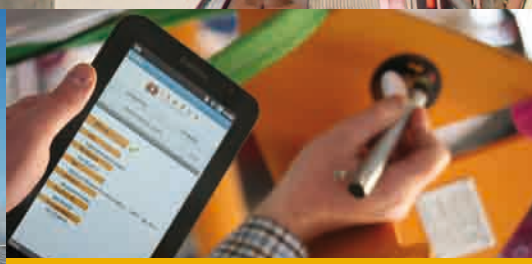
№14

2012/2013

GLOBUS HEBETECHNIK

THE CATALOGUE

Increased performance though greater safety in hoisting and lashing technology



www.globus-hebetechnik.de

SIP – Service in Partnership

Solutions you can depend on
For more than fifty years we have been producing first-class, reliable solutions in the whole area of hoisting, securing and transporting heavy loads of up to one hundred tons in weight. Be it specialised wire ropes for crane, sling chains or ropes: we offer safety and the highest precision.

More Safety 50 years with GLOBUS

We offer all-in-one solutions nation-wide and have also expanded our international activities. Today we are proud to be able to deliver to customers throughout Europe, North and South America and in the Near East and Asia.

Thanks to our construction department with the most highly qualified engineers we can realise your individual wishes and custom-built construction both rapidly and flexibly. Furthermore our committed support staff is always on site to provide advice. We are a member of the Trade Association for Ropes and Load Attachment Rigging where we set standards and work on norms. Our company has its headquarters in Hilden and is certified according to DIN EN ISO 9001:2000. It is also our goal to remain in the future the first address for the highest quality of safety technology.

Tested and certified by the Industrial Trade Association BG Hannover – FA. Iron and Metal

- For manufacturing wire cables
- General processing of wire cables such as splicing, encapsulated and grommets etc.
- Lifting accessories in accordance with EN 13155, BGR 500
- Manufacturer's qualification for welding steel construction according to DIN 18800-7:2002-09, Class E

BG-Prüfzert DIN EN ISO 9001

Quality Management
Certified since 1994 2002 according to DIN EN ISO 9001:2008

FSA

Member of the Trade Association for Ropes and Load Attachment Rigging

GS geprüfte Sicherheit

GS tested to Machine Directive 98/42/EC
GS Certificate Number: 065136-065139

5 Stars GS TESTED Quality

- ☆ Tested safety
- ☆ Maximum Quality
- ☆ Long Life
- ☆ Secure Investment
- ☆ Our Production

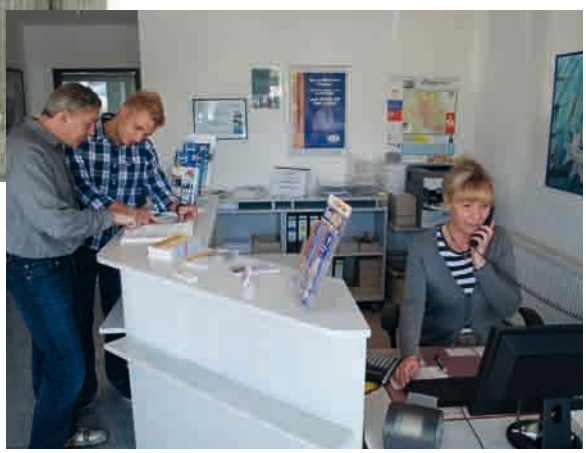
Your certified partner for lifting and sling devices according to EN ISO 9001:2008

Competence in lifting and sling technology

The Globus Management Team: (l-r.) Karl-Heinz Schütte, Oliver Beek, Thomas Urban, Elsbeth Löken

GLOBUS HEBETECHNIK

Telephone
+49 (0) 2103 9442-0



Service and Know-how

- Competent advice
- Wealth of experience with many projects
- Our own construction department
- Large team of staff

Service

- Certified testing service
- Innovative bolting services
- Intensive training and seminars
- 24 hour online shop

Products

- Producer of GS-tested wire ropes
- Our own production of loading devices
- Large range of quality products
- Trade Fair presence

PART I

In the first part of the catalogue you will find out all about Globus, Globus wire ropes, loading devices, hydraulics and factory equipment.

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GLOBUS HEBETECHNIK KÜNNE GROUP

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CRANE TECH

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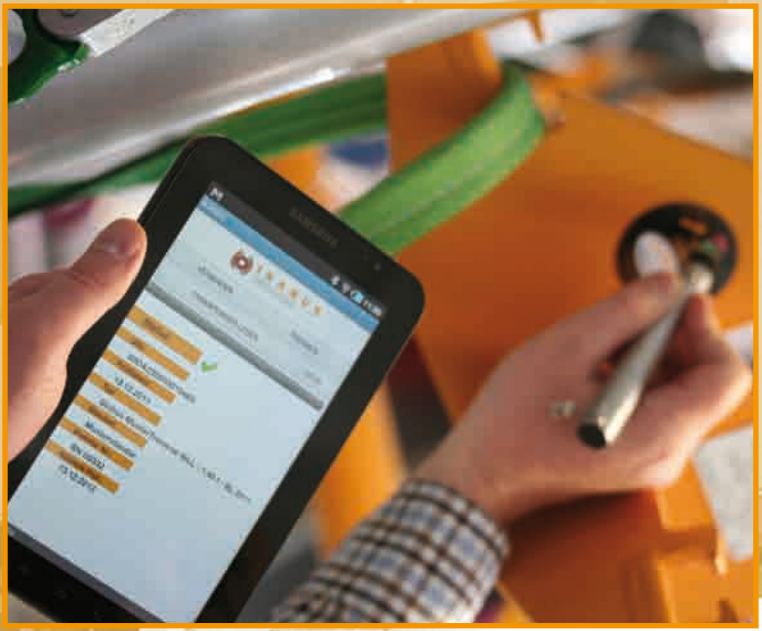
SPECIAL PRODUCTS

Globus – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

GLOBUS
HEBETECHNIK

Article placing in IKARUS Data bank



Globus – Inspection Service

Globus – Technical seminars

Service

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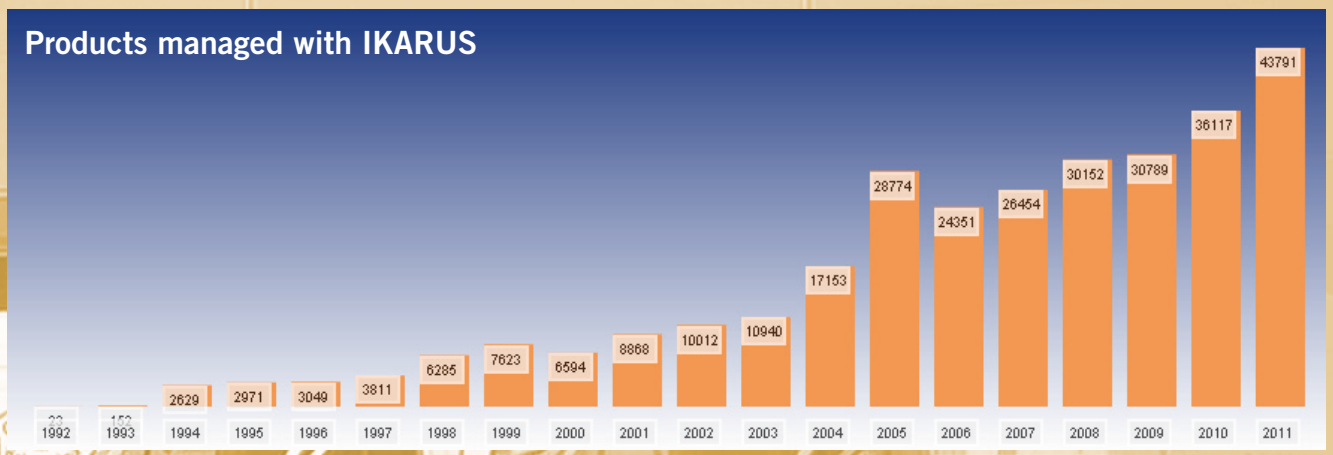
Products managed with IKARUS



IKARUS

Information & communication application for RFID-aided service

RFID INSIDE GLOBUS

IKARUS RFID-System

Crane inspections

Advice

Globus – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

Globus – Service in Partnership

More than just another Purchasing Guide

Strong cooperation of leading manufacturers with Globus
With customer-oriented services, competent consulting and innovative products of high quality, Globus has excellently established itself in the market of lifting and lashing technology. Globus does not only stand for first-class products, but also for comprehensive know-how, which supports our customers at all issues and problems with competent advice and perfectly suitable products.

The catalogue with particularly sound information
The informative Globus catalogue contains detailed infor mation to the broad assortment as well as sound decriptions of the technical data and properties of the presented products. A distinctive feature of the Globus catalogue are comprehensive expert information on legal grounds, load capacity tables, tips tests and maintenance. The Globus catalogue is more than just a purchasing guide. You will soon notice that the information sections become an indispensable tool and reference book.

More than 50 years of Globus – 50 years of more quality
For more than 50 years Globus offers safety products snd services in first-class quality: lifting and lashing technology you can rely on. Because, especially, if it is about safety, quality is indispensable. More than 50 years of quality are not by chance. Only the finest products of proven manufacturers find their way into our catalogue. In order to be able to offer you appropriate services, Globus takes care of a qualified and skilled consulting staff.

Now, here it is, the Globus catalogue no. 14! Grown to more than 500 pages, it presents many new features.

You, our loyal customers, have made possible the success of Globus – many thanks for this! Also in future it will be our on-going goal to be your partner, yourfirst adress for safety technology on highest level.

Consulting is Very Important To Us

More Efficiency by Experience
Globus supports you with its long-standing experience from many projects in lifting, lashing and safety technology. This service ranges from selecting Globus products suitable for your tasks, calculating the correct parameters or giving valuable advice for your application

Know-how
We know what we are talking about. Besides technical know-how, we have a lot of knowledge about legal regulations and can point out traps, pitfalls and pecularities which are not known by less qualified, only sales-oriented providers.

Trained Staff
By regular further education, we are always up-to-date interms of technology and legal regulations. In addition, our employees enjoy comprehensive product trainings from the manufacturers. So, you can trust on our trained and experienced consultants.

Our Service is Your Benefit
Find out more about the possibilities our offering for your applications.

Contact us and take advantage from the concentrated knowledge of our experts.

Globus – Focus on the client

We offer more than printed paper

IT Services

Online-Shop

Make use of our online shop. Here you can order comfortably with the click of a mouse. Simply visit the company website www.globus- hebetechnik.de and surf the shop at any time.

The clear arrangement of the products and the additional and full texts guarantees that you can find the desired product quickly and easily.

As the Globus shop is permanently updated and extended, you will always find the current prices for the whole Globus range.

PDF Catalogue on CD-ROM

Do you or your staff want to leaf through the Globus catalogue on your screen? Or do you wish to print individual pages to help you make a decision? Yyou also can order the catalogue through the procurement system.

eProcurement

We can make available to you all the data of our catalogue or excerpts from it in a database retrievable form for your electronic procurement. Authorized users have the possibility of ordering directly from the catalogue through their procurement system. Possible data formats are XML, BMEcat and others upon request.
In addition, we also offer various classification systems such as eClass , UNSPSC.

Interested? Then please contact us!

Explanation of the pictogram

To offer you the greatest benefit the Globus range is produced using the slogan maximum quality and safety. Products have received "Made in Germany" or "Made in Europe" as they have been produced exclusively in Germany and Europe. On the other hand products also receive awards when core services were rendered in Germany/Europe to increase the value of the product.

MADE IN GERMANY

MADE IN EUROPE

Surcharge

And yet once again, the prices for energy and raw materials are subjected to a constant roller coaster ride. Despite forecasts and predictive calculations, price stability can not always be guaranteed over the entire validity period of a printed catalog. Please pay attention to the „Surcharge" pictograph and regularly check our always-updated Online Shop. You will find the currently valid prices there.

Info	Important Tip or Information
2 year warranty	2 year warranty
SUPERPRICE	Particularly cost-effective prices
24 h delivery service	24 hour delivery service
Inspection service	Testing and Repair Service

GLOBUS Testing Service – Number 1 for testing

Certified testing service according to DIN EN ISO 9001:2008

Record

1. Manual numbering of working materials and testing programs or
2. Use of RFID-supported product and identification system IKARUS

Visual test

Identifying external defects
Visual inspection for deformities and wear and tear

Measure

Guarantee of the load capacity of hoisting devices and all slings and LAM
Testing wear and tear limits

Crack and stress tests

Testing for absence of cracks on the slings and LAM and hoist load capacity testing

Service, Repair

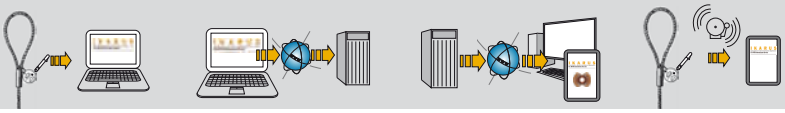
In-house Repair service
With your agreement the tested parts which fail the test are replaced.

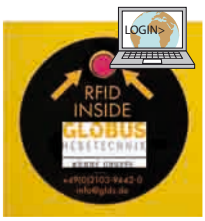
Certificate

Online copyrighted test program. All data is always accessible online. You can access and print the test results at any time. Self-access provision.

IKARUS

RFID based test documentation and product management – integrated quickly and simply in the Globus testing program





Testing, Servicing and Maintenance work

The complete test, maintenance and repair service by BG-approved experts

- **Slinging and Load Suspension Equipment**
  (on site or in our plant) test according to BGR 500
- **Magnets**
  Test according to BGR 500 chapter 2.8
  (permanent and batterry magnets)
- **Lifting Devices (on site or in our plant)**
  Test according to BGV D8
  (VBG 8 § 23 pulleys and ratchets, winches etc.)
- **Personal Protection Equipment**
  Test according to BGV A1 (VBG1), BGR 198 (ZH 1/709), BGR 199 (ZH /710)
- **EC Law**
  Annual test of all sling gear in accordance with EC Machinery regulation 2006/42 EC

Operation safety regulation, Federal Law Gazette No. 70 part 1 as of 2.10.2002. The changes refer amongst others to the monitoring and test as well as the documentation for all in an operation applied slinging and load suspension devices. § 10 test of the operating equipment (section 2) „... the employer has to check the operating equipment according to the periods defined in § 3 section 3 by respectively skilled persons and test them, if necessary ...“ § 11 Documentation (section 2) „The employer has to document the results of the tests according to § 10 ... If operating equipment, which are subject to § 10 section 1+2, is used outside the enterprise, a certificate about the conduction of the last tests has to be enclosed.These test data must be available at the operating site, so that the responsible authorities (STAFA and BG) can have a look into the documentation. In near future, the accident/incidentprevention regulations will be replaced by the Technical Regulations of the BetrSichV.

We are mobile!

- Our mobile testing service carried out the tests on site.
- We take the burden off your responsible staff and ensure a labour safety state of the slings and loading devices by certified and tested experts in accordance with EN 473 M1/2
- Many years of online-supported testing and repair service with “IKARUS“, tested trial software with its own database
- Using RFID technology – quick and precise product identification and reading device
- Reliable, robust and durable transponder
- The test files can be stored with an allocated image
- Ready for use at any time – online access with password
- Print of master files, test lists and test certificates

Service-Info

Weitere Infos erhalten Sie bei Herrn Steinweg

+49 (0) 2103 944213

Over 30 years of experience in testing

We test in accordance with BGR 500, Chap. 2.8 and/or EN 13155

Load suspension equipment must be checked within periods of less than one year by an expert. This interval should be shorter, if the conditions of use let it appear necessary. Our test technicians register your slinging equipment. This is a condition to fulfill 3.15.5, Test Certificate paragraph 2 and 3.

The test before commissioning 3.15 and the regular check according to 3.15.2 are in essential visual inspections and functional tests. The diameter wear of the chain must not exceed 10%. The elongation of individual chain links or the total length of the chain must not exceed 5%.

Round link chains, which are used as slinging equipment, must be subject to a special test in periods of less than 3 years proofing that it is free of cracks. The complete test includes accessory parts according to 1677 1-4. Our test technicians are qualified according to EN 473. At chains and components which do not fulfill the requirements of the aforementioned test, we conduct a repair – on condition of your consent.

Info

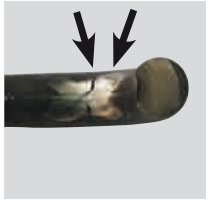
Attention!
Keep to the operation safety regulation!

Special experience and error identification by our test specialists

- Optimum defect identification with professional equipment
- Error identification also at daylight

Examples of Error Sources

Chain break: Error of the manufacturer



Material hardening due to use: Hairline cracks in the surface

Unusable: Wear and deformation of the chain links

Damaged slinging rope

Damaged round slings: Cut through polyester thread

Hook without safety trap and cranked

Load test of traverses

Electromagnetic crack check (chains)

Visual inspection (slinging equipment, textile and wire)

Examination done by experts

Safety check according to BG regulations and guidelines of the operation safety regulation (Betriebssicherheitsverordnung) as well as European standards

Globus experts are available for all kind of checks as they are defined in the accident/ incident regulations and the operation safety regulation.
Our services include not only the identification and notification of defects which are relevant to safety or operation, but we also provide the competent remediation of the defects.

Cranes Bridge cranes, container cranes, ceiling cranes, rotary cranes, portal cranes, slewing cranes and hoists	**BGV D6, BGG 905**
Load suspension equipment	**BGR 500 Kap. 2.8, EN 13155 (VBG 9a)**
Winches, hoisting and track racks	**BGV D8 (VBG 8), BGG 956-1**
Powered windows, doors and gates	**BGR 232 (ZH 1/494), BGG 950**
Lifting platform	**BGR 500 Kap. 2.10 (VBG 14) EN 120, BGG 945-1**
Escalator	**ZH 1/484, EN 115**
Liftable equipment for persons	**BGR 159 (ZH 1/461)**
Expertise	
Data analysis according to FEM 9.775	
Loading bridge and mobile ramps	**BGR 233, ZH 1/156**
Storage facilities and equipment	**BGR 234, EW 15635**
Ladders	**BGI 521**
Shelves	**DIN EN 15635**

What to do with self-built devices

Self-made devices are no problem as many self-made sling and hoisting devices are made according to the practical standards – often “only“ the documentation is missing, the risk analysis, risk assessment and the proper classification of the components. Through stress and crack tests and material properties (through measuring hardness) the components can be prepared for approval.

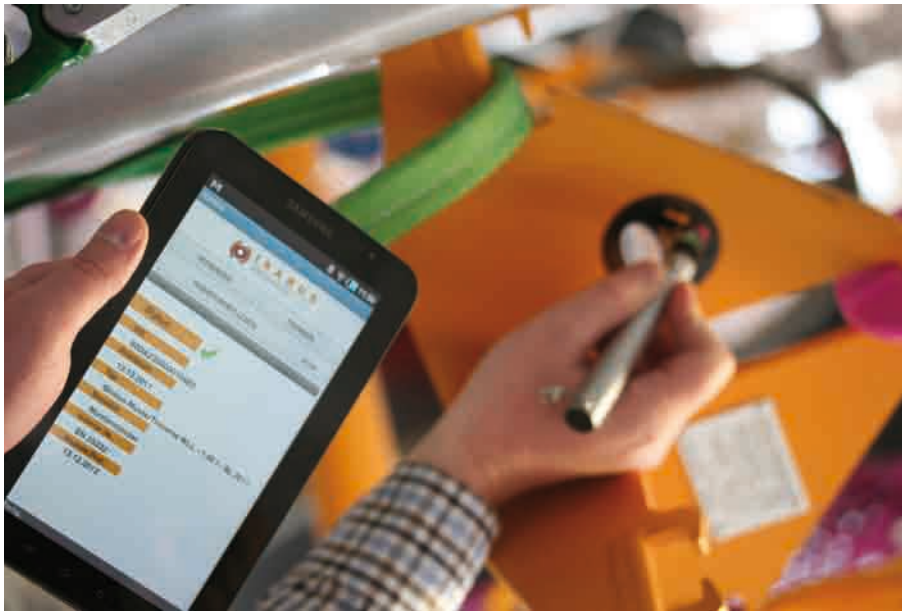
Globus helps you on your way!

Any Further Questions?
Globus Offers Additional Service:

- Project engineering of material handling plants including the required construction services (structural analysis, construction, eProject engineering)
- Manufacturing of simple and complex material handling plants and devices
- Assembly of complex material handling plants and steel buildings
- Preparation of expert opinion in the areas of steel buildings and materials handling by experienced engineers and experts
- Renovation, conversion, completion of already existing plants

Contact us!

IKARUS
Informations- & Kommunikations Applikation
Für RFID-Unterstützten Service



For more than 30 years the Globus Wire Rope Company has been supplying specialised testing for the load support sector (LAM) and for slings in accordance with the current BGR 500 which is a term known all too well by our clients. We have driven consistently the electronic management of all products requiring monitoring in accordance with BGR 500 over the past 20 years. Today we make available to our clients in the areas of load securing and hoisting technology a comprehensive database, which testing and management software we produced ourselves contains all product-specific-data such as:

- Sort and type of product
- Manufacturer
- Serial number
- Procurement date
- Cost centre allocation
- Testing intervals
- Testing data
- Image documentation

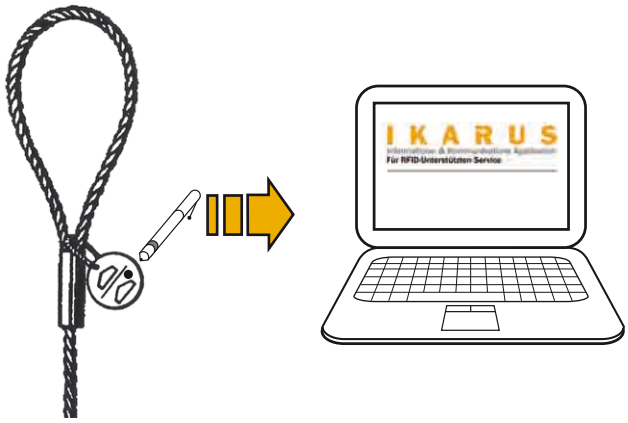
We provide our clients with the opportunity to access this data via the online portal to draft both testing lists and certificates and to print these, if required. The requirements are a PC, a printer and Internet access. The user interface for the testing software is controlled completely by the classical web browsers. Globus testing technicians catch the data on your site using a laptop and transmit these directly after testing to our online testing database, IKARUS. Our clients receive immediately the documentation for the tested slings and LAM. We not only take care of the annual testing of your slings in accordance with BGR 500, but also provide a comprehensive documentation management system making the workload easier for your company.

Greater efficiency with RFID
RFID (Radio Frequency Identification) facilitates automatic identification and localisation of objects as well as facilitating the organisation and management of data. For example, RFID is known in the area of anti-shoplifting technology and is indispensable.

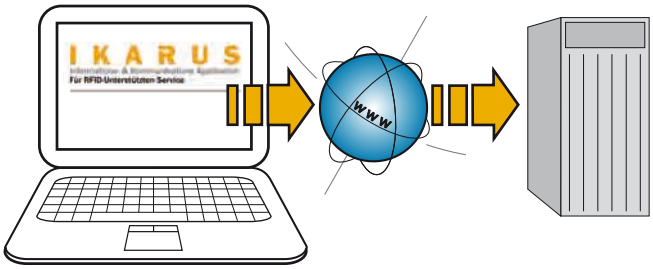
Operation
For classifying the products requiring monitoring, a RFID transponder (RFID tag) is attached to the product. A passive RFID tag consists in principle of a microchip and an antenna. Each chip has at least one writeable storage unit and has a UID (Unique Identification - a specific identification number).
As standard the Globus ILD RFID tags are fitted with a 2kBit Read-Write (RW) and additional data can be recorded. Using a reader, a high frequency electromagnetic alternating field is created which supplies power to the RFID tag and enables communication between the reader and the RFID tag. IKARUS uses the UID of a transponder to index the products that require monitoring in its database and thus enables rapid and precise identification of your products.

IKARUS2Go
With the mobile version - the IKARUS App – the data is loaded from the IKARUS online portal to a Tablet PC or a Smartphone with an Android operating system from version 2.3 to the Internet or a USB. This, in combination with the Globus ILD Bluetooth Pen, creates an overall mobile information and management unit where the status of the products to be monitored can be checked at any time and place in your company. If the IKARUS database is on a Tablet PC or Smartphone, no network or Internet connection is required. The Globus ILD Bluetooth Pen can write additional data to all RW transponders complying with ISO 15693 and ISO 14443.

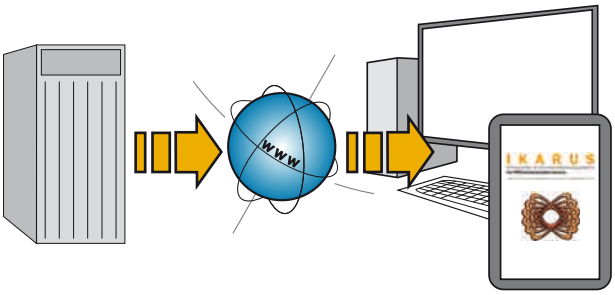
1. Data input of product on site in IKARUS



2. Data transmission and process on our own web servers



3. Availability of testing documentation over the Internet



4. Mobile data and scheduling on site

The benefits for you

The IKARUS database is a MySQL database and globally is the most common relational database management system. A standard feature is simple data exchange between old and new systems by Excel or text file.

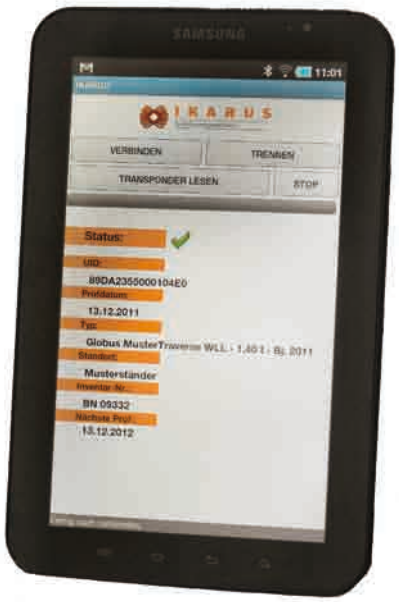
IKARUS is a web-based inventory and management application. It requires no further expensive licensing of maintenance software. All you need is a PC with Internet access and a browser (IE, Firefox etc.).
Contact us if you have no Internet access.

The IKARUS database is on a dedicated server in one of the largest server farms in Germany. This guarantees a high level of data security and 99,9% up time.

Many of our products such as Spanset, round slings and lifting ropes, RUD chains and slings, IP lifting clamps, Crosby shackles and traverses, load lifting devices and ropes from our own production are delivered as standard with a RFID tag.

With the mobile version of the IKARUS we concentrate on the globally most common operating systems for Tablet PCs and Smartphones. Here we also ensure an adapted neutral cost situation.

Tablet PC



Samsung Galaxy Tablet PC with 7“ Dis play (17,8 cm), resolution 1024 x 600 pixel, 16 GB storage, microSD slot, Wi-Fi and Bluetooth. Android operating system with pre-installed IKARUS App.

Order-No.	Price/Unit €
A.31063	430,00

Bluetooth Pen ILD

Globus Bluetooth Pen ILD

This comfortable writing/reading device is suitable for a 13,56 MHz transpon-der and is ISO 15693 and ISO 14443 compatible. Includes Li ION battery 500 mAh.

Order-No.	Price/Unit €
A.31021	784,00

Globus ILD Charger

Battery charger device for ILD Bluetooth Pen including Li/ION battery 500 mAh.

Order-No.	Price/Unit €
A. 31059	250,00

IKARUS Transponder

LABEL1836 special

- Standard: ISO15693 (HF)
- Chip type: ICODE SLI / my-D
- Data storage: 2kBit EEPROM - read/write
- Dimensions: 38 x 20 x 2 mm
- Particular properties: pliable, robust transponder for mounting metal, self-adhesive

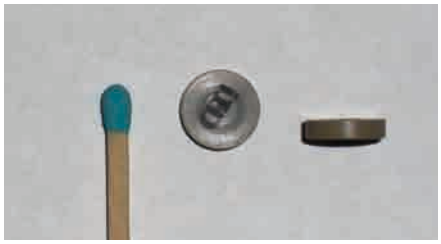
Order-No.	Price/Unit €
A. 31060	on request

MT Special device with stable quick chain fastener

- Standard: ISO15693 / ISO15693-2 (HF)
- Chip type: iID-M / iID-H
- Data storage: 2kBit EEPROM - read/write
- Dimensions: Ø 40 mm, width 5,0 mm
- Temperature load up to 180°C short-term
- DO, 160 qualified

Order-No.	Price/Unit €
A. 31062	9,90

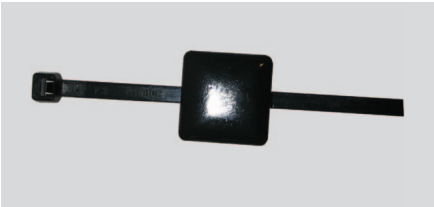
MINI-TAG special 8.5



- Standard: ISO15693 / ISO15693-2 (HF)
- Chip type: iID-M / iID-H
- Data storage: 2kBit EEPROM - read/write
- Dimensions: Ø 8,5 mm, width 2,0 mm
- Casing material: PEEK shell and EPOXY cast
- Particular properties: small, robust transponder for mounting on metal
- Temperature load yp to 180°C short-term
- DO 160 qualified

Order-No.	Price/Unit €
A. 30912	4,50

TIE-TAG



- Standard: ISO15693 / ISO15693-2 (HF)
- Chip type: iID-M / iID-H
- Data storage: 2kbit EEPROM - read/write
- Dimensions: 19 x 19 mm, with cable tie
- Particular properties: robust transponder, for simple mounting with cable ties, easily re-usable

Order-No.	Price/Unit €
A. 31061	on request

Label D11Special

- Standard: ISO15693 (HF)
- Chip type: ICODE SLI / my-D
- Data storage: 896bit / 2kbit / 10kbit EEPROM - read/write
- Dimensions: diameter 13mm, width 1,5mm
- Read distance: up to 15mm
- Particular properties: pliable, robust transponder for mounting on metal, self-adhesive

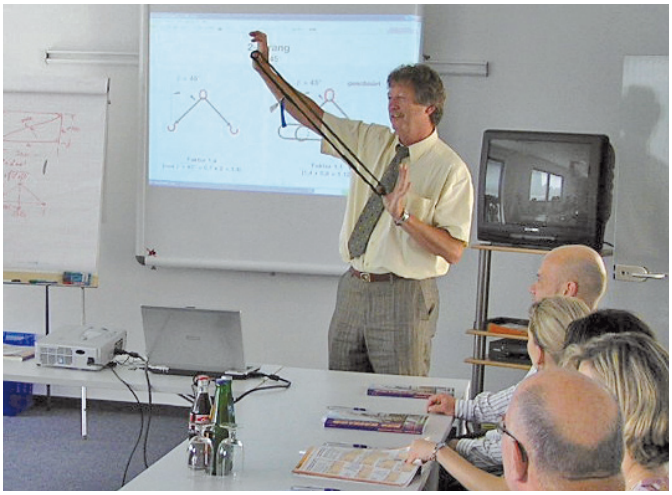
Order-No.	Price/Unit €
A.31153	3,60

Globus Expert Seminars

At Our Venues or On Site

All seminars can be specifically customized to your company.
An excerpt of our series of practical seminars:

- Height safety seminars for silo installations
- Cargo securing underground construction
- Crane driving license in steel plants
- Slinging technology/machine building
- Practical seminar cargo securing according to VDI 2700a (16 units)
- Expert seminar cargo securing in transport traffic including expert certificate (8 units)
- Education to a skilled person in slinging and lifting technology (textile, wire rope and chain including expert certificate) (8 units)



Info

Practically experienced expert facilitators expect you in our modern seminar rooms or are coming to you, if desired.

