

 **APROLYFT**



WHAT MAKES PROLYFT UNIQUE?



WORLD WIDE NETWORK OF SERVICE POINTS



LIFETIME WARRANTY



PROLYFT SERVICE BASE



INDIVIDUAL IDENTIFICATION

EXPERIENCE THE INTEGRATED SERVICE

SERVICE NETWORK

The Prolyft hoist can boast on a reliable service network. Unlike other manufacturers, Prolyte has set up a world wide network of Service points, who all are equipped and trained to supply extensive service for all Prolyft hoists in your own language.

TRAINED SERVICE PERSONNEL

All service points are certified to do all maintenance and repair jobs on the hoists if needed. For this purpose, the service points keep spare parts on stock as well as standard hoists. All technical and sales personnel is trained on a yearly basis to keep their know how on a high level and up to date with new developments.

CERTIFICATION

Only Prolyft service points can certify your hoist on a yearly basis to secure the Lifetime warranty for each Prolyft hoist. All Prolyft service points are accredited and certified to test your hoist and issue certificates.

FREE ACCESS

Each Prolyft hoist owner can track his hoists, registered within the Prolyft Service base. The hoist is equipped with a RFID tag for this purpose and can be identified individually. All hoist owners have free access to this base. Repair and certification history of the specific hoist are always accessible.

AUTOMATIC REMINDERS

Automatic reminders will be send to the owner of the hoist on a yearly basis, in order to make sure that the hoists are re-certified in time. If the hoist is tested at regular intervals at one of the Prolyft service points, Lifetime warranty is guaranteed.

HIGH QUALITY:

- Complies to all applicable European and American safety standards
- All forged and machined parts; stronger, more durable and with higher tolerances
- Powder coating
- All metal parts zinc plated

SECURITY:

- IP54 protection
- Integrated phase lost protection

USER FRIENDLINESS:

- A lightweight, compact and symmetrical hoist
- An identical body for 500, 1000 and 2000 kg hoists
- Build to the specifications of a team of qualified riggers
- Magnetic oil refilling plug in gearbox, for easy detection of excessive wear
- Easy repair and service access

SILENCE:

- Five pocket load wheel for smooth operation
- Oil based gear box, very low noise level (68dB)
- Internal one-piece nylon chain guide for silent operations

VERSATILITY:

- 136- 2000 kg lifting capacity
- Lifting speeds from 2 to 10 m/min.

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APPLICATION

DEFINITION

A hoist, as used within the entertainment branch, can be defined as an (electric) driven lifting device, whereby the main (special) lifting chain is the load bearing element, as used for lifting, holding and lowering of loads, either used above persons or not.

APPLICATION

Electrical hoists, as used within the entertainment branch, are commonly used for lifting or holding loads above persons. These loads can be truss constructions, set pieces, lighting or sound equipment or any technical equipment or decoration used in the design of the event. Since lifting and holding loads above persons causes higher levels of risk to the persons under the load, extra safety measures might be required.

STANDARDS / DIRECTIVES / CODE-OF-PRACTICE

EN-ISO-12100-1	Safety of machinery – Basic concepts, general principles for design – Part 1: Basic terminology, methodology (ISO 12100-1:2003)
EN-ISO-12100-2	Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles (ISO 12100-2:2003)
EN-14492-1/2	Cranes - Power driven winches and hoists - Part 1: Power driven winches
EN-60204-32	Safety of machinery - Electrical equipment of machines - Part 32: Requirements for hoisting machines (IEC 44/543/CDV)
ASME-B30.16	Overhead Hoists (Underhung)
FEM-9.511 (06.1986)	Rules for the design of series lifting equipment; Classification of mechanisms
FEM-9.671 (10.1988)	Rules for the design of series lifting equipment; Chain qualities, selection criteria and requirements
FEM-9.755 (06.1993)	Measure for achieving safe working periods for motorized serial hoist units (S.W.P.)
FEM-9.756 (08.2004)	Hand-operated and power driven hoists for special purposes.
FEM 9.683 (10.1995)	Selection of lifting and travel motors.
BGV-C1/GUV-V C	Veranstaltungs- und Produktionsstätten für szenische Darstellung
EN-818-7	Short link chain for lifting purposes - Safety - Part 7: Fine tolerance hoist chain, Grade T (Types T, DAT and DT)
CE	Machine directive 2006/42/EC
CE	Electromechanical Directive EMC 89/336/EEC
BS-7905-1	Lifting equipment for performance, broadcast and similar applications - Specification for the design and manufacture of above stage equipment (excluding trusses and towers)
DIN-56950	Veranstaltungstechnik - Maschinentechnische Einrichtungen - Sicherheitstechnische Anforderungen und Prüfung
ISO-13849-1	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design
IEC-62061	Safety of machinery - Functional safety of safety-related electrical, electronic and programmable electronic control systems
CWA 15902-1 (european code-of-practice)	lifting and load-bearing equipment for stage and other production areas within the entertainment industry
NPR-8020-10 (dutch code-of-practice)	lifting equipment for stages and other production areas within the entertainment industry "safety factors"



