Weight kg/piece	Reference
2.000	92,0	67,0	30,00	81	23,3	34,0	114	0,83	BETBA2000
3.000	106,0	73,5	33,20	116	33,6	36,0	129	1,20	BETBA3000
5.000	133,0	94,0	35,00	159	44,0	43,5	171	2,46	BETBA5000
8.000	136,5	100,0	35,00	159	48,0	51,0	177	3,26	BETBA8000

SAFETY HOOK

Safety hook, model CLS. This is the model usually supplied with the chain sling by default.

Ø mm	C.M.U kg	Ø mm	E mm	E1 mm	L1 mm	L mm	Weight kg/piece	Reference
7/8-8	2.000	25,0	40	35,0	136,0	175	0,88	BECLS08
10-8	3.150	34,5	50	45,0	168,0	214	1,58	BECLS10
13-8	5.300	40,0	60	52,5	207,0	268	3,00	BECLS13
16-8	8.000	50,0	80	63,3	254,0	332	5,90	BECLS16

CHAIN



Grade 80 lifting chain - EN 818-2 or ISO 3076 76

Chain diameter	MWL	Dimensi	ons mm	Weight	.	
mm	t	t	b	kg/m	Reference	
8	2	24	10,8	1,5	BECAG080D08	
10	3,15	30	13,5	2,3	BECAG080D10	
13	5,3	39	17,5	3,8	BECAG080D13	
16	8	48	21,5	6,1	BECAG080D16	

POLYESTER SLINGS

TABLE OF LOAD DISTRIBUTION FOR POLYESTER SLINGS

	DIRECT LIFTING	WITH CHOKER HITCH	IN A BASKET	AT ANG	LE B
SAFETY CODING BY COLOURS SAFETY FACTOR 7:1		<u>6</u>	UU	0<8< 45	45<8<60
COLOURS	1.0	0.8	2.0	1.4	1.0
Violet	1000	800	2000	1400	1000
Green	2000	1600	4000	2800	2000
Yellow	3000	2400	6000	4200	3000
Grey	4000	3200	8000	5600	4000
Red	5000	4000	10000	7000	5000
Brown	6000	4800	12000	8400	6000
Blue	8000	6400	16000	11200	8000
Orange	10000	8000	20000	14000	10000
Orange	12000	9600	24000	16800	12000
Orange	16000	12800	32000	22400	16000
Orange	20000	16000	40000	28000	20000
Orange	25000	20000	50000	35000	25000
Orange	30000	24000	60000	42000	30000
Orange	40000	32000	80000	56000	40000
Orange	50000	40000	100000	70000	50000

POLYESTER SLINGS

DOUBLE LAYER FLAT POLYESTER SLINGS

It has reinforced loops and they are made of 100% high capacity polyester. In the event they are used for abrasive or cutting loads, use the sling together with suitable protection, specified below. Available in other lengths between 1 and 6 metres.

Load capacity kg	Sling width	Loop length mm	р 2	U	ð	Ž			Reference	2
ĸġ			Straight	Double	Loop	0<8<45	46<8<60	1 m	3 m	6 m
1000	30	300	1000	2000	800	1400	1000	EAP011000	EAP013000	EAP016000
2000	60	400	2000	4000	1600	2800	2000	EAP021000	EAP023000	EAP026000
4000	130	400	4000	8000	3200	5600	4000	EAP041000	EAP043000	EAP046000
5000	150	500	5000	10000	4000	700	5000	EAP051000	EAP053000	EAP056000
6000	180	500	6000	12000	4800	8400	6000	-	EAP063000	EAP066000
8000	240	600	8000	16000	6400	11200	8000	-	EAP083000	EAP086000
10000	300	750	10000	20000	8000	14000	10000	-	EAP103000	EAP0106000

Loop reinforcement

	Safety factor: 7	
Loop	Useful length	

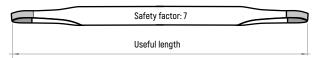
FOUR LAYER FLAT POLYESTER SLINGS

It has reinforced loops and they are made of 100% high capacity polyester. Designed for high load capacity, with reduced width. For abrasive or cutting loads, use them with the appropriate protection. Available in other lengths between 1 and 6 metres.

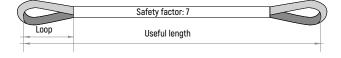
TUBULAR SLINGS WITH LOOPS

Slings specially recommended for delicate loads. Made of 100% high tenacity polyester. Available in other lengths between 1 and 6 metres.

