

A worker in a factory is operating a Demag DC chain hoist. The hoist is suspended from a ceiling beam and is lifting a large roll of corrugated metal. The worker is wearing a black t-shirt, glasses, and work gloves. The background shows a large industrial facility with various beams and equipment. The hoist has a blue motor and a white control unit. The ceiling beams are labeled "DEMAG... KBK 250 kg".

**Uncompromisingly
cost-effective**

The original

Demag DC chain hoists

DEMAG

Demag DC chain hoists

High productivity, efficiency, safety and reliability.

Demag DC chain hoists meet all the requirements of state-of-the-art hoist units, such as high productivity, efficiency, safety and reliability, and give you the certainty of a secure long-term investment. We develop and produce materials handling solutions for all industries and companies of all sizes, from small workshops to major industrial corporations.

ALL INCLUSIVE:

FULLY FEATURED WITH NO NEED FOR EXTRAS

All over the world, a hundred thousand customers have opted for a Demag DC chain hoist, since many features are already integrated as standard that have to be ordered and bought as extras elsewhere. Besides their attractive price, you can also benefit from a particularly long service life – with the Demag extra operating hours.

ALWAYS THE RIGHT PRODUCT

The large number of variants in our DC product range offer the right solution for every application. Loads can be lifted easily, efficiently and, above all, safely with the right control method to suit your needs.

DC-Com units are designed for normal application requirements, at an attractive price and available ex stock. DC-Pro units boast a longer service life and higher lifting speeds. DC-Pro units can be adapted to meet special needs and can provide solutions for many specific requirements. Both chain hoists are Demag brand quality products.

CERTIFIED

DC chain hoists satisfy the relevant provisions of

- Machinery Directive 2006/42/EC
- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC

Electromagnetic compatibility is ensured for interference immunity and interference emissions. Models that satisfy cCSAus regulations (Canada/USA) are available as an option.

SAFETY-RELATED FUNCTIONS

You can benefit from improved safety thanks to rugged and proven electronic controls in comparison with conventional controls. Performance Level c and Category 2 to EN ISO 13849-1 are satisfied as minimum requirements for the safety-related functions specified in DIN EN 14492-2.

DC: YOUR BENEFITS

- Individual customer solutions from our comprehensive product range
- Versatile and fully equipped as standard
- Proven technology
- Tough and reliable
- High level of safety and reliability and long service life
- Simple commissioning
- Ergonomic operation
- Minimum maintenance requirement and easy to service

The right solution for every application: For this application in combination with our modular K&K light crane system for transporting bulk loads.

**Our solution for
your application**

VERSATILE SOLUTIONS FOR LOADS UP TO 5 TONS

42351-6

The industry benchmark

FULLY EQUIPPED AS STANDARD

Meeting requirements at the highest level:

The DC chain hoist fulfils the same demanding requirements as its predecessors – and continues to set the industry benchmark. The DC range already includes many extras as standard, which adds many benefits to your investment:

- More operating hours thanks to higher FEM classification
- 24 V contactor control
- Operating limit switches (upper/lower)
- Installation transparency thanks to integrated operating time counter
- Height-adjustable pendant controller
- Plug-and-socket cable connectors
- Gearbox and slipping clutch maintenance-free for up to 10 years
- Brake maintenance-free for up to 10 years (up to 5 years for DC 10–25)
- Two speeds as standard
- Easy to service: Display for operating statuses

SAFE. BY DEMAG.

- Load is securely held in any operating situation and cannot drop while the hoist is at standstill, since the brake is arranged before the slipping clutch in the load-bearing arrangement
- Lasting safety thanks to monitored speeds in the slipping clutch, hoist motor and brake
- Low-wearing brake
- Automatic braking if the control system fails
- Up to 1,000 kg only 1/1 reeving: improved safety and ergonomics, reduced chain wear

YOUR SERVICE LIFE BENEFIT

- Demag “+” added to FEM classification
- Gearbox service life increased by 20%
- All parts generously specified

Height adjustment of the control cable



39045

Pivoting service cover



39044-2

Chain drive that is easy to assemble



42667

Display for elapsed operating time counter and operating statuses



42367

RELIABLE DEMAG QUALITY

- High-strength, robust cylindrical-rotor motor with fan and separate magnet brake
- Reliable operation from –20 °C to +45 °C without any reduction in the duty factor
- Operation also possible up to 60 °C and more
- Excellent surface protection
- IP 55 enclosure ensures high level of protection against moisture and dust penetration

SIMPLE COMMISSIONING

- Plug & Lift and Plug & Drive – plug-in electric connections
- Control cable length or position of pendant controller can be adjusted without the need for any wiring
- Folding suspension bracket ensures easy attachment to the trolley
- Infinitely variable adjustment of flange width

OPTIMUM ERGONOMICS

- Ergonomic DSC and DSE pendant controllers with gentle actuation force
- Demag radio control concept with DRC or DRC-MJ controllers for more freedom of movement

SERVICE-FRIENDLY

- Simple and rapid maintenance and repair of individual components thanks to the modular DC design – cuts any downtime to a minimum
- Elapsed operating time counter, status and error message display as standard
- Diagnostics interface (IDAPSY): read out and manage specific data
- Service cover: everything in one place – rapid access for commissioning and service
- Reduced downtimes as the entire chain drive can be replaced without dismantling motor or gearbox parts