ESSENTIALS:

DO:

- Inspect your hoist on a regular basis, keep a written record of all inspection and maintenance done to the hoist.
- Certify your hoist at least once a year at a Prolyft Service Point to enhance the life expectancy of your hoist and retain the lifetime warranty.
- Store your hoist in a proper way and protect it from environmental influences.
- A "Standard" hoist can be used up to its max. WLL in case a proper risk assessment has been carried out and allows so. In all other cases additional measures need to be taken. A minimum requirement in such case is that the WLL should be reduced with 50%.
- Use limit switches in case of limited travel height or a blocked travel path.
- Use designated and approved lifting chain only.
- Reconnect the dead-end of the chain to the hoist to reduce the drop-height of the chain in case of an involuntary chain drop.
- Protect your hoist against water and dust.
- Grids or loads on multiple hoists should only be lifted with hoists with similar loading capacity and lifting speed.
- Check the chain visually before each lifting job.

DO NOT

- Run the chain in or out the hoist when the hoist rests on its sides, this will damage the brake.
- Use the end-stop on the chain (and therefore the slip clutch) as travel limit.
- Use damaged lifting chains.
- Use hoist outdoor without proper protection for environmental influences, such as rain or dust.
- Lift loads under an angle; loads may exceed the maximum WLL due to a shift in the point of gravity, this can have a big impact on the flown truss structure and the roof construction.
- Use motor bridles, since this will cause the loading per hoist to fluctuate in an unforeseen way.
- Move loads above people without appropriate measures taken.
- Modify the hoist by any other than an official Prolyft Service point, product liability will move from the manufacturer to the person or company responsible for the modification.

PROLYFT 500 KG / 1000 KG / 2000 KG



Direct Control Hoist: PLE-11 / PLE-12 / PLE-13
Prolyft 500 kg / 1000 kg / 2000 kg

PLE-13, Prolyft 2000 kg

Low Voltage Control Hoist: PLE-21 / PLE-22 / PLE-23
Prolyft 500 kg / 1000 kg / 2000 kg

STANDARD FEATURES DIRECT CONTROL HOIST:

- C-Form 16A-4p powerplug and cable with strain relief
- Multiple voltage motor
- Chain bag for 30m and 65m chain
- Jam free chain guide
- Internal, sealed clutch
- Integrated handgrips
- Standard swivel hook on upper and lower chain
- Zinc plated load chain
- Phase failure contactor
- AC brake

OPTIONS:

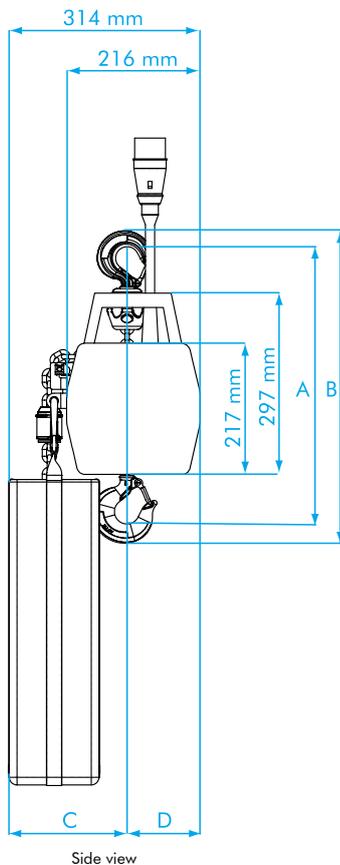
- Double brake
- Build in encoder for positioning system
- External Load cell system
- 8m/min lifting speed (for 500 kg hoist only)

STANDARD FEATURES LOW VOLTAGE CONTROL HOIST:

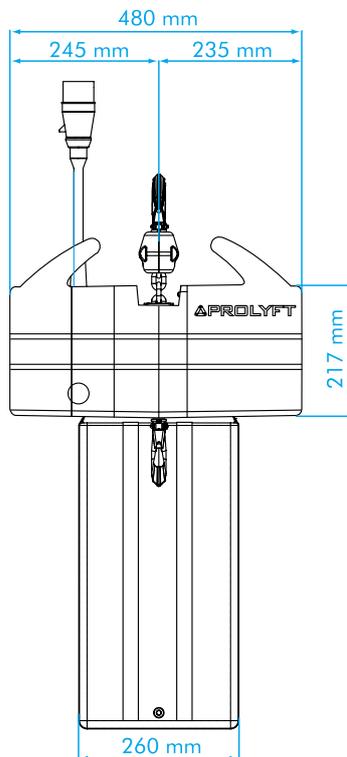
- C-Form 16A-4p powerplug and cable with strain relief
- C-Form 10A-4p control plug and cable with strain relief
- Multiple voltage motor
- Chain bag for 30m and 65m chain
- Jam free chain guide
- Internal, sealed clutch
- Integrated handgrips
- Standard swivel hook on body and lift chain
- Zinc plated load chain
- Adjustable limit switch (max. 70m lift)
- AC brake
- 115V control circuit

OPTIONS:

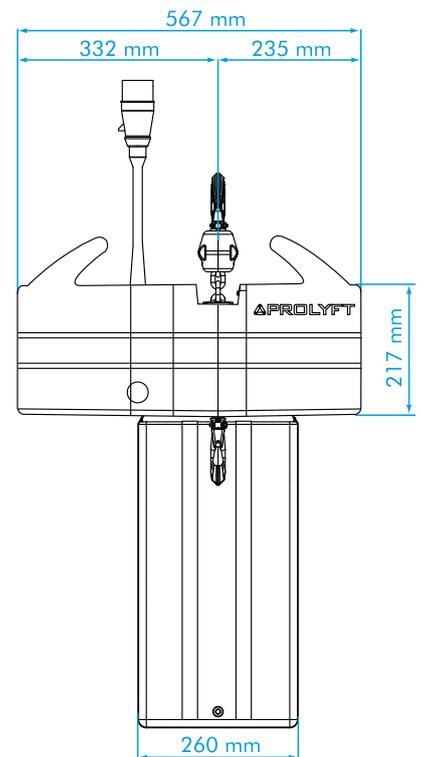
- 24V or 48V control circuit
- Double brake
- Build in encoder for positioning system
- External Load cell system
- Smart limit (to operate LV hoist as direct control)
- 8m/min lifting speed (for 500 kg hoist only)



Side view



Front view
Direct control hoist



Front view
Low voltage control hoist

All measurements are for the direct control and low voltage hoist:
 A : 500 / 1000 kg MIN. 411 mm - 2000 kg MIN. 478 mm
 B : 500 / 1000 kg MIN. 469 mm - 2000 kg MIN. 542 mm
 C : 500 / 1000 kg 194 mm - 2000 kg 216 mm
 D : 500 / 1000 kg 120 mm - 2000 kg 98 mm

Your Prollyft 1000 kg hoist can easily be converted into a 2000 kg hoist by using the PLS-13-002 upgrade set.

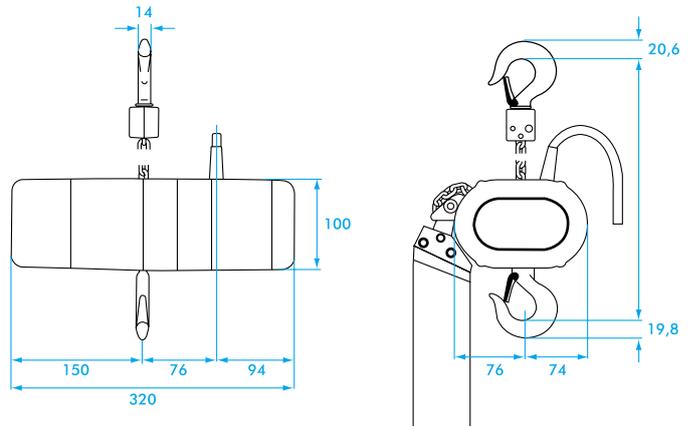
STRONG POINTS:

- Compact measurements & symmetrical design
- Lightweight housing 35 kg
- Powder coated sturdy housing
- Five pocket load wheel for smooth operation
- Multiple disk brake for reliable operation
- All forged and machined parts; stronger, more durable and with higher tolerances
- All steel, accurate and robust limit switches
- Internal one-piece metal chain guide
- Oil based gear box, very low noise level (68dB)
- Magnetic plug in gearbox, for easy detection of excessive wear
- Easy repair and service access
- Grade 80 chain, complies to FEM classification 2m
- 300 starts per hour
- Easy and secure mounting of chain bag