Load capacity kq	Sling width	Loop length mm	2) 55	Ũ	S				Reference	
кy	mm		Straight	Double	Loop	0<8<45	46 <b<60< th=""><th>1 m</th><th>3 m</th><th>6 m</th></b<60<>	1 m	3 m	6 m
2000	30	300	2000	4000	1600	2800	2000	E4A021000	E4A023000	E4A026000
4000	60	400	4000	8000	3200	5600	4000	E4A041000	E4A043000	E4A046000
6000	90	400	6000	12000	4800	8400	6000	E4A061000	E4A063000	E4A066000
8000	130	400	8000	16000	6400	11200	8000	-	E4A083000	E4A086000
10000	150	500	10000	20000	8000	14000	10000	-	E4A103000	E4A106000
12000	180	500	12000	24000	9600	16800	12000	-	E4A123000	E4A126000
16000	240	500	16000	32000	12800	22400	16000	-	E4A163000	E4A166000
20000	300	500	20000	40000	16000	28000	20000	-	E4A203000	E4A206000



Load capacity	Sling width	Loop length	2 	Ŭ	ð	Z	<u> </u>		Reference			
kg	mm	mm	Straight	Double	Loop	0<8<45	46 <b<60< th=""><th>1 m</th><th>3 m</th><th>6 m</th></b<60<>	1 m	3 m	6 m		
1000	45	250	1000	2000	800	1400	1000	EA011000	EA013000	EA016000		
2000	50	300	2000	4000	1600	2800	2000	EA021000	EA023000	EA0216000		
4000	80	450	4000	8000	3200	5600	4000	EA041000	EA043000	EA046000		
6000	95	500	6000	12000	4800	8400	6000	EA061000	EA063000	EA066000		
8000	110	500	8000	16000	6400	11200	8000	EA081000	EA083000	EA086000		
10000	130	500	10000	20000	8000	14000	10000	-	EA103000	EA106000		
12000	150	500	12000	24000	9600	16800	12000	-	EA123000	EA126000		
15000	150	1000	15000	30000	12000	21000	15000	-	EA153000	EA156000		
20000	150	1000	20000	40000	16000	28000	20000	-	EA203000	EA206000		
25000	170	1000	25000	50000	20000	35000	25000	-	EA253000	EA256000		
30000	200	1000	30000	60000	24000	42000	30000	-	EA303000	EA306000		



POLYESTER SLINGS

TUBULAR ENDLESS SLINGS

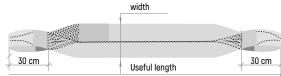
Slings specially recommended for delicate loads. Made of 100% high tenacity polyester. Available in other lengths between 1 and 6 metres.

Load capacity kg	Sling width mm	0) 53	Ŭ	δ		Reference				
ку		Straight	Double	Loop	0 <b<45< th=""><th>46<b<60< th=""><th>1 m</th><th>3 m</th><th>6 m</th></b<60<></th></b<45<>	46 <b<60< th=""><th>1 m</th><th>3 m</th><th>6 m</th></b<60<>	1 m	3 m	6 m	
1000	45	1000	2000	800	1400	1000	ET011000	ET013000	ET016000	
2000	50	2000	4000	1600	2800	2000	ET021000	ET023000	ET026000	
3000	65	3000	6000	2400	4200	3000	ET031000	ET033000	ET036000	
4000	80	4000	8000	3200	5600	4000	ET041000	ET043000	ET046000	
6000	95	6000	12000	4800	8400	6000	ET061000	ET063000	ET066000	
8000	110	8000	16000	6400	11200	8000	ET081000	ET083000	ET086000	
10000	130	10000	20000	8000	14000	10000	-	ET103000	ET106000	
12000	150	12000	24000	9600	16800	12000	-	ET123000	ET126000	
15000	150	15000	30000	12000	21000	15000	-	ET153000	ET156000	
20000	150	20000	40000	16000	28000	20000	-	ET203000	ET206000	
25000	170	25000	50000	20000	35000	25000	-	ET253000	ET256000	
30000	200	30000	60000	24000	42000	30000	-	ET303000	ET306000	

SLINGS FOR ALUMINIUM SECTIONS

Special slings for aluminium section warehouses. They are thin and wide slings, which reduces the possibility of the sling deforming the material. High capacity 100% polyester material. Available in other lengths between 2 and 6 metres.

Load capacity	Sling width	Loop length	Ĵ	Ŭ	ð	2	^		Reference	
kg	mm	mm	Straight	Double	Loop	0<8<45	46<8<60	2 m	4 m	6 m
400	180	300	400	800	320	560	400	EAL4200	EAL4400	EAL4600
500	230	300	500	1000	400	700	500	EAL5200	EAL5400	EAL5600



Safety factor: 7

Useful length

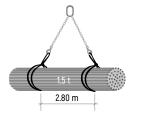
SLINGS FOR LIFTING CORRUGATED METAL

Non-reusable single-layer slings with a loop, made of 100% high tenacity polyester. They are suitable for sending with merchandise, facilitating loading and unloading manoeuvres.