42361

DC-Corr



42362

DC-C-Pro



42364

DCMS



42363

DCS



42366-1

DCBS



39904-11

Up to 180 m hook path for the maintenance of wind turbines



4056-5

Design suitable for the foodstuffs industry



39765-1

Reliability at all temperatures

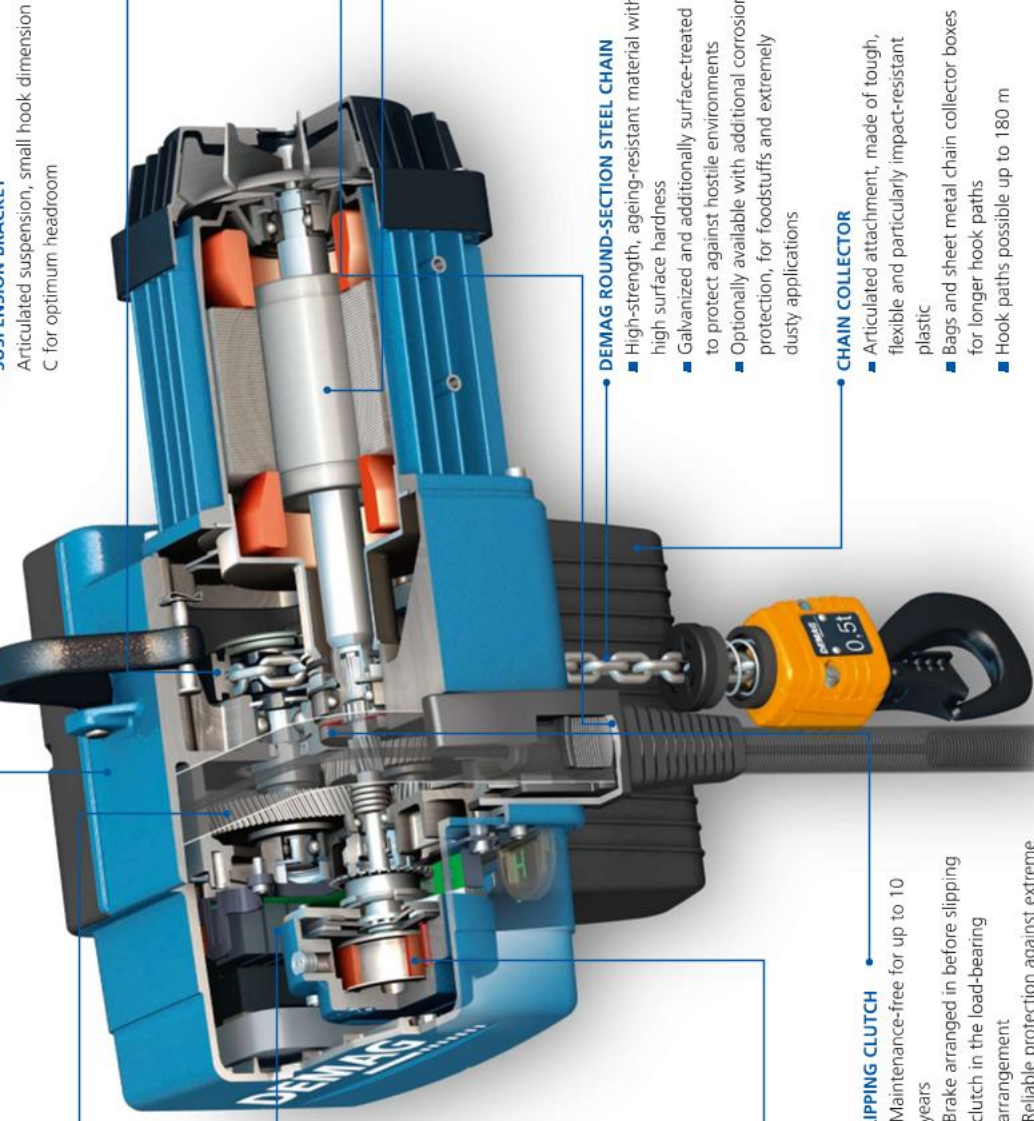
A solution for every application

Your application is decisive – whether for maintenance hoist units that are rarely used or three-shift operation. We have the right chain hoist to meet your needs.

You can also rely on our experience wherever operating conditions are tough and the working environment is harsh. These are just some of the areas where you can rely on our DC chain hoists:

- Galvanizing plants
- Pickling plants
- Foundries
- Electro-plating shops
- High temperature applications
- Foodstuffs applications
- Cleanroom areas
- Transporting molten masses
- Maintenance of wind turbine installations, both onshore and offshore (enclosed)

Details that matter



SUSPENSION BRACKET
Articulated suspension, small hook dimension C for optimum headroom

HOUSING

- Tough and weight-saving aluminium housing of compact and modern industrial design
- UV-resistant powder-coated finish, insusceptible to knocks and scratches

CHAIN DRIVE

- The chain drive consists of highly wear-resistant materials for a long service life, suitable for foundry applications as standard
- Quick and easy replacement of the entire chain drive without the need to remove the motor or housing parts

HEIGHT-ADJUSTABLE PENDANT CONTROLLER

- The length of the control cable can be infinitely varied for a hook path range of 2–5 m, 5–8 m and 8–11 m
- The length of control cable that is not needed can be stored under the service cover
- The control system and control cable are rated for electric travel applications in 3 axes

HOIST MOTOR

- Robust and durable high-performance motor with large safety reserves even at high ambient temperatures and in prolonged operation
- Two lifting speeds (F4)
- 60% cyclic duty factor, 360 starts/hour
- Insulation class F
- With thermal protection, depending on design

REEVING

- Load capacity up to 1,000 kg with only 1/1 reeving

Overview of components

GEARBOX

- Maintenance-free for up to 10 years
- In practical terms, Demag “+” means the service life is extended by approx. 20% in comparison with the conventional FEM Group of Mechanisms classification (e.g.: FEM 2m+ with 1,900 hours of service at full load)
- Reduced operating noise and smooth operation thanks to helical gearing in all gearbox stages

CONTROLS

- 24 V contactor control
- Elapsed operating time counter
- Operating limit switches (upper/lower for DC-Pro)
- DC 16/25 sizes fitted with geared limit switches as operating limit switches with four contacts for fast-to-slow and final cut-off

Alternatively

- Infinitely variable inverter control
- Conventional direct and contactor controls

BRAKE

- Maintenance-free for up to 10 years (up to 5 years for DC-Pro size 10–25)
- No brake adjustment required
- Short and gentle run-on paths
- The brake is impervious to poor weather and operating conditions (enclosure features double encapsulation)

SLIPPING CLUTCH

- Maintenance-free for up to 10 years
- Brake arranged in before slipping clutch in the load-bearing arrangement
- Reliable protection against extreme overloads
- Harmful continuous slipping eliminated thanks to speed monitoring

DEMAG ROUND-SECTION STEEL CHAIN

- High-strength, ageing-resistant material with high surface hardness
- Galvanized and additionally surface-treated to protect against hostile environments
- Optionally available with additional corrosion protection, for foodstuffs and extremely dusty applications

CHAIN COLLECTOR

- Articulated attachment, made of tough, plastic
- Bags and sheet metal chain collector boxes for longer hook paths
- Hook paths possible up to 180 m

Demag DCBS chain hoist with balancer function

Intuitive control. Precise positioning.



42207-1

DCBS-PRO: FEATURES

- Load capacity up to 250 kg
- Lifting and lowering by manual force on the controller
- Direct control of the load
- All benefits of the DCS-Pro chain hoist range

GRIP CONTROL

- The load can be controlled very easily with the D-Grip Servo operating handle.

LOAD CONTROL

- By switching over to "load positioning mode", the operator can grasp and guide the load directly with light pressure.

LOAD PICK-UP MODE

- Load handling attachments can be lifted and pre-tensioned
- Load can be removed without dropping or sudden upward pull
- Protection for jigs and machinery: the balancer only lifts until a preset force is reached.

Using the balancer function of our Demag DCBS-Pro chain hoist, you can lift and position loads weighing up to 250 kg with ease and completely intuitively. The special balancer function makes light work of handling loads and improves workplace ergonomics even further. The innovative solution for your load handling needs.

INTUITIVE LOAD CONTROL

The sensors integrated in the D-Grip Servo utilize the tare function, which allows the load to be handled with minimum force and direct fingertip control.

LOAD PICK-UP MODE

Load pick-up mode supports the operator when picking up loads. The balancer can be configured to lift the load until a pre-defined force is reached. The configured value can be re-programmed at any time. The balancer pre-tensions and raises the load handling attachment. The load can be removed without dropping or sudden upward pull.