Technical specifications for direct and low voltage hoist			
Load capacity	500 kg	1000 kg	2000 kg
lifting speed 50Hz standard m/min	4	4	2
Operating voltage	400v-3P-50Hz/ 230v-3p-60Hz	400v-3P-50Hz/ 230v-3p-60Hz	400v-3P-50Hz/ 230v-3p-60Hz
Protection class	IP 54*	IP 54*	IP 54*
Motor power at 50Hz	0,75 kW	0,75 kW	0,75 kW
Power consumption at operation	1,9amp	1,9amp	1,9amp
FEM CLASS	2m	2m	2m
FEM Duty factor	50%	50%	50%
Starts per hour	300	300	300
Noice level	68 dB	68 dB	68 dB
Load wheel	5 pocket	5 pocket	5 pocket
Load chain EN-818-7	7,1 x 20,5 mm	7,1 x 20,5 mm	7,1 x 20,5 mm
Falls of chain	1	1	2
Weight of chain per meter lift	1,1 kg	1,1 kg	2,2 kg
Weight of body	35 kg	35 Kg	37 kg
Type of control	direct	direct	direct
Type of connector	CEE 16A-4p	CEE 16A-4p	CEE 16A-4p
Low voltage control	115v	115v	115v
Suspension with swivelhook	standard	standard	standard

* IP 55 available as option

PROLYFT 250 KG



All measurements are in mm.

Technical specifications Prolyft PLE 10

	PLE-10-001	PLE-20-001
Load capacity	250 kg	226 kg
lifting speed 50Hz standard m/min	4	3
Operating voltage	400v-3P-50Hz/ 460v-3p-60Hz	220v-1P-50Hz/ 110v-1P-50Hz
Single phase operation	n/a	yes
Protection class	IP 54*	IP 54*
Motor power at 50Hz	0,16 kW	0,16 kW
Power consumption at operation	0,7amp	0,7amp
FEM CLASS	1Am	1Am
FEM Duty factor	50%	50%
Starts per hour	300	300
Noise level	55 dB	55 dB
Load wheel	10 pocket	10 pocket
Load chain EN 818-7	3,9 x 11,9	3,9 x 11,9
Falls of chain	1	1
Weight of chain per meter lift	0,34 kg	0,34 kg
Weight of body	11 kg	11 kg
Type of control	direct	low voltage
Type of connector	CEE 16A-4p	CEE 16A-4p
Low voltage control	48v/115v	48v/115v
Suspension with swivelhook	n/a	n/a

* IP 55 available as option

STRONG POINTS:

- Compact measurements (fits into H30V truss)
- Symmetrical design
- Lightweight housing
- Durable black coating on housing
- Power outlet on top side
- 10 pocket chain wheel for smooth and silent operation
- Closed, non adjustable electrical brake for reliable
- All machined parts, are stronger and more durable than powder pressed parts
- Internal one-piece guide
- Grade 80 chain
- 300 starts per hour
- Safe and Easy mounting of chain bag

STANDARD FEATURES 250 KG HOIST:

- Direct control
- CEE 16A-4p plug and cable with strain relief
- Multiple voltage motor
- Chain bag for 22m chain
- Jam free chain guide
- Internal, sealed clutch
- Standard swivel hook on lift chain
- Zinc plated load chain
- 10 pocket load wheel

OPTIONS:

- Low voltage control (115/48V)
- Single phase version
- Double brake

CONTROLLERS



PLE-30-010

1-WAY CONTROL, PLE-30-010 FOR DIRECT CONTROL PLE-40-010 FOR LOW VOLTAGE CONTROL

incl. high voltage contactors and emergency stop button, 1 x CEE 16A-5p plug and power cable and 1 x CEE 16A-4p plug and power cable.



PLE-30-020

2-WAY CONTROL, PLE-30-020 FOR DIRECT CONTROL PLE-40-020 FOR LOW VOLTAGE CONTROL

incl. high voltage contactors and emergency stop button, 1 x CEE 16A-5p plug and power cable and 2 x CEE 16A-4p plug and power cable.



PLE-30-043
Remote

REMOTE CONTROL PLE-30-043

Remote control for basic and modular range controllers, incl. 10 m. extension cable.

TOP CLASS CONTROLS, COMPETITIVELY PRICED

Polyte holds a range of top class but affordable hoists controllers. This range of controllers offer safe and reliable performance in the roughest circumstances. LED indicators guarantee visual control when needed, reduced size makes for easy handling. These controllers are available at very sharp rates.

