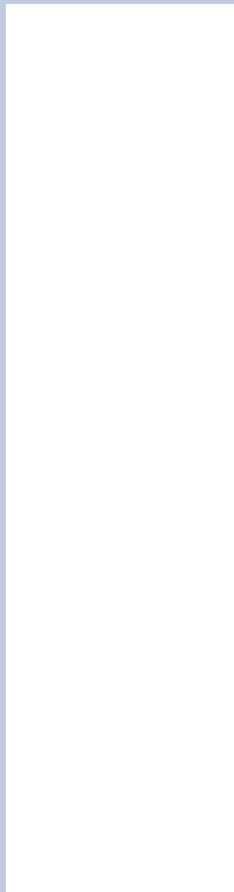


Litec	
Motoren hoists	006-019
<i>Loadstar Model F, Loadstar Mod. F Compact, Loadstar Model L, Loadstar Model RR, Prostar, Accessoires, Hoists Covers, Flight Case, Chain bags, T-Lift Black body, EXE Lodestar, Assistance and Maintenance</i>	
Litec	
Motorensteuerungen controllers	020-027
<i>XCDR8 XRSR8, XCDL4, XCDL8, XCDF4, XCLL4, XRDHG, XCDB4, XCLH1</i>	
Litec	
Rigging Hardware rigging hardware	028-037
<i>steel wires, roundslings, belt ratchet, chain stac, shackles, turnbuckles, beam clamps, bridle hook, bar hook, couplers</i>	
Litec	
Rigging-Kleidung litecwear	038-043
<i>black parka, black pile sweater, black sweatshirt, technician's trousers, long sleeve round neck, knit hat, golf cap, rig truss kit, professional working belt, shoulder bag, belt mounted pouch, hammer holder, radio pouch</i>	



Litec Rigging Division

Through this catalogue, Litec enters the rigging world to support its own range of aluminium structures. Handling equipment and everything needed to hang and anchor structures are increasingly more often requested by entertainment industry professionals. At the same time, international regulations are being established which push towards higher quality and safety standards.

As regards motor hoists, we have chosen to work together with Columbus McKinnon by distributing their most popular products and providing our organization and expertise. As regards anchoring and slings, we offer a special series made by Spanset to our specifications. Together with Manfrotto, we produce a series of aluminium hooks with innovative design and performance.

The control system line is instead entirely designed and built by our new rigging division. The EXE brand name is ours and will include all the electrical equipment we make.

Lastly, we have created a professional work clothing line designed for heavy duty use, but with an eye towards style and wearability.

Besides these products, which are highly varied but absolutely necessary for everyday work, we have started offering an assistance and maintenance service particularly oriented towards hoist management to ensure regular servicing and repair with original spare parts by qualified authorized staff.

Through this catalogue and the new rigging division, we aim to be even closer to the world of rigging by offering an increasingly wide range of coordinated products designed expressly for professional use.

To make everything you need before you need it.





Litec Rigging Abteilung

Mit diesem Katalog präsentiert sich Litec auch als kompetenter Partner für die Rigging-Welt und stellt Ihnen sein eigenes Sortiment an Aluminiumteilen vor. Vorrichtungen zum mobilen Flugbetrieb wie auch zur stationären Hängemontage werden immer öfter von Profis in der Unterhaltungsbranche nachgefragt. Zugleich gelten neuerdings internationale Vorschriften, die auf bessere Qualität und höhere Sicherheitsstandards abzielen.

Bei den Motorzügen arbeiten wir mit Columbus McKinnon zusammen, indem wir deren beliebteste Produkte vertreiben und unsere Organisation und Erfahrung mit einfließen lassen. Bei Schäkeln und Rundschlingen bieten wir eine bei Spanset nach unseren Vorgaben gefertigte Sonderserie an. Gemeinsam mit Manfrotto produzieren wir eine Serie von leistungsfähigen Aluminiumhaken in innovativem Design.

Das Control System-Sortiment wird dagegen ausnahmslos von unserer neuen Rigging-Abteilung entwickelt und hergestellt. Unter unserem Markennamen EXE werden künftig alle elektrischen Ausrüstungsteile in unserem Programm vermarktet.

Schließlich haben wir noch eine Kollektion professioneller Arbeitskleidung für den robusten Einsatz entwickelt, jedoch mit einem Augenmerk auf Style und Tragekomfort.

Neben diesen Produkten, die wir in einer großen Vielfalt anbieten, wie sie für die alltägliche Arbeit einfach unverzichtbar ist, haben wir jetzt auch einen Support- und Wartungsservice geschaffen, der speziell auf den Liftbetrieb ausgerichtet ist, um regelmäßige Service- und Reparaturarbeiten durch qualifiziertes Fachpersonal unter Verwendung von Original-Ersatzteilen zu gewährleisten.

Mit diesem Katalog und unserer neuen Rigging-Abteilung streben wir noch engeren Kontakt zur Rigging-Welt an und möchten Ihnen ein stetig wachsendes Sortiment optimal aufeinander abgestimmter Komponenten anbieten, die ausdrücklich für den Profieinsatz konzipiert sind.

Wir bauen alles, was Sie brauchen, ehe Sie's brauchen.

SUMMARY

HOISTS

6
 Lodestar mod F
 Lodestar mod F Compact
 Lodestar mod L
 Lodestar mod RR
 Prostar
 Optional & Accessories
 Hoist Covers
 Flight Case
 Chain bags
 T-Lift Black Body
 EXE hoist
 Assistance and Maintenance

pag.

CONTROLLERS

20
 pag. XCDR8
 XRSR8
 XCCL4
 XCCL8
 XCDF4
 XCLL4
 XRDHG
 XCDB4
 XCLH1





RIGGING HARDWARE

28

- Steel Wire
- Roundslings
- Belt Ratchet
- Stac Chain
- Shackles
- Master Links
- Turnbuckles
- Beam Clamps
- Bridle Hook
- Bar Hook
- Couplers

LITECWEAR

38

- Black Parka
- Black Pile Sweater
- Black Sweatshirt
- Technician's Trousers
- Long sleeve round neck
- Knit hat
- Golf Cap
- Rig truss kit
- Professional working belt
- Shoulder bag
- Belt mounted pouch
- Hammer Holder
- Radio Pouch

HOISTS

The Columbus McKinnon Corporation (CM), with head offices in New York State, is the world's leading producer of lifting, hanging and anchoring equipment.

It boasts over 130 years of experience in manufacturing manual and electric chain hoists.

The CM rigging division is specialized in creating products for show rigging, and CM is the top firm in the world for sales in the sector.

Litec has added its organization, service capacity and warehouse availability to meet the needs of a market that demands everything immediately

The CM Lodestar is an electric chain hoist designed for the show and entertainment industry.

Besides all the features of an industrial hoist, it also has the functions required to meet temporary rigging needs.

It works with high safety factors, excellent performance and very little maintenance.

Die Firma Columbus McKinnon (CM) mit Hauptsitz im Bundesstaat New York ist Weltmarktführer im Bereich Hebe-, Flug- und Verankerungs-Equipment.

Sie kann auf über 130 Jahre Erfahrung im Bau manueller und elektrischer Kettenzüge zurückblicken.

Die Rigging-Abteilung von CM ist auf die Fertigung von Produkten für das Showrigging spezialisiert und CM ist in diesem Bereich der umsatzstärkste Hersteller der Welt. Litec hat seine Organisation, Service- und Lagerkapazitäten mit eingebracht, um die Bedürfnisse eines Markts zu erfüllen, der alles sofort verlangt.

Der CM Lodestar ist ein elektrischer Kettenzug für die Show- und Veranstaltungstechnik.

Neben allen Merkmalen eines industriellen Kettenzuges besitzt er auch die für den mobilen Riggingbetrieb notwendigen Funktionen. Er arbeitet mit hohen Sicherheitsmargen, exzellenten Leistungsdaten und sehr geringem Wartungsaufwand.





HOISTS

FACTOR: SAFETY



CLUTCH OVERLOAD PROTECTION

2,0:1

CM Lodestar chain hoists are fitted with overload protection. The clutch and gear housing are made of forged steel and have a 2:1 safety factor. When the load is more than twice the hoist capacity, the clutch starts to slip.



MOTOR MADE TO WORK

3,5:1

CM Lodestar motors are made to withstand industrial work cycles. The motor uses efficient regenerative braking to prevent overheating and keep the pulling force constant. It can work continuously for 30 minutes per hour, and its 3.5:1 safety factor means the hoist is stable and accurate even when fully loaded.



BRAKE 1,000,000 TESTS

3,7:1

Sound design, simple mechanism and total safety. The electromechanical brake fitted to CM hoists acts in the event of power failure or electrical malfunction. It requires very little maintenance. It has a safety factor of about 4 times greater than the motor capacity. No faults have been found on any of the over one million Lodestar hoists sold.



HOUSING SOUND AND ERGONOMIC

5,0:1

The Lodestar hoist housing is made of cast aluminium alloy able to withstand stresses of up to 5 times the rated hoist capacity. The classic rounded cylindrical form of the Lodestar entertainment line has no potentially dangerous protruding parts or sharp edges. It is coated with high resistance epoxy powder.



CHAIN DIMENSIONED TO RESIST

7,0:1

Rust-resistant galvanized GR8 steel chain with 7:1 safety factor. Links are marked with identification data showing the year and date of manufacture.

HOISTS



DIRECT OR LOW VOLTAGE CONTROL

The terms "low voltage control" and "direct control" refer to the systems that control electric chain hoists.

Columbus McKinnon is one of the few electric chain hoist manufacturers to offer both control systems.

In the case of direct control motors, the direction pulse is transmitted along the four-pole 415 VAC 3P+E power cable.

Direct motor control units manage the order of phases L1, L2 and L3 and supply power to the hoist rotor so that it turns in one direction or the other.

There are no direction contactors inside a direct control Lodestar hoist: they are inside the controller. With low voltage motors, on the other hand, the direction pulse is transmitted along an additional four-pole cable which acts on contactors in the motor itself.

Die Begriffe "Niederspannungs-Steuerung" und "Direktsteuerung" beziehen sich auf die Systeme, welche zur Steuerung elektrischer Kettenzüge eingesetzt werden. Columbus McKinnon gehört zu den wenigen Herstellern von elektrischen Kettenzügen, der beide Steuerungsvarianten anbietet.

Bei direkt gesteuerten Motoren wird der Richtungsimpuls über das 4-polige Netzkabel 415 VAC 3P+E übertragen.

Die Steuerteile direkt gesteuerter Motoren verwalten die Reihenfolge der Phasen L1, L2 und L3 und versorgen den Liftrotor mit Spannung, damit er sich in die eine oder andere Richtung dreht.

Bei einem direkt gesteuerten Lodestar-Hoist gibt es im Inneren keine Richtungkontakte: diese befinden sich im Inneren des Steuergeräts.

Bei Niederspannungsmotoren wird dagegen der Richtungsimpuls über ein zusätzliches 4-poliges Kabel übertragen, das die Kontakte im Motor selbst anspricht.



There are pros and cons to both control systems, although many factors, such as working safety, margins of manoeuvre and - not least - economic considerations, increasingly more often orient users towards direct control.

One important difference between the two models is the presence of an end-stop unit inside the motor, i.e. limit switches.

Direct control motors use overdrive mechanical stop systems. A mechanical block is fitted at one end of the load chain (right side photo) which stops the chain from slipping off if the motor runs beyond the end of the chain.