PRECISE LOAD POSITIONING

As the operator, you can position the load even more precisely by direct control of the load.

You can control the load direct with your fingertips and position the load much more efficiently by eye.

ERGONOMIC MATERIAL HANDLING

Thanks to direct control of the load, the Demag DCBS-Pro chain hoist enables the operator to move the load in a natural posture with ease.

The minimum force required to move the load by hand allows the operator to concentrate on the task at hand and minimizes any distractions when handling the load. Besides the ergonomic benefits, this also improves safety at the workplace.

EXTERNAL LOAD SENSOR

In this version, the sensor is still included in the load-bearing arrangement, but not in the control handle. As a result, the DCBS-Pro can be integrated in custom handling systems, such as lifting columns and manipulators. Keeping the sensor separate from the control handle also has advantages when it comes to safe and precise handling for relatively large lifting heights. The position of the D-Grip Servo control handle can be freely selected and a variety of load handling attachments can be integrated.



42491-1



42259-4-2



4224-18

Demag DCM-Pro Manulift

Ergonomic single-handed load handling

The DCM-Pro Manulift was developed for handling loads quickly and safely with only one hand. It can be universally employed at any workplace.

SINGLE-HANDED CONTROL

The DCM-Pro is based on the lifting unit of the DC-Pro chain hoist and the DSM-C control unit, which is connected to it by a helical cable. Thanks to the control unit, which is rigidly connected to the load handling attachment for right and left-handed operation, the operator only needs one hand to operate the chain hoist and guide the load.

VERSATILE ADAPTABILITY TO ANY TASK

A variety of proven load handling attachments facilitate flexible adaptation of the chain hoist to meet your needs. They range from normal load hooks and various pantograph-type tongs to parallel gripper systems, for example for KLT containers used in the automotive industry.

ERGONOMIC OPERATION

Depending on the height of the workplace, DCM-Pro Manulift provides convenient control with a horizontal handle to guide the load. The DCRS-Pro rocker switch enables loads to be handled with a vertical control unit.

DCM-PRO: YOUR BENEFITS

- Convenient operation and load control with one hand
- For all Manulift load handling attachments or specially developed load handling attachments
- Simple replacement thanks to quick-release coupling
- Suitable for right-hand and left-hand operation



Alternatively with DCRS-Pro rocker switch

Option also for load capacities up to 500 kg.



Quick-release coupling as an interface

Quick-release coupling as an interface

The quick-release coupling enables a wide variety of load handling attachments to be changed with ease. All Manulift load handling attachments are fitted with a connecting pin with a swivel lock, which snaps into the quick-release coupling. The coupling pin can be disconnected by lifting the release sleeve.



Various load handling attachments

PGS parallel gripper system

Firmly holding loads up to 125 kg

PGS BOX GRIPPERS

The narrow design and short opening path of these grippers make it possible to pick up and deposit goods safely and easily, even in restricted spaces. The variable gripping range makes it possible to transport both the actual goods as well as a packed unit using the same gripper.



PGS SHAFT GRIPPERS

Various shaft grippers are available which can be adapted to different shaft types and applications by changing the gripper jaws. When fitted with a shaft support, they can be used to pick up shafts with various diameters or an unknown centre of gravity. This significantly improves the safety of handling tasks that, until now, have always involved a certain risk.



PGS CONTAINER GRIPPERS

The various container grippers can be supplied for fixed or adjustable container widths. They can be easily adjusted to the relevant container size.

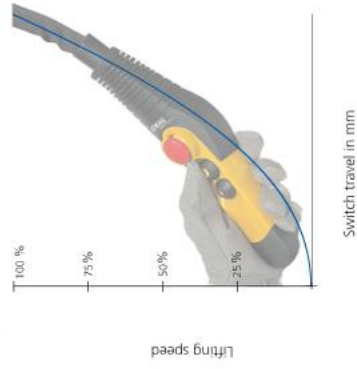




Demag DCS-Pro Variable speeds

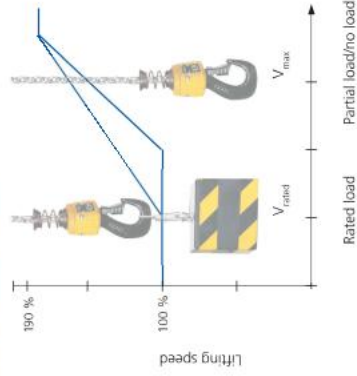
Demag DCS-Pro chain hoists offer truly variable lifting speeds. The speed of the lifting motion increases when more pressure is applied to the button on the pendant controller.

CHARACTERISTIC CURVE FOR SWITCHING ELEMENTS ON THE DCS PENDANT CONTROLLER



Just like the accelerator pedal of a car, you can carefully increase or reduce the variable lifting and lowering speed. Variable speeds, made by Demag.

PROHUB: INCREASED LIFTING SPEEDS IN THE PARTIAL LOAD RANGE



Fast and precise: variable speed control

Demag chain hoists with variable speed control offer outstanding benefits: valuable and sensitive parts can be moved and positioned more gently and carefully. Assembly and joining processes can be controlled with even greater precision with creep lifting speeds from 0.04 m/min. And you can achieve almost double the rated speed in the partial load range thanks to the ProHub function (see diagram). The entire control system and frequency inverter are integrated beneath the electric equipment cover as a compact modular sub-assembly.

Variable-speed Demag DCS chain hoists can guarantee you high efficiency and safety in your processes and even more precision.

SAFE AND RELIABLE VARIABLE-SPEED OPERATION WITH ONE HAND

- Demag DCS-Pro Manulift
- Demag DCRS-Pro rocker switch

Operators have even more convenient workplace equipment for precise load handling, depending on the application, when used in combination with variable inverter control for DCS-Pro Manulift and DCRS-Pro rocker switch.

- In comparison with the DC-Pro with two lifting speeds, variable-speed Demag DCS-Pro chain hoists offer you the following benefits:
- Variable speed control over the entire load spectrum
 - Creep lifting speed from 0.04 m/min
 - Gentle starting and precise positioning thanks to particularly fine control
 - ProHub: up to 90% higher nominal speed for partial load operations
 - Automatic switchover to slow lifting speed before the limit positions are reached
 - Sensitive control and optimum controller ergonomics
 - Acceleration and braking ramps for low load vibration
 - If required, parameters for the lifting speed, acceleration and braking ramp can be easily modified via the controller
 - Increased safety thanks to motor temperature monitoring
 - E 11 to E 34 travel drives for variable cross-travel speeds in connection with DCS

Many options to meet your individual needs

Select additional options from our comprehensive chain hoist product range to match your application needs, such as:



42570-1
Tristate control (DC-Com & DC-Pro)



42666
Variable control with integrated inverter



42570-3
Direct control (DC-ProDC)



42570-4
Contactor control (DC-ProCC)



42570-5
Variable control with customer-specific inverter (DC-ProFC)



42971
Geared limit switch with up to 8 contacts for cut-off at predefined positions



42974
External connector for the power supply



41435
External connector for the control cable



41432
Cross-type limit switches for travel motion cut-off



39496-1

39498-1
Suspensions: Suspension hook or chain hoist parallel to runway



41436

41436
Safety hook, stainless steel hook

Conventional direct controls or contactor controls can be used as an alternative to electronic control. The DC-FC variant can be supplied for control by means of an external frequency inverter. Some function characteristics of the electric controls do not apply here.