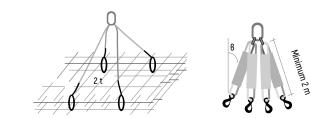
Low cost. For the lifting manoeuvre, the use of a multiple assembly sling with 2 or 4 legs with a minimum useful leg length of 2 metres is recommended. Option of labelling with electronic printing or flexography. Slings according to standard UNE 40901.

Available in other lengths between 0.5 and 2.5 metres.

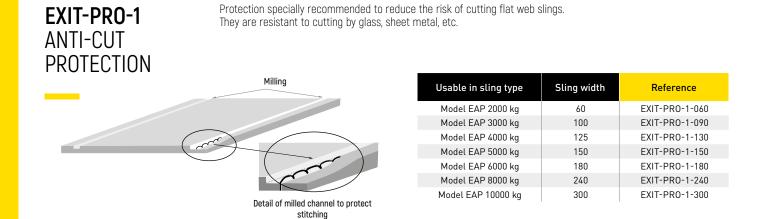
Load capacity	Sling width	Loop length		Reference					
kg	mm	mm	1 m	1.5 m	2 m	2.5 m			
1000	30	70	S1G30/07.0100	S1G30/07.0150	S1G30/07.0200	S1G30/07.0250			







Special application in bundles of rebar between two slings. MWL 1500 kg Special application in bundles of rebar between four slings. MWL 2000 kg —109

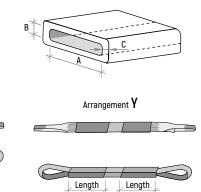


SL2 ANTI-CUT PROTECTION

Arrangement X

Length

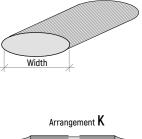
Protection in the form of a rectangular tube that can be moved along the sling. Specially recommended to reduce the risk of cutting flat slings. When ordering, the desired length of each section must be indicated.

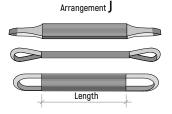


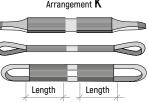
	Usable	in slin	g type		A	В	С	Reference
EAP		ET	E4A		mm	mm	mm	
EAP01	ET01	ET02	ET03	E4A02	50	22	12	SL2-050
EAP02		ET04		E4A04	70	22	12	SL2-70
EAP03	ET05		ET06	E4A06	100	22	12	SL2-100
EAP04		ET08		E4A08	135	22	12	SL2-135
EAP05	ET10		ET12	E4A10	160	22	12	SL2-160
EAP06	ET15		ET20	E4A12	190	22	12	SL2-190
EAP08		ET25		E4A12	280	32	12	SL2-280
EAP10		ET30		E4A20	320	32	12	SL2-320

SADOR COVER

Protection specially recommended to reduce wear by abrasion. Adaptable to all types of flat and tubular slings. Ideal for protecting slings for lifting boats. Made of 100% high tenacity polyester.







Usable in sling type							А	В	Reference
EAP		ET			E4A		mm	mm	
EAP01		-			-		45	28	SADOR-045
-	EA01		EA02	ET01		ET02	50	30	SADOR-050
-		EA03			ET03		65	40	SADOR-065
EAP02	EA04		EA05	ET04		ET05	80	50	SADOR-080
-		EA06			ET06		95	60	SADOR-095
EAP03		EA08			ET08		110	70	SADOR-110
-		EA10			ET10		130	80	SADOR-130
-		EA12			ET12		140	90	SADOR-140
EAP04		EA20		ET15		ET20	15	100	SADOR-150
EAP05		EA25			ET25		170	110	SADOR-170
EAP06		EA30			ET30		200	125	SADOR-200
EAP08		-			ET40		240	150	SADOR-240
EAP10		-			ET50		300	200	SADOR-300

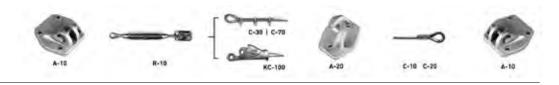
LIFELINE

- 111

LVG TYPE LIFELINES FOR INTERIOR USE

The LVG model lifelines, belonging to the universal range, without a shock absorber, are made of a galvanised cable with a diameter of 10 mm and the aluminium anchors (for exterior or interior) are made of L-2653 alloy with T6 treatment that gives them a high mechanical strength and resistance to corrosion.