MULTI CHANNEL CONTROLLERS

The Polyft controllers are developed for the control of the PLE-series chain hoists. The controllers are available in direct or low voltage control version and in standard 4,8 or 12 channel units in a 19" rack housing. The controllers allow you to operate the hoists individually or simultaneously with one single run button. For larger applications, the controllers can be interconnected to serve a system up to 64 channels. All pre-selected hoists are activated by one single run button.

BASIC RANGE

All Polyft control units are prepared for SOCAPEX connector mounting on the back side.



4-WAY CONTROLLER BASIC PLE 30-044 DIRECT CONTROL (400-415V-3PH-50HZ) PLE 40-043 LOW VOLTAGE CONTROL (400-415V-3PH-50HZ)

- Pre-selection facility with LED indication
- Output: 1 x Harting 16p connector for hoist connection
- Input power: 100 cm power cable with 1 x CEE 32A-5p with phase reverse plug
- Link input/output with 4p. Hirschmann connector
- Short circuit protection for power and control
- Emergency stop button
- 19"3U rack housing
- All A-class components



8-WAY CONTROLLER BASIC PLE 30-083 DIRECT CONTROL (400-415V-3PH-50HZ) PLE 40-083 LOW VOLTAGE CONTROL (400-415V-3PH-50HZ)

- Pre selection facility with LED indication
- Output: 2 x Harting 16p connector for hoist connection
- Input power: 100 cm power cable with 1 x CEE 32A-5p with phase reverse plug
- Link input/output with Neutrik Powercon connector
- Short circuit protection for power and control
- Emergency stop button
- 19"3U rack housing
- All A-class components