Info

We would be glad to pass you an offer about specific expert seminar.

Seminar	Dates and Venues	Services	target group	Seminar-No.	Price €
„Expert education pursuant BGR 500“ Assessment of an operational safety state of the lifting and load suspension equipment	20.09.2012 in Hilden on request on your site	Qualification training according to BGR 500	All employees which are intended by the company as skilled person/expert for lifting and load suspension equipment	SEMGL.BGR	290,00*
Assessment of rope discard and monitoring in the usage of wire ropes according to DIN EN standards. The training conveys practically and with examples the necessary knowledge for operators of cranes and strip accumulatos about wire ropes.	10.05.2012 in Hilden 12.09.2012 in Hilden 29.11.2012 in Hilden on request on your site	Qualification training according to BGV A1 / BGV D8 / BGR 500	Designers, operators and users	SEMGL.SEIL	290,00*
Instructions in lifting technology – load suspension equipment	24.05.2012 in Hilden 04.10.2012 in Hilden on request on your site	Qualification training according to BGR 500, EN 13155	Plant manager, safety experts, foremen, mechanics, assembler, slinger etc.	SEMGL.LAM	290,00*
„Education to a skilled person for cargo securing in transport traffic“ Handling safety in the daily use of cargo securing equipment and all relevant regulations	14.06.2012 in Hilden 06.09.2012 in Hilden 13.12.2012 in Hilden on request on your site		All employees involved atloading, e.g. drivers, dispatcher, loader etc.	SEMGL.LASI	290,00*
„Theoretical and practical foundations of the height safety technology“	25.10.2012 in Hilden on request on your site		Plant and laboratory managers, foremen, safety representatives, roofers, fire brigade, trainees, employee representatives etc.	SEMGL.PSA	290,00*

* Rebates at multiple bookings possible.

Our Knowledge Makes You Safe

With the current seminar program we present you our comprehensive training concept. Laws, regulations and standards are changing and also the operational requirements. The demand for special training subjects is also rising. The new concept fulfills these requirements.

Training Areas
On the following pages the comprehensive seminar program is described. The goal is to meet every kind of training demand in the following areas
- Lifting Technology
- Load Suspension Technology
- Height Safety Technology

Beyond these safety areas, we also educate in adjacent subjects people to crane operators. Also included in the program is the training on the important subject of risk analysis/risk identification and the education and further education of professional drivers according to the qualification law.

Step-By-Step Buildling Up Safety Knowledge
At the selection of the subject areas, we have focussed on the possibility of a combination with similar subject areas in temporal neighbourhood. This way, you can build up and improve your safety knowledge with a suitable combination of different seminar modules. It is now possible without problem to book several seminars, so that the time effort is significantly reduced.

Trainings Close To You
Besides 13 attractive sites in Germany, expert trainings, practice seminars and schoolings are conducted in the adjacent foreign countries like Luxembourg and Austria (Salzburg). On request you will get your seminar programme also very close to you, because we perform nearly all kind of seminar also in-house in your company.

Our Services
Our qualified presenters instruct practically and with modern media. You are provided a detailed seminar documentation, and the catering during the seminar is also well organised.

Consulting Helps You Along the Way
If you do not know exactly whether you have a need for trainings or cannot assess which seminar might be the right one for you, please contact us. We support you with a requirements analysis and determine the appropriate seminar for you. An additional help for your planning is the Globus seminar brochure. Please ask for it separately.
Refer to the website www.globus-seminare.de for further information and bookings.

A Plus of Safety

In addition, we offer further education and trainings in the area of safety as management task, safety management and health protection. Here, the most important subjects are legal grounds for superiors, the new health and safety act, health and safety on sites and the conduction of risk assessments.
Globus gladly informs you about the respective dates and venues.

Seminar Further Education for Professional Drivers

According to the Professional Driver Qualification Law

After the EC council has published a standardised regulation for the qualification of truck and bus drivers by means of the Professional Driver Qualification Law (BKfQG), professional drivers who are driving trucks even for long time, must also regularly attend a refreshing of the knowledge, which is required for carrying out their job. Until the renewal of his truck driving license, the holder has a period of five years to provide certificates on further education. As approved institution for further education, Globus has developed training modules, which according to the legal regulations can be passed coherently in 35 hours or in five parts of 7 hours each. The generous seminar rooms in the extended safety trainingcentre in Übach-Palenberg have enough room for up to 20 persons each. You receive beverages, a midday snack and a training certificate in accordance with BKrFQG for the licence office.

Your special advantage
To give you as much planning freedom as possible we offer short-term appointments, i.e. in bad weather periods, Saturday training and special compact courses are possible on request. Contact us!

Info

We compile an individual training program according to your requirements. Contact us!

Info

Additional safety

We also offer training and further training in the areas of safety as a management task, safety management and health protection, This covers the topics of labour safety for management, the new labour safety law, labour safety on construction sites and carrying out risk assessments prior to work. Globus will gladly provide you with information on dates and locations. Give us a call!

Modules		Dates and Venues		Services	Seminar-No.	Price €
Modul 1 + Modul 3	Health and Fitness Breakdowns, Accidents, Emergencies, Conduct at Fire and Crime	18.08.2012, Aachen 15.09.2012, Aachen 20.10.2012, Aachen	17.11.2012, Aachen 08.12.2012, Aachen	Qualification training according to BKrFQG, 3+4 hours	SEM00048 + SEM00050	98,00
Modul 2	Kinetic Chain, Energy, Environment	25.08.2012, Aachen 22.09.2012, Aachen 27.10.2012, Aachen	24.11.2012, Aachen 15.12.2012, Aachen	Qualification training according to BKrFQG, 7 hours	SEM00049	98,00
Modul 4	Social Regulations	11.08.2012, Aachen 08.09.2012, Aachen 13.10.2012, Aachen	10.11.2012, Aachen 08.12.2012, Aachen	Qualification training according to BKrFQG, 7 hours	SEM00051	98,00
Modul 5	Road Transport and Cargo Safety (Basic module)	04.09.2012, Übach-Palenberg 06.11.2012, Übach-Palenberg 24.11.2012, Übach-Palenberg 15.12.2012, Übach-Palenberg		Qualification training according to BKrFQG, 7 hours	SEM00052	98,00
Modul 6	Road Transport and Cargo Safety	11.-12.09.2012, Übach-Palenberg 27.-28.10.2012, Übach-Palenberg 10.-11.11.2012, Übach-Palenberg 07.-08.12.2012, Übach-Palenberg		Qualification training according to BKrFQG, 14 hours	SEM00053	196,00
Modul 8 + Modul 10	Road Transport, Regulations on Cargo Traffic Corporate Identity, Market Research	04.08.2012, Aachen 01.09.2012, Aachen 06.10.2012, Aachen	03.11.2012, Aachen 01.12.2012, Aachen	Qualification training according to BKrFQG, 3+4 hours	SEM00054 + SEM00055	98,00

Max. 20 participants for all seminars.
Dates for 2013 can be found from 10/2012 at www.globus-hebetechnik.de!

Seminar Cargo Securing Technology and Combined Seminars

Efficiently Improving Safety Knowledge

Expert Seminars
For cargo safety technology we offer 1- and 2-day expert seminars for the education to a skilled person (expert). The seminars include also legal and physical grounds, contents of the standards, handling and check of lashing equipment and the calculation of lashing forces. Each participant gets an expert certificate. At 2-day participations, an education certificate according to VDI 2700a is issued.
As an expert, the participant is capable of assessing the discard maturity and conducting the annual checks.

Instructions
Even half a training day is sufficient to introduce a participant into the issues and to convey basic content. Already trained employees can refresh and update their knowledge.

Combined Seminars
In cargo safety you can also combine multiple seminar subjects. Thus, you can easily combine the 2-day expert seminar Cargo Securing Technology with the expert seminar Cargo Securing in Containers according to the CTU regulation. Combine the expert seminar Lifting, textile, SEM00001, with the seminar Load Securing Technology, SEM0003 - you save time (the second journey to the destination is no longer necessary) and money. It is hard to improve your safety knowledge more efficiently.

Seminar	Dates and Venues	Seminar-No.	Price €
Expert Seminar Cargo Securing, 1 day Education to a skilled person for load securing in cargo traffic	04.09.2012, Übach-Palenberg 06.11.2012, Übach-Palenberg 05.12.2012, Übach-Palenberg	**SEM00003**	**300,00***
Basic Seminar Cargo Securing, half-day Abridged version of the 1-day seminar Cargo Securing	Seminar on request	**SEM00026**	**165,00***
Specialist seminar on load safety for heavy transport (1 day) Training for capable individuals for load safety devices on street vehicles, large and heavy transporters	13.09.2012, Übach-Palenberg	**SEM00057**	**310,00***
Practical Seminar Cargo Securing VDI 2700a, 2 days Education to a skilled person for load securing in cargo traffic with lashing equipment out of chemical fibres, chains and wire ropes according to VDI 2700a	11. – 12.09.2012, Übach-Palenberg 13. – 14.11.2012, Übach-Palenberg	**SEM00004**	**510,00***
Practical Seminar Cargo Securing CTU, 1 day Education in load securing in containers according to CTU packing guidelines	15.11.2012, Übach-Palenberg	**SEM00028**	**310,00***
Practical Seminar Cargo Securing Dagerous Goods, 2 days Education to a skilled person for load securing at transportation of dangerous goods with education certificate VDI 2700 a	05. – 06.12.2012, Übach-Palenberg	**SEM00029**	**515,00***
Practical Seminar Cargo Securing in Vans, 1 day Education to a skilled person for load securing aids in vans	04.12.2012, Übach-Palenberg	**SEM00030**	**300,00***
Combined Seminars			
Combined Seminar Cargo Securing/Lifting Technology, 2 days Expert seminar cargo securing and lifting technology 1 Textile Single Seminars SEM00003 + SEM00001	04. - 05.09.2012, Übach-Palenberg 06. - 07.11.2012, Übach-Palenberg 05. - 06.12.2012, Übach-Palenberg	**SEM00005**	**500,00***
Basic Seminar Cargo Securing / Lifting Technology, 1 day	Seminar on request	**SEM00027**	**340,00***
Practice Seminar Cargo Securing VDI 2700a + CTU, 3 days	11. – 13.09.2012, Übach-Palenberg 13. – 15.11.2012, Übach-Palenberg	**SEM00056**	**750,00***
Expert Seminar Lifting Technology 1+2, 2 days	05. – 06.09.2012, Übach-Palenberg 07. – 08.11.2012, Übach-Palenberg	**SEM00002**	**730,00***

Max. 20 participants for all seminars. Dates for 2013 can be found from 10/2012 at www.globus-hebetechnik.de!
* Rebates at multiple bookings. One person books multiple seminars or more persons from one company book the same seminar.

Seminar Lifting Technology

The Seminar Concept, which Builds Up Safety Know-How

Info

Refer to the Globus Seminar Brochure. Please contact us, and we send it to you. See also www.globus-seminare.de

Expert Knowledge Seminar
In the area of lifting technology we offer 1- and 2-day expert seminars for the education to a skilled expert. The seminars include legal grounds, correct application, safety notes and tests of textile slinging equipment, slinging chains, steel wire ropes and load suspension equipment.

Each participant gets an expert certificate. The conveyed training contents in reference of applicable regulations can be comprehended by the participants also after the seminar. This eases the correct selection and assessment of a safe status. As expert, he is capable of assessing the discard maturity and conducting the annual checks.

Instructions
Even half a training day is sufficient to introduce the participant to the issues and to convey basic contents. Already trained employees can refresh their knowledge and pick up-to-date training documents.

Combined Seminars
By combining multiple subjects you can build up and extend your knowledge about lifting technology step by step. We have coordinated the seminar subjects, which have associated contents, so that they can be combined. This way, you can combine the seminar Lifting Technology/ Textile Slinging Equipment with the seminar Lifting Technology/Wire Rope/ Chain, which is one day later at the same venue. In addition, there are combination possibilities with the subject of cargo securing (see page 21). So, you can improve your safety knowledge in a focussed way and very efficiently.

Seminar	Dates and Venues	Seminar-No.	Price €
Expert Seminar Lifting technology 1, textile, (1 day) Education to a skilled person with certificate of competence in Lifting technology of textile lifting slings	05.09.2012, Übach-Palenberg 07.11.2012, Übach-Palenberg	**SEM00001**	**280,00 ***
Expert Seminar Lifting technology 2 wire ropes and chains, (1 day) expert knowledge in lifting technology for wire ropes and sling chains	06.09.2012, Übach-Palenberg 08.11.2012, Übach-Palenberg	**SEM00023**	**470,00 ***
Expert Seminar Lifting technology 1+2, textile/wire ropes/chains, (2 days)	05. – 06.09.2012, Übach-Palenberg 07. – 08.11.2012, Übach-Palenberg	**SEM00002**	**730,00***
Basic Seminar Lifting technology textil, (1/2 day)	Seminar on request	**SEM00022**	**165,00***
Expert Seminar Load handling devices, (1 day)	09.11.2012, Langenfeld	**SEM00025**	**320,00***

You get the seminar documentation and a qualification certificate. Refer to www.globus-hebetechnik.de for the scheduled dates in 2013 starting from 10/2012!
* Rebates at multiple bookings. One person books multiple seminars or more persons from one company book the same seminar.

Seminar Safety Technology

Practical Training

Expert Knowledge Seminar
For the education to a skilled person in handling and checking the personal protection equipment against falling we offer 1- and 2-day expert seminars for the education to a skilled expert. Each participant gets an expert knowledge certificate. The correct application, the economic selection of the personal protection safety equipment and the checks of its safe status are trained. As expert, the participant is capable of assessing the discard maturity and conducting the annual checks.

Basic Seminar (Basic Module)
The seminar participant is enabled to assess the risk potential of his work and to select suitable securing means for the relevant situation. The basic training is prerequisite for the further education at handling the SpanSet rescue systems, which are offered in modules 1 to 3.

Extended module
With the extended module we offer you the unique opportunity, in addition to learning to handle arrester belts and connectors, to get informed and trained intensively in height safety devices.

The participant is enabled to save a fallen person without bringing himself into danger. The participant is trained on the relevant rescue system, which allows even a layman to save a person out of his/her safety harness.

Expert Seminars High-Altitude Worker
These include the education for commercial work in heights by application of manually operated work seats and are conducted as basic and further trainings.

Expert Seminars High-Altitude Rescue
These address persons, who have to conduct technical aid and rescue of persons in heights according to the required safety rules.

Info

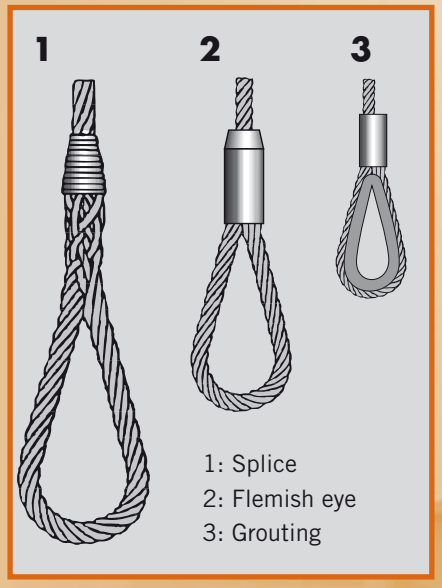
Further information at www.globus-hebetechnik.de! You can also register here!

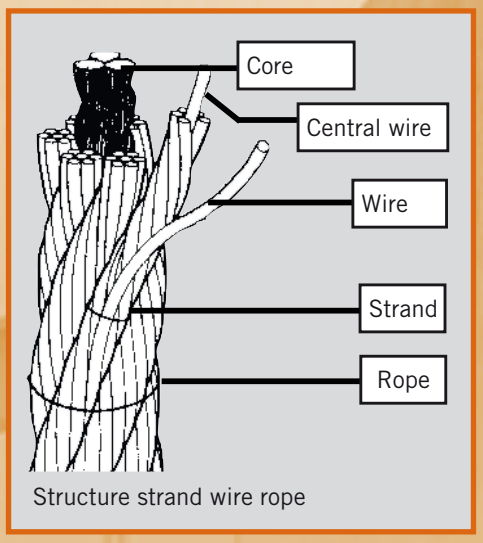
Seminar	Dates and Venues	Seminar-No.	Price €
Expert Knowledge fo Height Safety Technology, 2 days	28. – 29.08.2012, Übach-Palenberg 13. – 14.11.2012, Struppen	**SEM00006**	**640,00***
Basic Module + Module 1, Handling of Safety Harnesses and Connecting Equipment, 1 day	Seminar on request	**SEM00031**	**295,00***
Education to High-Altitude Worker, 5 days	Seminar on request	**SEM00041**	**750,00***
Training to work at heights Level 2 (Requirement SEM00041)	Seminar on request	**SEM00058**	**825,00***
Education to Supervising High-Altitude Worker, 5 days	Seminar on request	**SEM00042**	**925,00***
Further Education Seminar High-Altitude Worker/Supervising High-Altitude-Worker, 1 day	Seminar on request	**SEM00043**	**180,00***
Basic Seminar High-Altitude Rescue – Basic Education HRD, 10 days	17. – 28.09.2012, Struppen	**SEM00044**	**A. Anfr.**
Trainer Seminar High-Altitude Rescue – Team Leader/Trainer HRD, 10 days	17. – 28.09.2012, Struppen	**SEM00045**	**A. Anfr.**
Further Education Seminar High-Altitude Worker/Supervising High-Altitude-Worker, 5 days	08. – 12.10.2012, Struppen	**SEM00046**	**A. Anfr.**
Specialist seminar Group leader/trainer "Simple rescue operations" (5 days)	15. – 19.10.2012, Struppen	**SEM00059**	**475,00***

Refer to www.globus-hebetechnik.de for the scheduled dates in 2013 starting from 10/2012!
* Rebates at multiple bookings. One person books multiple seminars or more persons from one company book the same seminar.

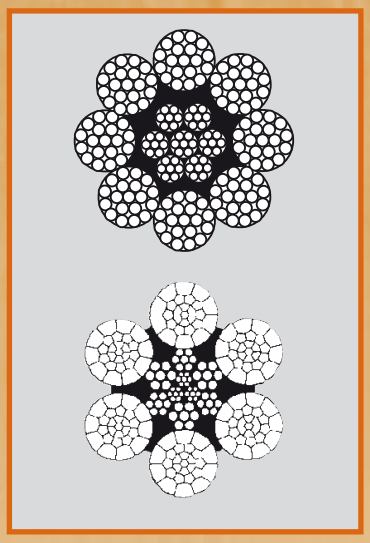
GLOBUS
HEBETECHNIK

Information about Wire rope



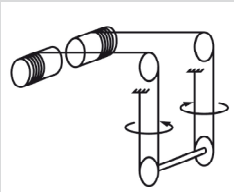


Structure strand wire rope



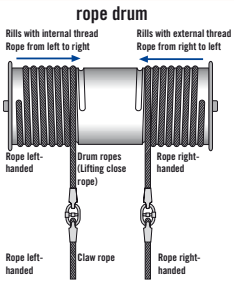
Technical Info

Wire rope allocation	A 26
Technical information on the wire rope (crane rope)	A 27 - A 37
Technical information on fixing rope	A 31, A 38 - A 39
Removal period for lifting devices and crane ropes	A 40 - A 41
Technical information on fibre ropes	A 42 - A 43



Reeving

Rope opening angle



Impact direction

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Page A	87	88	87	87	88	88	89	89	90	90	90	77	80	76	75	76	75	78	81	79	81	84	84	85	85	86
Construction crane grab crane Lifting rope					●	●	●	●	●	●	●	●			●		●	●	●		●	●	●	●	●	
							●		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●
Construction crane grab crand Adjustment rope															●		●		●		●	●		●	●	
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Construction crane grab crane Trolley travel rope										●		●			●		●	●					●			
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Construction crane grab crane Mounting rope					●	●							●				●									
																●			●		●	●		●	●	●
Construction crane grab-cran Boom rope, safety rope					●	●		●	●					●	●		●	●	●		●	●	●	●	●	
															●		●		●		●	●		●	●	
Construction crane grab Closing rope					●	●	●	●	●			●			●		●		●		●	●		●	●	
			●			●	●		●					●	●	●	●		●		●	●		●	●	●
Mobile crane Adjustment rope												●						●	●		●	●	●	●	●	
															●		●		●		●	●		●	●	
Mobile crane Adjustment rope																		●					●			
			●												●		●		●		●	●		●	●	
Mobile crane Safety rope														●	●	●	●	●	●		●	●	●	●	●	●
															●		●		●		●	●		●	●	
Container crane Stroke-hurry															●		●		●		●	●		●	●	
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Containerkran Verstellseil															●		●		●		●	●		●	●	
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Cable crane Lifting rope															●		●		●		●	●		●	●	
															●		●		●		●	●		●	●	
Cable crane Driving rope					●	●	●	●	●						●		●									
					●	●	●	●	●																	
Anchoring rope	●																									
		●	●	●	●	●	●	●	●																	
Lifting hoist rope		●	●	●			●	●																		
	On request																									
Page A	87	88	87	87	88	88	89	89	90	90	90	77	80	76	75	76	75	78	81	79	81	84	84	85	85	86

Electric pull

Lifting rope

Swim- /grab-crane Lifting rope

Swim- /grab-crane Adjustment rope

Swim- /grab-crane Safety rope

High and Low bucket excavator

Boom rope

Scoop buckets Lifting rope

Scoop buckets Adjustment rope

Bulk material charger Discharger, trolley travel rope, Lifting rope

Compensation rope Bulk material charger-Discharger, trolley

Compensation rope Bulk material charger-Discharger, trolley

Elevator rope

Sling rope

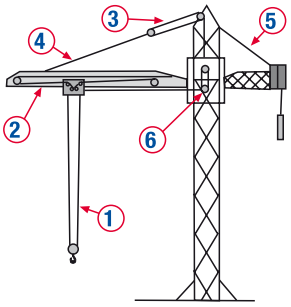
Bowden strand

Special applications of ropes

Please enter the following data on your orders:

- For running or standing property
- Rope Ø in mm
- Rope length in m
- Galvanized, blank or greased variant
- Flapping direction
- Nominal firmness
- Breaking stress
- Rope end connection

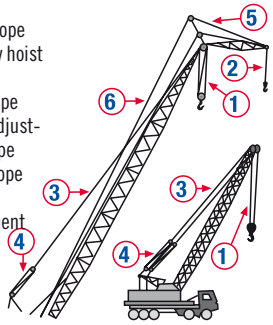
Tower turning crane



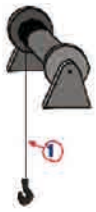
1 Lifting rope
2 Trolley driving rope
3 Boom adjust ment rope
4 Boom rope
5 Counter boom safety rope
6 Mounting rope

Mobile and Auto-crane

1 Lifting rope
2 Auxiliary hoist rope
3 Boom rope
4 Boom adjust-ment rope
5 Safety rope
6 Boom adjustment rope

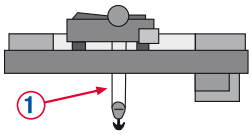


Electric pull



1 Lifting rope

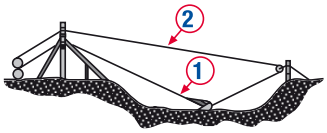
Indoor and Gantry crane



1 Lifting rope

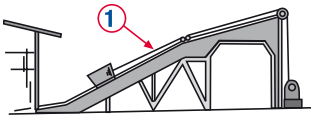
Scraper tilted

1 Drawing rope
2 Haul back rope Haul rope



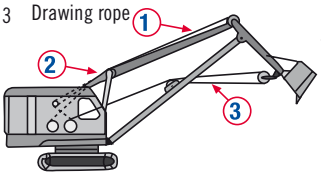
Elevator excavator

1 Elevator rope



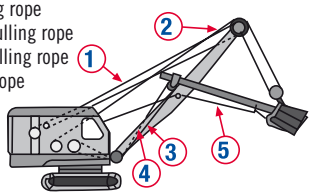
Low spoon excavator

1 Boom rope
2 Elevator rope
3 Drawing rope



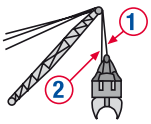
Shovel bucket

1 Boom adjustment rope
2 Lifting rope
3 Pre pulling rope
4 Re pulling rope
5 Flap rope



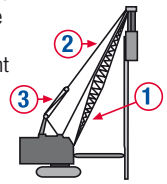
Slotted wall grip arm

1 Lifting rope
2 Closing rope



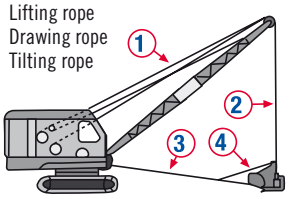
Ramme

1 Lifting rope
2 Boom rope
3 Boom adjustment rope



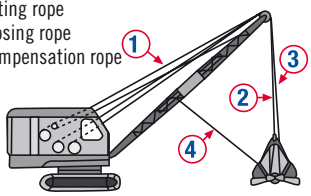
Excavator scoop bucket

1 Boom adjustment rope
2 Lifting rope
3 Drawing rope
4 Tilting rope



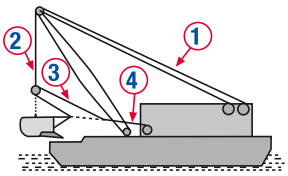
Excavator grip arm

1 Boom adjustment rope
2 Lifting rope
3 Closing rope
4 Compensation rope

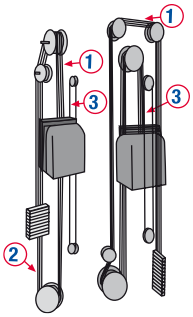


Swimming excavator

1 Boom rope
2 Lifting rope
3 Tilting rope
4 Pulling rope

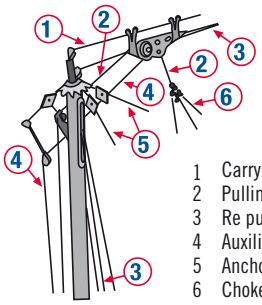


Passenger hoist



1 Driving disk rope
2 Counter rope
3 Governor rope

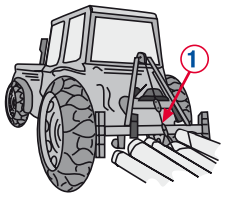
Forest tilting mast appliance and material cableway



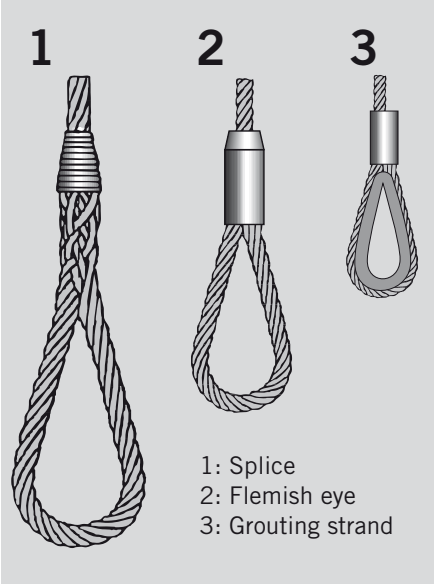
1 Carrying rope
2 Pulling rope
3 Re pulling rope
4 Auxiliary rope
5 Anchoring ropes
6 Choke rope

Forest tractor and extension hoists

1 Hoist cable

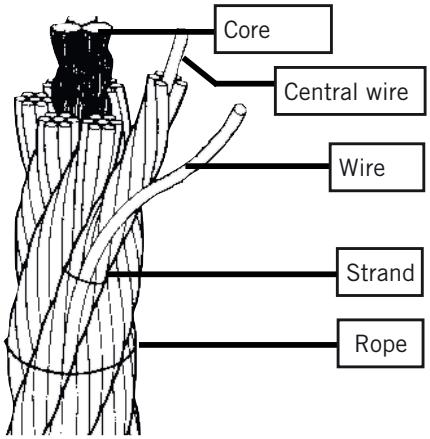


Technical wire rope info



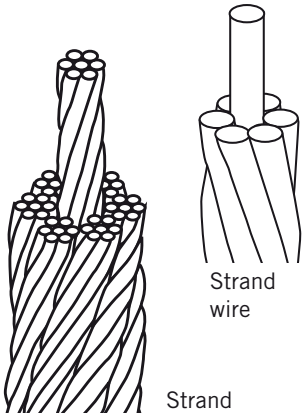
Component part:

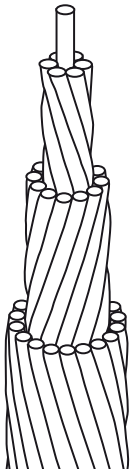
The classic rope is a not disclaimable element for machinery.