Demag radio controls

Wireless freedom of movement

Wherever radio control systems are used to control cranes and hoists, you can benefit from much greater flexibility than with wire-connected controls. Improved ergonomics, greater safety thanks to the variable distance to the load and, ultimately, higher productivity are among the outstanding benefits offered by radio control systems.

DRC-DC RADIO CONTROL

The DRC-DC system has been specially developed for pole-changing DC chain hoists with electronic control. Up to two (DRC-DC 6) or three motion axes (DRC-DC 10) can be controlled with the two hand-held transmitters.

The small receiver can be used in various installation configurations – depending on the size of the chain hoist. Pre-assembled cables facilitate fast and easy connection.



DRC-DC 6 hand-held transmitter



DRC-DC 10 hand-held transmitter



DRC-DC 10 radio control system for convenient control at a safe distance



42350-80

DRC-10 radio control system

DRC-MP RADIO CONTROL

The Demag DRC-MP multi-purpose radio control system can be used as an alternative to the DRC-DC system for the following applications:

- For variable control of DCS-Pro with up to three motion axes
- For installations with two crabs, switchover via F1 or F2 function keys
- For use of up to three digital feedback channels to display status information (select crab 1/2) or warning information

With the DRC-MP radio control system, you can choose between the following variable-speed transmitters: DRC-DC 10 pushbutton transmitter, DRC-MJ mini-joystick transmitter and the variable-speed DRC-J joystick transmitter. Useful accessories, such as a carrying strap for the DRC-J or a wall bracket for charging, help to improve your productivity.

42350-79

DRC-MJ mini-joystick transmitter

DRC-DC AND DRC-MP RADIO CONTROL BENEFITS

Strong and robust

- Impact and temperature-resistant housing
- Integrated bumper

Safe and reliable

- Reliable radio transmission thanks to frequency hopping
- Automatic frequency management
- Display section for operating statuses and battery capacity
- Stop function to DIN EN 13849-1 with category 3 Performance Level PL c (DRC-DC), PL d (DRC-MP)

Simple and convenient

- Ergonomic design
- Simple transmitter operation
- High level of availability thanks to fast charging of the transmitter battery or operation with conventional AA Mignon batteries
- Worldwide postal authority approval for operation without any need for registration or operating fees
- Simple wireless hand-held transmitter log-on

Demag pendant controllers

Classic solutions

OUR PENDANT CONTROLLERS: ALWAYS A PERFECT FIT

Pendant controllers precisely interpret the operator's control commands in any situation. They enable fatigue-free operation for right and left-handed operators both with and without gloves. Demag pendant controllers have an optimised ergonomic sloping design for convenient operation. They are extremely robust and well equipped for demanding operation.

CONTROL CABLE: ALWAYS AT THE RIGHT OPERATING HEIGHT

An innovative solution for optimum ergonomic adjustment of the length of the control cable or position of the pendant controller.



39045

PROPERTIES

- High-quality plastic which is highly resistant to impacts
- Protection against bending and impacts
- IP 65 enclosure: effective protection against dust and moisture
- 2-stage or stepless switching elements
- DSK and DST pendant controllers also for conventional controls

PROPERTIES

- Simple adjustment of DSC and DSE pendant controllers to achieve optimum working height for specific needs
- Control cable length can be adjusted by a mechanism without the need for any wiring
- Adjusting mechanism also contains the rugged strain relief arrangement for the control cable
- The control cable is made of a proven and particularly tough material
- Alternatively, a support sleeve or ZTY control cables can be used for special operating conditions



DSC-3

DSC-5

DSC-7

DSE-10

DSK

DST-3

DST-7

DST-9

DST-10

39745-6

40794-1

40791-4

40790-1



41807-11

CHAIN HOISTS FOR MAINTENANCE AT LARGE LIFTING HEIGHTS

For maintenance work or repairs in wind turbines, the required spare parts and equipment have to be lifted into the nacelle as quickly as possible. Demag DC-Wind chain hoists are proven lifting appliances in wind turbine systems:

- Hook paths up to 180 m
- High lifting speeds up to 24 m/min
- Motor for 100% duty factor
- Cold climate applications down to $-40\text{ }^{\circ}\text{C}$ (survive)

HANDLING LOADS ABOVE PEOPLE

Special safety requirements apply for chain hoists that are used in entertainment applications, e.g. in theatres and on stage, at trade fairs and in churches, etc.:

BGV-D8+: For DC chain hoists used for erection work and for holding, but not moving loads above people (German regulation).

BGV-C1: For DC chain hoists – prepared for use according to BGV-C1 – used for holding and moving loads above people (German regulation).

Optional:

- Double brake
- Manual brake release
- Pulse generator

CLIMBING HOISTS, TURNED 180°

Chain hoists turned 180° can be used as climbing hoists for scaffolding, maintenance or erection work.



39329-2

Special solutions

Demag trolleys

Push travel



42319

Click-fit trolley

U/RU PUSH-TRAVEL TROLLEYS

U/RU trolleys are available in four sizes for load capacities up to 1,100 kg (U11), up to 2,200 kg (U22), up to 3,400 kg (U34) or up to 5,600 kg (RU56).

- Flange width ranges up to max. 500 mm
- Infinitely variable flange width adjustment with adjusting rings
- Fast and simple installation
- Smooth travel and low travel resistance
- Travel rollers made of high-strength and wear-resistant Polyamide or spheroidal-graphite cast iron
- Can be used on parallel and sloping flanges
- Long service life and reliable travel thanks to flangeless travel wheels and steel guide rollers
- Minimised girder wear
- Side sections made of die-cast aluminium with high-quality powder-coating
- Integrated drop-stop and lift-off protection



42320

Push-travel trolleys

CF 5 CLICK-FIT PUSH-TRAVEL TROLLEY

Simply clicked onto the girder, curve-negotiating Click-fit trolleys are ready for operation with a load capacity of up to 550 kg.

- Flange widths from 58 to 91 mm
- For curve radius from 800 mm
- Integrated drop-stop and lift-off protection



42283

DC-Com chain hoist with push-travel trolley

CLAMP-FITTED BUFFERS

KPA/KPT clamp-fitted buffers are the ideal solution to limit travel and match DC trolleys. They can be bolted to sloping and parallel I-beam girders quickly and easily.



41837-2

FIXED SUSPENSION

You can also use our DC chain hoists as stationary units to lift and lower your loads. The FS13-200 fixed suspension can be used for loads weighing up to 1,250 kg and for a flange width of 200 mm in your application.