The low voltage control hoist has a chain length control system which stops the motor when the chain is about to reach the end.

The limit switches (photo below) are calibrated so as to stop the motor automatically a few links before the chain ends, thus preventing it from slipping off the load block.



In the specific case of the Lodestar hoist, the number of safety links is factory-set on the thin notched plates in the end-stop unit.

Correct limit switch operation depends on the exact sequence of phases L1, L2 and L3 in the hoist electrical power supply. An incorrect sequence can impair overdrive system operation.

The direct control hoist does not pose this problem.

In short, the substantial differences between the two hoists are the presence of contactors or otherwise on board and the use of two different

end-stop safety systems.

The implications one choice or the other entails all come down to these two aspects.

The hoist is the same in both cases; the way it is controlled is instead radically different.



All Lodestar and Prostar hoists supplied by Litec have a two-year guarantee on assembly in addition to the lifetime guarantee on the hoist provided by the parent company.

LODESTAR

LODESTAR

Over the years, the Lodestar electric chain hoist has become the emblem of lifting equipment in the entertainment industry. It owes its success to the reliability of its design and the soundness of its construction. The hoist assembly and the use of suitable accessories complete the hoist's efficiency and make it suitable for rigging needs.

LODESTAR

Im Lauf der Jahre ist der Lodestar Elektro-Kettenzug in der Veranstaltungstechnik zum Symbol für Hubequipment geworden. Seinen Erfolg verdankt er der ebenso zuverlässigen wie stabilen Konstruktion. Die Lifteinheit und die Verwendung geeigneter Zubehörteile komplettieren die Effizienz des Kettenzuges und empfehlen ihn für alle Rigging-Anwendungen.



Special application of a Lodestar inserted inside an aluminium truss.

Spezialeinsatz eines Lodestars mit interner Montage in einer Alu-Traverse.



MODEL F 0,50 ton



MODEL L 1,00 ton



MODEL RR 2,00 ton

Mechanical specifications

- Cast aluminium alloy housing
- Off-centre gear system to reduce jolts on the chain from the load block. Grease gear lubrication is lifetime guaranteed and prevents leaks and dripping.
- Forged steel chain guide. It consists of two heat treated alloy parts to ensure gentle chain running.
- The brakes mounted as standard on Lodestar hoists dissipate heat rapidly. They are built to work beyond the maximum load motor overload threshold.
- The limit switches on the low voltage version are simply, reliably and accurately adjusted.
- The hoist can be firmly and ergonomically gripped with two strong artificial leather strap handles.
- Lodestar hoists are designed to work both in the classic horizontal lifting position and upside down with the body hook uppermost.

Electrical specifications

- The standard working voltage is 415 V 3P+E 50 Hz. The hoist may also be set to work at 220 V 3P+E 50 Hz through simple internal adjustment.
- The Lodestar motor works with a +/- 10% voltage variation
- The motor is located opposite the brake unit to ensure better heat dissipation.
- The standard power cable is 76 cm long (2 feet)
- The standard low-voltage version control cable is 76 cm long (2 feet)
- Litec supplies a series of hoists with Mennekes plugs and sockets.

Finish and look

- The hoist is supplied matt black powder coated as standard.
- The side motor covers have rounded edges.

HOISTS



MODEL FC 0,50 ton COMPACT

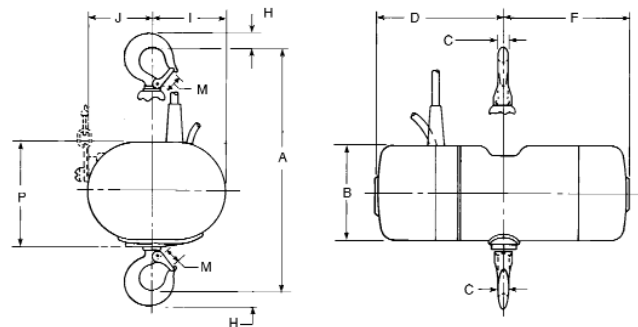
LODESTAR model F - Compact

With the collaboration of Columbus McKinnon, Litec produces a model F Lodestar hoist with smaller dimensions than standard.

The performance of the direct control hoist is unaltered, but the Compact version can be used inside truss modules or on rigging with limited space.

The mechanical and electrical specifications are the same as for the standard 500-kg model F.

Model	A m	B mm	C mm	D mm	F mm	H mm	I mm	J mm	M mm	P mm
F	20	156	17	279	197	25	122	100	25,0	168
FC	20	156	17	197	197	25	122	100	25,0	168
L	24	194	22	241	271	30	184	138	28,5	198
RR	36	194	29	241	271	38	157	165	33,0	198



Notes and useful information

- The continuous duty cycle of a Lodestar hoist is 30 minutes. Few other chain hoists have such excellent performance. The 0.5 and 1-ton versions are FEM 1Am classified and can operate safely for 800 hours at full load before general hoist servicing is needed. The 2-ton model is FEM 1Bm classified and can run safely for 400 hours at full load before needing reconditioning. The length of totally safe operation depends on the load spectrum and duration calculation.
- The standard assembly Litec offers includes swivel hooks for the body and chain hooks.
- Both hooks may be replaced with fixed hooks or Latchlok hooks for quick hooking and unhooking with only one hand.
- Each hoist may be assembled with a certain degree of customization: besides the chain length, you can choose the bag colour (black or grey), the type of hook, the length of control and power cables, and flight cases instead of standard packing.

Code	Description and capacity	CM Code	Model	Lifting speed	Net hoist weight	Chain weight per metre (EWL)	Power consumption when fully loaded	Volt - Phases Hertz	Reference design regulations		
									HMI	FEM	ISO
CHMF500D	0.5-ton Lodestar - single reeved - direct control	3192	F	4 m/m	22.2 kg	0.89 kg	1.0 A	415-3-50	H4-5	L4-1AM	M-4
CHMFC500D	Compact 0.5-ton Lodestar - single reeved - direct control	-	FC	4 m/m	22.2 kg	0.89 kg	1.0 A	415-3-50	H4-5	L4-1AM	M-4
CHML1000D	1-ton Lodestar - single reeved - direct control	3194	L	4 m/m	43.0 kg	1.42 kg	2.1 A	415-3-50	H4-4	L4-1AM	M-4
CHMRR2000D	2-ton Lodestar - double reeved - direct control	3202	RR	4 m/m	48.5 kg	2.84 kg	3.9 A	415-3-50	H4-4	L3-1BM	M-3
CHMF500L	0.5-ton Lodestar - single reeved - low voltage control	3183	F	4 m/m	26.0 kg	0.89 kg	1.0 A	415-3-50	H4-5	L4-1AM	M-4
CHML1000L	1-ton Lodestar - single reeved - low voltage control	3185	L	4 m/m	49.0 kg	1.42 kg	2.1 A	415-3-50	H4-4	L4-1AM	M-4
CHMRR2000L	2-ton Lodestar - double reeved - low voltage control	3188	RR	4 m/m	54.0 kg	2.84 kg	3.9 A	415-3-50	H4-4	L3-1BM	M-3



HOISTS

PROSTAR

PROSTAR

For light-weight rigging, theatres, fairs and on all occasions where limited loads are foreseen, CM has devised a small compact electric chain hoist with excellent performance.

The Prostar motor is fitted with an overload protection system, and is best suited to lifting balanced uniform loads when these are limited and space is a key rigging factor.

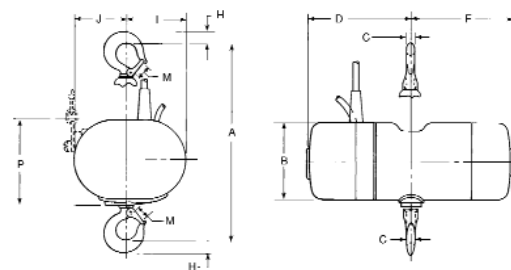
PROSTAR

Für leichtes Rigging, Theater, Messen sowie für alle Anwendungen, wo nur begrenzte Lasten vorgesehen sind, hat CM einen kleinen, kompakten und extrem leistungsfähigen elektrischen Kettenzug entwickelt.

Der Prostar-Motor besitzt einen Überlastschutz und eignet sich am besten zum Anheben von ausbalancierten, gleichförmigen Lasten, wenn diese begrenzt sind und Platz ein Schlüsselfaktor beim Rigging ist.



PROSTAR



Model	A m	B mm	C mm	D mm	F mm	H mm	I mm	J mm	M mm	P mm
Prostar	12	102	14	170	148	20	76	75	22,0	102

Mechanical specifications

- Cast aluminium alloy motor housing
- Load block with 10 chain pockets for smooth operation feed and low chain wear.
- Overload protection fitted as standard.
- Perfect vertical lifting, and coaxial body and chain hooks.
- Capacity: up to 250 kg single reeved; 500 kg double reeved
- Non-oxidizing grease lubricated gears.
- The Prostar is designed to work both in the classic horizontal lifting position, and upside down with the body hook uppermost.

Finish and look

- The hoist is supplied matt black powder coated as standard.

Electrical specifications

- Available in 415 V 3P+E 50 Hz and 220 V single-phase 50 Hz versions.
- 30 minutes duty cycle with more than 300 starts and stops per hour
- Highly silent operation: less than 55 db at 1 meter.

Notes and useful information

- If used together with other hoists, perfect load balancing is recommended.
- The motor comes with a lifetime guarantee on the mechanical parts and 2-year guarantee on the motor assembly.

Code	Description and capacity	CM Code	Model	Lifting speed	Net hoist weight	Chain weight per metre (EWL)	Power consumption when fully loaded	Volt - Phases Hertz	Reference design regulations		
									HMI	FEM	ISO
CHMPS250D	250-kg Prostar - single reeved - direct control	2128E	PS	4 m/m	11 kg	0.36 kg	0.7 A	415-3-50	H4-5	L4-1AM	M-4
CHMPS500D	500-kg Prostar - double reeved - direct control	n.a.	PS	2 m/m	11 kg	0.72 kg	0.7 A	415-3-50	H4-5	L4-1AM	M-4



HOISTS

CHAIN & ACCESSORIES



OPTIONAL EXTRAS AND ACCESSORIES

Optional CM kits and Litec complementary accessories are available on request. Various lengths of load chain may be chosen and the hoists may be supplied complete with flight cases.

CHAIN Code	Description
CHCFOO	CM chain for Lodestar model F
CHCLOO	CM chain for Lodestar model L
CHCRR00	CM chain for Lodestar 2 model RR
CHCPS00	CM chain for 250 kg and 500 kg Prostar

OPTIONAL EXTRAS Code	Description
CHOLSV	Silenstar kit for Lodestar model L
CHOLS1	4-position limit switch kit for Lodestar model F-L-RR
CHOFDDC	Double brake kit for Lodestar model F
CHOLDDC	Double brake kit for Lodestar model L
CHORRDC	Double brake kit for Lodestar model RR - LL
CHOFUH	Swivelling self-locking body hook - latchlok hook - model F
CHOLUH	Swivelling self-locking body hook - latchlok hook - model L
CHORRUH	Swivelling self-locking body hook - latchlok hook - model RR - LL
CHOFLLH	Swivelling self-locking chain hook - latchlok hook - model F-L
CHORRLH	Swivelling self-locking chain hook - latchlok hook - model RR



HOIST COVERS

Litec hoist covers for Lodestar F-L-RR models are made of 600 denier woven polyester with two coats of resin, and protect hoists from the elements.