The assembly of the lifeline is complemented by the systems to secure it to the structure: plates, posts, etc.



LVA TYPE LIFELINES FOR USE IN NORMAL AND/OR OUTDOOR ENVIRONMENTS

LVI TYPE

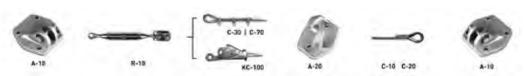
LIFELINES FOR

USE IN HOSTILE

ENVIRONMENTS

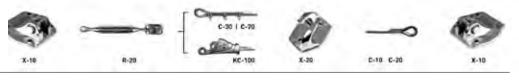
The LVA model lifelines, belonging to the UNIVERSAL range, without a shock absorber, are made of an AISI 316 (marine quality) stainless steel cable with a diameter of 10 mm and the aluminium anchors (for exterior or interior) are made of L-2653 alloy with T6 treatment that gives them a high mechanical strength and resistance to corrosion. Exterior finish with high quality epoxy-polyester paint.

The assembly of the lifeline is complemented by the systems to secure it to the structure: plates, posts, etc.



The LVI model lifelines, belonging to the UNIVERSAL range, without a shock absorber, are made of an AISI 316 (marine quality) stainless steel cable with a diameter of 10 mm and have stainless steel anchors suitable for exteriors or interiors with hostile corrosive or saline environments. Excellent mechanical strength and resistance to corrosion. Gloss exterior finish.

The assembly of the lifeline is complemented by the systems to secure it to the structure: plates, posts, etc



The MMA10 harness is considered a high-end harness. It has a fall arrest attachment point in the back area and two attachment points for ascent and descent in the abdominal area. It also has four adjustment points in the shoulder straps and leg loops. It is made of 48 mm webbing to improve user comfort, producing less pressure on the supporting parts of the harness. And the fittings are made of stainless and galvanised steel.

The absorber is made up of a package consisting of absorber + lanyard. It is 1.55 m long and is made of 12 mm high tenacity polyamide 6.6 3-strand twisted rope. The free space below the user must be at least 6 metres in height. The ends of these absorbers can be fitted with the carabiners that best suit the work to be carried out.

Description	Reference			
10a fall arrest harness with back attachment and 2 chest rings, shoulder straps and adjustable leg loops				
Twisted rope absorber with sleeve lock steel carabiner and large opening 60 mm aluminium hook				
Absorber with twisted rope and two steel carabiners with screw sleeve lock	MMK41			
Aluminium hook with 30 mm opening	MMM73			
Oval steel carabiner with screw sleeve lock. Opening 17 mm	MMM50			
	1			

Complete kit	Reference
mm10a harness + absorber with built-in lanyard with sleeve carabiner and 60 mm aluminium hook with equipment bag.	MMS255
Mm10a harness + shock absorber with built-in lanyard and two sleeve lock carabiners and equipment bag.	MMS25





LIFELINE

VERTICAL LIFELINE COMPONENTS

CRISBE

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Rotating articulated intermediate anchor that facilitates the passage of the fall arrest runner without manipulation by the user. It is made of high tenacity polyamide reinforced with fibreglass and UV filter

additive. It ensures that the cable is not damaged by the effect of the wind when it strikes

the metal structure (main cause of wear).

It allows the user to go up and down in complete safety, always keeping both hands on the ladder.

Separated from each other in steps of 10 m (6 m outdoors), they prevent the user from becoming separated from the ladder. Compatible with any fall arrest runner.

ABSORBER

Shock absorber that is fitted in the upper part of the lifeline and that allows the force transmitted to the body during the fall arrest phase to be reduced to less than 450 daN, with a travel of less than 40 cm. It has a higher specification than the current standard 353.1, which requires a force of less than 600 daN and a distance of less than 1 metre. It has a fall indicator and direct connection, without a textile absorber (greater comfort).

All the components are made of metal alloys.

It has a reduced size, without sharp edges or other elements that might injure the passing user.



FALL ARREST RUNNER

The fall arrest runner is the link between the cable and the user. Its reliability, robustness and ease of use are essential criteria when choosing a vertical lifeline. It is made entirely of steel. It has a double cam system for immediate blocking in the event of a fall. It easily attaches to the cable without the need to dismantle the lifeline. Increased smoothness even in descent. It has a capacity of more than 1800 kg.

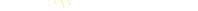


TENSIONER

It always guarantees the optimum tension of the cable, without the need to measure or control the tension. It is simply a case of loosening the nuts a few turns to ensure the cable is taut, with a guaranteed tension between 23 and 30 daN. With a reduced size, without sharp edges or other elements that might injure the passing user.

Includes indicator to show if the lifeline is operational.







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