Demag trolleys

Electric travel



42321

Electric travel drive

ELECTRIC TRAVEL DRIVES AND TROLLEYS

EU11, E22, EU34 and EU56 electric travel drives have been specially developed for operation with DC chain hoists.

- Fast and easy installation of the travel drives on U11 to U34 trolleys
- The control system integrated in the travel unit provides for excellent travel characteristics
- Smooth cross-travel starting and braking motions for low-sway load handling
- Speeds and acceleration/braking rates can be modified direct via the controller, if required
- All electric connections are of plug-in design
- Optional travel limit switches
- Compact design



42582

DC-Pro chain hoist with an EU electric-travel trolley on a KBK II profile section

DC-Com chain hoist with an EU electric-travel trolley



42284

TRAVEL DRIVE SPEEDS

- EU11, EU22, EU 34, EU 56 up to 40/10 m/min

ZBF MOTOR TRAVEL SPEEDS

- 12/4, 20/5, 24/6, 40/10 m/min depending on load

POWER SUPPLY

KBK 25 trailing cable can be used as a power supply line to the travelling hoist as well as for optional mobile pendant controllers, together with a separate rail. The DCL-Pro compact conductor line can be used as an alternative power supply arrangement.



42225-15

Crane applications: U11 to U34 and EU56 trolleys can be driven by ZB AC motors for applications with travelling hoists that have direct or conventional contactor controls.

Travelling hoist variants

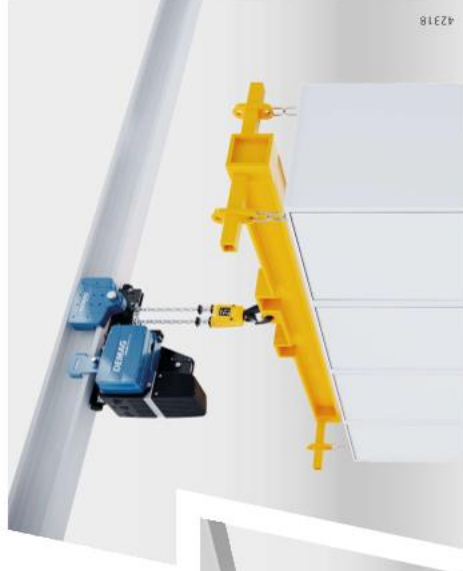
LOW-HEADROOM DESIGN

The particularly compact KDC monorail travelling hoist offers extremely low headroom for optimum utilisation of the hook path. A KLDC BigBag trolley with an extended hook centre distance is the right solution for handling bulky loads with long load bars.



42313-2

KDC low-headroom travelling hoist for restricted space



42318

KDC low-headroom travelling hoist with a load handling attachment on its hook

ARTICULATED TROLLEY FOR CURVED TRACKS

RE/UDDC (standard-headroom) and RE/KDDC (low-headroom) travelling hoists with articulated trolleys are ideally suited for travel on curved tracks made of I-beam girders.

- For curve radii from 800 mm
- Lateral guide rollers for quiet operation and gentle on the runway
- Travel motor mounted on angular gearbox for travel through narrow openings

KLDC low-headroom travelling hoist with extended hook-lead-off



41405-8

EKDDC articulated monorail hoist (low-headroom design)



1284_064

TWO CHAIN LEAD-OFFS – MECHANICALLY SYNCHRONISED

Double chain hoists that have two mechanically synchronised chain lead-offs are particularly suited for handling long materials and for spreader operation. LDC-D or KLDC-D variants can be supplied.

LDC-D units enable you to utilize higher speeds, while KLDC-D units offer benefits with the C dimension.

LDC-D: YOUR BENEFITS

- Suitable for higher speeds
- Longer chain service life thanks to reduced polygon effect since there are no additional chain return sprockets

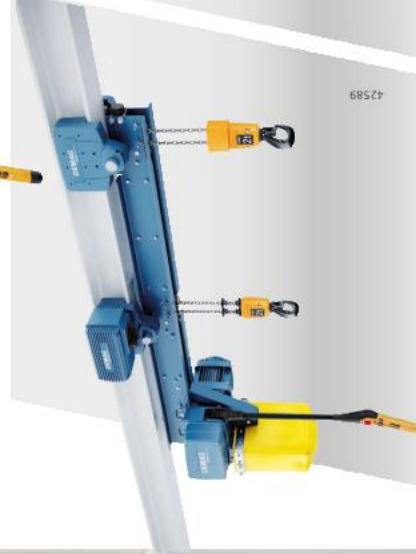
KLDC-D: YOUR BENEFITS

- C-dimension advantage as for low-headroom units



42591

LDC-D double chain hoist with connecting shaft



42599

KLDC-D double chain hoist, low-headroom design, 3/4 run-off position



42592

Demag articulated trolleys

TWO CHAIN LEAD-OFFS – TANDEM OPERATION

Two chain hoists can be used in tandem as an alternative to mechanically synchronised double chain hoists for transporting bulky goods, such as long materials and car bodies, etc.

- Parallel control from one control point
- Tandem control (not synchronised control) for safe operation as a group according to DIN EN 15011
- Individual chain hoists can be controlled by means of a selector switch



4124-19

Tandem control to turn a load

FOUR CHAIN LEAD-OFFS

Our LDC-Q quadro chain hoist with four mechanically synchronised chain lead-offs can be used for the smooth transport of customer-specific load handling attachments or parts that have a large surface area. One chain hoist drives four chain blocks via connecting elements, which ensures that your sensitive loads can be carefully transported with synchronized control.