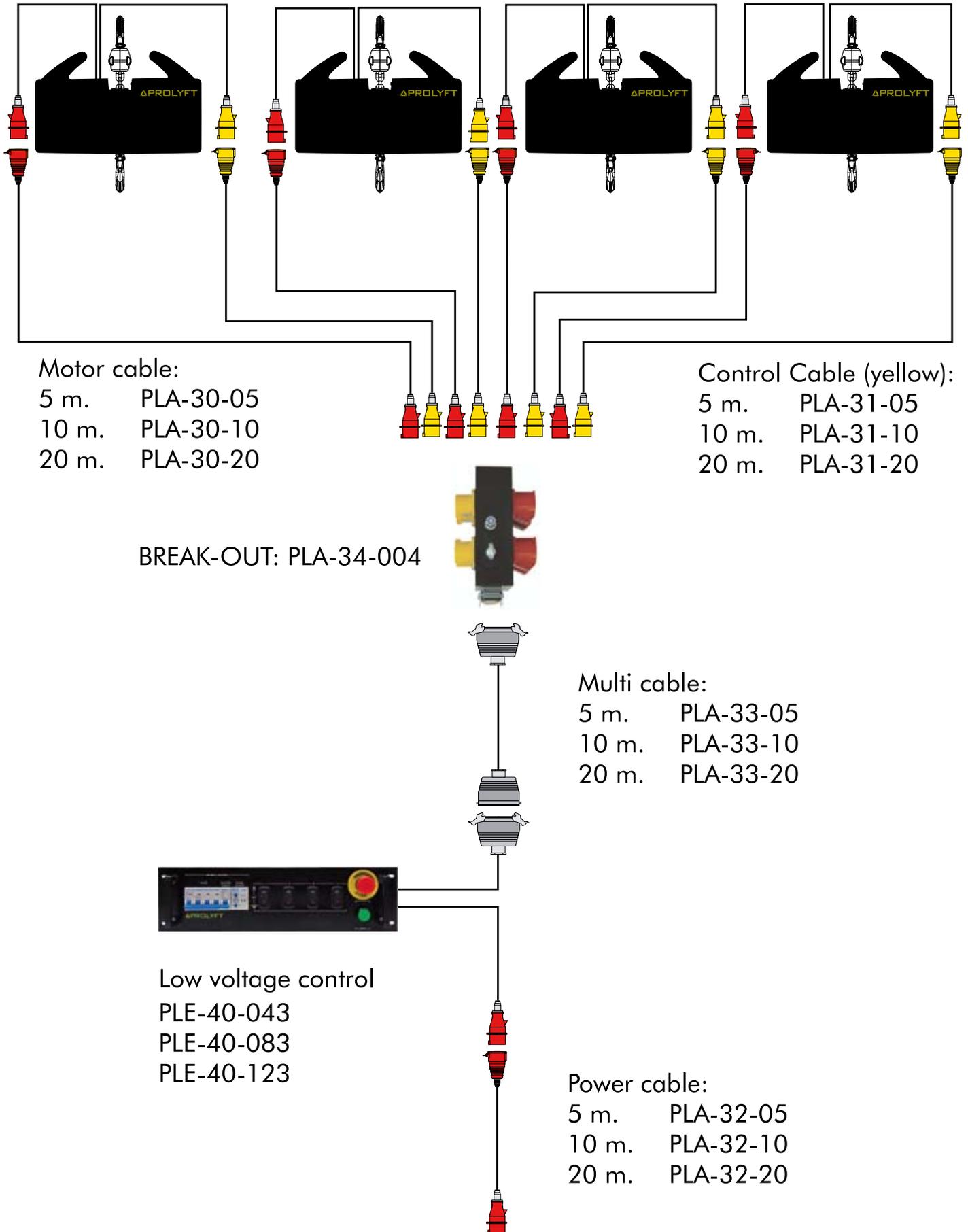


12-WAY CONTROLLER BASIC PLE 30-123 DIRECT CONTROL (400-415V-3PH-50HZ) PLE 40-123 LOW VOLTAGE CONTROL (400-415V-3PH-50HZ)

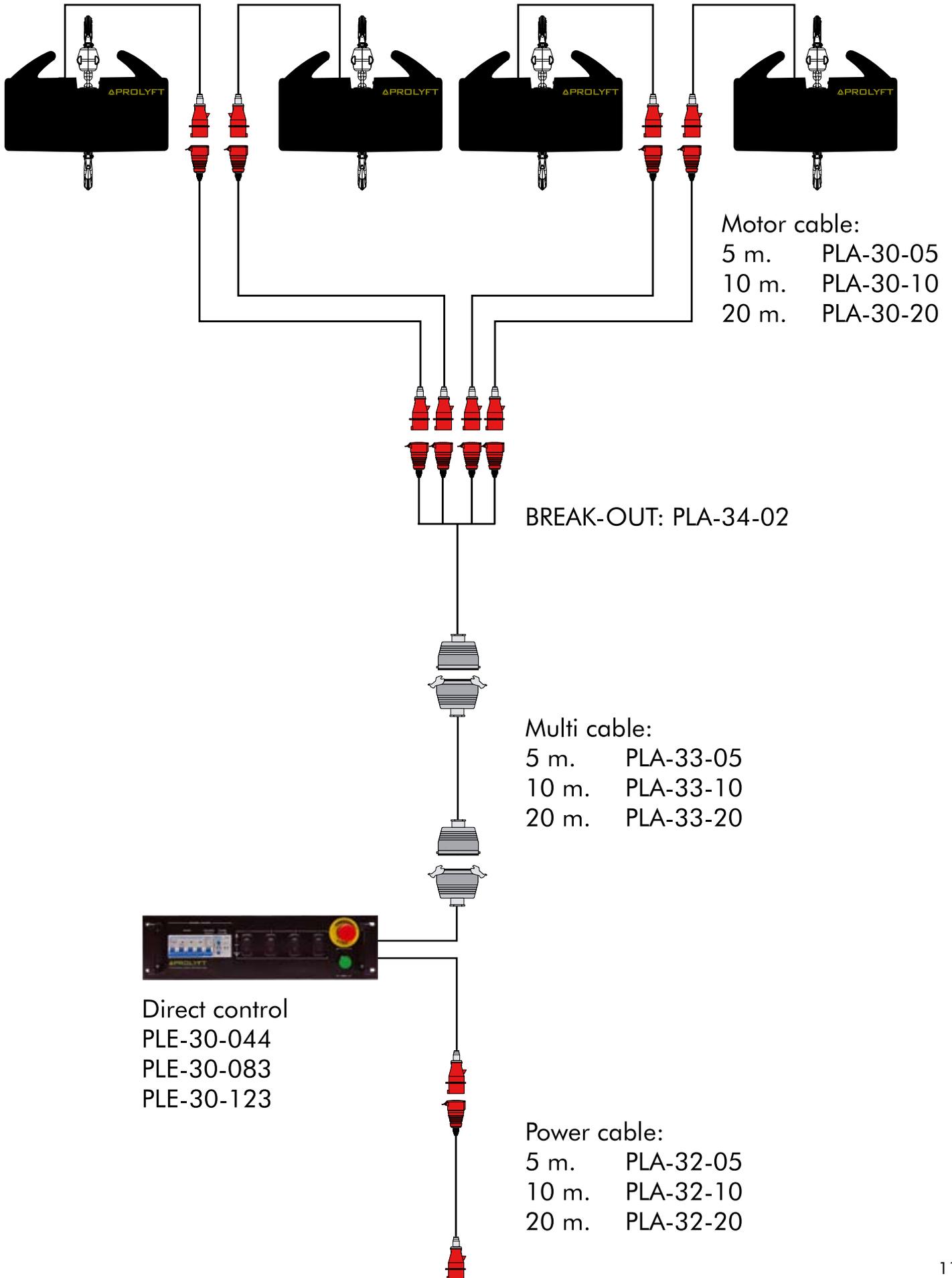
- Pre-selection facility with LED indication
- Output: 3 x Harting 16p connector for hoist connection
- Input power: 100 cm power cable with 1 x CEE 32A-5p with phase reverse plug
- Link input/output with 4p. Hirschmann connector
- Short circuit protection for power and control
- Emergency stop button
- 19"4U rack housing
- All A-class components