Structure strand wire rope

The wires can be screw-shaped, with one or more layers, normally wound around a central wire and make up spiral ropes or strands, which in turn make up the actual rope, wound helicoidal around one Soul.





Spiral rope

Structure of rope
Wire ropes consist of several strands, which are made of individual wires. Wires are thus the load bearing element of each wire rope.

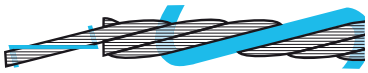
The strand
To manufacture a strand, wires are wound helically around a core wire.

Sling direction of the strand
The wires can be wound around the right of the core wire, thus right-handed (z) or also around the left, thus left-handed (s).

The strand rope
When producing ropes the strands are also helically wound around a core.

Sling styles
Sling direction (turning direction) of the rope stands for the direction of the helix of the outer strands. One differentiates right-handed ropes (abbreviation Z) and left-handed ropes (abbreviation S).

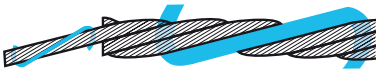
Cross laid
The wires in the strands have the opposite turning direction of the strands.



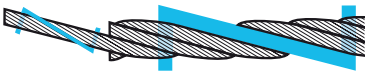
Cross laid Left zS

Cross laid right sZ

Long laid
The wires in the strands and the strands in the rope have the same direction of rotation.



Long laid left sS



Long laid right zZ

Intended purposes:

Running wire ropes
Are led over drums or disks (crane ropes, lifting ropes etc.)

Standing ropes
Are not redirected and are predominantly installed firmly (anchoring ropes, Guidance ropes, safety ropes etc.)

Carrying ropes
Take over the function of rails.
On them, roles of conveyances are led (Cable cranes, carrying ropes of cableways).

Sling ropes
Ropes, predominantly manufactured to lift loads.

Rope cores

Depending on the rope construction different materials with a different structure are used for the rope cores.

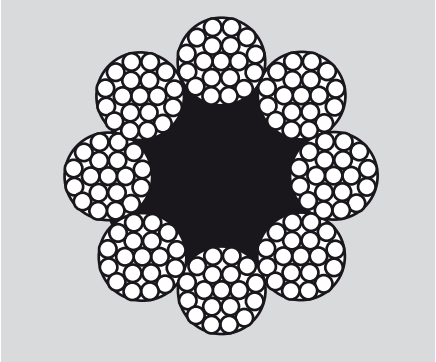
Fiber core (FC)
The core of a rope consists of natural and/or chemical fibers. Fiber cores store fat, support strands and absorb oscillations.

Steel core (WSC)
Steel cores consist of a core wire with spiral ropes or of stranded wires with strand ropes.

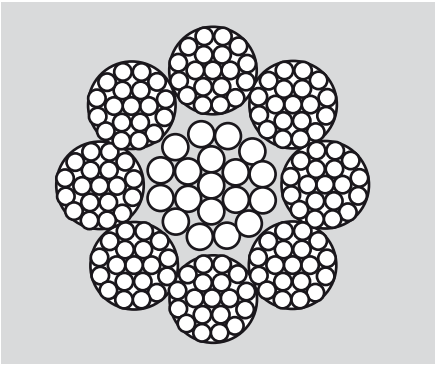
Steel strand core (WSC)
The core of a round strand cable is made of a steel strand.

Steel rope core (IWCR)
The core of a round strand rope is made of a strand rope.

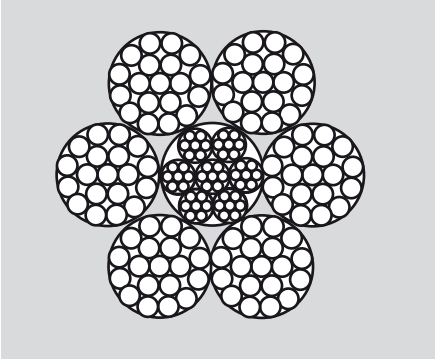
Plastic covered steel - core (EPIWRC)
The core consists of plastic - covered steel strand or plastic - covered steel rope.



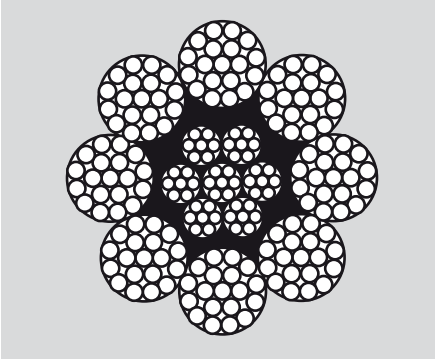
Round strand rope with fiber core



Round strand rope with steel strand core



Round strand rope with wire rope core



Round strand rope with plastic - covered steel core

Low spin and/or low tension

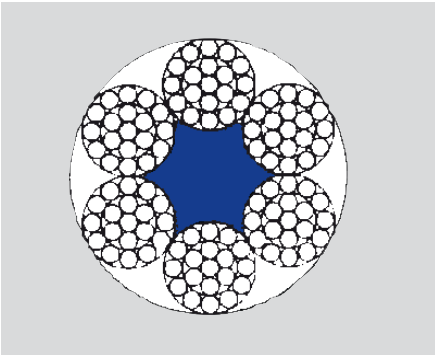
The production of low tension ropes is made possible by special treatment in the stranding process. It is low spin or low tension, if its strands and wires don't or hardly escape the rope unity, after removing the setting

Turning free, low turning

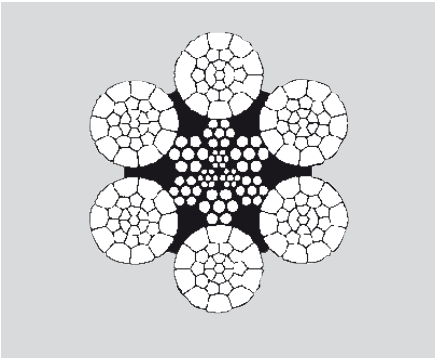
It is turn-free and/or low turning, if it doesn't turn or hardly turns around its own axis if a not guided load is affecting the longitudinal axis. Due to the geometry and the kind of stranding (multi-layer round strand ropes) the rope is turning free and/or low turning.

Compression of strands

The surfaces of the compressed ropes are smoothed , i.e. the tangent lines of the single wires become more laminar, due to this, the supporting and contact surface is enlarged. Compressed ropes have a substantially higher breaking strength than comparable, ropes which are not compressed. They also offer a quite good resistance against abrasion, because the external wires run more laminar.



Normal rope



Compressed rope

DIN EN 12385-2 term explanation

Stranding factor k

The stranding factor is an empirical value, which respects the stranding loss (= difference between determined and real breaking stress).

Minimum breaking strength

F_{min} (in kN)
The minimum breaking strength of the rope is the product of computational breaking strength and stranding factor k.

$$F_{min} = \frac{K \cdot d^2 \cdot Rr}{1000}$$

It is the smallest allowed value of the real breaking strength.

Linear mass w

in $M = w \cdot d^2$

The weight factor is a calculated value, which also respects the weight of the rope wires, as well as the weights of the core and the lubricants.

Filling factor f

The filling factor is the relationship of the metallic rope cross section to the area of its circle. For every rope construction the filling factor is specified in the corresponding norm.

Metallic cross section

q_m (in mm^2)
The metallic cross section is the cross section sum of all wires in the rope. It is calculated by the filling factor.

$$c = f \cdot \frac{\pi}{4}$$

d = rope diameter in mm

Nominal firmness

R_r (in N/m^2)

The nominal firmness is a figure for the breaking strength regulation of a rope.

Determined breaking strength

F_{em} (m kN)

The determined rope breaking strength is the sum of the, in the traction test, separately determined breaking strengths of all wires of the rope.

Real breaking strength

F_m (in kN)

The real rope breaking strength is the breaking strength which is determined by tearing up the rope in a whole strand.

Driving disks and rope drums - Common reeving systems

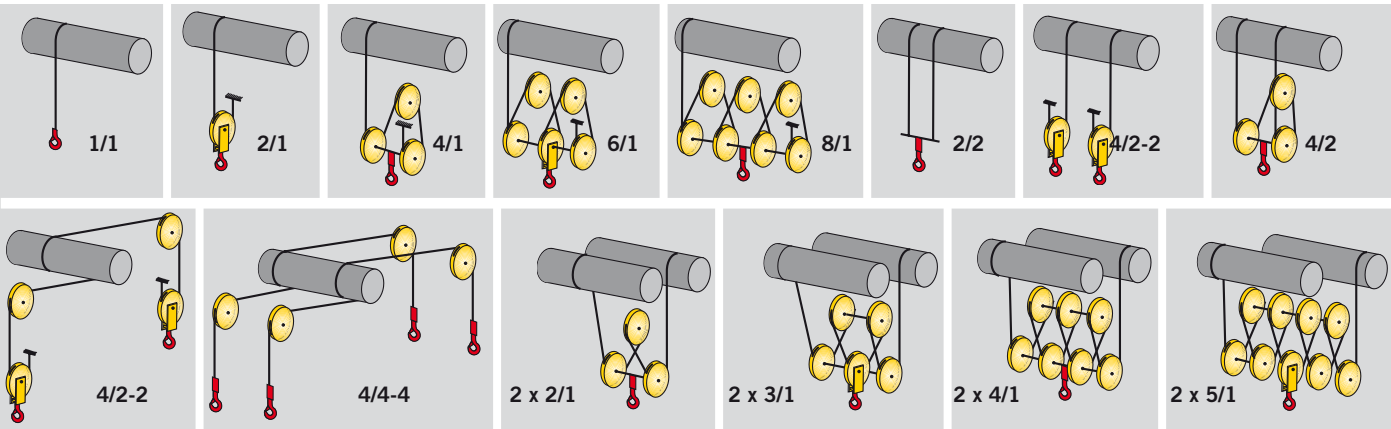
- Load bearing increase by repeated rope reeving
- Standard rope reeving 2/1 and/or. 4/1 e.g.: - small lifting heights, 8 stranded rope - large lifting heights, turning free ropes.

The sling direction has to be selected in opposite to the ascent direction of the drum.

Example: 4 / 4 - 4
- **Number of loading hooks**
- **Number of pulled ropes**
- **Number of rope strands**

Rope constructions for reeving systems

1/1 turning free wire ropes 36x7, Starlift, Eurolift
2/1 8-stranded wire ropes 8x19, 8x36, Strato/Turboplast, Superplast
2/1 with hook way starting from 40 m H40, turning free wire ropes
2/2 turning free wire rope 36x7, Starlift, Eurolift
4/1 8-stranded wire ropes 8x19, 8x36, Strato/Turboplast, Superplast
4/2 8-stranded wire ropes 8x19, 8x36, Strato/Turboplast, Superplast



Euro-machine guideline 2006/42 EG

The professional association FSA decided, that the European machine guideline 2006/42 EEC is complied in connection to the EN 13414-1 to 3 (instead of DIN 3088), and beyond that the FSA created a load-carrying capacity table (see envelope folding side).
This is a national appendix.

Security in the QM-system including product liability

- Nominal strength of the steel wires at least 1770 N/mm²
- Calculation of the load bearing capacity only of the minimum breaking strength and/ or of the remaining breaking strength
  Factor for aluminum grouting 0,9 Factor for Splice 0,8
  Operating coefficient 5

  Formel WLL = $\frac{F \times 0{,}8 \text{ oder } 0{,}9}{5}$
- Safety factor 5 (early accord. DIN 3088=6)
- Use only one layer round strand ropes (multi-layer ropes, e.g. Lifting ropes are forbidden)
- 3/4-stranded wire rope hangers must only be used with three-part ring hangers
- Loading hook at least quality grade 4, e.g. DIN 7541and EN 1677-3, EN 1677-5
- Hanging links may only be used according to EN 1677-4 (DIN 5688) quality grade 8 and EN 1677-6 quality grade 4
- Only use construction units that are in accordance to EN 1677-1+2 (DIN 5691 quality grade 8) for combination hangers

DIN	DIN/ISO	EN valid
General Requirements and acceptance conditions for strand wire	DIN 3051	EN 12385-1
Part 2 introduction, designation and definitions		EN 12385-2
Part 3 Inform. f. use and maintenance		EN 12385-3
Part 4 strand wire ropes for general applications		EN 12385-4
Part 5 strand wire ropes for elevators		EN 12385-5
Security of machines - basic ideas		EN 292-2 (A1=1995)
Security of machines - guiding principles		EN 1050
Forming steel thimbles AGAIN	DIN 3090	EN 13411-1
spliced rope loops	DIN 3089	EN 13411-2
Ferrules and - connections made from forgeable alluminum alloys	DIN 3093	EN 13411-3
Flemish eye with steel ferrule	DIN 3095	EN 13411-3
Metal and synthetic resin groutings	DIN 3092	EN 13411-4
Wire rope clamps f. rope loops	DIN 1142	EN 13411-5
Asymmetrical wedge locks	DIN 43148	EN 13411-6
Symmetrical rope locks	DIN 15315	EN 13411-7
Steel fittings and groutings		EN 13411-8
Kinds of inspection certificates	DIN 50049	EN 10204
Sling ropes in the lifting appliance operation 5/89	DIN 3088/ISO 8793	EN 13414-1 u. -3
Sling ropes made from steel wire ropes - Guide	DIN 3088	EN 13414-2
Grummets and cable sling – sling ropes	DIN 3088	EN 13414-3
Examined round steel chains	DIN 685	EN 818-1
Round steel chains for sling chains GK 8	DIN 5687-3	EN 818-2
Round steel chains for sling chains GK 5	DIN 5687-1	
Round steel chains for sling chains GK 4	DIN 766	
Full thimbles	DIN 3091	
Antenna wing units made from steel	DIN 4131	
Chimneys made from steel	DIN 4133	
Sling chains GK 8	DIN 5688-3	EN 818-4
Sling chains GK 4	DIN 695	EN 818-5
Sling chains, guide for use etc.	DIN 695	EN 818-6
Forged individual parts GK 8	DIN 5691	EN 1677-1
Forged hooks with security flap GK 8		EN 1677-2
Forged, self-locking hooks		EN 1677-3
Hanging / single links GK 8	DIN 5688-3	EN 1677-4
Forged hooks with security flap GK 4		EN 1677-5
Hanging / single links GK 4	DIN 695	EN 1677-6
Lashing strap/load protection	DIN 60060	EN 12195-2
Lashing chain/load protection		EN 12195-3
Textile sling gear part 1+2	DIN 61360	EN 1492 Teil 1+2
Sling fiber ropes	DIN 83302	EN 1492-4
Fiber ropes polyamide	DIN 83330/696	EN 1140
Fiber ropes polyester	DIN 83331/697	EN 1141
Fiber ropes Manila and Sisal	DIN 83322698	EN 1181
Fiber ropes polypropylene	DIN 83329/699	EN 1346
Fiber ropes hemp	DIN 83325	EN 1261
Fiber ropes general specifications		
Fiber ropes physical and mechanical characteristics	EN 919	EN 9554
High-strength shackles		EN 13889
Principles for rope drives	DIN 15020	
Groove profiles	DIN 15061	
Pulleys	DIN 15063	
Steel structures	DIN 18800	EN 1090 ff.
Hoist rope	DIN 21251	
Rope cases	DIN 83313	
Shackle normal steel	DIN 82101	
Crane-less load suspension device		EN 13155
Single links GK8	DIN 5688-3	
One-way lifting bands made from chemical fiber	DIN 60005-1	
Calculation of lashing powers		EN 12195-1
Lashing straps made from chemical		EN 12195-2
Lashing chains		EN 12195-3
Lashing wire ropes		EN 12195-4
Eyebolt	DIN 580	
Cranes, principle + calculation part 1-3	DIN 15018	EN 13001-1

Examined quality is a guarantor for security

Wire ropes as well as sling ropes must be examined periodically and also before each employment, because through wear security decreases.
The accident prevention guidelines regulations and the DIN EN norms lead you to the correct way.

Regulations

There is a large number of EN norms, depending on intended purpose, e.g. for Sling ropes EN 13414-1+2 (DIN 3088), as addition

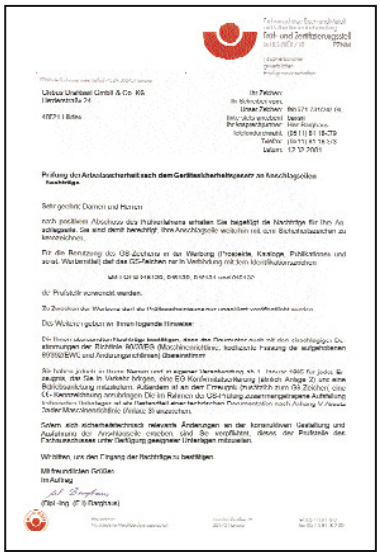
- Ferrules EN 13411-3 (DIN 3093)
- Splices EN-13411-2 (DIN 3089)
- Flemish Eye similar DIN 3095
- Thimbles EN 13411-1 (DIN 3090)
- Groutings EN 13411-4 (DIN 3092)
- Wire rope clamps. EN 13411-5 (DIN 1142)
- Eye hooks EN 1677/DIN 7541
- For rope drives e.g. DIN 15020, 15021, 15061, VDI apply, and 2358 is recommended
- Terms of delivery for wire ropes EN 12385 1+2 (DIN 3051)

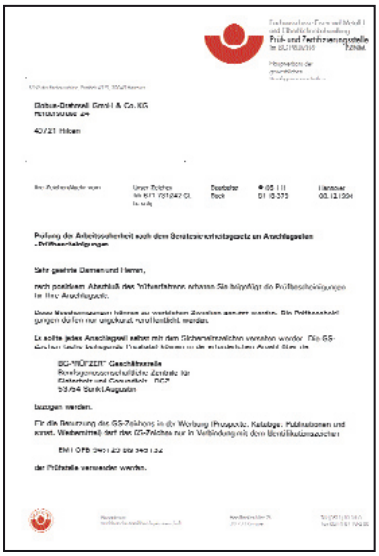
EN 12385-4 appendix A

Calculation of the minimum breaking strengthfor ropes according to tables 5 to 17

Rope with 2 mm up to 60 mm in diametercalculation of the minimum breaking strength Fmin(in kN)

$$F_{min} = \frac{K \cdot d2 \cdot Rr}{1000}$$





D = nominal rope diameter (mm)

Rr = rope strength class (N/mm²)

K = factor for the minimum breaking strength for a given rope class and kind of core

K1= factor for strand ropes with fiber cores(single layer rope) or central fiber core (low turning rope)

K2= factor for strand rope with independently stranded steel rope core

K3= factor for strand ropes with a strand core (single layer rope) or central core (low turning rope)

Info

You'll find further information about „DIN/CISO = EN " on page A 31!

Composition of calculation factors according to EN 12385-4, appendix A
Factors for strand ropes made from steel wire for general purposes

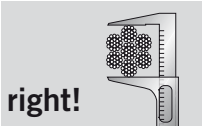
Kind of rope	Rope class	Ropes with fiber core or fiber core			Ropes with steel cores or central strand core						Old Norm DIN	New EN 12385 Table	Rope construction Amount		
		Factor for the calculated linear mass	Factor for the metallic cross section	Factor for minimus breaking strength	Factor for the calculated linear mass		Factor for the metallic cross section		Factor for the minimum breaking strength				oft the strands	of the wires in a strand	of all wires
		W_1	C_1	K_1	W_2	W_3	C_2	C_3	K_2	K_3					
Single layered round strand rope	6 x 7	0,345	0,369	0,332	0,384	0,384	0,432	0,432	0,359	0,388	3055	5	6	7	42
	8 x 7	0,327	0,335	0,291	0,391	-	0,439	-	0,359	-	3056	6	8	7	56
	6 x 19	0,359	0,384	0,330	0,400	-	0,449	-	0,356	-	3058/59	7	6	19	114
	8 x 19	0,340	0,349	0,293	0,407	-	0,457	-	0,356	-	3061/62	8	8	19	152
	6 x 36	0,367	0,393	0,330	0,409	-	0,460	-	0,356	-	3063/64	9	6	36	216
	8 x 36	0,348	0,357	0,293	0,417	-	0,468	-	0,356	-	3067	10	8	36	288
	6 x 35M	0,352	0,377	0,317	0,392	-	0,441	-	0,345	-	3065	11	6	35	210
	6 x 19M	0,346	0,357	0,307	-	0,381	-	0,418	0,332	0,362	3060	12	6	19	114
	6 x 37M	0,346	0,357	0,295	0,381	0,381	0,418	0,418	0,319	0,346	3066	13	6	37	222
Low turning rope	18 x 7	0,382	-	0,328	-	0,401	-	0,433	-	0,328	3069	14	18	7	126
	34(M) x 7	0,390	-	0,318	-	0,401	-	0,428	-	0,318	-	15	34	7	238
	36(M) x 7	-	-	-	-	0,454	-	0,480	-	0,360(1	3071	16	36	7	252
										0,350(2					

1) Up to and incl. rope strength class 1960 N/mm² 2) rope strength class larger 1960 up to 2160 N/mm²

Correct handling and control = high service life

Error frequency during rope uses

- Wrong drawing of rope
- Wrong sling direction on rope drums
- Pulleys or rope grooves not correctly laid out or worn
- No greasing - thereby increased wear



Correct measuring

Control end connections:

- Renew groutings when reaching the maximum resting period and rene wal in case of wire breaks and Corro- sion in the rope pear
- Check splices for correct position of the plug in strands and wire breaks
- Check pressing and bolt connections

Controls of pulleys and rope drums

- Pay attention to smooth operation!
- Examine bottoms of grooves!
- Exchange grooves with rope castings!

(correct groove Ø = Seil-Ø + 6 + 8% according to DIN 15020 = 1,05 x Seil-Ø)

Groove too tight **Correct!** Groove too broad

- Exchange grooves with rope castings!

Technical information

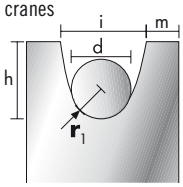
Controls according to DIN 15061 part 1 for pulleys

Accuracy

1 = standard rolled

2 = turned

3 = fine-turned, e.g. for huts Rolling mill cranes



Allowed deviation

Rope-Ø 3-7 = + 6%

Rope-Ø über 7 = + 5%

Rope-Ø 10-15 r1 = 1/2 Rope-Ø + 0,3

z.B.: Rope-Ø = 10 -> r1 = 5,3 mm

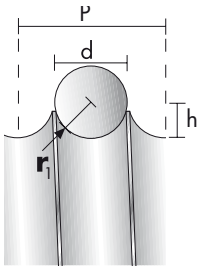
Rope-Ø 16-30 r1 = 1/2 Rope-Ø + 0,4

	Grove radius			reference values			rope diameter
	devination of nomin						
r1	1	2	3	h	i	m	d
1,6	+ 0,4	+ 0,2	+ 0,1	8	9	2	3
2,2	+ 0,4	+ 0,2	+ 0,1	10	11	2	4
2,7	+ 0,4	+ 0,2	+ 0,1	12,5	14	2	5
3,2	+ 0,4	+ 0,2	+ 0,1	12,5	15	3	6
3,7	+ 0,4	+ 0,2	+ 0,1	15	17	4	7
4,2	+ 0,4	+ 0,2	+ 0,1	15	18	4	8
4,8	+ 0,4	+ 0,2	+ 0,1	17,5	21	4,5	9
5,3	+ 0,6	+ 0,3	+ 0,2	17,5	22	4,5	10
6	+ 0,6	+ 0,3	+ 0,2	20	25	5	11
6,5	+ 0,6	+ 0,3	+ 0,2	20	25	5	12
7	+ 0,6	+ 0,3	+ 0,2	22,5	28	5	13
7,5	+ 0,6	+ 0,3	+ 0,2	25	31	6	14
8	+ 0,6	+ 0,3	+ 0,2	25	31	6	15
8,5	+ 0,8	+ 0,4	+ 0,2	27,5	34	6	16
9	+ 0,8	+ 0,4	+ 0,2	30	37	6	17
9,5	+ 0,8	+ 0,4	+ 0,2	30	38	6	18
10	+ 0,8	+ 0,4	+ 0,2	32,5	40	7	19
10,5	+ 0,8	+ 0,4	+ 0,2	35	43	7	20
11	+ 0,8	+ 0,4	+ 0,2	35	44	7	21
12	+ 0,8	+ 0,4	+ 0,2	35	45	7	22
12,5	+ 0,8	+ 0,4	+ 0,2	35	46	7	23
13	+ 0,8	+ 0,4	+ 0,2	37,5	48	8	24
13,5	+ 0,8	+ 0,4	+ 0,2	40	51	8	25
14	+ 0,8	+ 0,4	+ 0,2	40	52	8	26
15	+ 0,8	+ 0,4	+ 0,2	40	53	8	27, 28
16	+ 0,8	+ 0,4	+ 0,2	45	59	8	29, 30

Controls according to DIN 15061 part 2 for rope drums

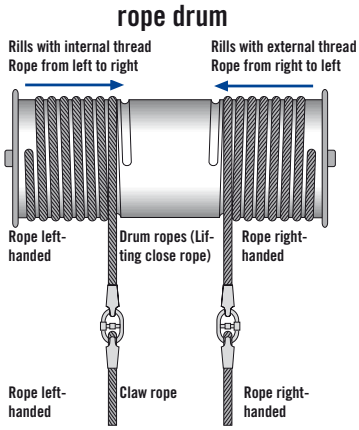
Accuracy

2 = turned



Rillenradius					rope diameter
r1	dev.of nom.	p	h	r2	d
1,6	+ 0,1	4	1,2	0,5	3
2,2	+ 0,1	5	1,5	0,5	4
2,7	+ 0,1	6	1,9	0,5	5
3,2	+ 0,1	7	2,3	0,5	6
3,7	+ 0,1	8	2,7	0,5	7
4,2	+ 0,1	9,5	3,0	0,5	8
4,8	+ 0,1	10,5	3,5	0,5	9
5,3	+ 0,2	11,5	4	0,8	10
6	+ 0,2	13	4,5	0,8	11
6,5	+ 0,2	14	4,5	0,8	12
7	+ 0,2	15	5	0,8	13
7,5	+ 0,2	16	5,5	0,8	14
8	+ 0,2	17	6	0,8	15
8,5	+ 0,2	18	6	0,8	16
9	+ 0,2	19	6,5	0,8	17
9,5	+ 0,2	20	7	0,8	18
10	+ 0,2	21	7,5	0,8	19
10,5	+ 0,2	22	7,5	0,8	20
11	+ 0,2	24	8	0,8	21
12	+ 0,2	25	8,5	0,8	22
12,5	+ 0,2	26	9	0,8	23
13	+ 0,2	27	9	0,8	24
13,5	+ 0,2	28	9,5	0,8	25
14	+ 0,2	29	10	0,8	26
15	+ 0,2	30	10,5	0,8	27
15	+ 0,2	31	10,5	0,8	28
16	+ 0,2	33	11	1,3	29
16	+ 0,2	34	11,5	1,3	30

Pay attention to correct flapping direction on rope drum!



Adjustment of the wire rope flapping direction to the rope drum groove ascent! Representation of the correct connection of rope ends with grip boom range!

DIN 15020 sheet 1 - groups of engines by run time classes and load collectives

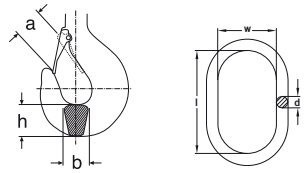
Run time class	Abbreviation Average run time for each day in h, related to 1 year			V_{006} upto 0,125	V_{012} 0,125-0,25	V_{025} 0,25-0,5	V_{05} 0,5-1	V_1 1-2	V_2 2-4	V_3 4-8	V_4 8-16	V_5 over 16
	No.	Designation	Explanation	group of engines								
Load collective	1	light	small frequency of largest loads	$1E_m$	$1E_m$	$1D_m$	$1C_m$	$1B_m$	$1A_m$	2_m	3_m	4_m
	2	medium	About the same frequency of small, middle and largest loads	$1E_m$	$1D_m$	$1C_m$	$1B_m$	$1A_m$	2_m	3_m	4_m	5_m
	3	heavy	Almost constantly largest loads	$1D_m$	$1C_m$	$1B_m$	$1A_m$	2_m	3_m	4_m	5_m	6_m

At a duration of an operating period of 12 min or more the rope drive may be classified 1 group of engines lower than the group of engines, which is determined from long-term class and stress collective.

Selection sheet crane hooks

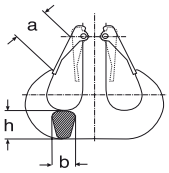
According to DIN 15401 and DIN 15402

Single hooks no.



Hook number eg. GSN xx eg. STB xx	b [mm]	h [mm]	Hook mouth [mm]	opened trap a [mm]
05	24	31	28	60
08	29	37	34	60
1	32	40	34	60
1,6	38	48	40	60
2,5	45	58	41	60
4	53	67	49	65
5	60	75	55	75
6	67	85	55	90
8	75	95	69	100
10	85	106	76	110
12	95	118	84	120
16	105	132	97	140
20	118	150	110	150
25	132	170	132	180
32	150	190	137	190
40	170	212	158	
50	190	236	180	
63	212	265	197	
80	236	300	222	
100	265	335	251	
125	300	375	284	
160	335	425	316	
200	375	475	350	
250	425	530	396	

Double hooks no.