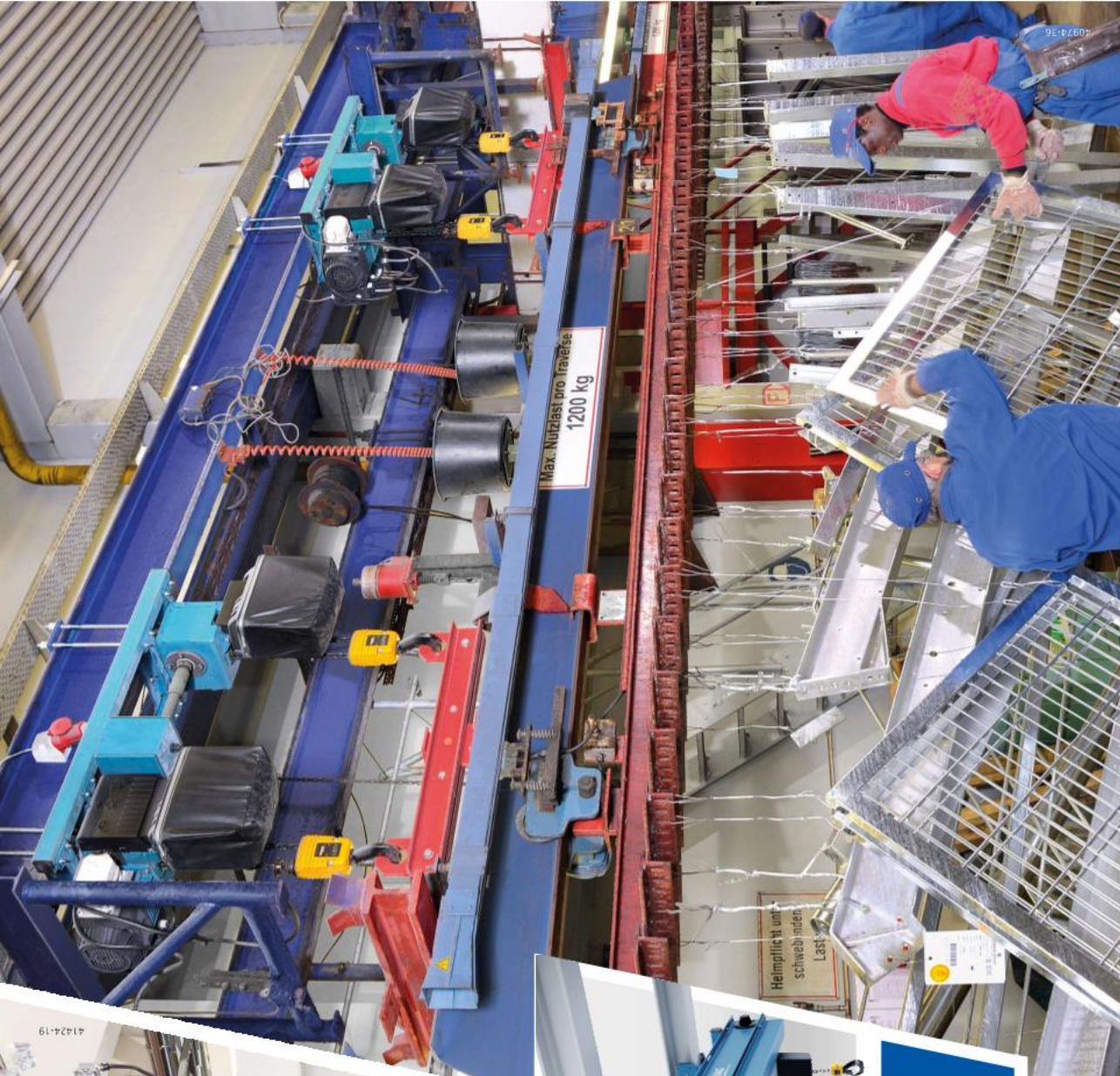
Alternatively, four separate DC chain hoists can also be operated under parallel electric control.



42581

LDC-Q quadro chain hoist

Handling suspended loads above workers in a galvanizing plant according to BGV D8+ with two double chain hoists operating in tandem



OUR CHAIN HOIST BENEFITS AT A GLANCE



Minimum load way



Safety



Long service life



Temperature range



Ergonomics



High-performance motor



Profibus



Service-friendly



Variable speeds



Status display



Slipping clutch monitoring



Low noise level



**One system to meet
all your needs**

Ergonomic operating sequences can be implemented thanks to the very good trolley running characteristics and the low deadweight of the installations. Reduced loads result in lower absenteeism due to illness and greater employee satisfaction.

With more than 50 years of experience with light crane systems, our crane construction kit provides for safe and reliable material flow in virtually all industries. Made of standardised products manufactured in large series, our components offer high operating reliability and a long service life.

KBK MODULAR LIGHT CRANE SYSTEM

- Extremely smooth travel
- Easy assembly
- Steel variant load capacity up to 3,200 kg, KBK Aluline up to 2,000 kg
- Ergonomic load handling for even heavy loads
- Virtually maintenance-free system
- Integrated conductor line for 5 profile section sizes
- Product configuration to meet your individual needs via our Demag Suspension Crane Designer tool

Demag KBK light crane system

Our modular crane construction kit

Interlinking production processes, serving machinery, moving materials – all handling and transport tasks have one thing in common: Loads often not only have to be lifted and lowered.

The horizontal motions can turning a lifting solution into a handling solution.

Whether for industrial, retail or service facilities, for individual workplaces, linear transport or area-serving crane applications – installations from the KBK crane construction kit make it possible to achieve highly effective, non-accumulating transport processes to meet specific requirements.

MAXIMUM FLEXIBILITY

- Modular system based on construction kit principle
- Wide range of applications from push-travel and electric systems or pneumatic operation to fully automated installations
- New components can be integrated or existing units can be replaced with ease at any time
- Aluminium and steel profile sections can be combined in the same installation

SUSPENSION MONORAILS

- Suspension monorails are the preferred linear solution to connect pick-up and deposit positions
- Flexible routing by means of straight and curved sections, track switches and turntables

SUSPENSION CRANES

- Single and double-girder suspension cranes for serving large areas
- Loads can be easily moved by hand thanks to low deadweight
- Electric travel drives for larger loads or longer distances





Demag slewing jib cranes Effective workplace units

Demag slewing jib cranes ensure that all types of workpieces can be lifted and transported quickly and easily and deposited gently and precisely. They provide handling performance at machine tools and assembly stations, as well as in outdoor storage yards and on loading ramps.

IMPROVED PRODUCTIVITY AND ERGONOMICS

Manual handling and combining or moving relatively light loads is often not only time-consuming, but also an ergonomic burden for employees. Demag pillar and wall-mounted slewing jib cranes help to improve workplace ergonomics.

- Broad spectrum of load capacities and outreach dimensions
- Jibs with struts for low deadweight
- Low-headroom design for buildings with low ceilings
- Pillar-mounted slewing cranes with two jibs
- Product configuration to meet your individual needs via our Demag Slewing Jib Crane Designer tool

PILLAR-MOUNTED SLEWING JIBS AND CRANES

These cranes can be installed almost anywhere, since they are free-standing units. The anchorage to attach the pillar to foundations or existing workshop floors satisfies the most demanding safety standards.

WALL-MOUNTED SLEWING JIB CRANES

They require no floor space as they are mounted on load-bearing concrete walls or pillars as well as machinery and installations.



Universal cranes Versatile solutions as standard

Our Universal cranes – indoor cranes or bridge cranes – give you the certainty of quality, efficiency and reliability at the highest level. Every crane and every crane component reflects our centuries of crane expertise and reliability as a partner for industry.

THE RIGHT CRANE TO MEET YOUR NEEDS

Single-girder overhead travelling cranes and suspension cranes are usually equipped with rolled steel section girders as the load-bearing structure for Universal cranes with DC chain hoists.

They can be integrated into existing workshops or new buildings as workshop cranes, for example. Demag crane installations are specified according to the current European crane standards:

- DIN EN 13001 "Cranes – General design"
- DIN EN 15011 "Cranes – Bridge and gantry cranes"

Online product configurator

Visit www.demag-designer.com for all important facts and figures on Demag DC chain hoists.

This information and planning platform provides you with a comprehensive product overview and contains all the data you need for project engineering. Various languages can be selected.