Code	Description
CHHLBK	Black hoist cover
CHHLG	Grey hoist cover

Specifications

- Made of waterproof polyester with two coats of resin
- Black or grey 600 x 600 denier woven fabric
- Double seam with Cucirini high resistance thread
- Polyester wear-resistant edge binding
- Front strap opening



FLIGHT CASE

There are two different flight case models for Lodestar hoists with 4 different internal configurations. Simple flight cases for Lodestar models L and RR, two-compartment flight cases for Lodestar model F, and four-compartment cases for the Prostar. The internal dividers are designed to hold the hoist, the chain bag hooked to the hoist, and any documents included with accessories, such as steel wire ropes, shackles and roundslings.

Specifications

- Made of birch plywood covered with scratch-resistant laminate
- Phenolic gluing to ensure excellent resistance to sudden changes in temperature
- Internal dividers, without sharp edges, shaped to house the hoist
- Stackable
- 4 guiding wheels (2 with brakes)

Code	Description	Weight	Size in cm
CHFF2	Flight case for 2 Lodestar model F hoists	43 kg	L.73 X W.57 X H.55
CHFLRR1	Flight case for 1 Lodestar model L - RR hoist	43 kg	L.73 X W.57 X H.55
CHFPS4	Flight case for 4 Prostar hoists	43 kg	L.73 X W.57 X H.55

HOISTS

CHAIN BAGS

CHAIN BAGS

The Litec chain bag line includes 8 models and covers the whole manual and electric hoist range.

Each hoist assembled by Litec is supplied with the sack corresponding to the length of chain ordered by the customer.

The sacks sold individually include coupling links and brackets for fixing them to the hoist.

KETTENSPEICHER

Das Litec Kettenbag-Sortiment umfasst 8 Modelle und deckt damit die gesamte Palette an manuellen und elektrischen Kettenzügen ab.

Jeder von Litec gebaute Kettenzug wird mit einem, zu der vom Kunden bestellten Kettenlänge passenden Kettenspeicher geliefert.

Bei den einzeln erhältlichen Kettenspeichern sind Kupplungsstücke und Halteklammern für die Befestigung am Kettenzug im Lieferumfang enthalten.

**Specifications**

- Made of waterproof polyester with two coats of resin
- Black 1100 x 800 denier woven fabric
- 4-cm wide strap made of high resistance multi-filament polyester with diagonal weave
- 9 x 80 standard coupling links or quick links; 160 kg maximum load
- Triple seam with high resistance Cucirini thread

Working Load Limit (WLL)

- CHBF24 Kg 25
- CHBP25 Kg 25
- CHBF40 Kg 45
- CHBL25 Kg 45
- CHBL40 Kg 70
- CHBRR20 Kg 70
- CHBRR36 Kg 120
- CHBPS24 Kg 20
- CHBPS32 Kg 20



The bag is held by two high resistance polyester straps which take the weight of the chain and distribute it over the upper metal frame. The two straps criss-cross the bottom to increase its loading capacity and prevent the bottom from falling through even in the case of very long chains.

Code	Description	Size in cm
CHBF24	Lodestar model F chain bag - max 24 m	19 X 21 X 32
CHBF40	Lodestar model F chain bag - max 40 m	19 x 21 x 42
CHBL25	Lodestar model L chain bag - max 25 m	19 x 21 x 42
CHBL40	Lodestar model L chain bag - max 40 m	19 x 21 x 59
CHBRR20	Lodestar model RR chain bag - max 40 m	19 x 21 x 59
CHBRR36	Lodestar model RR chain bag - max 72 m	19 x 21 x 70
CHBPS24	Prostar chain bag - max 24 m	10 x 10 x 30
CHBPS32	Prostar chain bag - max 32 m	10 x 10 x 38



HOISTS

T-LIFT BLACK BODY



T-LIFT BLACK BODY

T-lift black body is a manual hoist designed to work with chain take-up both when lifting and self-lifting.

The manual chain guard turns through 360° so that it may also be used from a working position on the ground.

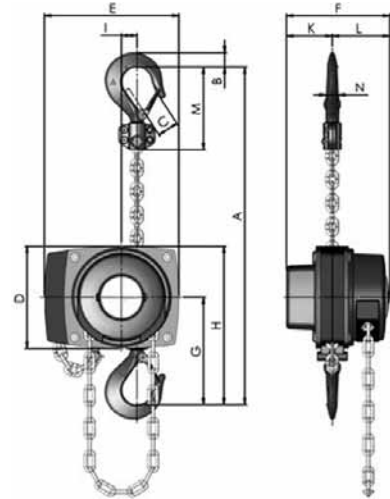
T-LIFT BLACK BODY

T-Lift Black Body ist ein manueller Kettenzug, der so konzipiert ist, dass die Kettenaufnahme sowohl beim Lastheben als auch beim Selbsthochziehen erfolgen kann.

Der manuelle Kettenschutz ist um 360° drehbar, so dass er auch von einer Arbeitsposition am Boden aus einsetzbar ist



T-LIFT BLACK BODY



Mechanical specifications

- The frame and motor housing are made of press-forged steel.
- The internal gear system is made of high-temperature forged steel
- It is supplied with latch-type body and chain hooks as standard
- Dry clutch/brake system takes the weight of the load as soon as the chain is released
- The standard assembly includes 16 m of load chain and 14 m of hand chain. On request, it may be fitted with different lengths of chain

Model	A mm (min.)	B mm.	C mm.	D mm.	E mm.	F mm.	G mm.	H mm.	I mm.	K mm.	L mm.	M mm.	N mm.
T-Lift Black Body	335	22	29	156	205	157	164	242	24	70	87	125	19

Code	Description and capacity
CHPYB1000	Manual T-Lift hoist - 1 ton - black body
CHPYLC01	Load chain - per metre (EWL)
CHPYLC16	Load chain - 16 m kit (EWL)
CHPYHC01	Hand chain - per metre (EWL)
CHPYHC07	Hand chain - 7 m kit (EWL)
CHBP25	Chain bag with bracket





EXE Lodestar
 Winner of the Plasa 2007 Awards for Innovation
 Winner of the ShowTech 2007 Product Award
 for the Category Stage Technology

HOISTS

EXE LODESTAR 650C1

Die Firma EXE freut sich, Ihnen das Modell 650C1 zu präsentieren, das zu unserer neuen Serie multifunktionaler Elektro-Kettenzüge für den Einsatz in der Unterhaltungsindustrie gehört. Die EXE-Lodestar® C1 Kettenzüge sind robust, leise und intelligent – mit einem kleinen Unterschied, der sie aus der Masse heraushebt: es sind Komplettgeräte.

Der EXE 650C1 verfügt über ein mechanisches Lodestar®-Herz, welches zu den am meisten geschätzten Elektro-Kettenzügen der Welt zählt, sowie eine Mikroprozessorsteuerung mit Hightech-Knowhow von EXE. Das ist die interessanteste Kombination auf dem aktuellen Kettenzugmarkt.

Der EXE 650C1 ist nach der Maschinenrichtlinie 98/37/EC zertifiziert, entspricht der deutschen BGV-C1 Vorschrift und ist vom TÜV gemäß EN ISO 13849-1 Norm mit Schutzklasse 3 zertifiziert.

Das Gehäuse wurde überarbeitet, um eine bessere Anpassbarkeit an die von der Unterhaltungsindustrie geforderten Einsatzzwecke zu gewährleisten. Und der interne Aufbau ist so konstruiert, dass sich die Betriebsbedingungen sicher überwachen lassen und er im Gefahrenfall selbsttätig reagiert.

Die Installation geschieht fast wie bei einem Moving Head: er wird in ähnlicher Weise verkabelt, mit anderen EXE-Lodestar®-Geräten gekoppelt, bekommt eine Maschinen-ID zugewiesen und schon kann's losgehen.

Der EXE 650C1 wertet die dynamischen Nutzlasten aus und hält automatisch, sobald eine Über- oder Unterlast vorliegt. Er erkennt zu hohe Arbeitstemperaturen, anormale Spannungen und Ströme sowie interne Funktionsstörungen. Er liest, speichert und meldet seine Raumposition, die durchgeführten Arbeitszyklen, die gehobenen Lasten und jede dabei registrierte Abweichung. Der Einsatz des EXE Dataloggers ermöglicht den Synchronbetrieb mit anderen vernetzten Kettenzügen.

Der EXE-Lodestar® bietet alle diese Arbeits- und Sicherheitsfunktionen in einem Gerät und benötigt keine externe Steuereinheit. Er ist somit der erste Kettenzug, der wirklich als vollständig konform zur BGV-C1 gelten kann.

Zur Überprüfung seiner Sicherheitsfunktionen bedient sich der EXE 650C1 des EXE™ Dual-Core-Systems. Diese in Litecs R&D-Labors entwickelte hochmoderne Technologie verwendet ein Bi-Prozessor-System zur

redundanten Verwaltung der systemeigenen Sicherheitskomponenten.

Er entspricht voll den Sicherheitsanforderungen der Schutzklasse 3 gemäß EN ISO 13849-1. Das EXE™ Dual Core-System legt alle Betriebsdaten des Kettenzugs im internen Flash-Speicher der beiden Mikroprozessoren ab und sorgt für einen zeitlich korrekten Ablauf der durchzuführenden Operationen. Somit kann man jederzeit den Betriebsstatus des Kettenzugs abfragen und die Daten im xls-Format auf einen USB-Stick herunterladen.

Das BGV-C1 Steuerungssystem der EXE-Lodestar Kettenzüge wurde inzwischen zum Patent angemeldet. Im D8-Spezialmodus lässt sich der EXE 650C1 mit einem auf dem Kettenzug angebrachten Schlüsselschalter zu einem Gerät der Klasse D8 umkonfigurieren. Hierbei wird das komplette C1-Sicherheitssystem umgangen. Dennoch wird auch im D8-Modus jeder Vorgang genau wie jede andere C1-Funktion registriert und gespeichert. Zusätzlich befindet sich auf dem Gerät ein Schalter, der durch Gedrückthalten die Über- und Unterlast- sowie die Synchronfunktionen vorübergehend deaktiviert. Nach Loslassen der Taste wird automatisch der BGV-C1-Status wiederhergestellt. Schlüsselschalter und Taste sind beide EC-zertifiziert und entsprechen gemäß EN ISO 13849-1 der TÜV-Schutzklasse 3.

EXE is pleased to present model 650C1, which is part of the new line of multifunction electric chain hoists for use in the entertainment business. The EXE-Lodestar® C1 chain hoists are robust, quiet and intelligent, with a detail that makes them stand out: they are complete machines. EXE 650 C1 has a Lodestar® mechanical heart, which is one of the most appreciated electric chain hoists in the world, and an electronic brain composed of sophisticated EXE control technology. This is the most interesting duo on the hoist market today.

EXE 650C1 is EC certified in accordance with the Machines Directive 98/37/EC, and conforms to the German BGV-C1 code of procedure, and based on the EN ISO 13849-1, it is certificated class 3 from TÜV. The outer part of the machine has been re-designed in order to adapt it to the uses required by the entertainment business and inside it is designed to monitor working conditions in safety and to act independently in the event of danger. It is installed in almost the same way as a moving

head: it is wired using similar procedures, it connects with other EXE-Lodestar® machines, it is allocated a machine ID and it is then ready to roll.