Hook number eg. GSN xx eg. STB xx	b [mm]	h [mm]	Hook mouth a [mm]
05	22	27	16
08	26	33	18
1	28	36	22
1,6	34	43	24
2,5	40	50	30
4	48	60	31
5	53	67	38
6	60	75	48
8	67	85	47
10	75	95	57
12	85	106	60
16	95	118	63
20	106	132	73
25	118	150	87
32	132	170	108
40	150	190	112
50	170	212	130
63	190	236	
80	212	265	
100	236	300	
125	265	335	
160	300	375	
200	335	425	
250	375	475	

End of service life with crane ropes acc. to DIN 15020 sheet 2

No. of the carrying wires in the ext. strands of the rope [1]	Number of visible wire breaks at the end of service life							
	Groups of engines 1Em 1Dm 1Cm 1Bm 1Am				Groups of engines 2m 3m 4m 5m			
	Cross laid With a length of		long laid With a length of		Cross laid With a length of		long laid With a length of	
	6 d	30 d	6 d	30 d	6 d	30 d	6 d	30 d
bis 50	2	4	1	2	4	8	2	4
51-75	3	6	2	3	6	12	3	6
76-100	4	8	2	4	8	16	4	8
101-120	5	10	2	5	10	19	5	10
121-140	6	11	3	6	11	22	6	11
141-160	6	13	3	6	13	26	6	13
161-180	7	14	4	7	14	29	7	14
181-200	8	16	4	8	16	32	8	16
201-220	9	18	4	9	18	35	9	18
201-240	10	19	5	10	19	38	10	19
241-260	10	21	5	10	21	42	10	21
261-280	11	22	6	11	22	45	11	22
281-300	12	24	6	12	24	48	12	24
over 300 [2]	0,04 . n	0,08 . n	0,02 . n	0,04 . n	0,08 . n	0,16 . n	0,04 . n	0,08 . n

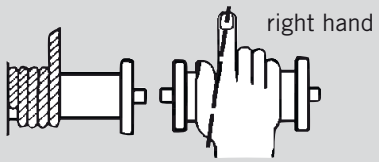
1) Filling wires are not regarded as carrying. For wire ropes, with several strand positions only the strand of the most outer strand position is deemed to be the „external strand“. For wire ro pes with steel core, the core is regarded like an inner strand.

2) The calculated numbers have to be rounded up.

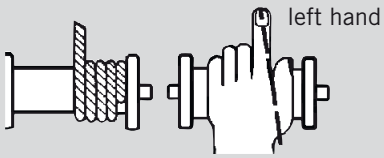
Classification of kinds of cranes

No.	Kinds of cranes	Operation	Lifting classes	Stress group
1	Hand cranes		H1	B1, B2
2	Assembly cranes		H1, H2	B1, B2
3	Engine house cranes		H1	B2, B3
4	Camp cranes	Cranes inter-rupt. operation	H2	B4
5	Camp cranes, cross beam cranes	Continuous operation	H3, H4	B5, B6
6	Workshop cranes		H2, H3	B3, B4
7	Bridge cranes, drop work cranes	Grip or magnet operation	H3, H4	B5, B6
8	Casting cranes		H2, H3	B5, B6
9	Stripper cranes, charging cranes		H3, H4	B6
10	Stripper cranes, charging cranes		H4	B6
11	Forging cranes		H4	B5, B6
12	Loading bridge cranes, half portal cranes, full portal cranes with trolley	Hook operation	H2	B4, B5
13	Loading bridge cranes, half portal crane, grip boom - or Full portal cranes with trolley or turning crane	Magnet operation	H3, H4	B5, B6
14	Mobile conveyer bridges with firmly built in or adjustable strap (straps)		H1	B3, B4
15	Wharf cranes, slipway cranes Equipment cranes	Hook operation	H2	B3, B4
16	Dockside cranes, rotary cranes, floating cranes, luffing and slewing cranes	Hook operation	H2	B4, B5
17	Dockside cranes, rotary cranes, floating cranes, luffing and slewing cranes	Grip or magnet operation	H3, H4	B5, B6
18	Heavy load swimming cranes, frame cranes		H1	B2, B3
19	Deck cranes	Hook operation	H2	B3, B4
20	Deck cranes	Grip or magnet operation	H3, H4	B4, B5
21	Tower turning cranes for building		H1	B3
22	Assembly cranes, derrick crane	Hook operation	H1, H2	B2, B3
23	Car cranes, mobile	Hook operation	H2	B3, B4
24	Car cranes, mobile	Grip or magnet operation	H3, H4	B4, B5
25	Railway cranes		H2	B4
26	Heavy load car cranes, mobile	Hook operation	H2	B3, B4
27	Car cranes, mobile cranes	Grip or magnet operation	H3, H4	B4, B5
28	Heavy load car cranes, mobile heavy load cranes		H1	B1, B2

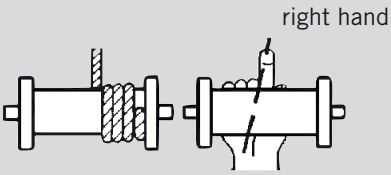
Sling direction of the rope



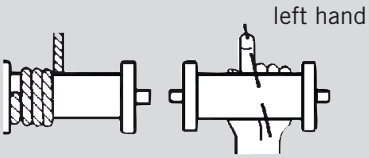
Upper run from left to right
right-handed rope



Upper run from right to left
left-handed rope



Lower run from right to left
right-handed rope



Lower run from left to right
left-handed rope

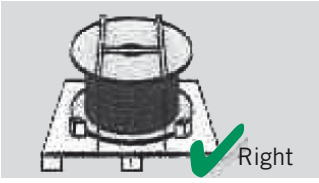
In acc. with abbreviation DIN EN 12385 part 2 (DIN 3051)

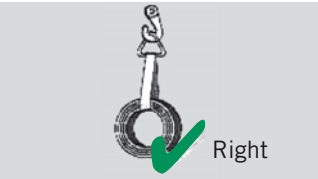
New no.	Abreviation characteristic	New	Old
4.4.2	Nominal diameters		[in mm]
4.3.3	Kind of the core fiber core	FC	FE
	Natural fiber core	NFC	FEN
	Chemical fiber core	SFC	FEC
	Steel core	WC	SE
	Steel rope core	IWRC	SES
	Steel strand core	WSC	SEL
4.4.3	Construction		DIN-Nr.
4.4.5	Nominal strength of the wires	N/mm²	N/mm²
	1570 N/mm² (160 kp/mm²)	von 1570	von 1570
	1770 N/mm² (180 kp/mm²)	bis 2160	bis 1770
4.4.6	Surface of the wires blank	U	bk
	Galvanized pulle	B	zn k
	Thick-galvanized	AB	di zn
4.4.7	Surface of the wires blank		
4.4.71	Spiral rope right-handed	z	z
4.4.72	Strand rope left-handed	s	s
	Cross laid right-handed	sZ	sZ
	Cross laid left-handed	zS	zS
	Long laid right-handed	zZ	zZ
	Long laid left-handed	sS	sS
	Low tension execution		spa
	Standard/cross laid	M	-
	Load bearing capacity	WLL	t

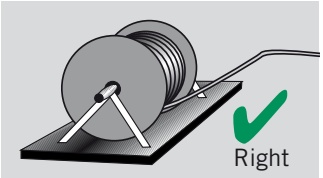
Correct data for the order

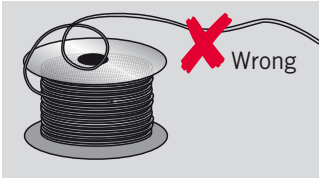
- Rope length in m or mm (rope length in relaxed condition; for a rope with end fittings, measure from point of suspension to point of suspension)
- Rope diameter in mm
- The execution of the rope ends (e.g. Thimble rope pear) must be indicated exactly
- Tolerances deviating from the norm have to be agreed upon particularly
- DIN/EN designation or construction (e.g. Fiber or steel core, steel strands or Steel rope core)
- Nominal strength of the wire (e.g. 1770 N/mm²) and the minimum breaking strength of the rope (e.g. 145 kN)
- Sling style (cross laid, long laid)
- Sling direction (right-handed, left-handed)
- Surface of the rope (blank, galvanized)
- Special whishes must be indicated (e.g. low tension, low turning or turning free)!

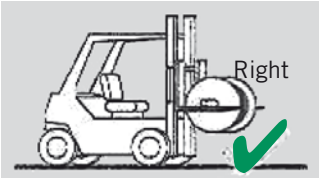
Unrolling of wire ropes







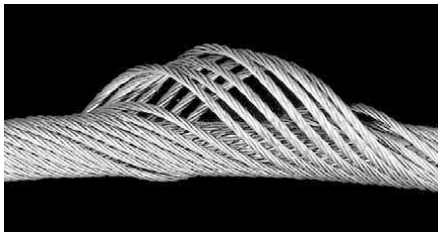




Damage which can occur in crane technology

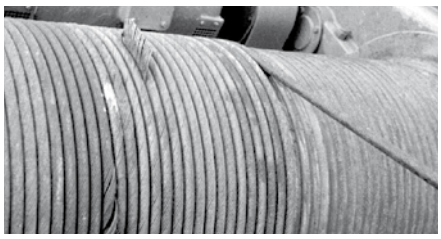
Birdcage formation

This wire was untwisted. Here the outer strands are too long for the wire. A wire disc caused the mass to be formed from the excess length and the outer strands are now too high.



Birdcage formation in a low rotational rope. If you have seen one you have seen them all.

Further birdcage formation on a low rotational rope.

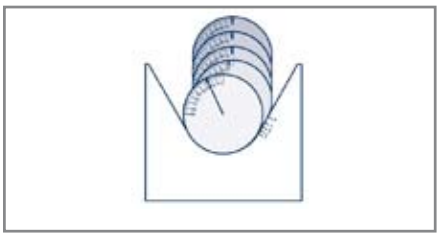


This low rotational rope was fixed to a free-moving eddy. While taking the strain of the load the rope wound up and loosened the outer strands. Then wound up parts of the rope passed through the reeving and the wire disc caused the overlength to loosen the outer strands to form a mass downstream. This is a typical example of how a fault (eddy) at the end of the rope (birdcage formation) can cause damage to the other end.

Grooves too narrow

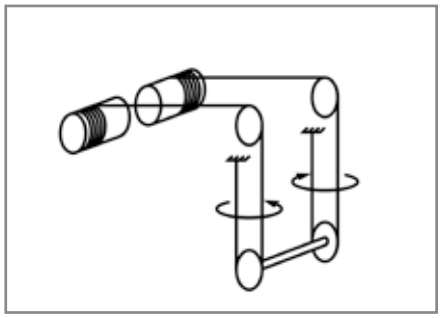
Avoid too narrow rills. If the groove radius is too small, the wire rope is compressed. Superfluous wire length forms a point. Presence of strand loosening or birdcage formation **(Page A 33)**.

Under the influence of a deflection angle the rope is drawn against its neighbouring strand. The outer wires are damaged upon contact **(Page A 33).**

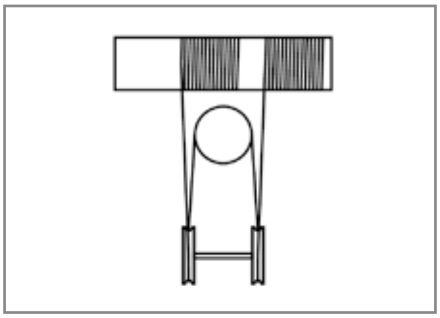


Groove opening angle 60°. Clearly diminished rope twisting at a deflection angle of 5°.

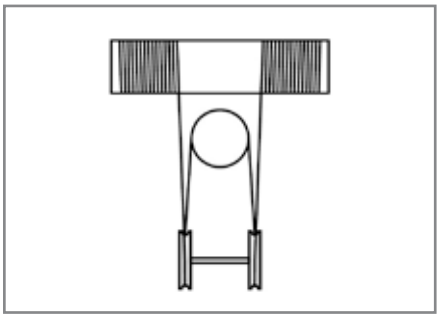
The rotation of wire ropes



Rotation resistant lift system with two drums with wires left and right with rope unable to rotate. Torque is eliminated.



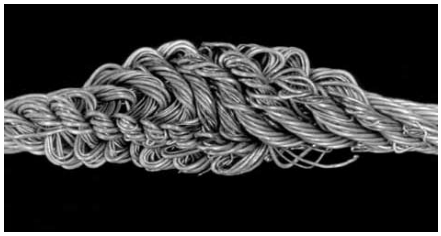
Crane with two left wire drums. A continuous rope with a left drum and a right rope. Disadvantage: small movement of the load in the winding direction during lifting.



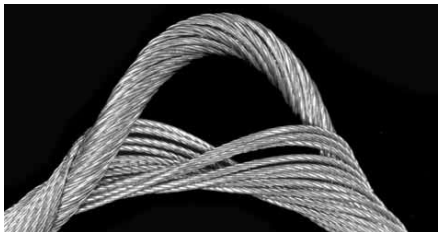
A left rope and a right drum / A double drum with one half on the left and the other on the right. When lifting there is no load shift however on the right drum the rope is stressed when rotating.

Reference: Dipl.-Ing. Verreet: Drahtseile vor Gericht

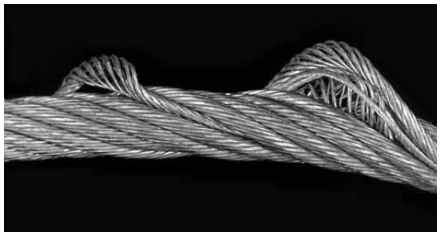
Damage caused by twisting



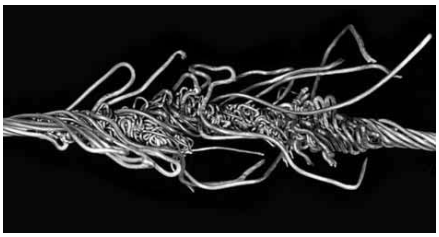
Steel core after peeling of the outer braids/ the accumulated extended length is clearly visible.



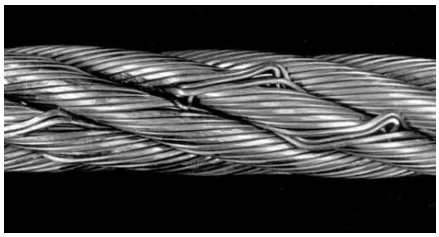
By rotating in the wire winding directions this rope was shortened and the steel liner lengthened.



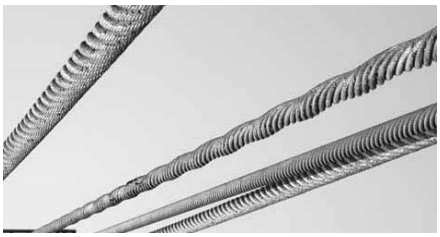
Double parallel ropes react sensitively to twisting. Here the inner braids have been lengthened and pressed out.



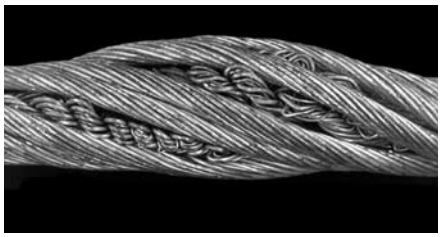
Often twisting damages the inner (shortest) strands. This is found stretched in the wire.



In this six-strand wire the two outer wires of the outer strands have loosened through twisting of the wire.

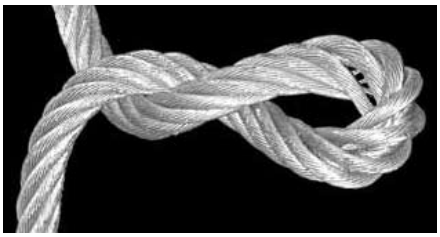


Corkscrews can form when ropes rub on construction components of drawn through wire grooves that are too narrow.



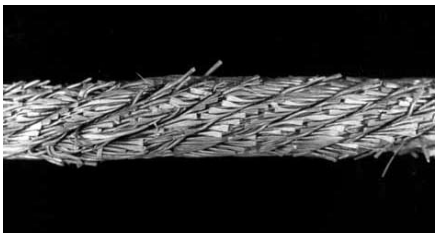
The lengthening of the inner strands caused by twisting was pushed by a steel wire to one point. Such damage is often found at the end point of the wire movement above the disc or the drum.

This wire was twisted in the direction of the upward drawn wire/ without a load the strand wire forms a loop in the direction the wire is twisted. When the wire then bears a load the loop can close and deform the wire rope permanently.



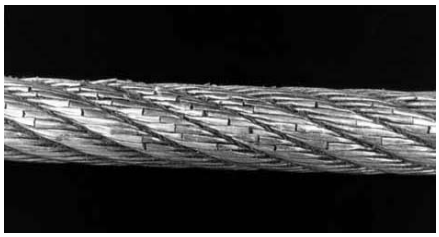
This wire was twisted in the upward direction. When not bearing a load a loop forms in the upward direction.

Damage to cable sheaves

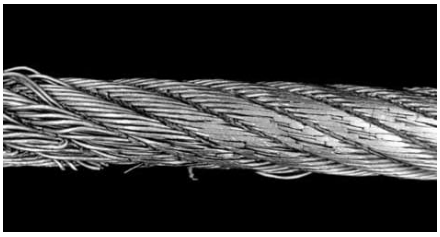


This wire was deployed in a pulley that was too narrow.

On account of the high friction a wire "jumps" more easily from a plastic disc than a steel one

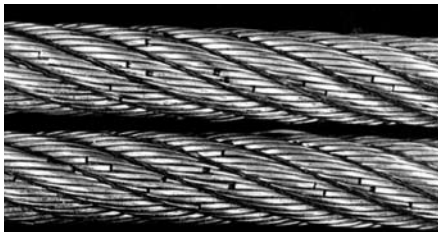


Another example of a wire deployed in a pulley that was too narrow.



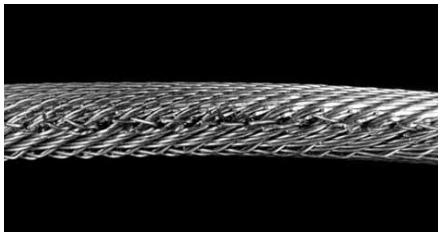
Wire grooves that are too open give poor support to the wire/ the result is premature wire breakage along one track.

Damage from a too intense bending cycle



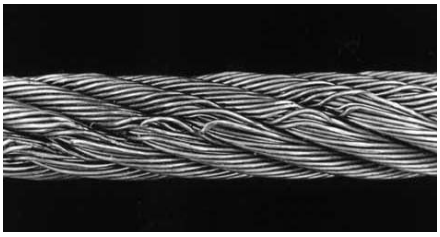
Fatigue cracking on steel wires with dense outer strands.

Reference: Dipl.-Ing. Verreet: Drahtseile vor Gericht



This rotation-resistant wire rope was seriously damaged by being drawn to the side of the groove.

Wire-disc contact points with the drum



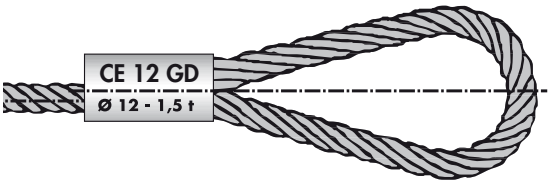
This wire rope was drawn over the side of the groove. Pay attention to the angular damage.

Attention - you should consider this

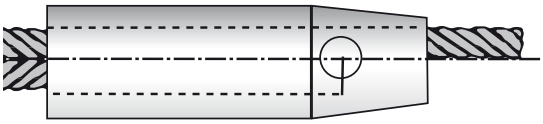
EN 13414 1+2

1. Manufacturer identification (GLOBUS = GD)
2. CE-stamp on the clamp
3. Grouting correct?

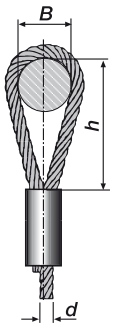
Does the dead rope end conclude with the edge of clamp?



Is the rope end visible the control drilling at the conical grouting?



4. Is the clamp length 4.5 x D?



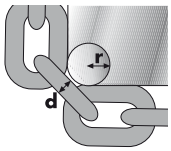
5. Rope loops in dependence of the crane hook or pin Ø

h= Width x 3

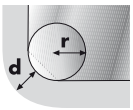
$B = \frac{h}{3}$

Standard loops are at least 15 x rope-Ø

One speaks of sharp edges,
if with chains the edge radius is smaller than the nominal thickness of the chain...



if with ropes the edge radius is smaller than the rope diameter.



6. Length specifications of sling ropes

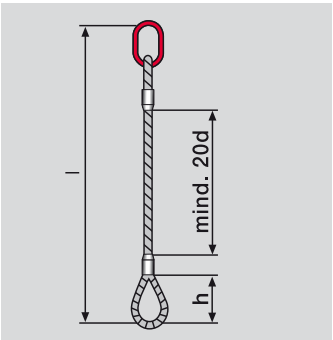


Fig. 1: Length of a single stranded sling rope

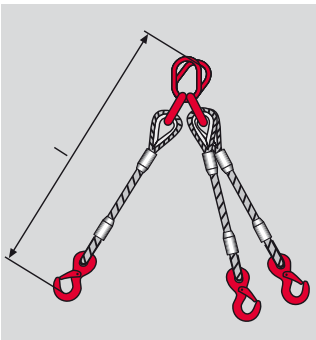
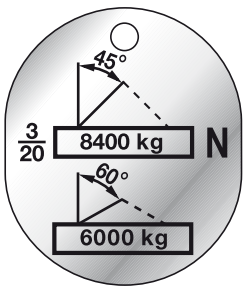
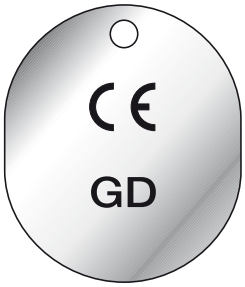


Fig 2: Length of a sling rope with multiple strands

7. Sling ropes with multiple strands have to be provided with identification tags



Front

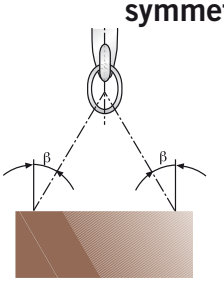


Back

8. Load bearing capacities of the sling chains can be taken from our table.
Sling chains with higher load bearing capacities according to the future European norm DIN EN 13 414-1, -2, -3 „Sling ropes“are allowed according to 9th regulation of the GSG (appendix I MRL) and loadable according to the load bearing capacity tags.

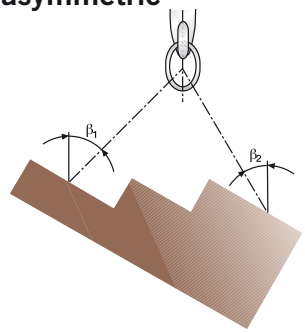
The tilt angle ∡ β may not be larger than 60°.
When stressing (B) asymmetrical the following load
Factor 1,0 with 2-strands and
Factor 1,4 with 3- and 4-strands.

symmetric



2-strand factor 1,4
3-, 4-strand factorr 2,1

asymmetric



2-strand factor 1,0
3-, 4-strand factor 1,4

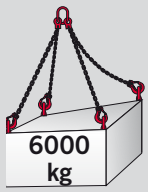
9. Application temperature

Kind of the end connection	Core	Temperature range [°C]	WLL [%]
Aluminum ferrule	Fiber	-40 up to +100	100
	Steel	-40 up to +150	100
Splice	Fiber	-40 up to +100	100
		-40 up to +150	100
	Steel	+151 up to +200	90
		+200 up to +300	75
		+300 up to +400	65
Flemish eye with steel clamp	Fiber	not allowed	
	Steel	-40 up to +150	100
		-151 up to +200	90
		-200 up to +300	75
		-300 up to +400	65

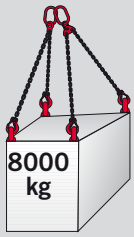
User examples for wire ropes / chains / round slings

Optimization of the load bearing capacity

up to 50% cost savings due to the use of a balance jack!



4-strand
Chain hanger



2 x 2-strand
Chain hanger
1 of it with balance jack

It pays off!

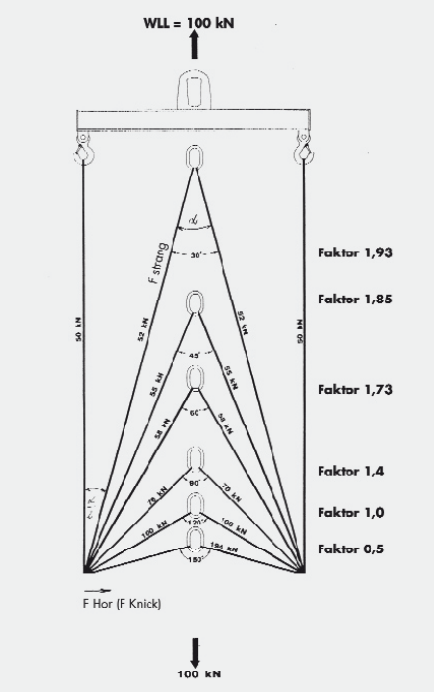
2-strand

4000 kg

+

2-strand with jack

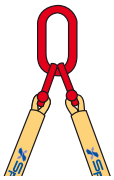
4000 kg = **8000 kg**



The RUD 2-Strand jack you will find on page 100 in the 2nd part

Practical examples

Round loop hanger



2-strand splinter set round loop hanger Load bearing capacity at 45°

2800 kg
Type RSG 2/2800

+

2-strand splinter set, round loop hanger with jack

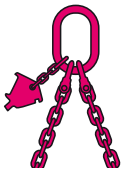
2800 kg
Type RSG 2/2800

=

With jack employment, total load bearing capacity at 45° tilt angle

5600 kg
instead 4200 kg

RUD VIP-chain hanger



2-Strang RUD VIP-hanger

5600 kg
Type VIP G2/Ø10

+

2-Strang RUD VIP-hanger with jack

5600 kg
Type VIP G2 /... Ø10

=

With jack employment, load bearing capacity at 45° tilt angle

11200 kg
instead 8400 kg

Wire rope hanger

2-strand wire rope hanger

3800 kg
Type DG 2/Ø16

+

2-strand wire rope hanger with jack

3800 kg
Type DGGW 2/Ø16

=

With jack employment, load bearing capacity at 45° tilt angle

7600 kg
instead 5700 kg

End of service life criteria for sling ropes

EN 13414 1+2

Sling ropes become unusable and must be discarded due to the occurrence of wire breaks, damages and wear during use. For definitions for the protection from damages with sling ropes see: BGR 500, chapter 2,8 (VBG 9a) „load suspension devices in lifting appliances operation“.
Sling ropes must not be used anymore, if in the area with the most wire breaks one of the three following numbers of visible wire breaks are determined.

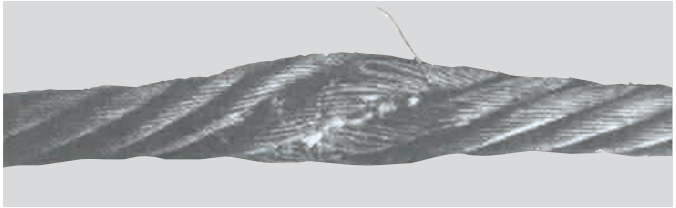
With sling ropes:

Kind of rope	Number of visible, coincidentally distributed wire breaks at end of service life on a length of	
	6d	30d
Strand rope	6	14
Cable sling rope -	6 x 19	6 x 36
Grummet	28	65

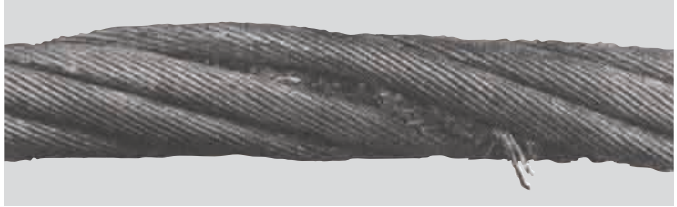
Exceptions for premature end of service life:
Wire break nests and cut places of the sharp edges

Wire rope with by corrosion and abrasion loosened wires

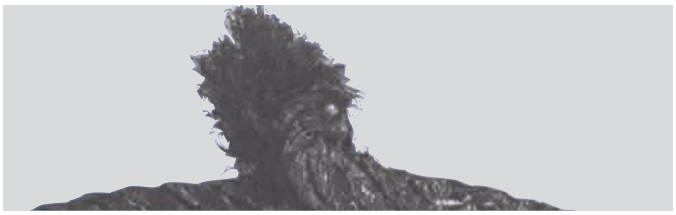
Wire rope with flattening



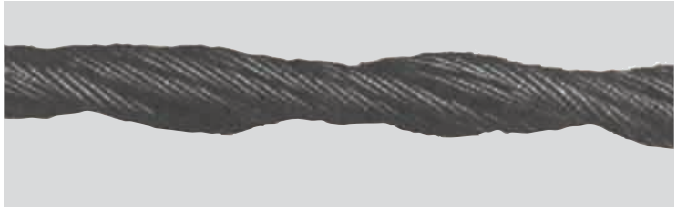
Wire rope with knots



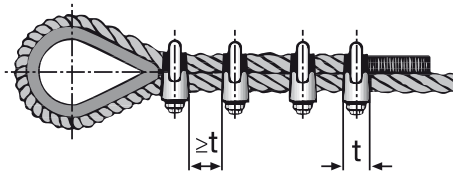
Wire rope with clank



Wire rope with knots



Wire rope with break



For a singular use or employment only wire rope clamps in accordance to EN 13411-5 (DIN 1142) are allowed to be used.

Info

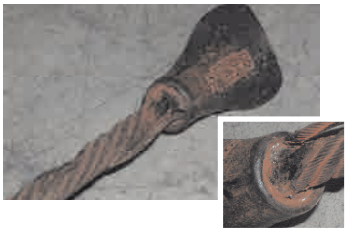
Important hint for constructional steel work! With spiral ropes up to Ø 34 two more wire rope clamps than indicated in the table and 10% higher tightening moment

Forces and number of wire rope clamps EN 13411-5 (DIN 1142):

Nominal size	Necessary tightening moment N * m	Necessary traction power the yoke threade N	Necessary number of wire rope clamps
5,0	2,0	2300	3
6,5	3,5	3200	3
8,0	6,0	4700	4
10,0	9,0	7100	4
13,0	33,0	15400	4
16,0	49,0	21000	4
19,0	67,7	28900	4
22,0	107,0	40800	5
26,0	147,0	47600	5
30,0	212,0	62300	6
34,0	296,0	79200	6
40,0	363,0	89800	6

The connection may only be made for a singular use with at least three DSK

Attention!
Remove such damaged slings!