More control options, incl. computerized hoist controls available on request.
Please contact cs@polyte.com for additional information.

LOW VOLTAGE CONTROL



DIRECT VOLTAGE CONTROL



ACCESSORIES



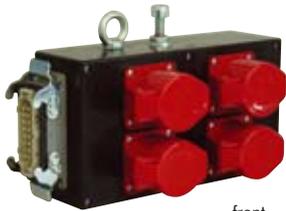
PLA-32-05/10/20
Mains Power cable
32A-5p, 5-10-20 metre



PLA-30-05/10/20
Motor power cable
16A-4p, 5-10-20 metre



PLA-31-05/10/20
Low voltage motor control cable,
115V-4p, 5-10-20 metre



front



back side

PLA-34-04
Break-out Harting 16p. connector male 4x 16A-4p female
and 4 x 115V-4p male, for low voltage control



PLA-33-05/10/20
Multi cable 16p connector, 5-10-20 metre



PLA-34-02
Break-out Harting 16p. connector male
4x 16A-4p female, for direct control



PLA-35-001
link cable, length 1m for controller



PLA-10-004
Chain bag for a 250 kg hoist,
max. 22m chain length



PLA-10-007
Chain bag for a 250 kg hoist,
max. 40m chain length

PLA-10-001
Chain bag for a 500, 1000 or
2000 kg hoist, max. 30m
chain length

PLA-10-009
Chain bag for 500, 1000 or
2000 kg hoist, max. 65m
chain length



PLA-40-001
Flight case for 2 x 250 kg hoist



PLA-40-012
Flight case for 1 x 500, 1000 or 2000 kg
direct control hoist



PLA-40-010
Flight case for 1 x 500, 1000 or 2000 kg
low voltage control hoist

OPTIONS / SPARE PARTS



PLA-50-003
Rain cover for 500, 1000, 2000 kg hoist



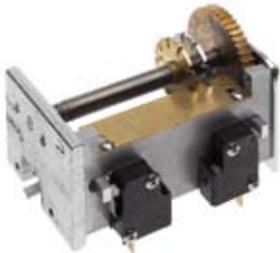
PLA-50-007
Rain cover for 2000 kg hoist



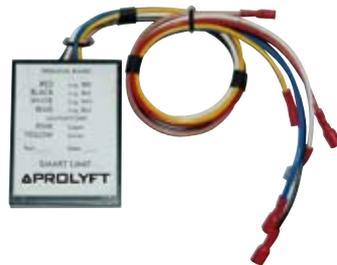
PLA-55-004
Double brake Kit for 500, 1000, 2000 kg hoist.
For assembly instructions we refer to the manual.
Also available for 250 kg hoist.



PLA-56-005
Lug. Fixed suspension point for 500, 1000, 2000 kg hoist, cross mounted



PLA-55-016
Limit switch for 500, 1000, 2000 kg hoist



PLA-55-025
Smart limit. Converts a low voltage hoist into a direct controlled hoists with limit switches



PLS-13-002
Upgrade set. To upgrade your 500 kg hoist to a 1000 kg hoist or a 1000 kg to a 2000 kg hoist by double reefing the chain

PLS-3JG20S
Standard swivel upper hook



PLA-10-006
Quick link to mount chain bag to bracket, 3,5 mm for 250 kg hoist



PLA-10-008
Quick link to mount chain bag to bracket, 6 mm for 500, 1000 and 2000 kg hoist



PLS-75JG6K
Chain stop kit for 500/1000/2000 kg hoist, to mount on dead end of chain