Suitable hoists and accessories can be selected simply and reliably. A practical and intuitive user interface ensures that you can find the right solution to meet your needs quickly and easily.

You can also download 3D CAD drawings of your selected chain hoist and integrate them into your design drawings.

Demag online ordering system www.demag-shop.com also makes it possible to order chain hoists and components immediately.



ONLINE PRODUCT CONFIGURATOR

- Easy to use
- Specify products to meet your needs
- Save your configuration
- Immediate results
- Online ordering via Demag Shop



CAD GEOMETRY DATA

- Configure 2D or 3D geometry data online in many file formats
- 3D PDF for rapid view without CAD program



INFORMATION AVAILABLE 24/7

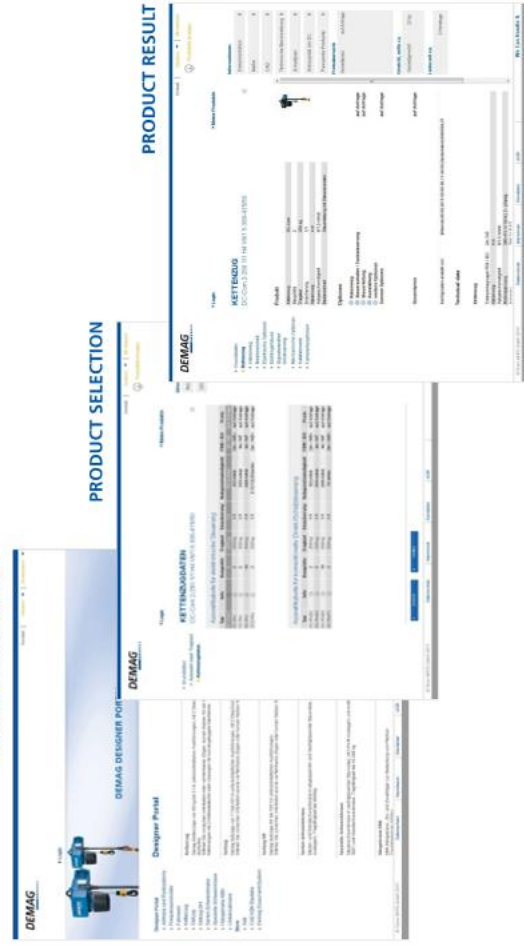
- Whenever you want
- Up-to-date information



DOCUMENTATION

- Product description
- Technical data
- Circuit diagrams
- Documents

CONFIGURED 3D CAD GEOMETRY DATA SELECTION



Simple project engineering

WWW.DEMAG-DESIGNER.COM

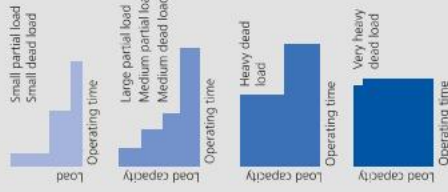
Technical data – selection criteria

The size of the hoist is determined by the

- Load spectrum
 - Average operating time
 - Load capacity
 - Reeving
1. What are the operating conditions?
 2. What is the specified safe working load?
 3. To what height must the load be lifted?
 4. What is the required lifting speed?
 5. Do the loads need to be lifted and lowered with great accuracy?
 6. Is horizontal load travel necessary?
 7. How is the hoist to be controlled?

THE LOAD SPECTRUM

(in most cases estimated) can be evaluated according to the definitions below:



- 1 Light**
Hoist units which are usually subject to very small loads and only in exceptional cases to maximum loads.
- 2 Medium**
Hoist units which are usually subject to small loads but often to maximum loads.
- 3 Heavy**
Hoist units which are usually subject to medium loads but frequently to maximum loads.
- 4 Very heavy**
Hoist units which are usually subject to maximum or almost maximum loads.

EXAMPLE:

Load capacity 250 kg
 Load spectrum from table Medium
 Lifting speed 8 m/min
 Reeving 1/1
 Average hook path 4 m
 No. of cycles/hour 20
 Working time/day 8 hours

The average operating time per working day is estimated or calculated as follows:

$$\text{Operating time per day} = \frac{Z \cdot \text{average hook path} \cdot \text{no. of cycles/h} \cdot \text{working time/day}}{60 \cdot \text{lifting speed}}$$

$$\text{Operating time/day} = \frac{2 \cdot 4 \cdot 20 \cdot 8}{60 \cdot 8} = 2.66 \text{ hours}$$

For the medium load spectrum and an average daily operating time of 2.66 hours, the table shows group 2m+. For a load capacity of 250 kg, the diagram shows size DC-Pro 2 – 250.

The chain hoist group of mechanisms is determined by the load spectrum and operating time.

Load spectrum		Avg. oper. time per working day in hours	
L1	Light	2-4	4-8
L2	Medium	1-2	2-4
L3	Heavy	0.5-1	1-2
L4	Very heavy	0.25-0.5	0.5-1
Group of mechanisms to DIN EN 14492		1Am	2m+
			3m
			4m

Load capacity for reeving		Product type and size		Lifting speed	
1/1 [kg]	2/1 [kg]			at 50 Hz [m/min]	
80/100/125		DC-Pro 1	8/2	80	8-16
		DC-Pro 2	16/4	80	8-16
		DC-Pro 5	24/6	80	8-16
160		DC-Pro 2	8/2	160	2-4
		DC-Pro 5	16/4	160	2-4
		DC-Pro 5	24/6	160	2-4
200		DC-Pro 2	8/2	200	2-4
		DC-Pro 5	16/4	200	2-4
		DC-Pro 5	24/6	200	2-4
250		DC-Pro 10	24/6	250	2-4
		DC-Pro 2	8/2	250	2-4
		DC-Pro 5	16/4	250	2-4
		DC-Pro 10	24/6	250	2-4
315		DC-Pro 5	8/2	315	2-4
		DC-Pro 10	12/3	315	2-4
		DC-Pro 10	24/6	315	2-4
400		DC-Pro 5	8/2	400	2-4
		DC-Pro 10	12/3	400	2-4
		DC-Pro 10	24/6	400	2-4
500		DC-Pro 5	8/2	500	2-4
		DC-Pro 10	12/3	500	2-4
		DC-Pro 10	24/6	500	2-4
630		DC-Pro 10	6/1.5	630	2-4
		DC-Pro 10	12/3	630	2-4
800		DC-Pro 10	6/1.5	800	2-4
		DC-Pro 10	12/3	800	2-4
1,000		DC-Pro 10	6/1.5	1,000	2-4
		DC-Pro 15	8/2	1,000	2-4
		DC-Pro 10	12/3	1,000	2-4
1,250		DC-Pro 10	8/2	1,250	2-4
		DC-Pro 15	8/2	1,250	2-4
		DC-Pro 16	12/3	1,250	2-4
1,600		DC-Pro 15	8/2	1,600	2-4
		DC-Pro 16	12/3	1,600	2-4
2,000		DC-Pro 10	6/1.5	2,000	2-4
		DC-Pro 25	8/2	2,000	2-4
		DC-Pro 10	6/1.5	2,000	2-4
2,500		DC-Pro 15	4/1	2,500	2-4
		DC-Pro 25	8/2	2,500	2-4
		DC-Pro 10	4/1	2,500	2-4
		DC-Pro 15	4/1	2,500	2-4
3,200		DC-Pro 16	6/1.5	3,200	2-4
		DC-Pro 15	4/1	3,200	2-4
4,000		DC-Pro 16	6/1.5	4,000	2-4
		DC-Pro 25	4/1	4,000	2-4
5,000		DC-Pro 25	4/1	5,000	2-4