Corrosion of the wires in the rope pear range
Grouting does not conclude with the outside edge

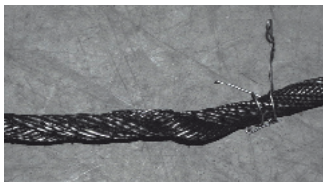
Wire breaks in the crane rope 6 x 36

Overloaded wide mouth-hook and damaged thimble

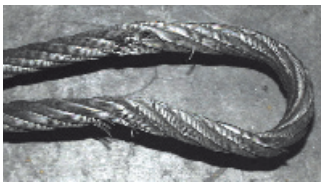
Grummet struck too loosely

Damaged rope pear/rope

Damaged rope grouting (wrong application)

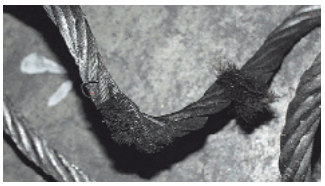


Rope tension in the rope, steel soul squeezed out

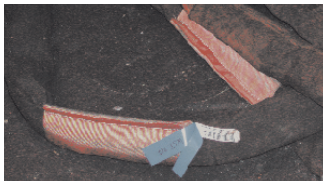


Strand wire breaks in rope loop with sling rope (by sharp edges)

Coated lifting strap torn



Outstepping of the hemp soul (no more rope group)



Repaired round loop operational again

Kink in the loop

Deep and dangerous tear in the C-hook-suspension

Melted round loop (Frictional heat) due to wrong application (laid double and sharp edge)

Cut round-loop

Cut round - bolt (sharp edge; smooth cut)

Lifting Fiber Rope DIN EN 1492-4

Version 1

1

Loops Short Splice

2

Endless-Short Splice

3

Endless-Long Splice

- Protection of cargo
- Easy adaptability
- Light weight
- Do not use fiber ropes below 16 mm for lifting

Operational conditions and und deposit ring
- Temperature scale -40°C bis 80°C
- Be aware of sharp corner deposit ring
- Ropes with breakes of braid/yarn breakage over 10%, heat damage, splice loosening, changes or damages caused by aggressive substances

Version 1+2: Load capacity only for 3-strands and 8-strands braided fiber ropes
Version 3: Endless long splice only 60% of load capacity
Version: A=3 strands
B=4 strands (reduction of load capacity by 10%)
C=8 strands braided

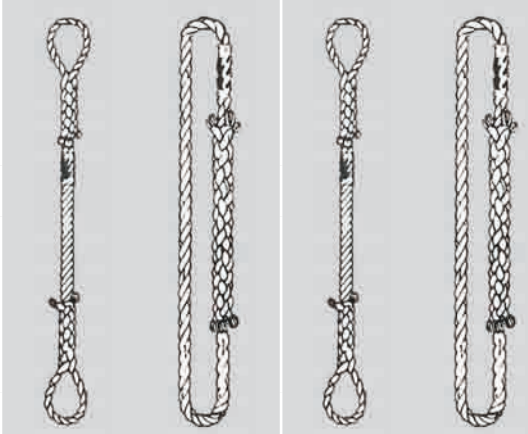
Info

Additional stop fiber ropes and accessories are located on pages 132-137 and 146-149

A - 3strands

B - 4strands

C = 8strands no photo



Load capacity label	Hemp EN 1261				Polymid EN 1140				Polyester EN 1141				Polypropylene EN 1346 1)			
	white				green				blue				brown			
Actual-Ø																
16	250	200	500	500	680	540	1350	1350	520	420	1050	1050	480	380	960	960
18	300	240	600	600	850	680	1700	1700	650	520	1300	1300	600	480	1200	1200
20	350	280	700	700	1100	880	2200	2200	800	640	1600	1600	750	600	1500	1500
22	430	350	860	860	1300	1000	2600	2600	1000	800	2000	2000	900	720	1800	1800
24	500	400	1000	1000	1500	1200	3000	3000	1200	960	2400	2400	1100	880	2200	2200
26	600	480	1200	1200	1800	1400	3600	3600	1400	1100	2800	2800	1200	960	2400	2400
28	700	560	1400	1400	2100	1700	4200	4200	1500	1200	3000	3000	1400	1100	2800	2800
30	800	640	1600	1600	2300	1800	4600	4600	1800	1400	3600	3600	1500	1200	3000	3000
32	900	720	1800	1800	2600	2100	5200	5200	2000	1600	4000	4000	1700	1400	3400	3400
36	1200	960	2400	2400	3200	2600	6400	6400	2500	2000	5000	5000	2200	1800	4400	4400
40	1400	1100	2800	2800	3800	3000	7600	7600	3000	2400	6000	6000	2600	2100	5200	5200
44	1600	1300	3200	3200	4500	3600	9000	9000	3700	3000	7400	7400	3200	2600	6400	6400
48	2000	1600	4000	4000	5400	4300	10800	10800	4300	3400	8600	8600	3700	3000	7400	7400

1) according to DIN 83329, load capacity of ropes made from polypropylene type 1 is 40% lower.

Characteristics of Fiber Ropes

Fiber parts:
Safety Requirements and Tests
In the old VBG 9a there was the notice of the fiber rope-Norm DIN 83302. The UVV and norm is no longer valid!
Replace with DIN EN 1492-4:2009-02

Valid Norms

Material	New	Old
Hemp (green)	DIN EN 1261	DIN 83325 E
Manila (black)	DIN EN 1181	DIN 83322 + DIN 698
Sisal (red)		
Polyamid (grün)	DIN EN 1140	DIN 83330 + DIN 696
Polyester (blue)	DIN EN 1141	DIN 83331 + DIN 697
Polypropylen (brown)	DIN EN 1346	DIN 83329(1) + 699
(Boats and Ocean)	New 83307	DIN 83332(2)
		DIN 83334(3)

Color Coding

Fiber Robes	Identification thread	Load Capacity Label
Hemp EN 1261	green	white
Sisal EN 1181	red	white
Polyester EN 1141	blue	blue
Polyethylen 700	orange	-
Manila EN 1181	black	white
Polyamid EN 1140	green	green
Polypropylen EN 1346	brown	brown

Behavior of synthetic ropes under various conditions

	Materials						
	Polyamid	Polyester (PES)	Polypropylen (PP)	Polyethylen (PE), (HMPE)	Aramid	LCP	PBO
Brands	Perlon Nylon			Dyneema Spectra	Twaron Tech-nora Kevlar	Vectran	Zylon
Washing temp. °C	50- 60	50- 60	30	30	80- 90	60	50
acid [50% con-centr.] 25°C/100°C residual value%	17.05.2010	80/0	without influence	without influence	without influence	without influence	without influence
Gasoline	without inf.	without inf.	without inf.	without inf.	without inf.	without inf.	without inf.
Diesel and lubricting oils	without influ-ence	without influence	without influence	without influence	without influence	without influence	without influence
Solvents	formic acid vinegar acid at high temp.	phenols cresols zinc chloride	low influence	low influence	low influence	low influence	low influence
Alkali (caustic)	resistant to mild alkali	resist.to alcali at 20°C dissol-ved by alkali 100°C	resistant to mild alkali	resistant	partially good resistance	very good resistance	very good resistance
Electrical characteristics	good insulation, bad conductor	very good insu-lation	excellent insulation	excellent insulation	excellent insulation	excellent insulation	excellent insulation
temperature limit short-term strain approx. °C	130	170	80	70	400	200	550
softening tempe-rature approx. °C	170	225	140	120	-	-	-
melting tempera-ture ca. °C	215	260	170	150	charred at approx. 500 °C	330	charred at approx. 650°C

Comparitive Overview

Comparison and behavior of synthetic fibers

	Synthetic fibers material							
	Polyamid (PA) 6 and 6.6	Polyester (PES)	Polypropylen (PP) multifil high-tensile	Polyethylen (PE)	Polyethylen high-tensile (HMPE)	Aramid	LCP	PBO
Brand name	Perlon Nylon				Dyneema Spectra	Twaron Kevlar Technora	Vectran	Zylon
thread strength CN/dtex	7-8	7- 8,4	ca. 7	ca. 4,5	28- 38	20- 25	22- 25	ca. 37
Spec. weight kg/ dm³	1,14	1,38	0,91	0,96	0,96	1,44	1,41	1,52
Decline in strength due to moisture %	5- 10	0	0	0	0	0	0	0
Water intake	1- 7	0,5- 2	0	0	0	2- 5	1	0,6
Knot strength	60- 65	55- 60	55- 65	50- 60	35- 50	30- 40	30- 35	35- 55
Light resistance %	good	very good	only equipped good	good	good	bad	bad	bad
Ultimate elon-gation %	16- 27	10- 16	12- 20	15- 30	3,8	2- 4	3,3	2,5
Abrasion resi-stance	very good	very good	satisfactory	satisfactory	good	sufficient	sufficient	deficient

GLOBUS
HEBETECHNIK

GS-certified wire ropes

Lifting technology

GS-certified wire rope	A 46 - A 48
GS-inspected certified special wire rope fittings	A 49
Wire rope hooks	A 50 - A 51
Wire rope accessories	A 52 - A 54
Swivels, insulated	A 55
Stainless steel wires and accessories	A 56- A 57

Grouting of cables

Wire ropes GS-certified

EC-Machinery dir. 2006/42 EC EN 13414-1/2, resp. acc. to the norm proposed by FSA

Our rope slings were regularly examined by the BG and were tested for their properties.
Quality you can rely on!

- Nominal strength of wires 1770 N/mm ²
- Galvanized version
- Fiber core

Higher loading capacity and other versions on request

MO 065136
MO 065137

Labelling

Info

Further version of 1-, 2- and 4-strand hangers can be found on pages 134-137!

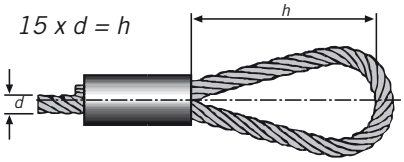
Usable length 1 m

Rope-Ø [mm]	WLL [kg]	Type A cylind-rical Type A cyl. Order-Nr.	Price/ Piece Ø x L €	Type A tapered Type A tap. Order-Nr.	Price/ Piece Ø x L €	Type A1 spliced Type A1 Order-Nr.	Price/ Piece Ø x L €	Type B thimble/ thimble Type B Order-Nr.	Price/ Piece Ø x L €	Type F3 loop/ thimble Type F3 Order-Nr.	Price/ Piece Ø x L €	Price/ Rope m €
8	700	ASA.ZN.Z.08.000	12,83	ASA.ZN.K.08.000	17,45	ASA.1.ZN.08.000	26.34	ASB.ZNZ.08.000	17,25	AS.F3.ZN.08.000	15,04	2,15
10	1000	ASA.ZN.Z.10.000	17,52	ASA.ZN.K.10.000	23,65	ASA.1.ZN.10.000	32.89	ASB.ZNZ.10.000	21,97	AS.F3.ZN.10.000	19,96	3,05
12	1500	ASA.ZN.Z.12.000	22,97	ASA.ZN.K.12.000	30,51	ASA.1.ZN.12.000	39.99	ASB.ZNZ.12.000	27,76	AS.F3.ZN.12.000	25,17	4,60
14	2000	ASA.ZN.Z.14.000	29,35	ASA.ZN.K.14.000	38,96	ASA.1.ZN.14.000	56,43	ASB.ZNZ.14.000	35,24	AS.F3.ZN.14.000	32,33	6,10
16	2700	ASA.ZN.Z.16.000	37,00	ASA.ZN.K.16.000	48,34	ASA.1.ZN.16.000	68,68	ASB.ZNZ.16.000	45,77	AS.F3.ZN.16.000	41,39	8,05
18	3150	ASA.ZN.Z.18.000	45,95	ASA.ZN.K.18.000	60,11	ASA.1.ZN.18.000	92,33	ASB.ZNZ.18.000	59,23	AS.F3.ZN.18.000	52,64	9,40
20	4000	ASA.ZN.Z.20.000	63,48	ASA.ZN.K.20.000	84,94	ASA.1.ZN.20.000	106,24	ASB.ZNZ.20.000	73,68	AS.F3.ZN.20.000	68,58	11,20
22	5000	ASA.ZN.Z.22.000	73,37	ASA.ZN.K.22.000	97,41	ASA.1.ZN.22.000	124.39	ASB.ZNZ.22.000	90,57	AS.F3.ZN.22.000	82,04	13,05
24	6300	ASA.ZN.Z.24.000	98,06	ASA.ZN.K.24.000	123,4	ASA.1.ZN.24.000	170,98	ASB.ZNZ.24.000	117,59	AS.F3.ZN.24.000	107,83	15,40
26	7000	ASA.ZN.Z.26.000	127,78	ASA.ZN.K.26.000	150,66	ASA.1.ZN.26.000	202,20	ASB.ZNZ.26.000	165,67	AS.F3.ZN.26.000	146.42	19,95
28	8000	ASA.ZN.Z.28.000	148,02		on request	ASA.1.ZN.28.000	268,14	ASB.ZNZ.28.000	186,72	AS.F3.ZN.28.000	167,05	23,75
30	9500	ASA.ZN.Z.30.000	162,03		on request	ASA.1.ZN.30.000	290,96	ASB.ZNZ.30.000	226,83	AS.F3.ZN.30.000	194,43	24,25
32	11000	ASA.ZN.Z.32.000	209,69		on request	ASA.1.ZN.32.000	339,10	ASB.ZNZ.32.000	302,48	AS.F3.ZN.32.000	255.63	29,50
36	14000	ASA.ZN.Z.36.000	267,12		on request	ASA.1.ZN.36.000	418,34	ASB.ZNZ.36.000	398,08	AS.F3.ZN.36.000	332.60	31,00
40	17000	ASA.ZN.Z.40.000	374,82		on request	ASA.1.ZN.40.000	580,04	ASB.ZNZ.40.000	610,50	AS.F3.ZN.40.000	540.46	41,48

Surcharge **Inspection service**

42 to 60 mm versions on request!

Order-example book usable length!
ASA.1.ZN.24.020 Rope-Ø 24 mm, 2 m Usable length



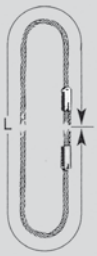
Wire rope slings with loop

Wire rope sling according to EN 13 414-1

1-strand wire rope sling with hanging		Type [SK] Automatic safety hook		Type [BS] BK-hook		Type [WS] open jaw hook		
Wire-Ø [mm]	Load Capacity 1-strand simple direct [kg]	Order-No.	Price/Unit Length 1 m €	Order-No.	Price/Unit Length 1 m €	Order-No.	Price/Unit Length 1 m €	Extra price per 1m rope length €
8	700	AS.SSK.08.000	35,74	AS.SBO.08.000	72,95	AS.SWO.08.000	34,47	2,15
10	1000	AS.SSK.10.000	43,31	AS.SBO.10.000	78,8	AS.SWO.10.000	46,11	3,05
12	1500	AS.SSK.12.000	56,43	AS.SBO.12.000	92,5	AS.SWO.12.000	50,93	4,60
14	2000	AS.SSK.14.000	65,43	AS.SBO.14.000	99,65	AS.SWO.14.000	57,53	6,10
16	2700	AS.SSK.16.000	85,99	AS.SBO.16.000	126,65	AS.SWO.16.000	84,70	8,05
18	3150	AS.SSK.18.000	102,34	AS.SBO.18.000	137,9	AS.SWO.18.000	95,95	9,40
20	4000	AS.SSK.20.000	146,38	AS.SBO.20.000	195,85	AS.SWO.20.000	121,50	11,20
22	5000	AS.SSK.22.000	171,44	AS.SBO.22.000	209,3	AS.SWO.22.000	134,96	13,05
24	6300	AS.SSK.24.000	231,22	AS.SBO.24.000	316,2	AS.SWO.24.000	226,73	15,40
26	7000	AS.SSK.26.000	295,52	AS.SBO.26.000	354,9	AS.SWO.26.000	265,32	19,95
28	8000	AS.SSK.28.000	318,05	AS.SBO.28.000	377,35	AS.SWO.28.000	285,95	23,75
30	9500	AS.SSK.30.000	433,83	AS.SBO.30.000	on request	AS.SWO.30.000	364,32	24,25
32	11000	AS.SSK.32.000	on request	AS.SBO.32.000	on request	AS.SWO.32.000	425,52	29,50

Surcharge Inspection service

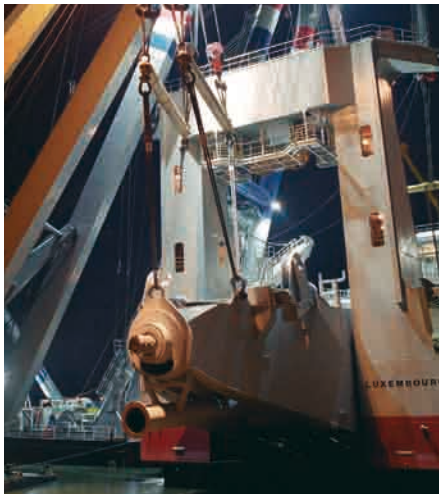
Special ropes

	Continuous with 2 clamps with fibre core FC				Continuous with 2 clamps zinc coated with steel core WSCC				Continuous with 1 clamp with fibre core FC			
												
Wire-Ø [mm]	Load Capacity [kg]	Order-No.	Price/Unit usable length 1 m €	Extra price per 1m rope length €	Load Capacity [kg]	Order-No.	Price/Unit usable length 1 m €	Extra price per 1m rope length €	Load Capacity [kg]	Order-No.	Price/Unit usable length 1 m €	Extra price per 1m rope length €
8	1400	AS.EL.2K.08.000	14,10	4,30	1500	AS.EL.OK.08.000	19,95	9,60	980	AS.EL.1K.08.000	12,90	4,30
10	2000	AS.EL.2K.10.000	19,30	6,10	2300	AS.EL.OK.10.000	25,01	11,20	1400	AS.EL.1K.10.000	17,00	6,10
12	3000	AS.EL.2K.12.000	24,30	9,20	3400	AS.EL.OK.12.000	31,50	13,70	2100	AS.EL.1K.12.000	23,00	9,20
14	4000	AS.EL.2K.14.000	31,10	12,20	4500	AS.EL.OK.14.000	40,50	17,80	2450	AS.EL.1K.14.000	29,00	12,20
16	5400	AS.EL.2K.16.000	38,20	16,10	6000	AS.EL.OK.16.000	49,90	20,70	3800	AS.EL.1K.16.000	37,00	16,10
18	6300	AS.EL.2K.18.000	46,90	18,40	7400	AS.EL.OK.18.000	59,60	24,60	4400	AS.EL.1K.18.000	46,00	18,40
20	8000	AS.EL.2K.20.000	65,05	22,40	9200	AS.EL.OK.20.000	81,45	29,00	5600	AS.EL.1K.20.000	63,50	22,40
22	10000	AS.EL.2K.22.000	73,15	26,10	11300	AS.EL.OK.22.000	94,60	34,20	7000	AS.EL.1K.22.000	73,40	26,10
24	12600	AS.EL.2K.24.000	97,75	30,80	13400	AS.EL.OK.24.000	123,15	39,90	8800	AS.EL.1K.24.000	98,00	30,80
26	14000	AS.EL.2K.26.000	124,6	39,90	15600	AS.EL.OK.26.000	156,95	46,80	9800	AS.EL.1K.26.000	128,00	39,90

Surcharge Inspection service

Cable laid slings spliced or pressed

According to EN 13414-3



Lifting Technology

- Flexible design
- Splices according to EN 13414-2
- Tensile strength 1770 N/mm²

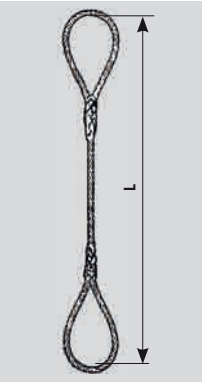
alternative: 1960 N/mm²

- Standard loop 15d
- Zinc-coated

1) Sling construction
   6 (6 x 19 M-WC) + FC
2) Sling construction
   6 (6 x 36 WS-WC) + FC

Cable laid sling Type K spliced, 1770 N/mm²

Nominal Wire-Ø [mm]	Load capacity perpendicular kg	Order-No.	Price/1 m €	Price/rope ldf. m €
24	3400	AS.AK.24.000	200,00	22,40
27	4200	AS.AK.27.000	210,00	26,60
30	5600	AS.AK.30.000	226,00	30,80
33	6800	AS.AK.33.000	263,00	41,50
36	8000	AS.AK.36.000	284,00	46,00
39	9500	AS.AK.39.000	365,00	50,90
42	11000	AS.AK.42.000	448,00	58,50
48	14500	AS.AK.48.000	585,00	75,50
54	18000	AS.AK.54.000	on request	on request
60	22500	AS.AK.60.000	on request	on request



Cable laid sling Type KZ pressed

Nominal Wire-Ø [mm]	Load capacity perpendicular kg	Order-No.	Price/1 m €	Price/rope ldf. m €
24	3750	AS.KZ.24.000	on request	on request
27	4750	AS.KZ.27.000	on request	on request
30	6500	AS.KZ.30.000	on request	on request
33	7500	AS.KZ.33.000	on request	on request
36	9000	AS.KZ.36.000	on request	on request
39	10500	AS.KZ.39.000	on request	on request
42	12500	AS.KZ.42.000	on request	on request
48	16000	AS.KZ.48.000	on request	on request
54	20500	AS.KZ.54.000	on request	on request
60	25000	AS.KZ.60.000	on request	on request

Surcharge | Inspection service

Order example: Please state length!
AS.KZ.30.080 Sling-Ø 30 mm, 8 m usable length

Flemish Eye wire rope

According to EN 13414-1

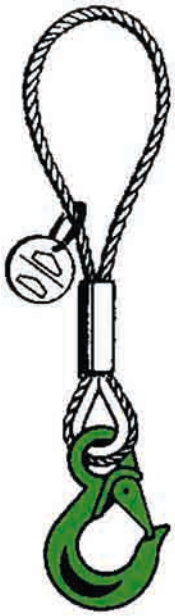
- Laid according to EN 13414-3 (similar to 3095)
- Steel clamp against high wear and tear For use in extreme cases
- For high temperatures up to 400 °C
- Low wear and tear
- Steel core
- 6 strand construction

Nominal Wire-Ø [mm]	Load capacity perpendicular kg	Order-No.	Price/1 m €	Extra cost/m €
10	1250	AS.AB.LF.10.000	25,30	5,01
12	1800	AS.AB.LF.12.000	37,00	6,06
14	2500	AS.AB.LF.14.000	43,50	7,75
16	3200	AS.AB.LF.16.000	47,70	9,03
18	4000	AS.AB.LF.18.000	56,80	10,71
20	5000	AS.AB.LF.20.000	74,20	12,65
22	6000	AS.AB.LF.22.000	on request	on request
24	7300	AS.AB.LF.24.000	on request	on request
26	8600	AS.AB.LF.26.000	on request	on request
28	10000	AS.AB.LF.28.000	on request	on request
32	13000	AS.AB.LF.32.000	on request	on request

Surcharge | Inspection service

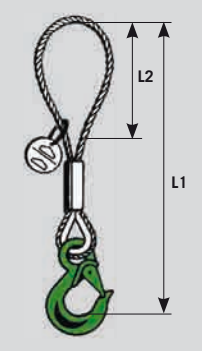
1-Strand reduced hangers

GS-certified



Sika-Hook

Rope Ø [mm]	Load capacity perpendicular kg	L1 [mm]	L2 [mm]	Oder-no.	Price/ Unit €
10	1300	430	~ 200	AS.DGR.SIKA.10.000	45,60
12	2600	500	~ 250	AS.DGR.SIKA.12.000	67,80
14	3300	520	~ 250	AS.DGR.SIKA.14.000	80,40
16	3900	580	~ 300	AS.DGR.SIKA.16.000	115,40
18	5200	680	~ 300	AS.DGR.SIKA.18.000	138,70
20	6500	730	~ 350	AS.DGR.SIKA.20.000	198,70
22	7900	800	~ 350	AS.DGR.SIKA.22.000	228,20
24	9100	970	~ 400	AS.DGR.SIKA.24.000	342,80
26	10500	970	~ 400	AS.DGR.SIKA.26.000	376,50



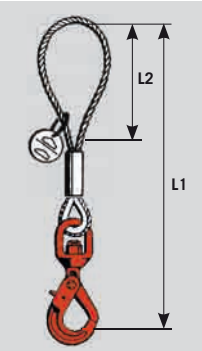
XLO-Hook

Rope Ø [mm]	Load capacity perpendicular kg	L1 [mm]	L2 [mm]	Oder-no.	Price/ Unit €
10	1300	450	~ 200	AS.DGR.XLO.10.000	89,30
12	2600	510	~ 250	AS.DGR.XLO.12.000	110,00
14	3300	550	~ 250	AS.DGR.XLO.14.000	116,60
16	3900	580	~ 300	AS.DGR.XLO.16.000	149,10
18	5200	700	~ 300	AS.DGR.XLO.18.000	185,90
20	6500	750	~ 350	AS.DGR.XLO.20.000	281.50
22	7900	800	~ 350	AS.DGR.XLO.22.000	287,50
24	9100	980	~ 400	AS.DGR.XLO.24.000	527,10
26	10500	980	~ 400	AS.DGR.XLO.26.000	562,50

MO 065138

GKE-Hook

Rope Ø [mm]	Load capacity perpendicular kg	L1 [mm]	L2 [mm]	Oder-no.	Price/ Unit €
10	1300	490	~ 200	AS.DGR.SKE.10.000	149,50
12	2600	550	~ 250	AS.DGR.SKE.12.000	154,40
14	3300	600	~ 250	AS.DGR.SKE.14.000	161,70
16	3900	630	~ 300	AS.DGR.SKE.16.000	235,20
18	5200	780	~ 300	AS.DGR.SKE.18.000	246,80
20	6500	830	~ 350	AS.DGR.SKE.20.000	410,60
22	7900	900	~ 350	AS.DGR.SKE.22.000	416,90
24	9100	1030	~ 400	AS.DGR.SKE.24.000	641,60
26	10500	1030	~ 400	AS.DGR.SKE.26.000	676,20



Surcharge | Inspection service

Ropes with steel core for extreme loads

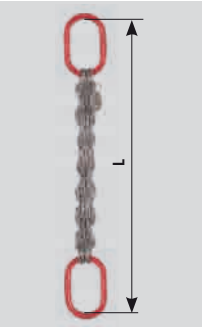
Typ DH NG x NL

- Flexible design
- Effective against buckling
- Wide support
- High loading capacity

Nominal size rope-Ø	Load capacity perpendicular kg	U-way [kg]	Moved at 45° degree kg	Internal width A-link	Oder-No.	Price 1. m €	More price €/m
DH 6	2500	5000	3500	60	AS.DH.06.000	126,00	61,00
DH 8	4000	8000	5600	90	AS.DH.08.000	148,00	70,00
DH 10	5000	10000	7000	90	AS.DH.10.000	192,00	78,80
DH 12	8000	16000	11200	100	AS.DH.12.000	252,00	100,20
DH 14	10000	20000	14000	110	AS.DH.14.000	333,00	126,00
DH 16	15000	30000	21000	160	AS.DH.16.000	581,00	151,20

Surcharge | Inspection service

Order-example: Usable lenght !
AS.DH.06.050 Rope-Ø 6 mm, 4 m usable length



Zinc-coated wire rope hanging accord.to EN 13 414-1

Quality tested according to Directive on Machinery 2006/42 EC

Wire rope hanging 1 strand

1-strand wire Rope hanging		Type SO Automatic safety hook		Type BO BK-hook		Type WO Open jaw hook		Type Thimble		
Wire-Ø [mm]	load capacity 1-str. simple direct [kg] [kg]	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Extra price per 1m rope length €
8	700	D1.08.SK.000	46,60	D1.08.BO.000	83,75	D1.08.WO.000	59,95	D1.08.KA.000	26,10	2,15
10	1000	D1.10.SK.000	52,80	D1.10.BO.000	88,30	D1.10.WO.000	64,45	D1.10.KA.000	30,75	3,05
12	1500	D1.12.SK.000	69,00	D1.12.BO.000	106,15	D1.12.WO.000	72,35	D1.12.KA.000	38,90	4,60
14	2000	D1.14.SK.000	78,55	D1.14.BO.000	113,45	D1.14.WO.000	92,60	D1.14.KA.000	46,20	6,10
16	2700	D1.16.SK.000	103,40	D1.16.BO.000	143,75	D1.16.WO.000	106,05	D1.16.KA.000	59,95	8,05
18	3150	D1.18.SK.000	121,60	D1.18.BO.000	156,80	D1.18.WO.000	119,20	D1.18.KA.000	73,20	9,40
20	4000	D1.20.SK.000	169,45	D1.20.BO.000	218,35	D1.20.WO.000	178,60	D1.20.KA.000	93,40	11,20
22	5000	D1.22.SK.000	197,35	D1.22.BO.000	232,21	D1.22.WO.000	195,30	D1.22.KA.000	110,45	13,05
24	6300	D1.24.SK.000	269,30	D1.24.BO.000	351,10	D1.24.WO.000	262,20	D1.24.KA.000	146,60	15,40
26	7000	D1.26.SK.000	on request	D1.26.BO.000	on request	D1.26.WO.000	on request	D1.26.KA.000	on request	on request
28	8000	D1.28.SK.000	on request	D1.28.BO.000	on request	D1.28.WO.000	on request	D1.28.KA.000	on request	on request
30	9500	D1.30.SK.000	on request	D1.30.BO.000	on request	D1.30.WO.000	on request	D1.30.KA.000	on request	on request
32	11000	D1.32.SK.000	on request	D1.32.BO.000	on request	D1.32.WO.000	on request	D1.32.KA.000	on request	on request

Surcharge | Inspection service

Info

Further wire rope hanging combinations see Page 135 or on request.