PLS-20428K
Chain stop kit for 250 kg hoist

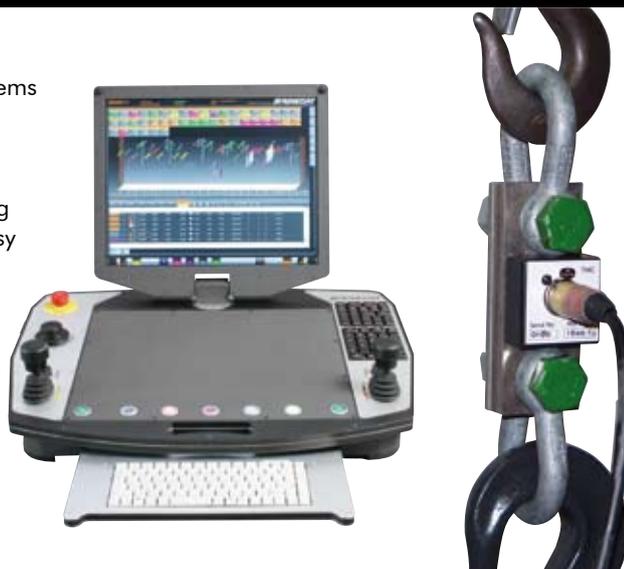
RIGGING HARDWARE

LOAD CELL SYSTEM

Prollyft offers high quality and accurate load monitoring systems on demand. Load monitoring provides additional safety for complex rigging grids, moving loads or roof systems.

There are three main elements in each system: the load cell (combined with a shackle), the power supply and the viewing and programming software. Each item is designed to be easy and intuitive to use while still being robust and reliable.

Please contact our customers service department for more details.



SAFETY FIRST

Buy your rigging hardware with the assurance of top quality, tested and certified products. Like you have come to expect from Prolyte, all products comply with the latest regulations and standards. Prolyte uses only the best materials available in the market that will guarantee safe and flawless performance. Prolyte offers a variety of safe and user-friendly rigging materials to sling trusses, make bridles or provide guy wires where needed. Each piece of equipment offers just that bit of extra that makes it riggers proof.

RIGGING HARDWARE

Prolyte supplies a wide range of standard rigging hardware, used in daily practice. From steel wire ropes, soft steels and shackles to chain clutches, ratchet straps and round slings. All steel wire ropes are available in 1 or 2 tonne versions. Prolyte also provides sleeved or black steel wire ropes.

All steel wire ropes are colour coded and have a turn back loop with tapered ending and inspection eye. Furthermore all steels are marked with the Prolyte logo, a certification number and WLL.



SOFTSTEELS

The softsteel® has a normal outside webbing for soft slings, but instead of the polyamide core, the softsteel® has a core made of steel wires. The steel wires within the softsteel® are as flexible as a normal soft sling, but have a much better fire resistance.

The softsteel® can be used in circumstances where the normal soft slings are not allowed.

The softsteel® is available with a WLL of 2000 kg.

The outside webbing is black, including a grey identification label and a cleverly hidden inspection window to inspect the steel wires within the softsteel®.

The softsteel® applies to all CE regulations and are BGV C1 approved.



RIGGING HARDWARE



Steel wire rope sleeved
 SW-10-L050-EE/C WLL 1000kg, 10 mm.
 SW-14-L050-EE/C WLL 2000kg, 10 mm.
 Available in lengths from L050-L1000, colour coded.



Steel wire rope black
 SW-10-L050-EE/B WLL 1000kg, 10 mm.
 Available in lengths from L050-L1000, colour coded.



Steel wire rope
 SW-10-L050-EE WLL 1000kg, 10 mm.
 SW-14-L050-EE WLL 2000kg, 14 mm.
 Available in lengths from L050-L1000, colour coded.



RS-1T-100 / RS-2T-100 / RS-3T-100
 roundsling L100, WLL 1000 kg, 2000 kg, 3000 kg, black
 Available in different lengths.



SS-2T-100
 soft steel L100, WLL 2000 kg, black
 Available in the following lengths: L050, L100, L200, L300



Shackle pin type
 RI-SH1T-EB WLL 1 ton - RI-SH2T-EB WLL 2 ton
 RI-SH3,2T-EB WLL 3,25 ton - RI-SH4,7T-EB WLL 4,7 ton



RI-O-RING-3T
 Top ring WLL 3 ton



BM-M12-EB
 Lifting eye M12 thread



Shackle bolt type
 RI-SH1T WLL 1 ton - RI-SH2T WLL 2 ton
 RI-SH3,2T WLL 3,25 ton - RI-SH4,7T WLL 4,7 ton



CH-07-150CHH
 Shortening chain length 1,5m, WLL 1,5 ton



CH-07-200HCSH
 Shortening chain with spanner length 2m, WLL 1,5 ton



CH-10-200CRH
 Shortening chain length 2m, WLL 3 ton



For a list of Prolyft Service Points please go to www.prolyte.com



PROLYTE PRODUCTS

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