EXE 650C1 reads the dynamic pay loads and stops automatically if it is over- or underloaded. It detects working temperatures that are too high, anomalous voltages and electrical currents as well as internal functioning break-downs.

It reads, memorizes and signals its spatial position, the work cycles it has carried out, the loads it has lifted and any anomalies it encounters.

Use of the EXE Datalogger enables the machine to operate in synchronism while linked to other chain hoists.

The EXE-Lodestar® has all these working and safety functions within one machine and does not require a specific control unit. It is the first chain hoist which can really be considered entirely BGV-C1.

EXE 650C1 uses the EXE™ Dual Core system to check the safety functions. This sophisticated technology, which was developed in the Litecs's R&D Laboratories, makes use of a bi-processor system for the redundant management of the system's safety components.

It complies fully with the Class 3 safety requirements of the EN ISO 13849-1. EXE™ Dual Core memorizes all the chain hoist's work data inside the flash memory of the two microprocessors and keeps the chronology of the operations carried out.

It is therefore possible to verify the chain hoist's status at any given time and to download the data in an xls format onto a USB memory stick.

The patent for the BGV-C1 control system found in the EXE-Lodestar chain hoists has been filed.

Extraordinary D8 mode EXE 650C1 can be commutated into a class D8 by use of a selector key situated on the chain hoist. This selection bypasses the entire C1 safety system. Each operation in D8 mode however, is registered and memorized just like any other C1 function.

Also situated on the machine there is a button which, if kept pressed, enables the operator to temporarily bypass the overand under loading and synchronous functions. The BGV-C1 condition is restored when the button is released. The key selector and the Button are both EC certificated and are approved TUV class 3 of the EN ISO 13849-1.



CERTIFICATIONS: The electric chain hoist is CE certified, TÜV and BGV-C1 certified.
 Applied standards: SR2.0, UNI EN ISO 12100-1, UNI EN ISO 121002, UNI EN 1050, UNI EN 614-1, UNI EN 954-1,
 UNI EN 60204-1, CEI EN 61508, UNI EN ISO 13849, CEI EN 60447, UNI EN 894-1, UNI EN 894-3, UNI EN 418,
 UNI EN 1037, UNI EN 294, UNI EN 349, UNI EN 811, UNI EN 953, UNI EN 959, 73/23/CEE, 89/336/CEE, CEI 44-14,
 CEI 523, CEI EN 60204-32, UNI ISO 7000, EN 62079, UNI EN 12644-1, UNI EN 12644-2



HOISTS



Type	Code
EXE 650C1 incl. Kette 18m, Kettensack	CHML650C1M18
EXE 650C1 incl. Kette 24m, Kettensack	CHML650C1M24

Technische Spezifikationen

- Klasse FEM 2M
- Direktsteuerung
- Hebe- und selbstaufziehender Betrieb
- Fixgeschwindigkeit 4m/Min.
- Elektromagnetische Stromag-Doppelbremse 25 + 25nm
- Mechanische Begrenzerschalter mit 4 integrierten Positionen
- 2 eingebaute justierbare Soft-Begrenzerschalter
- Mechanischer Sicherheitskoeffizient 10:1
- 16A Drehstrom-Netzkaabel mit Stecker
- Betriebsspannung 380/420V/3p/50Hz
- EXE™ Dual Core-System zur Überwachung der Sicherheitsfunktionen
- Elektronischer Lastsensor mit Datenausgabe via Bildschirm
- Maschinen ID-Kennung
- Endlos-Drehregler mit Positionsspeicher
- Arbeitsdatenspeicherung im eingebauten Flash-Speicher
- Systembereitschaftsdiagnose in 350 ms
- Erfassung von Arbeitszyklen und deren Überprüfung auf Korrektheit
- Elektro-Kettenzug konform zur Maschinenrichtlinie 98/37/EC
- Systemintegritäts-Level (SIL) 3 nach EN ISO 13849-1
- Überwachung der Motorbetriebstemperatur
- Not-Bypass des C1-Systems mit zertifiziertem Schlüsselschalter
- D8-Taste für kurzzeitige Deaktivierung der C1-Funktionen
- Synchronbetrieb mit anderen Kettenzügen wählbar
- Ausgabe von Fehlermeldungen auf integriertem Ziffern-Display
- Automatischer Systemstopp bei Überlast
- Automatischer Systemstopp bei Unterlast
- Integrierte Phasensequenz-Anzeige
- 4-Pol XLR-Eingang für optionale externe Wägezelle
- Analoges Linksystem und MOD-Datenbus mit 5-Pol XLR-Ein-/Ausgang
- Eingebauter Prüfmodus für Bremsschaltkreis
- Arbeitsgeschwindigkeit: 50%
- Gewicht pro Meter Kettenlänge: 1,45kg
- Kettenzüge: 1

Technical Specifications

- Class FEM 2M
- Direct Control Command
- Lifting and self-lifting operations
- Fixed speed 4 metres per minute
- Double electromagnetic brakes Stromag 25+25nm
- Mechanical limit switches with 4 integrated positions
- 2 integrated, adjustable Soft Limit switches
- Mechanical safety coefficient 10:1
- 16A three phase power cable with plug
- Voltage 380/420v/3p/50Hz
- EXE™ Dual Core Control system for managing safety operations
- Electronic detector of dynamic pay load and display of data on screen
- Machine ID allocation
- Incremental encoder with position memory
- Registration of work data on integral Flash memory
- System diagnostics for ignition in 350ms
- Detection of work cycles and checking that Duty Circle is intact
- The electric chain hoist conforms Machine Directive 98/37/EC
- System Integrity Level (SIL) 3 conforms to EN ISO 13849-1
- Monitoring of motor operating temperature
- Emergency bypass of C1 system with certificated safety key
- D8 button for momentary bypass of C1 functions
- Set up to work in synchrony with other chain hoists
- Return of error codes on integrated numeric display
- Automatic Stop for the system in the event of overload
- Automatic Stop for the system in the event of underload
- Integrated phase sequence indicator
- 4 pin XLR input for optional external load cell
- Analogue link system and MOD BUS with 5 pin XLR input and output data
- Integrated system of brake circuit checking
- Duty rate: 50%
- Weight of 1 metre of chain: 1.45Kg
- Chain pulls: 1





HOISTS

ASSISTANCE

ASSISTANCE AND MAINTENANCE

Litec is structured to provide a complete assistance and maintenance service for Lodestar and Prostar hoists, which consists of:

- Three-monthly routine maintenance inspections
- Annual inspections with issue of an inspection and test card
- Special maintenance and hoist assembly
- Repair and replacement of missing parts
- Reconditioning of Lodestar hoists at the end of their life cycle
- Scrapping of old hoists
- Hoist upgrade and installation of optional kits

SUPPORT UND WARTUNG

Litec bietet Ihnen einen umfassenden Support- und Wartungsservice für die Kettenzugmodelle Lodestar und Prostar, der folgendes beinhaltet:

- Routine-Inspektionen alle 3 Monate
- Jahresinspektionen mit Inspektionsbericht und Prüfzertifikat
- Spezielle Wartung und Pflege
- Reparaturen und Ersatz fehlender Teile
- Runderneuerung von Lodestar-Kettenzüge am Ende ihrer Betriebsdauer
- Verschrottung ausgedienter Geräte
- Upgrade und Installation optionaler Kits



MAINTENANCE AND ANNUAL INSPECTION

Electric chain hoists should be inspected at the intervals established by the manufacturer. These inspections must comply with the directives and laws in force in the country of use.

In the case of Lodestar hoists, Columbus McKinnon advises annual routine servicing and periodic inspections based on usage.

Litec performs annual inspections on Lodestar and Prostar hoists, which consist of:

- Visual inspection
- Brake wear measurement and calibration
- Inspection of electrical motor connections
- Calibration of the end-stop unit and upper and lower limit switches
- Inspection of the upper and lower chain hooks
- Hoist load test
- Hoist overload test
- Load chain inspection

During the annual routine maintenance, wear of the mechanical parts, such as the chain guide, fixed-end blocks, motor bearings, etc. is checked.

After maintenance is completed, a card is issued showing the tests carried out, the results obtained, the measurements made and any parts repaired or replaced.

HOISTS



ON-LINE SUPPORT



<http://support.litectruss.com>

Each assembled motor is recorded in an on-line database, which forms part of the Litec On Line Support Service.

Customers can find the following information on the site:

- List of the hoist motors they possess, serial numbers and conformity declarations
- Assembly kits, accessory codes and date of installation
- Test register for routine and special maintenance
- Repair reports and an assistance request form
- Photos of load and overload tests on the motors
- Information on how to carry out three-monthly maintenance
- Scheduled maintenance calendar
- Form for calculating the remaining safe-use life
- Extracts of relevant regulations and laws in force

TEST DATES

Litec provides a free maintenance warning service to clients which consists of sending an e-mail 10 days before the three-monthly inspection date for hooks and chains, and a warning e-mail 30 days before annual hoist test dates.

The support.litectruss.com site gives instructions for carrying out three-monthly inspections on hoists. There is also a form which automatically calculates the remaining motor safe-use life.

REPAIR AND REPLACEMENT

Each operation is documented and recorded on the inspection and check card which is issued after each repair.

We inform customers before proceeding with the repair of badly damaged hoists to discuss possible implications.

MAINTENANCE STAFF

The technicians who maintain and repair Lodestar and Prostar hoists are duly certified by Columbus McKinnon for routine and special maintenance, and the repair and assembly of CM chain hoists.





CONTROLLERS

Entertainment industry electric hoists cannot exist without a suitable control system.

Having good control equipment means working in safe conditions and extending motor life. Litec has developed its own line of controllers - marketed under the name EXE - with unequalled safety systems compared with other products currently available on the market.

The range includes simple portable one-channel controllers, and four and eight-channel rack equipment with remote cable or radio controls. On request special multichannel systems can be tailor-made according to use requirements.

EXE controllers comply meticulously with European Machinery Directive 98/37/CEE, and are fitted with safety devices on the input power supply, emergency controls, and motor overload and short circuit protection.

Most models have a link function which allows them to run either as masters or slaves. Large sets of hoists can therefore easily be managed synchronously by linking several controllers together.

All the electrical components are industrial grade, individually certified, and comply with European directive requirements.

Elektrische Kettenzüge für die Veranstaltungstechnik sind nutzlos ohne eine geeignete Steuerung.

Gutes Steuerequipment zu haben, bedeutet, dass man unter sicheren Bedingungen arbeitet; zudem hilft es die Lebensdauer der Motoren zu verlängern. Litec hat seine eigene Serie von Controllern entwickelt, die unter dem Namen EXE vermarktet werden und im Vergleich zu anderen marktgängigen Produkten über beispiellose Sicherheitssysteme verfügen.

Das Sortiment umfasst einfache, tragbare 1-Kanal-Steuerungen sowie 4- und 8-Kanal-Rackgeräte mit Kabel- oder Funkfernbedienung. Auf Anfrage fertigen wir auch spezielle Multikanalsysteme, die genau auf die Bedürfnisse des Kunden zugeschnitten sind.

EXE-Controller entsprechen exakt der EN ISO-Norm 98/37/CEE über die Sicherheit von Maschinen und sind mit Sicherheitsvorrichtungen bei der Netzeingangsspannung, Not-Aus-Schaltern, Motor-Überlastschutz und Kurzschluss-Schutzschaltung ausgestattet.