Wire rope hanging 2 strands

Corrosion is not in our dictionary

2-strand wire Rope hanging			Type SO Automatic safety hook		Type BO BK-hook		Type WO open jaw hook		Type Thimble		
Wire-Ø [mm]	load capacity 2-str. simple angle 0-45° [kg]	load capacity 2-str.-tilt angle 45-60° [kg]	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Extra price per 1m rope length €
8	950	700	D2.08.SO.00	87,60	D2.08.BO.00	180,50	D2.08.WO.00	84,10	D2.08.KA.00	44,10	4,30
10	1400	1000	D2.10.SO.00	107,50	D2.10.BO.00	192,00	D2.10.WO.00	95,10	D2.10.KA.00	55,10	6,10
12	2100	1500	D2.12.SO.00	136,00	D2.12.BO.00	218,50	D2.12.WO.00	117,50	D2.12.KA.00	69,80	9,20
14	2800	2000	D2.14.SO.00	165,00	D2.14.BO.00	239,00	D2.14.WO.00	137,50	D2.14.KA.00	84,30	12,20
16	3800	2700	D2.16.SO.00	206,00	D2.16.BO.00	298,00	D2.16.WO.00	192,00	D2.16.KA.00	110,75	16,10
18	4400	3150	D2.18.SO.00	248,50	D2.18.BO.00	331,50	D2.18.WO.00	224,00	D2.18.KA.00	137,25	18,80
20	5600	4000	D2.20.SO.00	374,00	D2.20.BO.00	460,00	D2.20.WO.00	292,5,	D2.20.KA.00	175,10	22,40
22	7000	5000	D2.22.SO.00	489,50	D2.22.BO.00	501,50	D2.22.WO.00	331,00	D2.22.KA.00	208,20	26,10
24	8800	6300	D2.24.SO.00	567,50	D2.24.BO.00	731,00	D2.24.WO.00	531,50	D2.24.KA.00	283,20	30,80

Surcharge Inspection service

Wire rope hanging 4 strands

4-strand wire Rope hanging			Typ SO Automatic safety hook		Typ BO BK-Haken		Typ WO Open jaw hook		Type Thimble		
Wire-Ø [mm]	load capacity 2-str. simple angle 0-45° [kg]	load capacity 2-str.-tilt angle 45-60° [kg]	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Order-No.	Price/Unit usable length 1 m €	Extra price per 1m rope length €
8	1450	1050	D4.08.SO.00	176,50	D4.08.BO.00	365,00	D4.08.WO.00	175,00	D4.08.KA.00	110,50	8,60
10	2100	1500	D4.10.SO.00	221,50	D4.10.BO.00	392,00	D4.10.WO.00	222,50	D4.10.KA.00	133,35	12,20
12	3200	2300	D4.12.SO.00	321,50	D4.12.BO.00	461,00	D4.12.WO.00	270,00	D4.12.KA.00	169,75	18,40
14	4200	3000	D4.14.SO.00	342,50	D4.14.BO.00	495,50	D4.14.WO.00	285,00	D4.14.KA.00	197,90	24,40
16	5700	4050	D4.16.SO.00	445,50	D4.16.BO.00	628,50	D4.16.WO.00	410,50	D4.16.KA.00	261,55	32,20
18	6600	4700	D4.18.SO.00	525,00	D4.18.BO.00	688,00	D4.18.WO.00	482,50	D4.18.KA.00	313,55	37,60
20	8400	6000	D4.20.SO.00	804,00	D4.20.BO.00	971,50	D4.20.WO.00	647,50	D4.20.KA.00	414,30	44,80
22	10500	7500	D4.22.SO.00	1.099,00	D4.22.BO.00	1.118,00	D4.22.WO.00	850,50	D4.22.KA.00	630,05	52,20
24	13200	9400	D2.24.SO.00	1.584,00	D4.24.BO.00	1.655,00	D4.24.WO.00	1.463,00	D4.24.KA.00	1.025,00	61,40

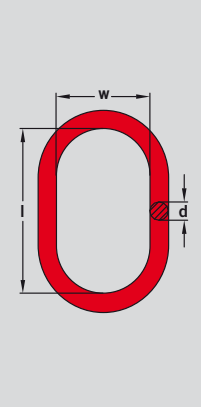
Surcharge Inspection service

Wire rope accessories

Oval Master link

Grade 8 - EN 1677-4

Nominal size	WLL [kg]	For lifting ropes EN 13414-1: for rope 1-strand [mm]	for rope 2-strand [mm]	For lifting chains EN 814-4: for chain 1-strand [mm]	for chain 2-strand [mm]	Size [mm] d	l	w	Weight [kg]	Order-No.	Price/ Unit €
A13	1680	–	–	6/7 - 8	6 - 8	13	90	50	0,3	A.A13.01.G8.3088.00	7,50
A16	2500	8 - 14	8 - 12	8 - 8	7 - 8	16	110	60	0,5	A.A16.02.G8.3088.00	9,25
A18	3300	16 - 18	14	10 - 8	8 - 8	18	130	70	0,8	A.A18.03.G8.3088.00	12,90
A20	4350	20	18	–	10 - 8	20	140	80	1,1	A.A20.04.G8.3088.00	17,75
A22	5650	22	20	13 - 8	–	22	160	90	1,5	A.A22.05.G8.3088.00	19,20
A26	8400	24 - 28	22	16 - 8	13 - 8	26	180	100	2,3	A.A26.08.G8.3088.00	29,20
A32	12500	32	24 - 28	18/19/20 - 8	16 - 8	32	230	125	4,4	A.A32.10.G8.3088.00	51,65
A36	16000	34 - 36	32	22-8	18 - 8	36	250	140	6,2	A.A36.15.G8.3088.00	83,50
A40	18000	40	32	–	19/20 - 8 22 - 8	40	290	160	8,8	A.A40.17.G8.3088.00	141,90
A45	25000	44 - 48	36 - 40	26/28 - 8	26 - 8	45	320	175	12,0	A.A45.20.G8.3088.00	180,60
A50	31500	56	44	32 - 8		50	340	190	16,0	A.A51.32.G8.3088.00	318,15

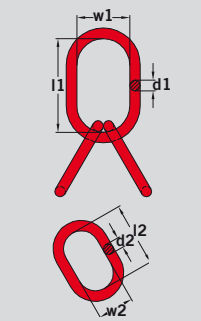


Ring slopes for ropes

A-and B-link measurements according to EN 1677-4 (DIN 5688-3)

EN 13414-1, EN 1677-4

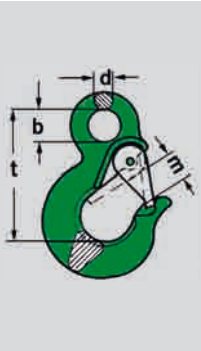
Nominal size	WLL [kg]	for rope-Ø 3- und 4-strand [mm]	Size [mm] d1	l1	w1	d2	l2	w2	t	Weight [kg]	Order-No.	Price/ Unit €
6/7-8	3150	8-12	18	130	70	13	60	30	189	1,2	RGS.18.03150	33,10
8-8	4250	14-16	20	140	80	16	70	35	210	1,8	RGS.20.04250	41,50
10-8	6700	18	26	180	100	20	90	45	270	3,6	RGS.26.06700	54,60
13-8	11200	22	32	230	125	26	120	60	315	7,6	RGS.32.11200	94,00
16-8	17000	24-28	40	290	160	28	130	65	420	12,6	RGS.40.17000	131,80
18-8	21200	30	45	320	175	32	140	70	460	17,8	RGS.45.21200	272,50
19/20-8	26500	32	50	340	190	36	160	80	500	24,4	RGS.50.26500	373,80
22-8	31500	36	50	340	190	40	180	90	520	27,6	RGS.50.31500	456,80



Sika-hook

Grade 5 –
Type SIKA

Nominal size	WLL [kg]	Size [mm] b	d	m	t	Gewicht [kg]	Bestell-Nr.	Preis/Stück €
6-8	1000	27	13	24	105	0,8	132830010	22,40
7-8	1500	28	14	28	115	0,9	132830016	30,70
8-8	2000	32	14	29	123	1,1	132830020	33,10
9-8	2700	34	16	34	137	1,5	132830025	44,90
10-8	3150	34	17	34	138	1,6	132830030	49,60
11-8	4000	40	20	40	164	2,5	132830040	78,00
13-8	5300	50	23	45	188	3,7	132830050	89,80
14-8	6300	52	24	50	213	4,8	132830063	126,00
16-8	8000	54	26	57	216	5,0	132830080	149,60
18-8	10000	60	34	61	234	8,0	132830100	236,30

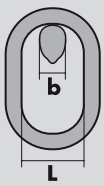


Surcharge | Inspection service

Info

Oval master link width

L = crane hook width + 20 %



Info

Attention, applies to cable-accessories according to the new standard EN 1677, Part 1 - 5

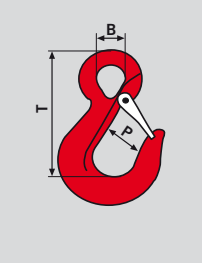
Wire rope accessories

Hanging components by dimensions

Hook with eye

Grade 8 – Type CSO

WLL [kg]	Connecting chain [mm]	Size [mm] T	B	P	Weight [kg]	Order-No.	Price/Unit €
1120	6	87	24	34	0,26	00.CSO.06.8	18,10
2000	8	102	26	40	0,54	00.CSO.08.8	20,90
3200	10	122	35	41	0,97	00.CSO.10.8	30,30
5400	13	154	40	52	1,75	00.CSO.13.8	59,50
8200	16	185	50	60	2,8	00.CSO.16.8	73,50
12800	18-20	235	60	70	8,2	00.CSO.18.8	113,80

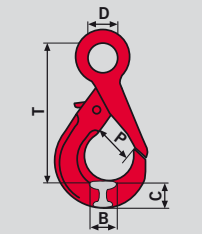


Self closing Hook

Grade 8 – Type XLO

WLL [kg]	Connecting chain [mm]	Size [mm] T	B	C	D	P	Weight [kg]	Order-No.	Price/Unit €
1120	5-6	111	16	26	24	32	0,51	XLO.001120.G8.00	40,80
2000	7-8	134	23	29	29	43	0,91	XLO.002000.G8.00	44,50
3200	10	168	32	35	35	47	1,79	XLO.003150.G8.00	56,00
5400	13	199	37	45	46	61	3,36	XLO.005300.G8.00	94,50
8200	16	247	43	56	59	74	6,04	XLO.008000.G8.00	180,30
12800	18-20	282	51	63	69	88	9,22	XLO.012500.G8.00	267,80

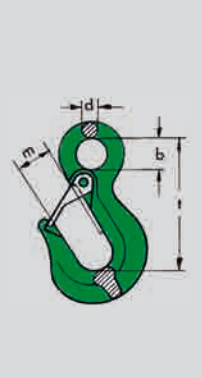
With extra robust closing



Eyelet hook

DIN 7541-
Type OHS

WLL [kg]	Size [mm] t	b	m	Weight [kg]	Order-No.	Price/Unit €
1000	100	25	25	0,45	OEHS.001000.7541	25,70
1250	112	28	28	0,60	OEHS.001250.7541	30,20
1600	125	31	31	0,90	OEHS.001600.7541	37,30
2000	140	35	35	1,20	OEHS.002000.7541	40,60
2700	160	40	40	1,80	OEHS.002700.7541	57,90
3200	180	45	45	2,50	OEHS.003200.7541	70,90
4000	200	50	50	3,50	OEHS.004000.7541	101,10
5000	224	56	56	5,00	OEHS.005000.7541	130,20
6300	250	63	63	7,00	OEHS.006300.7541	167,00
8000	280	71	71	10,00	OEHS.008000.7541	238,40
10000	315	80	80	14,00	OEHS.010000.7541	297,20

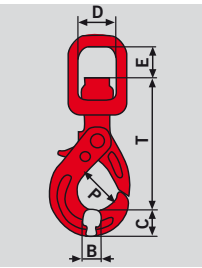


Safety Hook

Grade 8 – Type GKE

WLL [kg]	Connecting chain [mm]	Size [mm] T	B	C	D	E	P	Weight [kg]	Order-No.	Price/Unit €
2000	7-8	122	17	25	31	33	32	0,77	GKE.002000.G8.00	73,50
3200	10	148	24	29	36	40	43	1,38	GKE.003150.G8.00	96,30
5400	13	185	32	34	47	47	47	2,56	GKE.005300.G8.00	129,50
8200	16	213	37	46	56	60	61	4,58	GKE.008000.G8.00	224,00
12800	18-20	268	43	57	72	62	74	9,51	GKE.012500.G8.00	432,30
15500	22	350	52	62	81	88	90	14,50	GKE.015000.G8.00	857,50

Compact construction, not to be revolved when loaded!

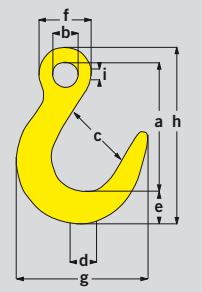


Cast hook with eye

Type CFO

WLL [kg]	Connecting chain [mm]	Size [mm] a	b	c	d	e	f	g	h	i	Weight [kg]	Order-No.	Price/Unit €
1120	6	93	18	47	17	22	38	97	125	7	0,33	CFO6J	21,10
2000	7-8	124	24	63	22	30	51	129	166	9	0,78	CFO7/8J	27,00
3200	10	157	33	79	28	36	66	160	208	11	1,5	CFO10J	57,80
5400	13	190	44	93	36	46	85	198	256	14	3	CFO13J	71,80
8200	16	205	35	95	45	52	88	204	284	24	5,6	CFO16J	164,50
12.800	18-20	235	40	111	53	55	92	228	315	25	7,8	CFO18/20J	287,00
15.500	22	265	46	123	66	71	110	258	268	324	13,5	CFO22J	441,00

Surcharge | Inspection service

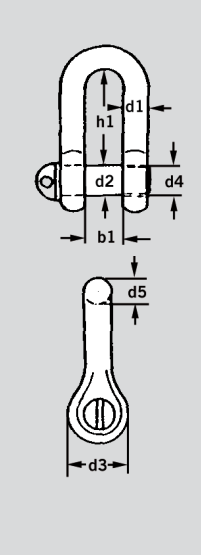


Shackles

Type SCH A

DIN 82101
with bolts

WLL [kg]	Nominal size	d1	d2	d3	d4	d5	b1	h1	Weight [kg]	Order-No.	Price / Unit €
		Size [mm]									
100	0,1	4	5	10	M 5	5	7	15,5	0,1	SCHA.00100.82101	0,35
160	0,16	5	6	12	M 6	6	8	18	0,1	SCHA.00160.82101	0,40
250	0,25	7	8	16	M 8	8	11	24	0,1	SCHA.00250.82101	0,60
400	0,4	8	10	20	M 10	10	14	30	0,1	SCHA.00400.82101	0,85
630	0,6	10	12	24	M 12	12	17	36	0,2	SCHA.00600.82101	1,20
1000	1,0	13	16	32	M 16	15	21	49	0,4	SCHA.01000.82101	2,00
1600	1,6	17	20	40	M 20	19	27	61	0,8	SCHA.01600.82101	3,60
2000	2,0	19	22	44	M 22	21	30	67	1,0	SCHA.02000.82101	5,80
2500	2,5	21	24	48	M 24	23	33	73	1,3	SCHA.02500.82101	7,50
3150	3,0	24	27	54	M 27	26	38	83,5	1,9	SCHA.03000.82101	10,50
4000	4,0	27	30	60	M 30	29	42	91	2,5	SCHA.03000.82101	15,00
5000	5,0	30	36	72	M 36	33	47	111	4,0	SCHA.05000.82101	24,50
6300	6,0	34	39	78	M 39	37	53	119,5	5,4	SCHA.06000.82101	33,00
8000	8,0	38	45	90	M 45	41	60	139,5	7,9	SCHA.08000.82101	70,00
10.000	10,0	42	48	96	M 48	45	66	147	10,0	SCHA.10000.82101	87,00
12.500	12,0	47	52	104	M 52	50	73	158	13,5	SCHA.12000.82101	117,00
16.000	16,0	52	60	120	M 60	55	81	185	19,2	SCHA.16000.82101	176,00

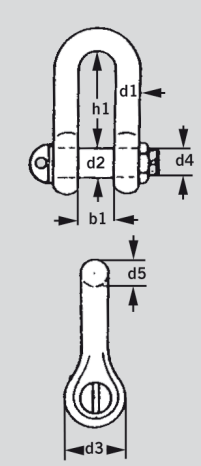


Inspection service | Surcharge | Other shackles on request!

Type SCH C

DIN 82101
with nut screw
and split

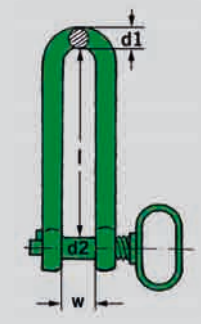
WLL [kg]	Nominal size	d1	d2	d3	d4	d5	b1	h1	Weight [kg]	Order-No.	Price / Unit € galvanised
		Size [mm]									
400	0,4	8	10	20	M 10	10	14	30	0,1	SCHC.00400.82101	1,10
630	0,6	10	12	24	M 12	12	17	36	0,2	SCHC.00600.82101	1,50
1000	1,0	13	16	32	M 16	15	21	49	0,4	SCHC.01000.82101	2,50
1600	1,6	17	20	40	M 20	19	27	61	0,8	SCHC.01600.82101	4,50
2000	2,0	19	22	44	M 22	21	30	67	1,1	SCHC.02000.82101	7,50
2500	2,5	21	24	48	M 24	23	33	73	1,4	SCHC.02500.82101	9,50
3150	3,0	24	27	54	M 27	26	38	83,5	2,0	SCHC.03000.82101	13,50
4000	4,0	27	30	60	M 30	29	42	91	2,7	SCHC.03000.82101	19,00
5000	5,0	30	36	72	M 36	33	47	111	4,3	SCHC.05000.82101	30,90
6300	6,0	34	39	78	M 39	37	53	119,5	5,8	SCHC.06000.82101	42,00
8000	8,0	38	45	90	M 45	41	60	139,5	8,5	SCHC.08000.82101	94,50
10.000	10,0	42	48	96	M 48	45	66	147	10,8	SCHC.10000.82101	120,00
12.500	12,0	47	52	104	M 52	50	73	158	14,4	SCHC.12000.82101	159,00
16.000	16,0	52	60	120	M 60	55	81	185	20,5	SCHC.16000.82101	223,00



Inspection service | Surcharge | Other shackles on request!

Sheet pilling shackle SCHS

WLL [kg]	t	d1	W	Weight [kg]	Order-No.	Price / Unit €
	Size [mm]					
2500	250	30	50	4,8	SCHS.002500.00.00	108,60
3000	250	30	50	5,0	SCHS.003000.00.00	120,90
5000	250	30	50	5,9	SCHS.005000.00.00	130,00
10000	400	50	110	21,0	SCHS.010000.00.00	406,30



Inspection service | Surcharge

Universal spin trap with insulator

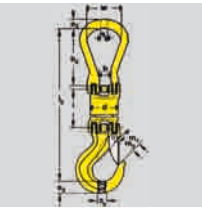
Isolation between the crane and load up to 1000 V dielectric strength

Benefits of Insulation:

- Improved personal safety, no damage to ropes, chains, electrical protection of conductors and equipment.
- Improved operating level brings lower operating costs

Spin trap Master link / hook, Type D5

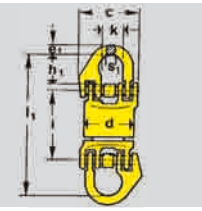
WLL	Size [mm]				Weight	Order-No.	Price/Untit
[kg]	l5	m	s2	w	[kg]		€
2000	264	27	14	50	1,3	SK.LI.D5.08	427,00
3150	338	34	18	66	2,5	SK.LI.D5.10	566,00
5300	406	42	22	72	5,0	SK.LI.D5.13	738,00
8000	493	49	25	82	8,3	SK.LI.D5.16	968,00
12500	560	59	30	105	13,5	SK.LI.D5.18	1.359,00



with Iso spin trap SKLI

Spin trap Grade 8, (Isolated, max 1000 V) Type D1

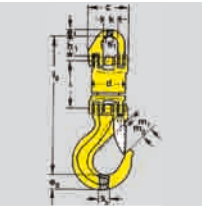
WLL	Size [mm]				Weight	Order-No.	Price/Untit
[kg]	l1	k	c	s1	[kg]		€
2000	131	17,5	49	9,0	0,8	SK.LI.D1.08	383,00
3150	164	24,0	66	12,0	1,6	SK.LI.D1.10	504,00
5300	208	29,0	82	16,0	2,9	SK.LI.D1.13	652,00
8000	241	35,0	103	19,0	5,2	SK.LI.D1.16	805,00
12500	285	42,5	117	22,5	8,6	SK.LI.D1.18	1.080,00



with Iso spin trap SKLI

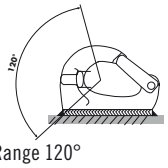
Ball-vortex with hook, (Isolated, max 1000 V) Type D2

WLL	Size [mm]			Weight	Order-No.	Price/Untit
[kg]	l2	m2	s3	[kg]		€
2000	193	27	18	1,1	SK.LI.D2.08	406,00
3150	245	34	23	2,1	SK.LI.D2.10	538,00
5300	305	42	28	4,3	SK.LI.D2.13	701,00
8000	370	49	34	7,3	SK.LI.D2.16	911,00
12500	419	59	41	11,9	SK.LI.D2.18	1.250,00

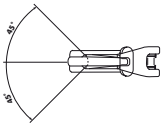


with Iso spin trap SKLI

Welding hook UKN

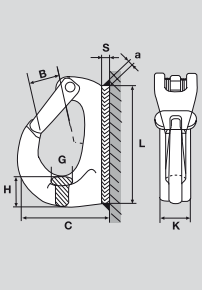


Range 120°



Allowed range 45°

Type	WLL	Size [mm]					Weight	Order-No.	Price/Untit
	[t]	B	C	G	K	L	[kg]		€
UKN-1	1,25	21	72	17	25	95	0,6	KG.UKN-1	90,00
UKN-2	2,50	26	86	20	30	114	1,0	KG.UKN-2	98,00
UKN-3	3,75	29	105	23	35	132	1,3	KG.UKN-3	107,00
UKN-4	5,00	29	111	29	42	140	1,9	KG.UKN-4	132,00
UKN-5	6,00	34	130	30	45	165	2,8	KG.UKN-5	172,00
UKN-8	10,00	34	133	39	50	172	3,7	KG.UKN-8	204,00
UKN-10	12,50	47	168	43	55	220	6,3	KG.UKN-10	247,00
UKN-15	18,50	53	188	52	55	240	9,0	KG.UKN-15	285,00



Safety crane hook

Type GKC

Type SKC

Type BKGC

The safety hook reduces accidents and helps to reduce transportation cost. No poster is possible by self locking. Safety hooks are available for all security-container

Type	Property	WLL	Weight	Order-No.	Price/Untit
SKC-13-8	only usable with SKT	5000	3,0	SKC.13	152,00
GKC-13-8	with swivel joint yoke	5000	3,6	GKC.13	115,00
BKGC 13 x 8	with swivel joint yoke	5000	3,2	BKGC.13	123,00
BKGC 16 x 8	with swivel joint yoke	8000	3,4	BKGC.16	130,00
ER-KO	Fitting for SKG/GKC	complete		ER.KO	40,80
ER-KL	Fitting for SKG/GKC	single flap gate		ER.KL	36,20
ER-FE	Fitting for SKG/GKC	single spring		ER.FE	5,10
ER-NI	Fitting for SKG/GKC	single riveted bolt		ER.NI	1,80
ER-HU	Fitting for SKG/GKC	single ferrule		ER.HU	2,20

Rope slings made of stainless steel

- Rope: material 1,4401
- Safety hooks: material 1,4301
- Rope connections with stainless steel clamps similar to DIN 3093

Stainless slings are used primarily:
- Food industry
- Butchery
- Dye-works
- Dairies
- Chemical industry
- Shipping
- Bakeries
- Hardening shop
- Pub work

Accessories: Stainless steel hooks or suspension links you find on the next page.

Reliability table

Subs.-Nr.	DIN-Label	C	Si	Mn	Cr	Mo	Ni	other
1.4301	x 5 CrNi 18 9	≤ 0,07	≤ 1,00	≤ 2,00	18,0	-	10,0	-
1.4541	x 10 CrNiTi 18 9	≤ 0,10	≤ 1,00	≤ 2,00	18,0	-	10,0	Ti
1.4404	x CrNiMo 18 10	≤ 0,07	≤ 1,00	≤ 2,00	17,5	2,25	12,0	-
1.4571	x 10 CrNiMoTi 18 10	≤ 0,10	≤ 1,00	≤ 2,00	17,5	2,25	11,5	Ti

Possible uses:
1.4301 Food industry
1.4541 Food industry, chemical industry
1.4404 Textile industry
1.4571 Textile industry , Chemical Industrie

Reliability table

Corrosive agent	Concen-tration %	Tempe-rature °C	1.4301 V2 AE	1.4541 V2 AE	1.4404 V4 AS	1.4571 V4 AE
saltwater		boiling	1	1	0	0
nitric acid	1-90	-	0	0	0	0
HNO_3	1-50	boiling	0	0	0	0
	50-90	boiling	2-3	2-3	2-3	2-3
muriatic acid	0,2-0,5	-	1	1	1	1
HCl	dto.	50	2	2	2	2
	1-2	-	2-3	2-3	2-3	2-3
	dto.	50	2-3	2-3	2-3	2-3
acid sulfur	1-50	-	1	1	1	1
H_2SO_4	dto.	70	1-2	1-2	1-2	1-2
	dto.	boiling	2-3	2-3	2-3	2-3
fluor	10	-	1-2	1-2	1-2	1-2
	40	-	2-3	2-3	2-3	2-3
hydroxile (Alkali)	20	-	0	0	0	0
	dto.	boiling	1	1	1	1
sulphate	0	0	0	0	0	0
	-	ca. 400	1-2	1-2	1-2	1-2
chloride	-	-	1	1	1	1
fatty acid $C_{18}H_{34}O_2$	-	150	0	0	0	0
acetic acid $C_2H_4O_2$	-	-	0	0	0	0
gallic acid $C_6H_2OH_3CO_2H$	-	-	0	0	0	0

0 = fully resistant 1 = practically resistant
2 = less resistant 3 = theoretically resistant

Rope sling with pressed loops

Rope-Ø [mm]	WLL 1-strand simply direct in [kg]	Order-No.	Preis 1. Meter €	Mehr-preis/m €
8	600	NI.ASA.08.0000	76,00	10,20
10	1000	NI.ASA.10.0000	96,00	16,90
12	1300	NI.ASA.12.0000	138,00	19,80
14	1800	NI.ASA.14.0000	234,00	35,10
16	2300	NI.ASA.16.0000	300,00	65,70
20	3600	NI.ASA.20.0000	474,00	88,00

Surcharge

Note : With respect to actual prices!

Rope sling with oval ring and safety load hook

Rope-Ø [mm]	WLL 1-strand simply direct in [kg]	Order-No.	Price 1. m €	More price/m €
8	600	NI.ASF.08.0000	165,00	10,20
10	1000	NI.ASF.10.0000	185,00	16,90
12	1300	NI.ASF.12.0000	271,00	19,80
14	1800	NI.ASF.14.0000	354,00	35,10
16	2300	NI.ASF.16.0000	418,00	65,70
20	3600	NI.ASF.20.0000	646,00	88,00

Surcharge

Note : With respect to actual prices!

Rope sling with loop and safety load hook

Rope-Ø [mm]	WLL 1-strand simply direct in [kg]	Order-No.	Price 1. m €	More price/m €
8	600	NI.DG1.0HF.08.0000	200,00	10,20
10	1000	NI.DG1.0HF.10.0000	244,00	16,90
12	1300	NI.DG1.0HF.12.0000	320,00	19,80
14	1800	NI.DG1.0HF.14.0000	420,00	35,10
16	2300	NI.DG1.0HF.16.0000	501,00	65,70
20	3600	NI.DG1.0HF.20.0000	787,00	88,00

Surcharge

Note : With respect to actual prices!