DC-Com chain hoist with 2 lifting speeds and electronic control

Load capacity [kg]	Chain hoist Type/size	Hook path from [m]	Lifting speed at 50 Hz [m/min]	FEM/ISO Group of mechanisms	Reeving	Weight [kg]
80	DC-Com 1		8/2	4m/M7		
100/125			9.6/2.4	3m/M6		
160	DC-Com 2		6/1.5	3m/M6		21
200/250			7.2/1.8	2m/M5		
315	DC-Com 5	4	4.5/1.1	3m/M6	1/1	27
400/500			5.4/1.3	2m/M5		
630	DC-Com 10		4/1	3m/M6		47
800/1,000			4.8/1.2	2m/M5		
1,250			4/1	3m/M6		63
1,600/2,000	DC-Com 10		4.8/1.2	2m/M5	2/1	

DC-Pro chain hoist with 2 lifting speeds and electronic control or conventional direct/contact control (DC/CC)

Load capacity [kg]	Chain hoist Type/size	Hook path from [m]	Lifting speed		Group of mechanisms FEM/ISO	Reeving	Weight [kg]
			at 50 Hz [m/min]	at 60 Hz [m/min]			
80	DC-Pro 1	DCM-Pro 1 ¹⁾	82	9,6/2.4	4m/M7		22
	DC-Pro 2	DCM-Pro 2 ¹⁾	164	19,2/4.8			
100	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
125	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
160	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
200	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
250	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
315	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
400	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
500	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
630	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
800	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
1,000	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
1,250	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
1,600	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
2,000	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
2,500	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
3,200	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
4,000	DC-Pro 5		246 ²⁾	28,8/7.2	4m/M7		28
	DC-Pro 1		82	9,6/2.4			
5,000	DC-Pro 5		164	19,2/4.8	4m/M7		28
	DC-Pro 1		82	9,6/2.4			

¹⁾ DCM-Pro only with electronic control. ²⁾ 2m+ corresponds to 1,900 hours at full load. ³⁾ Chain drive FEM 1Am to DIN EN 818-2. ⁴⁾ Chain drive FEM 2m to DIN EN 818-2. ⁵⁾ Chain drive FEM 1Cm to DIN EN 818-2. ⁶⁾ Chain drive FEM 3m to DIN EN 818-2. ⁷⁾ Only with operating limit switch for lifting motion.

DCS chain hoist with variable lifting speed and integrated inverter control (DCS) or prepared for customer's own control system (FC)

Load capacity [kg]	Chain hoist Type/size	Hook path from [m]	Lifting speed at 50/60 Hz		Group of mechanisms FEM/ISO	Reeving	Weight [kg]
			Min.-rated- [m/min]	Max.- ²⁾ [m/min]			
80	DCS-Pro 1	DCMS-Pro 1 ¹⁾ DCRS-Pro 1 ¹⁾	3	0.15-30	4m/M7		25
	DCS-Pro 5		3	0.15-30			
125	DCS-Pro 1	DCMS-Pro 1 ¹⁾ DCRS-Pro 1 ¹⁾	3	0.15-30	4m/M7		25
	DCS-Pro 5		3	0.15-30			
160	DCS-Pro 2	DCMS-Pro 2 ¹⁾ DCRS-Pro 2 ¹⁾	3	0.15-16	2m+ ²⁾ /M5+		25
	DCS-Pro 5		3	0.15-16			
200	DCS-Pro 5		3	0.08-8	2m+ ²⁾ /M5+		29
	DCS-Pro 1		3	0.11-12			
315	DCS-Pro 5		3	0.08-8	2m+ ²⁾ /M5+		29
	DCS-Pro 1		3	0.11-12			
400	DCS-Pro 5		3	0.08-8	2m+ ²⁾ /M5+	1/1	29
	DCS-Pro 1		3	0.11-12			
500	DCS-Pro 5		3	0.08-8	2m+ ²⁾ /M5+		29
	DCS-Pro 1		3	0.11-12			
630	DCS-Pro 5		3	0.06-6	4m ³⁾ /M7		54
	DCS-Pro 1		3	0.11-12			
800	DCS-Pro 5		3	0.06-6	3m ³⁾ /M6		54
	DCS-Pro 1		3	0.11-12			
1,000	DCS-Pro 5		3	0.06-6	2m+ ²⁾ /M5+		54
	DCS-Pro 1		3	0.11-12			
1,250	DCS-Pro 5		3	0.06-6	2m+ ²⁾ /M5+		54
	DCS-Pro 1		3	0.11-12			
1,600	DCS-Pro 5		3	0.04-4	4m ³⁾ /M7		68
	DCS-Pro 1		3	0.08-8			
2,000	DCS-Pro 5		3	0.04-4	1Am ³⁾ /M4		54
	DCS-Pro 1		3	0.06-6			
2,500	DCS-Pro 5		3	0.06-6	3m ³⁾ /M6		74
	DCS-Pro 1		3	0.08-8			
3,200	DCS-Pro 5		3	0.06-6	2m+ ²⁾ /M5+		68
	DCS-Pro 1		3	0.08-8			
4,000	DCS-Pro 5		3	0.04-4	4m ³⁾ /M7		86
	DCS-Pro 1		3	0.06-6			
5,000	DCS-Pro 5		3	0.04-4	1Am ³⁾ /M4		68
	DCS-Pro 1		3	0.06-6			

¹⁾ DCMS/DCRS-Pro only with electronic control. ²⁾ 2m+ corresponds to 1,900 hours at full load. ³⁾ Chain drive FEM 1Am to DIN EN 818-2. ⁴⁾ Chain drive FEM 2m to DIN EN 818-2. ⁵⁾ Chain drive FEM 1Cm to DIN EN 818-2. ⁶⁾ Chain drive FEM 3m to DIN EN 818-2. ⁷⁾ Max. lifting speed in the partial load (average hoist load).

DCBS chain hoist with balancer function and variable lifting speed

Max. load capacity [kg]	Chain hoist Type/size	Lifting height from [m]	Lifting speed at 50/60 Hz		Group of mechanisms FEM/ISO	Reeving	Weight [kg]
			Min.-rated- [m/min]	Max.- ²⁾ [m/min]			
125	DCBS-Pro 1		4.3	0.15-30	4m/M7 3m ³⁾ /M6 2m+ ²⁾ /M5+	1/1	29
	DCBS-Pro 2		4.3	0.15-16			



Our chain hoists



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