Die meisten Modelle verfügen über eine Link-Funktion, die sowohl den Master- als auch Slavebetrieb erlaubt. Große Installationen mit vielen Hoists lassen sich daher bequem durch Zusammenschaltung mehrerer Steuergeräte synchron betreiben.

Alle elektrischen Bauteile entsprechen Industriespezifikationen, sind individuell zertifiziert und entsprechen den europäischen Sicherheitsrichtlinien.





EXE CONTROLLERS

RADIO

DIRECT CONTROL RADIO

This is the top product in the current EXE motor control line.

The radio push-button panel is ergonomic, made of ABS, and has a shoulder strap. It has been tested to work within a range of 100 metres from the receiver located inside the controller.

The push-button radio panel handles channel preselection, Go and STOP.

FUNK-DIREKTSTEUERUNG

Dieses Gerät ist das Spitzenprodukt im aktuellen Sortiment unserer EXE-Motorsteuerungen.

Der Handsender mit seinem ergonomischen Tastenfeld besteht aus ABS-Kunststoff und hat einen Schulterriemen. Er ermöglicht den problemlosen Funkbetrieb innerhalb 100 Meter Entfernung von dem im Controller untergebrachten Empfänger.

Das Tastenfeld des Sendeteils bietet Zugriff auf die Funktionen Kanalvorwahl, Go und STOP.



XCDR8 + XRSR8

XCDR8**Specifications**

- Power supply: 380/400 VAC 50 Hz
- Power sockets: 400 VAC 16 A 6H 3P+E
 - Power plug: 400 VAC 32 A 6H 3P+N+E with mechanical phase inverter

- 3 position running switch
- GO button
- Emergency stop mushroom button
- Main thermal-magnetic residual current circuit breaker
- Voltage ON LED indicator
- Manoeuvre selection LED for each channel
- Direct - Radio mode selector
- Radio signal ON LED
- Individual motor cut-outs with independent adjustment
- In RADIO mode, it works together with the XRSR8 radio push-button panel



XRSR8 (+ battery charger)

XRSR8 Direct Control Specifications

- 8 transmission channels
- UP-DOWN preselection
- GO button
- Emergency stop mushroom button
- START button
- Extractable rechargeable battery
- Safety key

Working frequency:
Range of action:
Modulation:
START command time lag:
Battery recharging time:

ISM Band 434,050 - 434,775 MHz
100 metres
GMSK, 3 kHz dev.
<750 MS
3 hours

EXE CONTROLLERS

LINKABLE



XCDL8



XCDL4



XCDL8



XCDL4



XCDF4

DIRECT CONTROL LINKABLE

The middle line includes three 4 and 8-channel linkable models. The flight-case DF4 model uses 5-pin industrial connectors for linking, and is only linkable with other DF4s.

The DL4 and DL8 models are linkable to each other, and are fitted as standard with 5 and 3-pole XLR connectors.

The use of different connectors is a design choice to prevent the accidental connection of products which are not electrically compatible.

Using the DIRECT or REMOTE selector found on the front panel, the controllers may be set as masters or slaves respectively, thus allowing the synchronous management of a large number of hoist motors.

XCDL4

XCDL8

Specifications

- Power supply: 380/400 VAC 50 Hz
- Power sockets: 400 VAC 16 A 6H 3P+E
- Power plug: 400 VAC 32 A 6H 3P+N+E with mechanical phase inverter

- 3 position running switch
- GO button
- Emergency stop mushroom button
- Main thermal-magnetic residual current circuit breaker
- Voltage ON LED indicator
- Manoeuvre selection LED for each channel
- Link cable provided

- XLR 5-pole link OUT connector
- XLR 3-pole link IN connector
- May be used with external "STOP and GO" push-button panel
- Direct - Remote mode selector
- Individual motor cut-outs with independent adjustment

XCDF4

Specifications

- Power supply: 380/400 VAC 50 Hz
- Power sockets: 400 VAC 16 A 6H 3P+E
- Power plug: 400 VAC 32 A 6H 3P+N+E with mechanical phase inverter

- 3 position running switch
- GO button
- Emergency stop mushroom button
- Main thermal-magnetic residual current circuit breaker
- Control circuit thermal-magnetic circuit breaker
- Voltage ON LED indicator
- 5-pole link IN - OUT connectors
- Link cable provided
- May be used with external "STOP and GO" push-button panel

EXE CONTROLLERS

LINKABLE

LOW VOLTAGE - LINKABLE

The low voltage controller line consists of a 4-channel model.

It may be linked as master or slave both to other controllers of the same model and to XCDL4 and XCDL8 series direct controllers.

NIEDERSPANNUNG – LINKFÄHIG

Bei Niederspannungs-Controllern bieten wir ein 4-Kanal-Modell an.

Es kann als Master- oder Slavegerät sowohl mit anderen Steuer-teilen desselben Typs als auch mit den Direkt-Steuerungen XCDL4 und XCDL8 gekoppelt werden.



XCLL4

XCLL4**Specifications**

- Power supply: 380/400 VAC 50 Hz
- Power sockets: 400 VAC 16 A 6H 3P+E
- Control plugs: 130-100 VAC 16 A 4H 3P+E
- Power plug: 400 VAC 32 A 6H 3P+N+E with mechanical phase inverter



- 3 position running switch
- GO button
- Emergency stop mushroom button
- Main thermal-magnetic residual current circuit breaker
- Voltage ON LED indicator
- Manoeuvre selection LED for each channel
- Link cable provided
- XLR 5-pole link OUT connector
- XLR 3-pole link IN connector
- May be used with external "STOP and GO" push-button panel
- Direct - Remote mode selector
- Individual motor cut-outs with independent adjustment



XRDHG

XRDHG - Stop and Go push-button panel**Specifications**

- 24 V IN-OUT control.
- GO button
- Emergency stop mushroom button
- 5-pole XLR connector
- yellow ABS casing
- Cable length: 14 m
- Compatible with:
XCDL4 - XCDL8 - XCLL4

EXE CONTROLLERS

BASE



DIRECT CONTROL - BASE

This is the basic line product. It is made with industrial grade components and fitted with an emergency STOP button.

DIREKTE KONTROLLE – BASE

Das Produkt unserer Basislinie. Es wird aus hochbelastbaren, eng tolerierten Bauteilen gefertigt und verfügt über einen NOT-AUS-Knopf.



XCDB4

XCDB4

Specifications

- Power supply: 380/400 VAC 50 Hz
- Power sockets: 400 VAC 16 A 6H 3P+E
- Power plug: 400 VAC 32 A 6H 3P+N+E with mechanical phase inverter
- 3 position running switch
- GO button
- Emergency stop mushroom button
- Main thermal-magnetic residual current circuit breaker
- Control circuit thermal-magnetic circuit breaker
- Voltage ON LED indicator



XCLH1

XCLH1 - Low Voltage

Specifications

- 1 channel 110 V low voltage controller
- UP button
- DOWN button
- Cable length: 3 metres
- Control socket: 130-100 VAC 16 A 4H 3P+E

SOLUTIONS ON DEMAND

EXE WITH MOD BUS PROTOCOL AND OTHER SPECIAL VERSIONS

Special versions and products made to meet specific requirements are often needed, especially in theatres and television studios. EXE makes multichannel control systems with analogue, digital, radio and Mod Bus connections.

EXE MIT MOD BUS-PROTOKOLL UND ANDERE SPEZIALVERSIONEN

Häufig werden spezielle Lösungen und Produkte für ganz bestimmte Anforderungen benötigt, insbesondere in Theatern und TV-Studios. EXE baut Multikanal-Steuerungssysteme mit analogen, digitalen, Funk- und Mod Bus-Anschlüssen.



EXE CONTROLLERS



Link - XLR5 - XLR3



Link 5 PIN

Links between EXE controllers

EXE controllers (excluding the Df4 model) are linked using XLR cables. To make sure DMX or signal cables in general are not used by mistake, the EXE link cables have male XLR 3-pole - male XLR 5-pole connectors. Following the wiring diagram provided in each manual, it is possible to connect jumpers for a great number of controllers. Since the link connection is analogue and not digital, the number of linkable controllers is proportional to the distance between the controllers and the length of the cables used to link them.

EXE controller safety devices

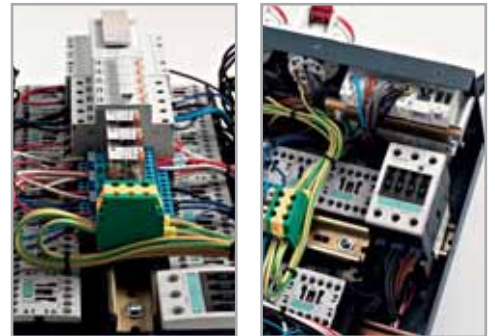
Each controller is protected upstream from the power circuit by a thermal-magnetic residual current circuit breaker. In addition to this device, EXE controllers are fitted with a cut-off solenoid activated by an emergency STOP mushroom button.

Pressing the emergency STOP mushroom button simultaneously trips the cut-off solenoids on all the linked controllers, thus isolating the power circuit upstream.

The overload protections and motor cut-outs have two basic features:

- 1) They are adjustable over a current range which includes the fully loaded hoist power consumption peaks. Adjustment is not compulsory for controller operation, but it limits hoist wear and prevents possible malfunction which may stem from any work overloads the hoist may be subject to.
- 2) All overload protections should be enabled to allow controller operation.

If a protection is not enabled, no power is supplied to any of the output channels.



Code	description	control	motor cutout fuse ampere rating	tot HP	tot kW	weight	sizes	compatible push-button panel	linkable	thermal-magnetic residual current circuit breaker	cut-off solenoid	plug with phase inverter
XCDB4	4-channel basic controller	DC	-	-	-	9,2 kg	483x251x90	-		•		
XCDF4	4-channel flight case controller	DC	-	-	-	14,6 kg	560x360x230	-	•	•		
XCDL4A	4-channel multilink controller	DC	1.6/2.5	4	3	16,0 kg	488x348x175	XRDHG	•	•	•	•
XCDL4B	4-channel multilink controller	DC	4.0/6.3	8	6	16,0 kg	488x348x175	XRDHG	•	•	•	•
XCDL8A	8-channel multilink controller	DC	1.6/2.5	8	6	19,5 kg	488x348x175	XRDHG	•	•	•	•
XCDL8B	8-channel multilink controller	DC	4.0/6.3	16	12	19,5 kg	488x348x175	XRDHG	•	•	•	•
XCDR8A	8-channel radio controller	DC	1.6/2.5	8	6	25,6 kg	488x348x175	XRSR8		•	•	•
XCDR8B	8-channel radio controller	DC	4.0/6.3	16	12	25,6 kg	488x348x175	XRSR8		•	•	•
XCLH1	1-channel portable controller	BT	-	-	-	1,0 kg						
XCLL4A	4-channel multilink controller	BT	1.6/2.5	4	3	14,5 kg	488x348x175	XRDHG	•	•	•	•
XCLL4B	4-channel multilink controller	BT	4.0/6.3	8	6	14,5 kg	488x348x175	XRDHG	•	•	•	•

RIGGING HARDWARE

Litec offers a vast range of accessories for lifting, fixing and anchoring structures.

In collaboration with Spanset and Columbus McKinnon, we have created a line of rigging accessories consisting of products that are more suited for rigging with our structures.

The roundslings and steel wire ropes have been produced taking the dimensions and effective carrying capacity of each type of assembly into consideration.

The wire ropes are fitted with oversized colour-coded thimbles. The roundslings are from the black magic line Spanset has created according to our specifications.