Rope attachments two-stranded with safety load hook

Rope-Ø [mm]	WLL 2-strand [kg] 0 - 45°	45 - 60°	Order-No.	Price 1. m €	More price/m/ Strang €
8	840	600	NI.DG2.0HF.08.0000	389,00	10,20
10	1400	1000	NI.DG2.0HF.10.0000	435,00	16,90
12	1800	1300	NI.DG2.0HF.12.0000	579,00	19,80
14	2500	1800	NI.DG2.0HF.14.0000	766,00	35,10
16	3200	2300	NI.DG2.0HF.16.0000	971,00	65,70
20	5000	3600	NI.DG2.0HF.20.0000	1.536,00	88,00

Surcharge

Note : With respect to actual prices!

cromox Suspension links, G5

For 1 and 2 strand sling chains

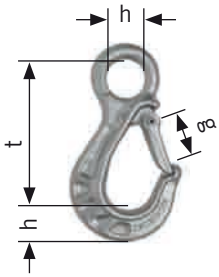
Type	WLL [kg] 1-strand	2-strand 45°	2-strand 60°	Size d	t	b [mm]	Weight app. [t]	Order-No.	Price/ Unit €
NAF 6706	1000	1000	750	13	110	60	0,340	NAF.6706.0	13,40
NAF 0807	1250	1400	1000	16	110	60	0,530	NAF.0807.0	16,50
NAF 1008	2000	1700	1250	18	135	75	0,800	NAF.1008.0	21,65
NAF 1310	3200	2800	2000	22	160	90	1,500	NAF.1310.0	32,95
NAF 1613	5000	4500	3200	26	180	100	2,300	NAF.1613.0	46,35
NAF 1816	7100	7100	5000	32	200	110	3,900	NAF.1816.0	102,00
*NAF 2018	8000	9000	6300	36	260	140	6,350	*NAF.2018.0	143,00
NBF 13	2000	1000	750	13	54	25	0,195	CRX.NBF.13	12,35
NBF 16	3200	1700	1250	16	70	34	0,370	CRX.NBF.16	15,45
NBF 18	4100	2800	2000	18	85	40	0,530	CRX.NBF.18	19,55
NBF 22	6300	4500	3200	22	115	50	1,065	CRX.NBF.22	30,90
NBF 26	7600	7100	5000	26	140	65	1,825	CRX.NBF.26	45,30

cromox Suspensions heads, G5

Type NATF for 3 and 4 strand sling chains

Type	WLL [kg] 45°	60°	Size [mm] d	t	b	Weight app. [kg]	Orer-No.	Price/ Unit €
NATF 0607	2100	1500	A 18	135	75	1,20	NATF.0607	44,30
			B 13	54	25			
NATF 08	2650	1800	A 22	160	90	2,30	NATF.0008	60,80
			B 16	70	34			
NATF 10	4250	3000	A 26	180	100	3,56	NATF.0010	81,40
			B 18	85	40			
NATF 13	6700	4750	A 32	200	110	6,05	NATF.0013	155,50
			B 22	115	50			
NATF 16	10000	7500	A 36	260	140	10,00	NATF.0016	224,50
			B 26	140	65			

cromox eye hook, G5



Type NOHF with safety flap

Type	WLL [kg]	Size [mm] t	g	b	h	Weight ca. [kg]	Order-No.	Price/ Unit €
NOHF 04	300	75	20	17	17	0,185	CX.NOHF.04	47,40
NOHF 06	750	100	25	25	22	0,350	CX.NOHF.06	50,50
NOHF 08	1250	126	32	27	28	0,790	CX.NOHF.08	65,90
NOHF 10	2000	160	39	37	34	1,370	CX.NOHF.10	109,00
NOHF 13	3200	190	51	48	45	3,000	CX.NOHF.13	149,50
NOHF 16	5 000	230	66	55	51	4,800	CX.NOHF.16	212,00
NOHF 18	7 000	230	66	55	51	4,800	CX.NOHF.18	226,50

cromox safety fitting

For NGHF and NOHF

Type	Weight [kg]	Order-No.	Price/ Unit €
NSG 04	0,026	CX.SNSG.04	21,65
NSG 06	0,030	CX.SNSG.06	22,65
NSG 08	0,050	CX.SNSG.08	24,70
NSG 10	0,095	CX.SNSG.10	26,80
NSG 13	0,150	CX.SNSG.13	29,85
NSG 16/18	0,250	CX.SNSG.16	34,00

cromox Safety D Shackle, G5

Type NSS certified

Type	WLL [kg]	Size a	d	t	b [mm]	Weight ca. [kg]	Order-No.	Price/ Unit €
NSS 04	300	7	6	23	12	0,035	CRX.NSS.04	2,88
NSS 05	500	9	8	24	17	0,070	CRX.NSS.05	5,36
NSS 06	750	11	10	35	20	0,135	CRX.NSS.06	9,48
NSS 08	1250	13	12	42	25	0,225	CRX.NSS.08	12,90
NSS 10	2000	18	16	64	32	0,540	CRX.NSS.10	28,75
NSS 13	3200	21	19	76	38	0,945	CRX.NSS.13	45,20

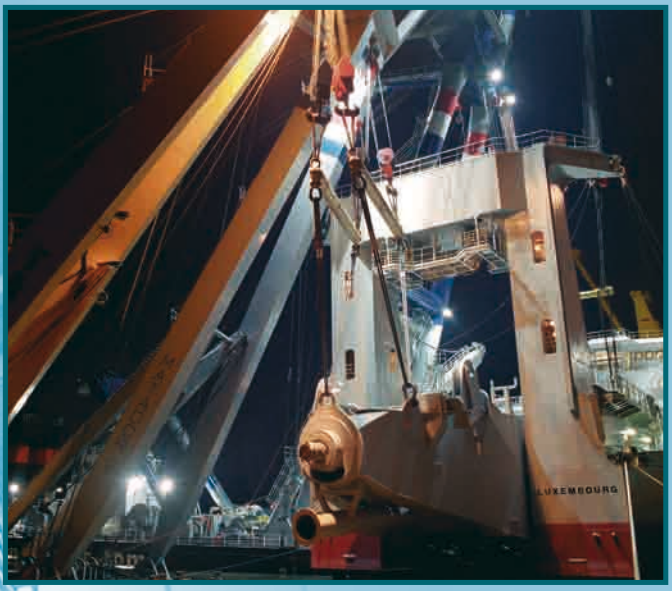
GLOBUS
HEBETECHNIK

Heavy Duty Grommets in operation

High strength reduction for heavy capacity ropes

Heavy duty shackles

Heavy duty grommets and wide body shackle in usage



Heavy duty technology

Grommets	A 60 - A 64
Accessories for grommets	A 65 - A 69

Edge protection

GLOBUS – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

Grommets acc. to EC Machinery Directive 2006/42/EG

and EN 13414-3 and special grommets

- Own production
- Grommets are supplied with load capacity badge
- Other Special requests are EC-conform just after the line straightening machines 2006/42/EC

Since 1994, we account for the manufacturing of our entire stop ropes etc, also the grommets through GS testing i.e. conformity according to the EC machinery directive.

Info

- **Grommets should only be used in pairs.**
- **Red marked lock may be put to only one free traction.**
- **While embracing the load, the rope may not be twisted.**
- **Running visual controls are necessary.**
- **Nominal firmness of the wires at least 1770 N / mm² / 1960 N mm².**
- **Rope EN 12385-4**

Heavy duty technology

Load capacity table	Standard according to EN 13414-3						Special grommets	
	Type G1	Type G2	Type G3	Type G4 N/mm²	Type G4/1960 N/mm²	Flexible G5/1960 N/mm²	Extremely flexible G7/1960 N/mm²	
					EN 12385-4		up to 30% more WLL at same diameter	
Construction rope-Ø [mm]	Tab. 12 7 (6x19FE) WLL [t]	Tab. 13 7 (6x37FE) WLL [t]	Tab. 9 7 (6x36FE) WLL [t]	Tab. 9 7 (6x36SE) WLL [t]	Tab. 9 7 (6x36SE) WLL [t]	Tab. 10 7 (8x36SE) WLL [t]	special rope 7 (Special) WLL [t]	Weight ~ kg/m size
12,0	2,00	-	-	-	-	-	-	0,4
15,0	3,20	-	-	-	-	-	-	0,6
18,0	4,60	-	-	4,90	5,40	-	-	0,9
21,0	6,30	6,25	6,25	6,25	7,50	8,50	-	1,2
24,0	8,25	8,25	8,25	9,00	9,50	-	-	1,6
27,0	10,50	10,50	10,50	11,50	12,50	13,50	-	2,6
30,0	11,50	11,50	11,50	14,00	15,00	-	19,20	3,2
33,0	-	14,00	14,00	17,00	18,50	18,00	23,20	3,8
36,0	-	16,50	16,50	20,00	21,50	20,00	27,80	4,5
39,0	-	19,50	19,50	23,50	25,50	28,50	32,50	5,3
42,0	-	22,50	22,50	27,00	29,60	31,10	37,60	6,2
48,0	-	30,00	30,00	35,50	39,00	40,00	49,70	8,0
54,0	-	37,50	37,50	45,00	49,00	49,50	62,50	10,1
60,0	-	46,00	46,00	55,50	60,00	61,00	76,50	12,6
66,0	-	60,00	60,00	69,00	75,00	-	94,80	15,2
72,0	-	72,50	72,50	84,00	92,00	-	116,50	18,1
78,0	-	76,00	76,00	102,00	112,00	-	-	21,3
84,0	-	98,00	98,00	121,00	132,00	-	-	24,6
90,0	-	-	-	144,00	158,00	-	-	28,9
96,0	-	-	-	168,00	178,00	-	-	32,1
102,0	-	-	-	196,00	216,00	-	-	37,1

1960 N/mm²

Larger Ø on request

Grommets Continuous laid accord. to EN 13414-3

Types G1, G2, G3 cable version with laid in fibre core

Type G1 wire construction accord. to EN 12385-4

Wire-Ø in construction 7 (6x19 M-FC) [mm]	MI BK [kN]	Single capacity vertical [t]	Knotted [t]	min. circum-ference [m]	Order-No.	Zinc-coated Price/2 m size €	Zinc-coated extra price/m €
9	57,1	1,15	0,90	2	ASG1.A0.009.0000	31,00	8,00
12	101,5	2,00	1,60	2	ASG1.A0.012.0000	44,00	11,00
15	158,8	3,20	2,60	2	ASG1.A0.015.0000	50,00	13,00
18	229,0	4,60	3,70	2	ASG1.A0.018.0000	52,00	14,00
21	308,9	6,30	5,00	2	ASG1.A0.021.0000	65,00	21,00
24	387,7	8,25	6,50	2	ASG1.A0.024.0000	71,00	24,00
27	510,8	10,50	8,50	3	ASG1.A0.027.0000	82,00	28,00
30	630,7	11,50	9,00	3	ASG1.A0.030.0000	90,00	32,00

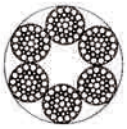
Order example: Please state required length = size : 2 m
ASG1.A0.015.0000 Wire Ø15 mm, 10 m size = 5 m length
Nominal tensile strength 1770/1960 N/mm²

Type G2 Wire construction accord. to EN 12385-4

Wire-Ø in construction 7 (6x37 M-FC) [mm]	MI BK [kN]	Single capacity vertical [t]	Knotted [t]	min. circum-ference [m]	Order-No.	Zinc-coated Price/2 m size €	Zinc-coated extra price/m €
33	687,2	14	11	4	ASG2.A0.033.0000	108,00	44,00
36	908,3	16,5	13	4	ASG2.A0.036.0000	126,00	48,00
39	1065	19,5	15,5	4	ASG2.A0.039.0000	140,00	53,00
42	1231,2	22,5	18	4	ASG2.A0.042.0000	156,00	61,00
48	1620	30,0	23,5	4	ASG2.A0.048.0000	186,00	72,00
54	2041	37,5	30	4	ASG2.A0.054.0000	214,00	85,00
60	2527,2	46,0	37	4	ASG2.A0.060.0000	224,00	100,00

Nominal tensile strength 1770/1960 N/mm²

- Grommets should only be used in pairs.
- The wire should not be rotated when slinging the load.
- Constant visual monitoring required.
- Nominal tensile strength of the wires at least 1770 N/mm² and 1960 N/mm².



Type G3 Wire construction accord. to EN 12385-4

Wire-Ø in construction 7 (6x36 M-FC) [mm]	MI BK [kN]	Singl e capacity vertical [t]	Knotted [t]	min. circum-ference [m]	Order-No.	Zinc-coated Price/2 m size €	Zinc-coated extra price/m €
21	309	6,3	5,0	2	ASG3.A0.021.0000	67,00	22,00
24	388	8,25	6,5	2	ASG3.A0.024.0000	74,00	24,00
27	510	10,5	8,5	2	ASG3.A0.027.0000	85,00	29,00
30	544	11,5	9,0	3	ASG3.A0.030.0000	93,00	33,00
33	684	14,0	11,2	3	ASG3.A0.033.0000	113,00	45,00
36	812	16,5	13,2	3	ASG3.A0.036.0000	131,00	50,00
39	958	19,5	15,6	3	ASG3.A0.039.0000	146,00	56,00
42	1105	22,5	18,0	4	ASG3.A0.042.0000	162,00	63,00
48	1449	29,5	23,6	4	ASG3.A0.048.0000	193,00	75,00
54	1830	37,2	29,8	4	ASG3.A0.054.0000	222,00	88,00
60	2255	46,0	36,8	4	ASG3.A0.060.0000	242,00	104,00

Nominal tensile strength 1770/1960 N/mm²

Lock

Grommets Continuous laid accord. to EN 13414-3

Type G4 with steel core (WSC), in cable laid version

- Grommets should only be used in pairs.
- Lock marked in red should only be opened with free traction.
- The wire should not be rotated when slinging the load.
- Constant visual monitoring required.
- Nominal tensile strength of the wires at least 1770 N/mm² and 1960 N/mm².

Type G4 in wire construction accord.to EN 12385-4

Wire-Ø in construction 7 (6x36 WS - WC) [mm]	MI BK [kN]	Single capacity vertical [t]	Knotted [t]	min. circum-ference [m]	Order-No.	blank Price / 2 m Size €	blank extra Price/m €
27*	550,8	11,5	9,2	3	ASG4.A0.027.0000	95,40	34,80
30*	680,4	14,0	11,2	3	ASG4.A0.030.0000	106,00	40,00
33	822,0	17,0	13,6	4	ASG4.A0.033.0000	142,00	55,30
36	979,6	20,0	16,0	4	ASG4.A0.036.0000	154,50	61,30
39	1144,8	23,5	18,8	4	ASG4.A0.039.0000	171,00	68,10
42	1339,2	27,0	21,6	4	ASG4.A0.042.0000	190,00	78,40
48	1738,8	35,5	28,4	4	ASG4.A0.048.0000	227,50	92,40
54	2203,0	45,0	36,0	4	ASG4.A0.054.0000	261,00	109,00
60	2721,6	55,5	44,4	6	ASG4.A0.060.0000	310,50	129,00
66	3294,0	69,0	55,2	6	ASG4.A0.066.0000	363,50	151,50
72	3920,4	84,0	67,2	6	ASG4.A0.072.0000	422,50	177,50
78	4600,8	102,0	81,6	6	ASG4.A0.078.0000	493,00	207,00
84	5335,2	121,0	96,8	6	ASG4.A0.084.0000	574,00	240,00

Order example: Please state required length = size : 2 m
ASG4.A0.066.0050 Wire-Ø 66 mm, 5,0 m length
* Const. 7(6x19W-WC)
Nominal tensile strength 1770 N/mm²

Grommets:

- Continuous wire without butt
- Load allocation on two wires
- When using shackles pay attention to corresponding dimensioning (With Ø = shackle mat Ø -> 25 % loss)

Type G4/ 1960 in wire construction accord. to EN 12385-4

Wire-Ø in cons-truction 7 (6x36 WS - WC) [mm]	MI BK [kN]	Single capacity vertical [t]	Knotted [t]	min. circum-ference [m]	Order-No.	blank Price/2 m Size €	blank extra Price/m €
27*	678	12,5	10,0	2	ASG4.A1.027.0000	105,00	38,50
30*	832	15,0	12,0	3	ASG4.A1.030.0000	117,00	44,00
33	1013	18,5	14,8	3	ASG4.A1.033.0000	162,30	60,90
36	1200	21,5	17,2	3	ASG4.A1.036.0000	170,00	67,40
39	1416	25,5	20,4	3	ASG4.A1.039.0000	188,20	75,00
42	1644	29,6	23,7	4	ASG4.A1.042.0000	209,00	86,40
48	2148	39,0	31,2	4	ASG4.A1.048.0000	250,00	101,60
54	2712	49,0	39,2	4	ASG4.A1.054.0000	287,00	120,10
60	3348	60,0	48,0	4	ASG4.A1.060.0000	341,30	142,10
66	4065	75,0	60,0	4	ASG4.A1.066.0000	399,60	166,90
72	4464	92,0	73,5	6	ASG4.A1.072.0000	464,90	195,20
78	5316	112,0	89,5	6	ASG4.A1.078.0000	542,30	227,70
84	6564	132,0	105,5	6	ASG4.A1.084.0000	631,40	263,90
96	8540	178,0	142,5	6	ASG4.A1.096.0000	on request	on request
108	10848	251,0	201,0	6	ASG4.A1.108.0000	on request	on request

* Const. 7(x19W-WC) nominal tensile strength 1960 N/mm²

Grommets Continuous laid accord. to EN 13414-3

Typ G5 cable version with laid in steel core (WSC)

- High load capacity
- Flexible design
- Low weight
- Special grommets with BG approval
- Tensile strength 1960 N/ mm²

Typ G5/1960 Flexible special grommets in wire construction EN 12385-4

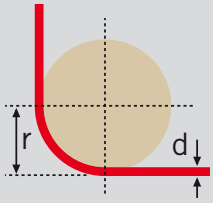
Wire-Ø in construction 7(8x36 WS-WC) [mm]	MI BK [kN]	Single capacity vertical [t]	min. circumference [m]	Order-No.	blank Price/2 m Size €	blank extra Price/m €
21*	476	8,5	2	ASG4.A0.021.0000	on request	on request
27*	756	13,5	3	ASG4.A0.027.0000	on request	on request
33*	1363	18,0	3	ASG4.A0.033.0000	on request	on request
39	1584	28,5	3	ASG4.A0.039.0000	on request	on request
42	1740	31,3	3	ASG4.A0.042.0000	on request	on request
48	2260	40,6	4	ASG4.A0.048.0000	on request	on request
54	2750	49,5	4	ASG4.A0.054.0000	on request	on request
60	3420	61,0	4	ASG4.A0.060.0000	on request	on request
75	5076	91,4	6	ASG4.A0.075.0000	on request	on request

More diameters on request.
* construction 7(8x19 W-WC)

Heavy duty technology

Info

Attention! In particular to the "sharp edge" and small location bolts are dangerous.



A sharp edge is always present, when the edge radius „r" is smaller than the material strength „d" of the sling.

Trial assessment: Grommet breakage tests

Grommet Design	Location bolts 1 : 1 [mm]	Residual tensile strength [%]	Location bolts 1 : 2 [mm]	Residual tensile strength [%]
G - Ø39	40	91	80	102
G - Ø60	60	88	120	97
G - Ø84	85	78	170	94
G - Ø48	50	75	100	97

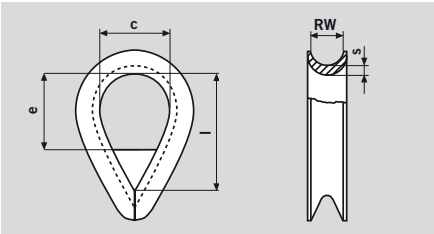
Sharp edge

Capacity reduction of 25%

2 x d = 100 % load capacity

Heavy duty thimble

Type HEG

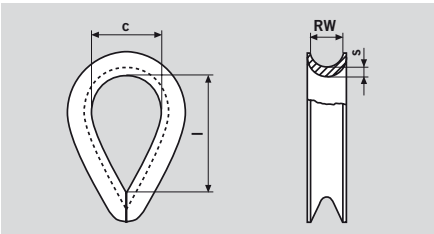


NG fitting for stable shackles	groove width [mm]	inside width C [mm]	inside length to flange e [mm]	inside length* l [mm]	Order-No.	Price/pc. €
17/25	35	80	100	160	KAU.HEG.017	on request
25/35	40	90	120	180	KAU.HEG.025	
35/55	50	110	125	220	KAU.HEG.035	
55/85	62	140	160	280	KAU.HEG.055	
85/120	72	160	175	320	KAU.HEG.085	
120/150	85	190	265	380	KAU.HEG.120	
150/200	100	200	290	400	KAU.HEG.150	

* for thimble without flange

Heavy duty thimble

Accord. to DIN 83333, hot galvanised



NG	groove width [mm]	inside width C [mm]	inside length l [mm]	back strength S [mm]	Weight [kg]	Order-No.	Price/pc. €
8,0	34	85	150	13	2,8	KAU.333.080	on request
10,0	38	95	170	15	4,2	KAU.333.100	
12,0	42	105	190	16	5,1	KAU.333.120	
16,0	46	115	205	16	5,5	KAU.333.160	
20,0	50	125	225	18	9,3	KAU.333.200	
25,0	56	140	250	20	13,0	KAU.333.250	
31,0	62	155	280	21	13,6	KAU.333.310	
40,0	68	170	306	23	19,3	KAU.333.400	
45,0	75	185	340	25	24,6	KAU.333.450	

Special grommet Type G7 with GS

With special approval for over 30% more load capacity

Type G7 - Special rope similar to EN 13414-3

Wire-ø [mm]	Indiv. capacity vertical [t]	Knotted [t]	min. Size [m]	Order-No.	blank Price/2 m Size €	blank Extra Price/m €
39	32,5	26	2	ASG7.S0.039.0000	on request	on request
42	37,5	30	2	ASG7.S0.042.0000		
48	49,7	39,5	3	ASG7.S0.048.0000		
54	62,5	50	3	ASG7.S0.054.0000		
60	76,5	61	3	ASG7.S0.060.0000		
66	94,8	76	4	ASG7.S0.066.0000		
72	116,5	93	4	ASG7.S0.072.0000		
78	151,0	121	4	ASG7.S0.078.0000		
84	177,0	141	4	ASG7.S0.084.0000		
90	198,0	158	6	ASG7.S0.090.0000		
96	237,0	190	6	ASG7.S0.096.0000		

Further versions upon request

- BG Certification
- Low weight
- High load capacity
- Nominal tensile strength 1960 N/mm²

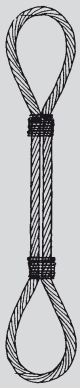
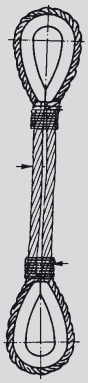
Heavy duty technology

Type Cobra Special grommet with PES protective jacket

German registered design

- Version G7 with Cobra protective jacket
- Protection from abrasion
- Protection from damage
- Special load capacity label
- Testing capability through hook-and loop fastener

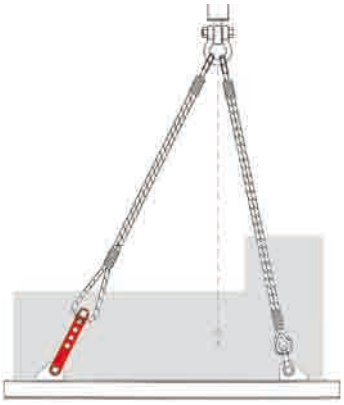
Contact us. We are happy to advise you!

Design form	Standard	Version 1 Loop/loop	Version 2 Loop/thimble	Version 3 thimble/thimble
Grommets				

High tensile reductions for heavy duty grommets

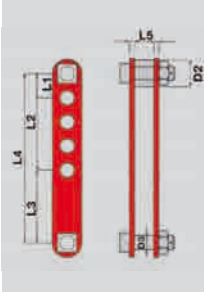
Up to 175 t

- Load capacity of 17 – 150 t
- Adaption of bolts to high tensile shackle bolts
- Additional fine tuning – 10 mm Adjustments on request
- Reduction through hole matrix



Reduction TL

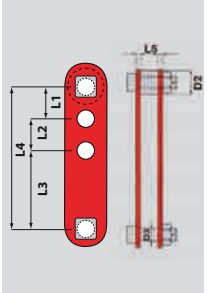
WLL	Size [mm]							Weight	Order-No.	Price/Unit
[t]	D2	D3	L1	L2	L3	L4	L5	[kg]		€
17	80	44	80	320	150	470	57	17	TL 17	on request
25	100	51	90	360	280	640	70	30	TL 25	on request
35	110	57	100	400	300	700	80	40	TL 35	on request
55	130	70	120	480	360	840	100	80	TL 55	on request
85	170	82	150	600	420	1020	124	130	TL 85	on request
120	220	95	200	800	550	1350	140	-	TL 120	on request
150	240	108	200	800	550	1350	160	-	TL 150	on request



Reduction KTL

- Short transport shackle
- Load capacity of 17 – 175 t
- Adaption to bolts on high tensile shackle bolts
- Additional fine tuning – 10 mm adjustment on request
- Reduction through hole matrix

WLL	Size [mm]							Weight	Order-No.	Price/Unit
[t]	D2	D3	L1	L2	L3	L4	L5	[kg]		€
17	80	44	80	160	150	310	57	15	KTL 17	on request
25	100	51	90	180	200	380	70	24	KTL 25	on request
35	110	57	100	200	230	430	80	35	KTL 35	on request
55	130	70	120	240	300	540	100	71	KTL 55	on request
85	170	82	150	300	370	670	124	126	KTL 85	on request
120	220	95	200	400	430	830	140	221	KTL 120	on request
150	240	108	200	400	480	880	160	285	KTL 150	on request
175	260	118	215	430	500	930	165	353	KTL 175	on request

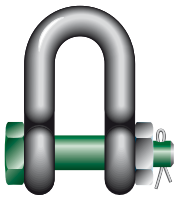


Adjustable Reduction

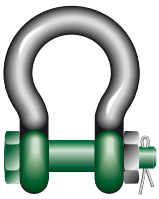
Further possibilities of adapting under strain upon request.
We are happy to advise you.

Load Capacity [t]	Order-No.	Price/Unit €
25	VVTL 25	on request
35	VVTL 35	on request
55	VVTL 55	on request
85	VVTL 85	on request
120	VVTL 120	on request

Designs of shackle types



Standard shackle straight Type HC1



Polar shackle curved Typ GP

SuperPin Shackle curved Typ Typ GS

Standard-shackle curved Typ HC2

Broad shackle Curved Typ GB

Open jaw shackle curved Typ GW

Heavy duty technology

Info

Please pay attention to precise capacity load of the shackle!

According to DIN 13889 shackles are normed to 25 t!

Technical information

Proper application and use

This application is not admitted with normal, high-strength shackling: 13889, a sloping train corner is bigger than 7° **inadmissibly!**

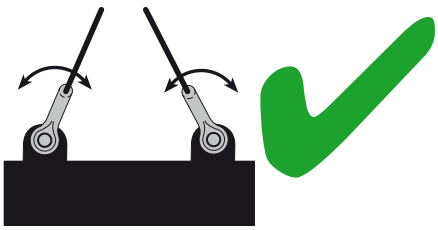
For Globus-Shackle, the following load-carrying capacity is released according to EN 13889:
For 7 °> β <30 °: 0.8 X nominal load-carrying capacity
For 30 °> β <45 °: 0.7 X nominal load-carrying capacity

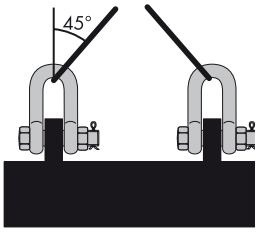
Only the GD marked shackle of Globus can do this.
The following conditions are to be kept absolutely:

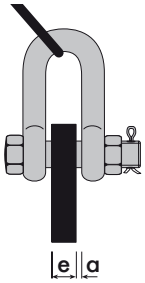
1. The free bolt loading width **e** is pos sible to be used completely, i.e. the gap **a** is to be filled in, if necessary, by distance discs.
2. The drilling should not be much greater than the shackle bolts.
3. Security of the screw nut by spring retention/splint.

During usage ensure:

- Brackets and bolts marked, same quality and readable.
- Thread does not damage.
- Shackle brackets and bolts not deformed or worn out (10%), no cracks or corrosion.
- Screw nut tightened by hand and secured with splint.





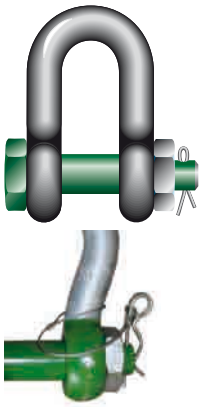


High tensile shackle with special spring retainer

According to EN 13889, up to 25 t

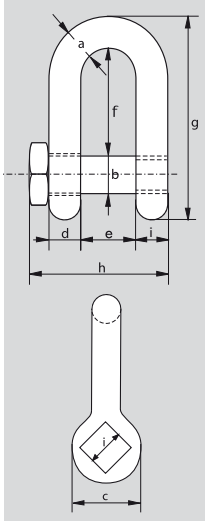
- Temperature range: -20°C - +200°C
- Material: Brackets and bolts of high tensile steel quality class 6 certified
- Safety factor: Minimum breaking load = 6 times WLL
- Norms: EN 13889 and requirements of US Fed Spec RR-C-271 Type IVA Class 2 Grade A deleted
- Surface treatment: hot galvanised
- Certificates: On request we can issue a product certificate / EC declaration of conformity

High tensile shackle Type HC-1, straight with nut and splint

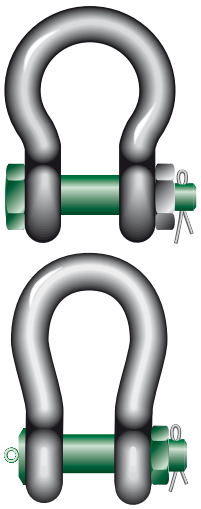


Special spring retainer!

WLL [kg]	Clip-Ø a	Mounting Bolt-Ø b	Eye-Ø c	Strength eye d	Inside width e	Inside length f	Outer length g	Length bolt h	i	Weight [kg]	Order-No.	Price / Unit €
	Size [mm]											
2000	13,5	16	34	13,5	22	43	85	83	13	0,38	GR.0002000.HC1.MS	8,00
3250	16	19	40	16	27	51	105	99	17	0,67	GR.0003250.HC1.MS	11,30
4750	19	22	47	19	31	59	125	115	20	1,08	GR.0004750.HC1.MS	14,40
6500	22	25	53	22	36	73	144	131	23	1,66	GR.0006500.HC1.MS	21,40
8500	25	28	60	25	43	85	161	151	25	2,46	GR.0008500.HC1.MS	30,70
9500	28	32	67	28	47	90	179	167	28	3,42	GR.0009500.HC1.MS	41,10
12000	32	35	74	32	51	94	199	179	31	4,50	GR.0012000.HC1.MS	59,60
13500	35	38	80	35	57	115	220	198	34	6,10	GR.0013500.HC1.MS	79,20
17000	38	42	89	38	60	127	239	202	19	7,63	GR.0017000.HC1.MS	92,10
25000	45	50	104	45	74	149	283	244	24	13,20	GR.0025000.HC1.MS	159,50
35000	50	57	111	50	83	171	333	270	27	18,53	GR.0035000.HC1.MS	183,70
42500	57	65	134	57	95	190	360	302	30	25,95	GR.0042500.HC1.MS	384,60
55000	65	70	145	65	105	203	399	330	33	35,30	GR.0055000.HC1.MS	458,20
85000	75	83	163	75	127	229	455	376	40	52,93	GR.0085000.HC1.MS	759,20



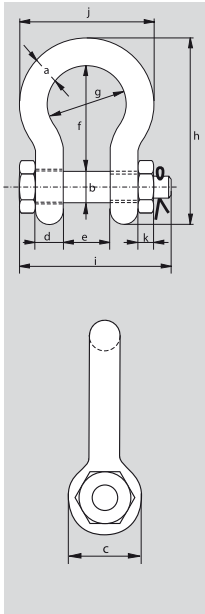
High tensile shackle Type HC-2, curved with nut and splint



Heavy duty version from 120 t

WLL [t]	Clip-Ø a	Mounting Bolt-Ø b	Eye-Ø c	Strength eye d	Inside width e	Inside length f	Width Clip g	Outer length h	Length bolt i	Outer width j	Width nut k	Weight [kg]	Order-No.	Price / Unit €
	Size [mm]													
2000	13,5	16	34	13,5	22	51	32	91	83	63	13	0,42	GS.0002000.HC2.MS	8,00
3250	16	19	40	16	27	64	43	114	99	79	17	0,74	GS.0003250.HC2.MS	11,30
4750	19	22	47	19	31	76	51	136	115	94	20	1,18	GS.0004750.HC2.MS	14,40
6500	22	25	53	22	36	83	58	157	131	107	23	1,77	GS.0006500.HC2.MS	21,40
8500	25	28	60	25	43	95	68	176	151	124	25	2,58	GS.0008500.HC2.MS	30,70
9500	28	32	67	28	47	108	74	197	167	137	28	3,66	GS.0009500.HC2.MS	41,10
12000	32	35	74	32	51	115	83	218	179	154	31	4,91	GS.0012000.HC2.MS	59,60
13500	35	38	80	35	57	133	92	240	198	170	34	6,54	GS.0013500.HC2.MS	79,20
17000	38	42	89	38	60	146	99	262	202	183	19	8,19	GS.0017000.HC2.MS	92,10
25000	45	50	104	45	74	178	126	314	244	226	24	14,22	GS.0025000.HC2.MS	159,50
35000	50	57	111	50	83	197	138	358	270	250	27	19,85	GS.0035000.HC2.MS	183,70
42500	57	65	134	57	95	222	160	414	302	287	30	28,30	GS.0042500.HC2.MS	384,60
55000	65	70	145	65	105	260	180	463	330	329	33	39,59	GS.0055000.HC2.MS	458,60
85000	75	83	163	75	127	329	190	556	376	355	40	62,00	GS.0085000.HC2.MS	759,20
120000	95	95	215	89	144	381	238	667	440	416	50	110,00	GS.0120000.HC2.MS	request
150000	105	108	245	100	165	400	275	702	490	485	60	160,00	GS.0150000.HC2.MS	request
200000	120	130	288	110	175	500	290	854	520	530	60	235,00	GS.0200000.HC2.MS	request

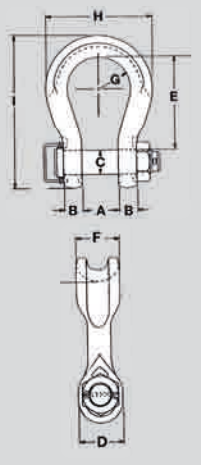
With certificate upon request accord. to EN 10204!