The STAC chains and shackles are made by the CM workshop in Virginia, and are extremely reliable accessories.

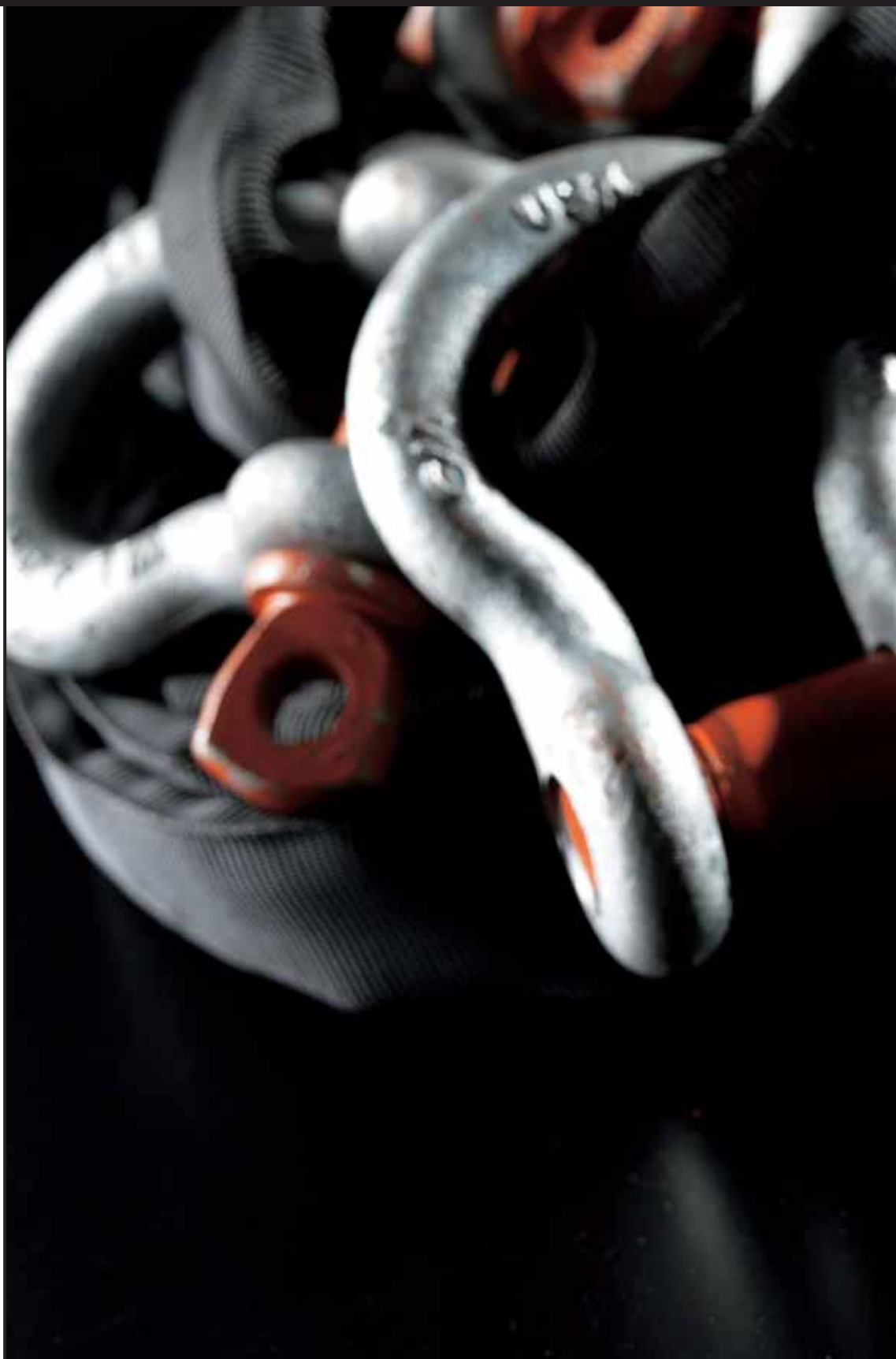
Litec bietet ein umfangreiches Zubehörsortiment zum Heben, Fixieren und Verankern unterschiedlichster Lasten an.

Zusammen mit Spanset und Columbus McKinnon haben wir eine Serie von Rigging-Accessoires entwickelt, die speziell für das Rigging in Verbindung mit unseren Komponenten geeignet sind.

Die Rundslingen und Stahlseile wurden unter Berücksichtigung der Abmessungen und effektiven Lastkapazität jeder einzelnen Montageversion dimensioniert.

Die Stahlseile sind mit farbkodierten Oversized-Verstärkungsringen ausgestattet. Die Rundslingen stammen aus der bei Spanset nach unseren Vorgaben gefertigten Black Magic-Serie.

Die STAC-Ketten und -Schäkel werden bei CM in Virginia hergestellt und sind äußerst zuverlässige Zubehörteile.





RIGGING HARDWARE

STEEL WIRE

STEEL WIRE ROPES

216-wire metal core ropes with end eyes, oversized thimbles and conical ferrules. Available with 1 or 2-ton SWL/WLL* capacities.

* Safe Working Load - Working Load Limit.

STAHLSEILE

Metallkernseile aus 216 Einzeldrähten mit Endösen, farbkodierten Oversized-Verstärkungsringen und konischen Presshülsen. Erhältlich mit 1 oder 2 t SWL/WLL-Lastkapazität.

Safe Working Load(SWL) = Sichere Arbeitslast
Working Load Limit(WLL) = Arbeitsgrenzlast

Thimbles are fixed to the ends of our steel wire ropes with Talurit conical ferrules; the ferrules are fitted by cold pressing in compliance with European standards EN 13411 and DIN3093.

The inspection hole on the ferrule is useful for the rope manufacturer for tests and inspections, but not necessarily for the end user (EN 13411-3).

It is remotely possible for a rope to slip from a ferrule, however before this happens the rope thimbles will already have changed shape.

Regular checking of the thimble shape together with rope strand condition tests are an excellent guarantee of safety.

Die Verstärkungsringe werden mit konischen Talurit-Presshülsen auf den Endösen der Stahlseile fixiert, die wiederum durch Kaltpressung gemäß den europäischen Sicherheitsnormen EN 13411 und DIN 3093 aufgedrückt werden.

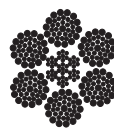
Die Prüfföffnung in der Presshülse ist für Tests und Inspektionen durch den Seilhersteller, jedoch nicht unbedingt für den Endbenutzer vorgesehen (EN 13411-3).

In seltenen Fällen kann ein Seil aus einer Presshülse herausrutschen. Aber bevor das passiert, haben sich die Verstärkungsringe des Seils bereits verformt.

Wer regelmäßig die Form der Verstärkungsringe und die Seiladern auf Spliss hin überprüft, hat eine ausgezeichnete Sicherheitsgarantie.



Arrangement and layout of strands inside the 216-wire rope.



Specifications

- 6-strand rope with 26 wires each - total 216 wires
- Thimbles two-sizes bigger than the rope
- Talurit conical ferrules
- Metal core

- 2 models: 1 or 2 tons
- 2 versions: pure rope or rope with sheath
- 7 sizes: from 0.75 to 12 metres

Ferrules are marked with the lot reference number, capacity and rope diameter.

Safety factor: 5:1

Thimble colour	Rope length	Pure Rope		Rope with sheath	
		1000 kg WLL 10 mm rope diam. Code	2000 kg WLL 14 mm rope diam. Code	1000 kg WLL 10 mm rope diam. Code	2000 kg WLL 14 mm rope diam. Code
Orange	0.75 metres	RGSW1075	RGSW2075	RGSWC1075	RGSWC2075
Red	1.50 metres	RGSW1150	RGSW2150	RGSWC1150	RGSWC2150
White	3.00 metres	RGSW1300	RGSW2300	RGSWC1300	RGSW2300
Blue	6.00 metres	RGSW1600	RGSW2600		
Yellow	9.00 metres	RGSW1900	RGSW2900		
Brown	10.00 metres	RGSW11000	RGSW21000		
Green	12.00 metres	RGSW11200	RGSW21200		

RIGGING HARDWARE

ROUNDSLINGS



POLYESTER ROUNDSLINGS

Black endless polyester slings. Essential for lifting and hanging loads and structures. Useful for creating basket or choke bridles on structures and trusses.

POLYESTER RUNDSCHLINGEN

Schwarze Endlos-Rundschlingen aus Polyester. Wichtig zum Heben und Hängen von Lasten und Installationen. Sehr gut geeignet zur Stütz- oder Hängesicherung an Equipment und Traversen.

Do not tie or connect roundslings to each other since this reduces their actual capacity in an uncontrollable way. The mode factor, i.e. the way a roundslings is used, should always be considered when calculating rigging capacities. For this reason and owing to their susceptibility to shear, roundslings have a coefficient of 7 (EN 1492-2).

Rundschlingen nicht miteinander verbinden, da sich hierdurch ihre reale Lastkapazität in unkontrollierbarer Weise reduziert. Der Mode-Faktor, also die Verwendungsart einer Rundschlinge, sollte bei der Berechnung der Rigging-Kapazitäten stets mit berücksichtigt werden. Daher und aufgrund ihrer Anfälligkeit für Scherkräfte haben Rundschlingen einen Koeffizienten von 7 (EN 1492-2).



Specifications

- Black polyester anchoring
- Sheath reinforced with Supraplus monofilament fabric, a highly abrasion-resistant material
- The outside sheath/polyester core combination prevents twisting

- 2 models: 1 and 2 tons
- 6 sizes: from 0.5 to 3 metres in diameter

Safety factor: 7:1

Code	Description	Code	Description
RGRS101	1000 kg roundslings - 0.5m EWL	RGRS201	2000 kg roundslings - 0.5m EWL
RGRS102	1000 kg roundslings - 1 m EWL	RGRS202	2000 kg roundslings - 1 m EWL
RGRS103	1000 kg roundslings - 1.5m EWL	RGRS203	2000 kg roundslings - 1.5m EWL
RGRS104	1000 kg roundslings - 2 m EWL	RGRS204	2000 kg roundslings - 2 m EWL
RGRS105	1000 kg roundslings - 2.5m EWL	RGRS205	2000 kg roundslings - 2.5m EWL
RGRS106	1000 kg roundslings - 3 m EWL	RGRS206	2000 kg roundslings - 3 m EWL

EWL = Effective Working Length

Mode factor	WLL capacity of a roundslings	
	1 ton	2 ton
Direct tension	1,0	1000kg / 2000kg
Choke	0,8	800kg / 1600kg
Up to 7°	2,0	2000kg / 4000kg
Over 7° up to 45°	1,4	1400kg / 2800kg
Over 45° up to 60°	1,0	1000kg / 2000kg
Over 7° up to 45°	0,7	700kg / 1400kg
Over 45° up to 60°	0,5	500kg / 1000kg

RIGGING HARDWARE

ANCHORING

BELTS RATCHET

Anchoring consisting of 35 and 50 mm polyester belts for fastening and safety.

RATSCHENGURTE

Polyestergurte mit 35 und 50 mm Breite zum Sichern und Fixieren.

STAC CHAIN

Super resistant chain produced by CM to form sound variable length bridles.

It is made of fire-resistant abrasion-resistant hardened burnished steel.

Each link is individually tested and certified.

It is important to use STAC chains correctly and take the mode factor into consideration. Each lateral load stress a chain undergoes leads to changes in the WLL and SWL values.

STAC KETTEN

Superresistente, von CM produzierte Abspannkette zur Bildung stabiler, langenverstellbarer Verankerungen.

Gefertigt aus feuer- und abriebfestem, gehartetem, hochglanzpoliertem Stahl.

Jedes Kettenglied wird einzeln gepruft und zertifiziert.

Es ist wichtig, STAC-Ketten korrekt einzusetzen und den Mode-Faktor zu berucksichtigen. Jede Querbelaugung, die auf eine Kette einwirkt, hat eine Veranderung der WLL- und SWL-Werte zur Folge.

**Specifications**

- They consist of two parts with two-finger joint couplers
- Chrome-plated tensioning device
- Abrasion-resistant belt

- 3 models: from 2 to 4 tons
- 4 sizes: from 3 to 12 metres

Safety factor: 2:1

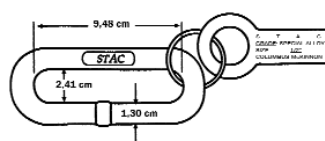
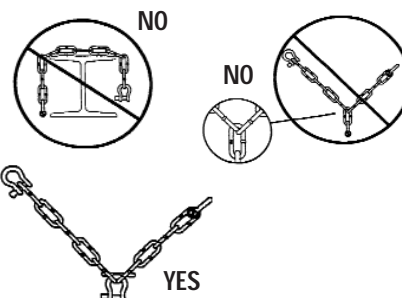
Code	Description and capacity
RGBR23503	Ratchet belt - 2000 kg - 35 mm - (EWL) 3 m
RGBR23504	Ratchet belt - 2000 kg - 35 mm - (EWL) 4 m
RGBR45008	Ratchet belt - 4000 kg - 50 mm - (EWL) 8 m
RGBR45012	Ratchet belt - 4000 kg - 50 mm - (EWL) 12 m
RGBR23508	Ratchet belt - ring - 2 tons - 35 mm - 8 m long

**Specifications**

- WLL capacity: 5750 kg
- Each length of chain is supplied with a product identity tag

Safety factor: 4:1

Code	Description and capacity
RGSC150	CM STAC Chain - 1.50 m long 5,448 kg

**Correct and incorrect use of STAC Chain**

RIGGING HARDWARE

HARDWARE



SHACKLES

We supply 4 kinds of zinc-plated Columbus McKinnon omega shackles as standard for anchoring connections and ropes.

On request we can supply other kinds of shackle and shapes, and their corresponding accessories.

SCHÄKEL

Serienmäßig liefern wir die verzinkten Columbus McKinnon Omega-Schäkel in 4 Ausführungen für Ankerverbindungen und Seile.

Auf Anfrage sind auch Schäkel in anderen Formen und Größen mit samt dem passenden Zubehör lieferbar.



Specifications

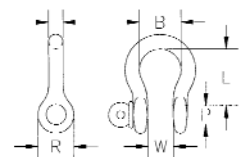
- Zinc-plated steel omega shackles
- Orange screw pin

- 4 models: from 1 to 4.75 tons

Each shackle is marked with its size in inches and millimetres and its WLL load limit

Safety factor: 5:1

Code	Description	Size R	Size B	Size P	Size W	Size L
RGSH100CM	CM shackle - 3/8" - 1000 kg - screw pin	25.2 mm	27.8 mm	11.2 mm	16.2 mm	32.1 mm
RGSH200CM	CM shackle - 1/2" - 2000 kg - screw pin	32.8 mm	37.4 mm	16.0 mm	22.2 mm	50.7 mm
RGSH325CM	CM shackle - 5/8" - 3250 kg - screw pin	37.5 mm	43.8 mm	20.3 mm	29.3 mm	60.5 mm
RGSH475CM	CM shackle - 3/4" - 4750 kg - screw pin	46.5 mm	59.5 mm	22.5 mm	34.2 mm	72.4 mm



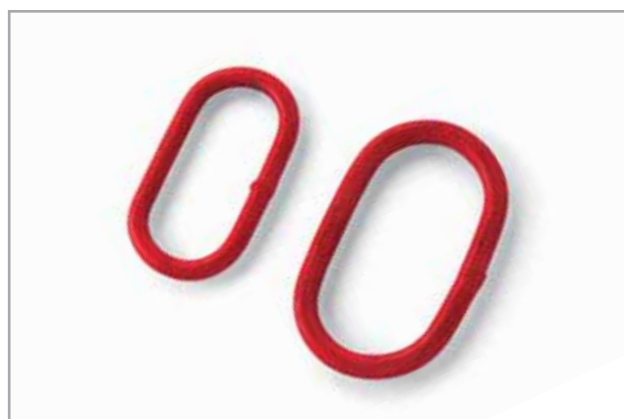
MASTER LINKS

We supply two master link models (2.4 and 3.15 tons) for anchoring connections using shackles.

On request we also have triple master links and coupling links.

O-RINGE

Unser Sortiment umfasst zwei Modelle (mit 2,4 bzw. 3,15 Tonnen Lastkapazität) für Ankerverbindungen mit Schäkeln. Auf Anfrage sind außerdem Dreifach-Masterlinks und Kupplungsglieder lieferbar.

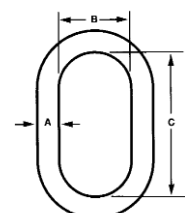


Specifications

- 2 models: 2.120 and 3.15 tons

Safety factor: 4:1

Code	Description	Size A	Size B	Size C
RGML2120	Master link WLL 2,120 kg	25.2 mm	27.8 mm	11.2 mm
RGML3150	Master link WLL 3,150 kg	32.8 mm	37.4 mm	16.0 mm



RIGGING HARDWARE

HARDWARE

TURNBUCKLES

Zinc-plated turnbuckles with forked ends for adjusting anchoring and bracing cables.

Hook or eye ends available on request

SPANNSCHLÖSSER

Verzinkte Spannschlösser mit Gabelenden zur Justierung von Abspann- und Verstrebungsseilen. Endstücke mit Haken oder Ösen sind auf Anfrage ebenfalls erhältlich.



Code	Description	Maximum closing	Maximum opening	Stroke
RGTB05	3/8" turnbuckle - 0.54 ton - 302/416 mm	30.2cm	41.6cm	11.4 cm
RGTB10	1/2" turnbuckle - 1 ton. - 414/585 mm	41.4cm	58.5cm	17.1 cm
RGTB20	3/4" turnbuckle - 2.36 ton. - 508/679 mm	50.8cm	67.9cm	17.1 cm

Specifications

- Fork with pin and bolt
- Available in 3 sizes

Safety factor: 5:1

BEAM CLAMPS

Clamps suitable for hanging hoists and other lifting devices on I and H girders and beams.

TRÄGERKLEMMEN

Klemmen zur Hängemontage von Kettenzügen und anderen Hubwerkzeugen an Einfach- und Doppel-T-Trägern.



Code	Description	WLL capacity	Beam width	Weight
RGBC1BK	Beam clamp - WLL 1000 kg	1000 kg	75/220 mm	4.8 kg
RGBC2BK	Beam clamp - WLL 2000 kg	2000 kg	75/220 mm	5.5 kg
RGBC3BK	Beam clamp - WLL 3000 kg	3000 kg	100/250 mm	11.8 kg

Specifications

- Minimal vertical space occupied
- Black

- 3 models: 1.2 and 3 tons

Each clamp has a tag showing its WLL.

RIGGING HARDWARE



BRIDLE HOOK

The bridle hook is designed to support triangular and square-section trusses with 30 and 40 cm sides. It can be fitted to the two truss sections simply by changing the position of the pins or bolts which hold its components together.

Its characteristic strong points are the versatility, carrying capacity and stability it provides to the loaded trusses.

TRAVERSENAUFHÄNGUNG

Diese Konstruktion ist für die Hängemontage von Drei- und Vierpunkt-Traversen mit 30 oder 40 cm Seitenlänge ausgelegt.

Durch einfache Positionsänderung der Verbindungsschrauben erfolgt das mühelose Anbringen an den beiden Traversenteilen.

Ihre typischen Vorzüge sind u. a. die Vielseitigkeit, Belastbarkeit und Stabilität, die sie den belasteten Traversen verleiht.



The bridle hook does not require any additional safety anchoring and allows aligned vertical hanging.

The maximum capacity of the bridle hook is 1200 kg (WLL).

Der Ankerhaken erfordert keine zusätzliche Sicherung und ermöglicht die parallele senkrechte Ausrichtung.

Die maximale Tragleistung des Zughakens beträgt 1200 kg (WLL).

Code	Description
CBQ3040	Bridle Hook for 30&40 cm square truss
CBT3040	Bridle Hook for 30&40 cm triangular truss



CBQ3040



CBT3040



Bar Hook

Hooking plate with eye for 30, 40 and 52cm trusses.

Traversenadapter mit Öse für Traversen mit 30, 40 und 52 cm Seitenlänge.

Code	Description	Portata	Weight	Interasse
C030	Bar Hook for 30cm truss	1000kg	2,2kg	239mm
C040	Bar Hook for 40cm truss	1000kg	3,5kg	350mm
C052	Bar Hook for 52cm truss	1200kg	4,2kg	470/490mm
C052D	Bar Hook for 52cm Heavy Duty truss	2300kg	4,7kg	470/490mm

RIGGING HARDWARE

COUPLERS

This section includes hooks and other accessories compatible with aluminium structures.

The Truss Clamp line has been completely renewed with the Eye Coupler series made by Manfrotto lighting support.

It has been reduced the weight without compromising on robustness and as if that weren't enough, it has made them look the part, with elegant and distinctively eye-catching design.

Dieser Abschnitt beinhaltet Haken und anderes Zubehör, das zu Aluminium-Konstruktionen kompatibel ist.

Die Produktlinie der Truss Clamps wurde mit der von Manfrotto Lighting Support hergestellten Eye Coupler-Serie komplett erneuert.

So konnte das Gewicht ohne Stabilitätseinbußen reduziert werden. Und als ob das noch nicht genug wäre, überzeugen die Teile auch durch eine markante wie elegante Optik.

CONNECTION KIT FOR LP EYE COUPLER

Kit to connect two C460 clamps.



C466



Washer seat

Designed to provide further strength to the locking system.

Lightened Structure

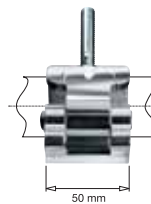
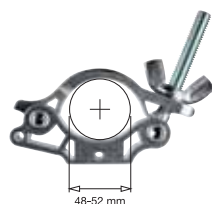
Lighter yet optimised resistance in major stress areas.

Smooth Edge

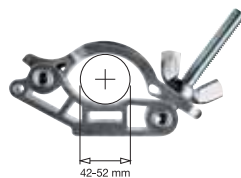
Ergonomic shape, user friendly and eye catching designed.

Jaw-limiting Pin

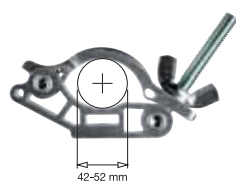
Developed for easier hook-like use.



LP EYE COUPLER: Industry standard Ø48-52 mm pipe clamp range, load capacity up to 500Kg, TUV certified. Available with rigging range of fittings, including M12 bolt w/nut, 28 mm TV spigot, lifting ring.



MP EYE COUPLER: wider Ø42-52 mm pipe clamp range, special flattened jaw design for easier fixing in tight spaces, load capacity up to 500kg, TUV certified. Available with a full range of fittings.



MP SLIM EYE COUPLER: narrower, lighter version of MP Coupler for use in extremely small spaces, load capacity 300kg, TUV certified.

RIGGING HARDWARE



LP EYE COUPLER SINGLE

The base model of LP eye coupler for any customised application.

Weight: 0,36 kg
Pay Load: 500 kg
Hole: 13 mm

C460



LP EYE COUPLER WITH HALF SPIGOT

Provided with Half Litec Spigot for Heavy Duty and Standard truss connections.

Weight: 0,55 kg
Pay Load: 500 kg
End: Spigot

C470



LP EYE COUPLER WITH LIFTING EYE

Provided with lifting eye, for multipurpose use with chains, wires and ropes.

Weight: 0,55 kg
Pay Load: 500 kg
End : Ring

C463



LP EYE COUPLER WITH FORK CONNECTOR

Provided with Half Litec Fork for High Load Truss connections.

Weight: 0,57 kg
Pay Load: 500 kg
End: Fork

C475



LP EYE COUPLER WITH M12 BOLT PLUS NUT M12+DADO

Supplied with M12 bolt and nut for custom solutions.

Weight: 0,40 kg
Pay Load: 500 kg
End: M12x27

C464



LP SWIVEL EYE COUPLER

Twin couplers free to rotate 360° for firm, quick and easy interconnection for truss, bars or pipes.

Weight: 0,76 kg
Pay Load: 300 kg

C482



MP EYE COUPLER

The base model of MP eye coupler for any customised application.

Weight: 0,39 kg
Pay Load: 500 kg
Hole: 13 mm

C4460



MP EYE COUPLER WITH M12 BOLT + NUT

Supplied with M12 bolt and nut for custom solutions.

Weight : 0,43 kg
Pay Load: 500 kg
End: M12x27

C4464



MP EYE COUPLER WITH HALF SPIGOT

Provided with Half Litec Spigot for Heavy Duty and Standard truss connections.

Weight: 0,58 kg
Pay Load: 500 kg
End: Spigot

C473



MP SLIM EYE COUPLER

The base model of MP slimlight version eye coupler.

Weight: 0,26 kg
Pay Load: 300 kg
Hole: 13 mm

C4560

LITECWEAR

None of the products in this catalogue would even exist if it were not for our rigger friends. They are increasingly more specialized expert workers who are often asked to work in extreme situations and all weather conditions, day and night.

It seems right to offer a special line of work clothing for them.

The fabrics used to make the clothes are excellent quality pre-shrunk cotton and anti-peeling polyester to ensure long life and comfortable wearability.

The size of sleeves and cuffs, length of garments and location of pockets have all been chosen specifically with the job in mind.

The belt accessories have been designed to allow safe work and easy movement even in difficult conditions.

The brand name and logo are discreet and unobtrusive so that the garments can also be worn outside the working environment.

Litecwear is not a promotional line. We supply work clothes and accessories specifically designed for the needs of riggers and all structure assembly workers.

Ohne unsere lieben Rigger gäbe es keines der Produkte in diesem Katalog. Immer öfter sind es spezialisierte Fachkräfte, die häufig in Extremsituationen und bei jedem Wetter ihren Job machen müssen, bei Tag und Nacht.

Es erscheint daher angemessen, für sie eine Kollektion mit spezieller Arbeitskleidung anzubieten. Als Gewebe verwenden wir ausschließlich einlaufsic here Baumwoll- und abschälteste Polyesterstoffe bester Qualität, die lange Haltbarkeit und hohen Tragekomfort garantieren.

Die Breite der Ärmel und Aufschläge, die Länge der Hosen und Jacken und die Lage der Taschen wurden alle speziell mit Blick auf den Job gewählt.

Die Gürtelaccessoires sind so gestaltet, dass sie ein sicheres Arbeiten und optimale Bewegungsfreiheit selbst unter schwierigen Bedingungen erlauben.

Markenname und Logo sind diskret und unauffällig angebracht, so dass die Kleidung auch außerhalb der Arbeitsumgebung getragen werden kann.

Litecwear ist keine Promotion-Kollektion. Wir liefern speziell für die Bedürfnisse von Riggern und Roadies entwickelte Arbeitskleidung und Zubehörartikel.







LITECWEAR

TECHNICAL CLOTHING

The Litecwear technical clothing line includes both a summer outfit consisting of a polo shirt, shorts, a sweatshirt and a cap, and a winter outfit consisting of a pile sweater, long trousers, a parka and a knit hat.

Zur Funktionskleidung der Litec-Kollektion gehören ein Sommer-Outfit, bestehend aus Poloshirt, Shorts, Sweatshirt und Kappe sowie ein Winter-Outfit, bestehend aus Walk-Sweatshirt, langer Hose, Parka und Strickmütze.



WTLJP

BLACK WATERPROOF PARKA WITH HOOD

- Made of 1200 denier woven Dupont Nylon Teflon® Fabric Protector
- Internally lined at the back with netting
- Vent cut along the whole length of the back with "mouse tail" grey trim
- Sewn-in hood
- Front pocket with zip and "mouse tail" grey trim
- Straight cuffs with Velcro closure
- Technician's hook-strap sewn into the upper inner edge of the front pocket

BLACK PILE SWEATER

- Made of pre-shrunk Italian cotton.
- Sleeves and bottom without elastic or ribs.
- High neck with zip
- Side pockets with vertical seam
- Top vertical pocket with zip
- Technician's hook sewn into the bottom of the vertical pocket
- Waterproof fabric shoulder reinforcement
- Black



WTLPF



WTLST

BLACK SWEATSHIRT WITH HOOD

- Made of pre-shrunk Italian cotton.
- Raglan sleeves without elastic or ribs.
- Coarse-tooth zip for front fastening
- Capacious side pockets
- Large hood
- Top vertical pocket with zip
- Technician's hook sewn into the bottom of the vertical pocket
- Black

LITECWEAR



TECHNICIAN'S TROUSERS

- 100% yarn-dyed pre-shrunk cotton; approx. 3% shrinkage guaranteed, 250 g per sq.m. Made in Italy
- Legs may be removed with zip fastener covered with protective flap inside and out
- Large long raised rear pocket
- Large side pockets with button closure
- Side pockets with "mouse-tail" trim
- Adjustment straps on sides
- Sewn-in technician's hook and oversized belt-loops



LONG SLEEVE ROUND NECK

- 100% Cotton
- Long Sleeve
- Size M-L-XL-XXL



KNIT HAT

- Colour: black
- Made of acrylic fabric
- One size

WTLKH



GOLF CAP

- Colours: black
- Stiff front
- 4 side air holes
- Adjustable at back with Velcro
- 100% cotton
- One size

WTLFC

Code	Description
WTLTBKM	Technician's trousers, convertible into shorts - M
WTLTBKL	Technician's trousers, convertible into shorts - L
WTLTBKXL	Technician's trousers, convertible into shorts - XL
WTLTSBK	Short technician's trousers - M
WTLTSBK	Short technician's trousers - L
WTLTSBKXL	Short technician's trousers - XL
WTLTBK	Long sleeve round neck - M
WTLTBK	Long sleeve round neck - L
WTLTBKXL	Long sleeve round neck - XL
WTLTBKXXL	Long sleeve round neck - XXL
WTLFC	Golf cap
WTLKH	Black knit hat

Code	Description
WTLSTM	Sweatshirt with zip - M
WTLSTL	Sweatshirt with zip - L
WTLSTXL	Sweatshirt with zip - XL
WTLPFM	Black pile sweater with zip - M
WTLPFL	Black pile sweater with zip - L
WTLPFXL	Black pile sweater with zip - XL
WTLJPM	Parka - M
WTLJPL	Parka - L
WTLJPXL	Parka - XL



LITECWEAR

RIGGING BELT ACCESSORIES

The Litecwear rigging belt accessories line includes a series of accessory holders and bags designed to hold the technician's personal equipment.

Das Litecwear-Sortiment an Gürtel-accessoires für Rigger beinhaltet eine Reihe von Zubehörhaltern und -taschen, in denen der Techniker seine Utensilien verstauen kann.



The belt fastening system of the belt mounted tool pouch, hammer holder and rig truss kit have a double Velcro safety mechanism. This system holds the accessories firmly to the belt, but at the same time makes them easy to remove.

Das Gurtschließsystem der Werkzeuggürteltasche, der Hammergürteltasche und des Rig-Truss-Kits sind mit einem doppelten Klettband-Sicherheitsmechanismus ausgestattet. Dieses System hält die Werkzeuge sicher am Gürtel fest und ermöglicht trotzdem eine leichte Entnahme.



RIG TRUSS KIT FOR LIBERA SYSTEM

- Made of woven waterproof 1500 denier nylon with two coats of resin
- Metal reinforced corners
- Wide belt-loop for two belt positions
- Three-pronged clasp for hooking to technician's hook in belt
- Safety straps

(The spanner, lever and Allen wrench are not supplied)

Code	Description
WTLSB	Shoulder bag
WTLSF	Adjustable lumbar spine support
WTLTP	Belt mounted tool pouch
WTLRP	Radio pouch
WTLHL	Hammer holder
WTLRK	Rig truss kit in pouch - for Libera System

ADJUSTABLE LUMBAR SPINE SUPPORT

The lumbar spine support belt is fastened around the waist with a Velcro closure. The tool belt has an easy lock fastener and double adjustment to adapt perfectly to the lumbar spine support.

- Professional work belt with waist support
- Padded water-repellent Velcro-adjustable lumbar spine protection band
- Upper tool belt with quick lock adjustable closure
- Available in S-M / L-XL sizes



LITECWEAR



WTLSB

SHOULDER BAG

- Made of 800 x 340 denier black nylon
- Protective internal padding
- Close-fitting 4 cm shoulder strap
- Capacious external pocket with zip
- Internal pocket with accessory divider
- Double three-pronged external clasp on underside
- Size: 34 x 32 x 10 cm

BELT MOUNTED TOOL POUCH

- Made of 1200 denier woven Dupont Nylon Teflon® Fabric Protector
- Two side pockets, large middle pocket, 2 internal compartments for spigots, pins and split pins
- External accessory loop
- Double Velcro belt fastening



WTLTP



WTLHL

HAMMER HOLDER

- Consists of a black polyester and leather strap
- Funnel-shaped so that a rubber-handled hammer may be easily extracted
- Safety strap with Velcro fastener
- Belt-loop strap



WTLRP

RADIO POUCH

- Cordura radio pouch with elastic fastener
- Openwork fabric front
- Three-pronged waist and shoulder belt clasp
- Lower accessory loop



**IT'S NEVER JUST A SET,
IT'S MORE LIKE CROWD CONTROL**

Denon DJ. Everything you need.

Wie auch immer du es machen willst – DENON DJ hat für dich genau das richtige Gear um jeden Floor zu rocken: Media Player und Mixer, Tabletop oder 19"-Rackmount, stylische Hochleistungskopfhörer: alles in höchster Qualität und für den harten Clubeinsatz konstruiert. Jede Nacht vertrauen professionelle DJs und Clubs weltweit DENON DJ Premiumprodukten wegen ihrer exzellenten Zuverlässigkeit und der innovativen Funktionen – Premiumprodukte geschaffen für dein bestes Set...und der Floor gehört dir!
If your lifestyle depends on it, choose Denon.



www.denon.dj
use it. live it.