Broad shackles Type GB

- Broad bearing surface in the mounting to protect the lifting slings
- Conservation of thimble
- Mounting and bolts of alloy steel, quality class 8, certified
- Minimum breakage load = 5 times WLL
- Mounting lacquered in silver, bolts in green
- -20°C to +200°C
- Certificates: On request we issue product certificates and EC declaration of conformity

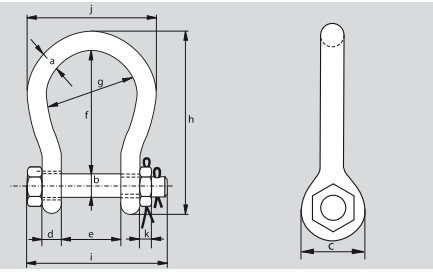
WLL [t]	Size [mm] A	B	C	D	E	F	G	H	I	Weight [kg]	Order-No.	Price / Unit €
7*	31,8	17,5	22,4	46,2	90,4	40,6	31,8	149	104	1,81	GB.0007.000.B5.MS	on request
12,5*	42,9	23,4	28,7	60,5	118	54,1	41,4	194	140	4,54	GB.0012.500.B5.MS	on request
18*	51,6	29,5	35,1	68,3	148	63,5	50,8	238	172	6,80	GB.0018.000.B5.MS	on request
30	60,2	35,1	41,4	88,9	176	79,5	63,5	289	216	11,34	GB.0030.000.B5.MS	on request
40	55	51	109	45	80	200	140	331	252	22	GB.0040.000.B5.MS	on request
55	60	57	115	55	95	250	160	396	304	50	GB.0055.000.B5.MS	on request
75	70	70	140	70	105	290	186	467	359	67	GB.0075.000.B5.MS	on request
125	85	80	155	85	130	365	220	569	428	103	GB.0125.000.B5.MS	on request
150	94	95	180	89	140	390	250	627	441	160	GB.0150.000.B5.MS	on request
200	110	105	200	100	150	480	276	744	474	220	GB.0200.000.B5.MS	on request
250	126	120	228	110	170	540	300	842	528	320	GB.0250.000.B5.MS	on request
300	135	134	245	122	185	600	350	926	594	350	GB.0300.000.B5.MS	on request
400	160	160	295	145	220	575	370	964	686	635	GB.0400.000.B5.MS	on request
500	170	180	330	160	250	680	450	1107	763	803	GB.0500.000.B5.MS	on request



Prices and further versions on request. Technical changes reserved.
* = red splint

Wide range shackle Type GW

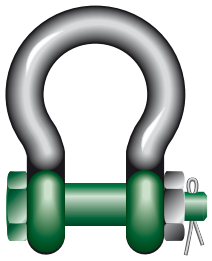
- Brackets and bolts alloy steel, grade 8, heat-treated
- Galvanised
- On request, we provide a test certificate and/or basic raw material for this product free of charge.
- - 20°C to 200°C



WLL [t]	Size [mm] A	B	C	D	E	F	G	H	I	J	K	Weight [kg]	Order-No.	Price / Unit €
4,75	22	25	52	22	63	112	88	173	157	132	23	2,08	GW.0004.000.B6.MS	36,00
6,5	25	28	59	25	75	135	105	204	182	155	25	3,14	GW.0006.000.B6.MS	49,50
9,5	32	35	72	32	90	162	126	248	217	190	31	5,95	GW.0009.000.B6.MS	111,00
12	35	38	79	35	100	180	140	274	240	210	34	7,87	GW.0012.000.B6.MS	147,00
16	38	42	89	38	106	216	159	319	248	235	19	12,5	GW.0016.000.B6.MS	228,00
25	45	50	104	45	127	248	175	370	296	265	24	18	GW.0025.000.B6.MS	289,90
30	50	57	111	50	146	273	207	411	338	307	27	25	GW.0030.000.B6.MS	334,90
55	65	70	145	65	165	314	213	487	389	343	33	48	GW.0055.000.B6.MS	453,40
75	75	83	163	75	184	330	254	530	432	404	40	70	GW.0075.000.B6.MS	1.093,40

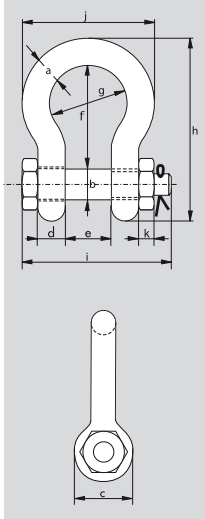
Prices and other versions on request

Polar-Shackle Type GP

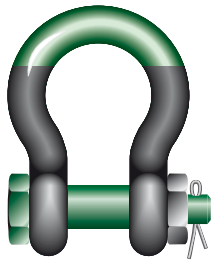


- Temperature range -40 °C to +200 °C
- Material: Brackets and bolts alloy steel, grade 8, heat-treated
- Safety factor: Minimum breaking load = 6 times WLL
- Standards: EN 13889 and meets the performance requirements of the U.S. Fed. Spec. RR-C-271 Class 3 Type IVA, Grade B
- Surface treatment: Galvanised
- Certificate: On request, we provide a test certificate, basic raw material, manufacturer certificate and/or EC declaration of conformity for this product free of charge.

					Size [mm]									
WLL [t]	Brackets-Ø a	Bolts-Ø b	pip-Ø c	Strong pip d	Internal width e	Internal length f	Internal Bracket g	Outer length h	Length Bolts i	Outer width j	Width of serew k	Weight [kg]	Order-No.	Price / Unit €
2	13,5	16	34	13,5	22	51	32	91	83	63	13	0,42	GS.02.00.000.PS.MS	18,40
3,25	16	19	40	16	27	64	43	114	99	79	17	0,74	GS.03.25.000.PS.MS	25,40
4,75	19	22	47	19	31	76	51	136	115	94	20	1,18	GS.04.75.000.PS.MS	32,30
6,5	22	25	53	22	36	83	58	157	131	107	23	1,77	GS.06.50.000.PS.MS	47,10
8,5	25	28	60	25	43	95	68	176	151	124	25	2,58	GS.08.50.000.PS.MS	67,30
9,5	28	32	67	28	47	108	75	197	167	137	28	3,66	GS.09.50.000.PS.MS	91,90
12	32	35	74	32	51	115	83	218	179	154	31	1,91	GS.12.00.000.PS.MS	123,40
13,5	35	38	80	35	57	133	92	240	198	170	34	6,54	GS.13.50.000.PS.MS	161,50
17	38	42	89	38	60	146	99	262	203	183	19	8,19	GS.17.00.000.PS.MS	219,80
25	45	50	104	45	74	178	126	314	244	226	24	14,22	GS.25.00.000.PS.MS	370,30
35	50	57	119	50	83	197	138	358	270	250	27	19,85	GS.35.00.000.PS.MS	464,10
42,5	57	65	134	57	95	22	160	414	302	287	30	28,33	GS.42.50.000.PS.MS	621,00
55	65	70	145	65	105	20	180	463	330	329	33	39,59	GS.55.00.000.PS.MS	1133,80
85	75	83	163	75	127	329	190	556	376	355	40	62,0	GS.85.00.000.PS.MS	1866,80

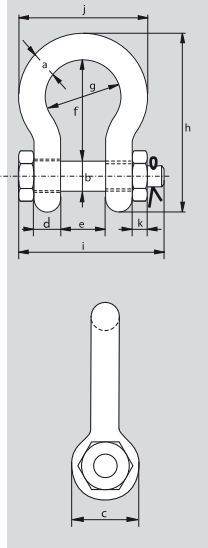


SuperPin-Shackle Typ GS



- Temperature range: -20°C to 200°C
- Material: Brackets and bolts alloy steel, grade 8, heat-treated
- Safety factor: Minimum breaking load = 6 times WLL
- Standards: EN 13889 and meets the performance requirements of the U.S. Fed. Spec. RR-C-271 Class 3 Type IVA, Grade B
- Surface treatment: Galvanised
- Certificate: On request, we provide a test certificate, basic raw material, manufacturer certificate and/or EC declaration of conformity for this product free of charge. To all shackling from 140 t, a Lloyd's register of Shipping test load certificate is provided.

					Maße [mm]									
WLL [t]	Brackets-Ø A	Bolts-Ø B	pip-Ø C	Strong pip D	Internal width E	Internal length F	Internal Bracket G	Outer length H	Length Bolts I	Outer width J	Width of screw K	Weight [kg]	Order-No.	Price / Unit €
3,3	13,5	16	34	13,5	22	51	32	91	83	63	13	0,44	GS.0003.300.GS.MS	34,20
5	16	19	40	16	27	64	43	114	99	79	17	0,79	GS.0005.000.GS.MS	35,00
7	19	22	47	19	31	76	51	136	115	94	20	1,26	GS.0007.000.GS.MS	36,50
9,5	22	25	53	22	36	83	58	157	131	107	23	1,88	GS.0009.500.GS.MS	47,60
12,5	25	28	60	25	43	95	68	176	151	124	25	2,78	GS.0012.500.GS.MS	62,50
15	28	32	67	28	47	108	75	197	167	137	28	3,87	GS.0015.000.GS.MS	86,80
18	32	35	74	32	51	115	83	218	179	154	31	5,26	GS.0018.000.GS.MS	95,60
21	35	38	80	35	57	133	92	240	198	170	34	6,94	GS.0021.000.GS.MS	150,80
30	38	42	89	38	60	146	99	262	203	183	19	8,79	GS.0030.000.GS.MS	156,20
40	45	50	104	45	73	178	126	314	244	226	24	15,0	GS.0040.000.GS.MS	220,00
50	50	57	119	50	83	197	138	358	270	250	27	20,7	GS.0050.000.GS.MS	316,00
80	65	70	145	65	105	260	180	463	330	329	33	41,1	GS.0080.000.GS.MS	787,90
110	75	83	163	75	127	330	190	556	376	355	40	62,2	GS.0110.000.GS.MS	1.245,80
140	95	95	215	89	144	381	238	667	440	416	50	110,0	GS.0140.000.GS.MS	A. Anfrage
175	105	108	245	100	165	400	275	702	490	485	60	160,0	GS.0175.000.GS.MS	A. Anfrage



GLOBUS
HEBETECHNIK

Globus Standard ropes

Casar Special wire ropes

Crane technology

Crane rope ends, end connectors	A 72 - A 73
CASAR Special wire rope	A 74 - A 81
Forest and winch ropes	A 82
GLOBUS Special ropes	A 83
DIEPA Special ropes	A 84 - A 86
Standard rope	A 87 - A 88
Motor wire ropes	A 89 - A 90
Stainless steel ropes and special ropes	A 91
Wire rope accessories	A 92 - A 93

GLOBUS – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

We are your crane rope specialist

In case of production halt we will help you immediately!

Due to our new wrapping roads with about 900t of wire ropes, every rope is exactly cut to length. The confectioned rope is either spliced, shed or pressed. The work is done by our specialists.

- Extensive assortment: Standard ropes, special ropes (Casar, Diepa), car crane ropes, electric hoist ropes, tower turning crane ropes, Excavator and gripping ropes , safety ropes
- If nothing is said on the order, wire ropes are always delivered in right threaded variants

How can the crane rope end look like?

Sharpen/Weld

Flex-cut and tied with sticky tape

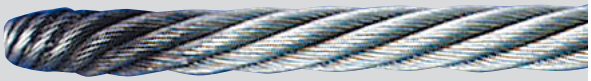
Mounting costs included in end price

Flex-cut and stranded ending

Mounting costs	
up to Ø [mm]	€
10	2,25
20	4,50
30	6,75

One tip guarantees easy mounting

Mounting costs	
up to Ø [mm]	€
10	7,80
20	15,65
30	24,50
40	32,35



Crane rope labelling

Mounting costs	
	€
welded	10,50

We are your crane rope specialist

The breaking strength of the rope is lowered with most rope connections. You can see the remaining data of the minimum breaking strength in % in the table (in accordance to EG-guideline).

Remaining breaking strength	90%	90%	80%	90%	80%	90%	80%	90%	90%	100%	100%
	Price per end connection/€										
Rope-ø [mm]	Cylindrical pressed loop €	Conical pressed loop €	spliced loop €	Cylindrical pressed thimble DIN 6899/€	Spliced thimble DIN 6899 €	Cylindrical pressed thimble DIN 3090/€	Spliced thimble DIN 3090 €	Pressed Full thimble DIN 3091 €	Pressed terminals or fitting €	Shed Wirelock €	Shed VG3 €
6	5,80	8,20	10,30	7,00	13,90	8,70	15,10		9,20	44,20	
8	7,20	10,00	11,90	8,50	15,30	10,40	17,00	17,30	12,20	44,20	
10	9,20	12,00	14,90	10,40	18,60	13,10	21,60	21,80	15,20	50,90	55,70
11	10,00	13,00	16,30	11,60	20,80	15,30	24,50	27,20	16,60	61,20	64,70
12	10,30	14,50	17,70	12,40	22,40	16,20	26,10	27,90	18,20	61,20	72,80
13	10,70	15,90	23,80	13,00	30,10	17,10	34,20	38,30		64,40	81,00
14	11,20	16,40	25,20	14,90	31,60	18,80	35,60	40,10		64,40	83,80
15	12,00	18,70	26,70	18,10	33,90	21,90	40,60	45,30		82,70	89,90
16	12,70	18,90	28,10	18,60	37,20	25,10	43,80	48,50		82,70	99,40
18	16,50	24,30	40,10	24,50	52,00	35,70	63,40	58,50		96,30	111,70
20	25,10	36,80	44,50	29,60	57,40	44,70	72,60	70,20		96,30	122,90
22	27,40	40,20	48,90	36,60	63,60	58,50	85,50	96,00		107,20	146,00
24	39,30	52,90	67,30	49,80	96,60	75,20	121,80	113,00		115,50	151,20
26	48,60	93,90	88,80	74,10	115,00	102,00	142,80	148,10		122,90	161,70
28	55,20		125,00	94,70	162,80	122,90	191,10	197,40		157,50	169,10
30	63,40		133,40	119,70	177,50	167,00	223,70	242,60		157,50	202,70
32	77,80		142,80	121,80	186,90	169,10	234,50	244,70			219,50
34	91,90		201,60	132,30	265,70						238,40
36	109,80		213,20	165,90	289,80						302,40
38	120,40		249,90	185,50	308,70						330,80
40	161,70		266,70	211,10	320,30						384,30

Diverse costs

- Test certificate EN 10.204 3.1 are charged with 8,00 €
- Packing unit: 3,00 €
- Minimum order amount: 100,00 €/ Handling fees for orders below 100,00 € = 30,00 €
- Shipping costs: effectiv costs will be charged (for example UPS or DPD-Table)
- Wire rod additional charge

Cost for length cutting:			
Up to	25,00 €	order amount (per pos.)	20 % additional charge
Up to	50,00 €	order amount (per pos.)	10 % additional charge
Up to	100,00 €	order amount (per pos.)	5 % additional charge
Up to	250,00 €	order amount (per pos.)	4 % additional charge
Up to	500,00 €	order amount (per pos.)	3 % additional charge
Up to	750,00 €	order amount (per pos.)	2 % additional charge
Up to	5.000,00 €	order amount (per pos.)	1 % additional charge

Additional variants:

Remaining breaking strength	85%	80%	100%	90%	90%	90%
	Wire rope clamps according to EN 13411-5	Wedge closed	Shed fork rope Hull	Loop with Flemish eye	Pressed eye terminal	Pressed fork terminal

Additional costs:

Reel costs	Nominal	Price/ €
LK 1	cross reel	46,20
LK 2	cross reel	52,00
LR 2	round reel	57,80
LR 3	round reel	86,60
LR 4	round reel	109,70
LR 5	round reel	219,50
LR 6	round reel	265,70
EK 1	Single use cross reel	19,00
EK 2	Single use cross reel	23,00
EK 3	Single use cross reel	42,00

The freight free and unharmed reel returns are compensated with 80% (does not apply to single use).

Always the best choice – Casar-Special ropes

1

May we introduce: This is our friend Karl.
Karl is the construction head of his company.
His colleagues call him the "maker".
Karl makes sure that the work is done well, on time and at a low cost. His motto: I only buy the best.

2

And this is Detlef.
Detlef is responsible to watch out for the costs.
His colleagues call him the "bean counter".
His motto: I only buy the cheapest.
Detlef is convinced: "Without me, the company would already be bankrupt."

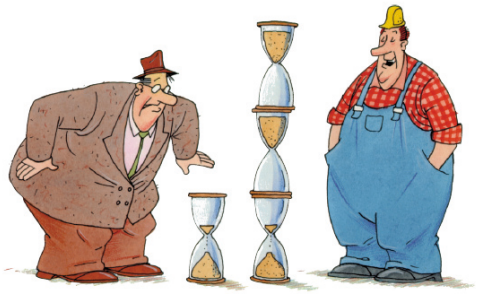
3

Karl says: „For a good lifting rope by Casar I pay 1500€".

4

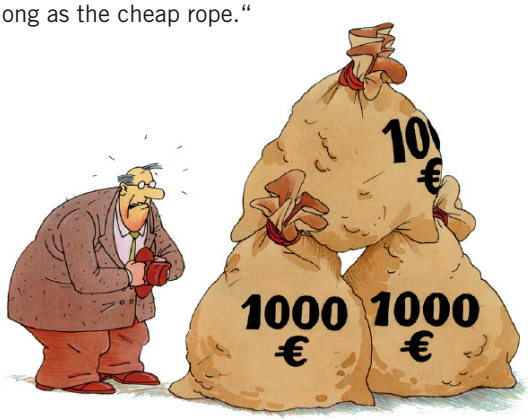
Detlef is convinced: „Karl has gone mad!" There are lifting ropes available for only 1000€."

5



Karl proves: „The Casar-rope lasts three times as long as the cheap rope."

6



And Detlef realizes: „Then I'll have to buy three ropes for 1000€ each to do the same amount of work!"

7

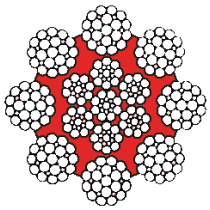
The Boss is thrilled: „With Casar special wire ropes, the company saves money."

8

conclusion:

Casar Stratoplast

- High bending change strength
- Low vibration sensitivity
- Corrosion safety of the steel rope core due to plastic layer between outer strand and steel rope core
- Intensive lubrication



Info

Attention, must not be used with swivel!

Rope ø [mm]	Weight [kg/m]	Order-Nr.	1770 N/mm² RE BK [kN]	1770 N/mm² MI BK [kN]	Price blank €/% m	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m
10	0,53	STRP.10.S.B.00.SZ.000	86,4	74,0	705,00	95,6	82,0	734,00
11	0,55	STRP.11.S.B.00.SZ.000	105,4	88,5	787,00	116,8	98,0	819,00
12	0,61	STRP.12.S.B.00.SZ.000	120,8	106,6	774,00	133,8	118,0	848,00
13	0,73	STRP.13.S.B.00.SZ.000	144,6	125,5	953,00	160,1	138,9	993,00
14	0,85	STRP.14.S.B.00.SZ.000	168,3	144,6	1.030,00	186,4	160,1	1.073,00
15	0,99	STRP.15.S.B.00.SZ.000	196,1	166,3	1.186,00	217,2	184,1	1.235,00
16	1,12	STRP.16.S.B.00.SZ.000	222,0	189,0	1.223,00	245,8	209,3	1.274,00
17	1,25	STRP.17.S.B.00.SZ.000	248,2	211,5	1.281,00	274,9	234,2	1.335,00
18	1,41	STRP.18.S.B.00.SZ.000	279,2	239,8	1.387,00	309,2	265,5	1.444,00
20	1,77	STRP.20.S.B.00.SZ.000	350,7	295,3	1.623,00	388,4	327,0	1.691,00
22	2,19	STRP.22.S.B.00.SZ.000	434,4	356,2	1.944,00	481,0	394,5	2.025,00
24	2,49	STRP.24.S.B.00.SZ.000	495,6	423,4	2.173,00	548,8	468,9	2.264,00
26	2,91	STRP.26.S.B.00.SZ.000	578,4	504,7	2.465,00	640,4	558,8	2.568,00
28	3,34	STRP.28.S.B.00.SZ.000	664,1	576,2	2.838,00	735,4	638,0	2.957,00

Please enter: surface (B=blank, Z=galvanized), Strength (1770 N/mm², 1960 N/mm²) Enter usable length!
STRP.13.S.B.17.SZ.050 Stratoplast Rope-Ø 13 mm blank 1770 N/mm² 50 m Usable length.
Additional charge for galvanization 15 %

Fields of application:

Cross travel, adjustment, safety rope

Adjustment, safety, lifting, closing rope

Adjustment, lifting rope

Adjustment, safety rope

Lifting, contact wires

Closing, adjustment

Lifting rope

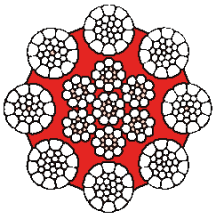
Boom, lifting rope

Lifting rope

Lifting rope closing, compensation, gripper, lifting rope

Casar Turboplast

- 8-stranded rope with tightened outer strands
- Corrosion safety of steel rope core by plastic layer between outer layer and steel core
- Good resistance against pressing on the rope barrel



Info

Attention, must not be used with swivel!

Rope ø [mm]	Weight [kg/m]	Order-Nr.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
8	0,29	TURP.08.S.B.00.SZ.000	65,4	55,5	852,00	72,1	63,5	938,00
9	0,37	TURP.09.S.B.00.SZ.000	83,9	71,6	863,00	92,4	81,4	950,00
10	0,43	TURP.10.S.B.00.SZ.000	103,8	87,0	820,00	114	101	902,00
11	0,53	TURP.11.S.B.00.SZ.000	124,0	105,4	891,00	138	121	980,00
12	0,66	TURP.12.S.B.00.SZ.000	148,3	124,9	894,00	164	144	983,00
13	0,78	TURP.13.S.B.00.SZ.000	175,3	148,3	1.042,00	193	170	1.146,00
14	0,90	TURP.14.S.B.00.SZ.000	202,1	171,4	1.133,00	223	196	1.246,00
15	1,04	TURP.15.S.B.00.SZ.000	233,2	198,7	1.299,00	257	226	1.429,00
16	1,18	TURP.16.S.B.00.SZ.000	265,6	224,9	1.336,00	293	252	1.470,00
17	1,33	TURP.17.S.B.00.SZ.000	298,7	250,4	1.404,00	329	283	1.544,00
18	1,47	TURP.18.S.B.00.SZ.000	331,1	282,5	1.519,00	365	314	1.671,00
19	1,64	TURP.19.S.B.00.SZ.000	370,4	317,2	1.694,00	408	351	1.863,00
20	1,83	TURP.20.S.B.00.SZ.000	412,9	348,5	1.765,00	455	391	1.942,00
21	1,97	TURP.21.S.B.00.SZ.000	444,8	380,9	2.011,00	490	421	2.212,00
22	2,19	TURP.22.S.B.00.SZ.000	493,7	425,2	2.110,00	544	468	2.321,00
23	2,39	TURP.23.S.B.00.SZ.000	539,2	462,2	2.227,00	594	511	2.450,00
24	2,61	TURP.24.S.B.00.SZ.000	587,0	504,2	2.382,00	647	556	2.620,00
25	2,82	TURP.25.S.B.00.SZ.000	635,4	547,3	2.631,00	700	602	2.894,00

Order example: surface (B=blank, Z=galvanised), Strength (1770 N/mm², 1960 N/mm²) and usable length!
TURP.15.S.B.17.SZ.100 Turboplast rope-Ø 15 mm blank 1770 N/mm² 100 m usable length,
Additional charge for galvanization 15 %

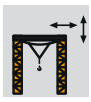
Fields of application:

Cross travel, adjustment, safety rope

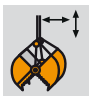
Adjustment, safety, lifting, closing rope

Adjustment, lifting rope

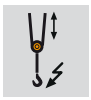
Adjustment, safety rope


Lifting, contact wires

Closing, adjustment


Lifting rope

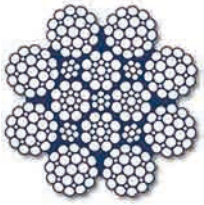
Boom, lifting rope


Lifting rope

Lifting rope closing, compensation, gripper, lifting rope

Casar Stratolift

- 8-stranded rope
- Overlapping free double parallel construction
- Intensive lubrication



Info

Attention, must not be used with swivel!

Fields of application:

Holding rope

Holding rope

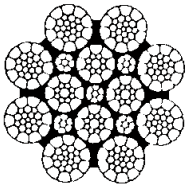
Lifting rope

Rope ø [mm]	Weight [kg/m]	Order-No.	1770 N/mm² RE BK [kN]	1770 N/mm² MI BK [kN]	Price blank €/% m	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m
10	0,45	STRL.10.S.B.00.SZ.000	91,7	78,8	705,00	101,6	87,3	1.005,00
11	0,55	STRL.11.S.B.00.SZ.000	112,6	96,8	787,00	124,6	107,2	981,00
12	0,64	STRL.12.S.B.00.SZ.000	132,6	114,0	814,00	146,8	126,3	848,00
13	0,75	STRL.13.S.B.00.SZ.000	154,1	132,4	953,00	170,6	146,6	993,00
14	0,86	STRL.14.S.B.00.SZ.000	177,3	152,4	1.030,00	196,3	168,7	1.073,00
15	1,01	STRL.15.S.B.00.SZ.000	207,0	177,9	1.186,00	229,2	197,0	1.235,00
16	1,14	STRL.16.S.B.00.SZ.000	233,6	200,9	1.223,00	258,7	222,5	1.274,00
17	1,28	STRL.17.S.B.00.SZ.000	262,8	226,0	1.281,00	291,1	250,3	1.335,00
18	1,44	STRL.18.S.B.00.SZ.000	297,1	255,4	1.387,00	329,0	282,8	1.444,00
20	1,80	STRL.20.S.B.00.SZ.000	369,7	317,8	1.623,00	409,4	352,0	1.691,00
22	2,20	STRL.22.S.B.00.SZ.000	451,9	388,5	1.944,00	500,4	430,2	2.025,00
24	2,58	STRL.24.S.B.00.SZ.000	530,0	455,7	2.173,00	586,9	504,7	2.264,00
26	3,01	STRL.26.S.B.00.SZ.000	618,3	531,7	2.465,00	684,6	588,8	2.568,00
28	3,48	STRL.28.S.B.00.SZ.000	716,8	613,3	2.838,00	793,7	682,5	2.957,00

Crane technology

Casar Turbolift

- 8-stranded rope with tighte ned outer strands
- Overlapping free double parallel construction
- High breaking strength
- Intensive lubrication



Info

Attention, must not be used with swivel!

Fields of application:

Holding rope

Holding rope

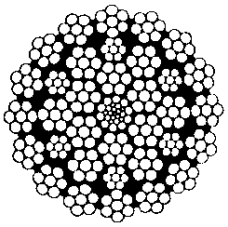
Lifting rope

Rope ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
10	0,48	TURL.10.S.B.00.SZ.000	111,6	94,0	820,00	123,0	103,6	902,00
11	0,58	TURL.11.S.B.00.SZ.000	135,4	113,6	891,00	149,2	125,2	980,00
12	0,69	TURL.12.S.B.00.SZ.000	161,7	135,5	894,00	178,2	149,3	983,00
13	0,82	TURL.13.S.B.00.SZ.000	190,4	158,4	1.042,00	209,8	174,5	1.146,00
14	0,95	TURL.14.S.B.00.SZ.000	220,8	184,1	1.133,00	243,3	202,8	1.246,00
15	1,09	TURL.15.S.B.00.SZ.000	253,7	212,4	1.299,00	279,6	234,1	1.429,00
16	1,24	TURL.16.S.B.00.SZ.000	288,6	241,9	1.336,00	318,1	266,5	1.470,00
17	1,40	TURL.17.S.B.00.SZ.000	325,7	274,8	1.404,00	358,9	302,8	1.544,00
18	1,56	TURL.18.S.B.00.SZ.000	363,2	308,4	1.519,00	400,3	339,8	1.671,00
19	1,74	TURL.19.S.B.00.SZ.000	406,7	340,3	1.694,00	448,2	375,0	1.863,00
20	1,93	TURL.20.S.B.00.SZ.000	450,1	379,0	1.765,00	496,0	417,7	1.942,00
21	2,11	TURL.21.S.B.00.SZ.000	492,2	415,2	2.011,00	542,5	457,6	2.212,00
22	2,34	TURL.22.S.B.00.SZ.000	545,7	458,9	2.110,00	601,4	505,7	2.321,00
23	2,56	TURL.23.S.B.00.SZ.000	596,2	501,7	2.227,00	657,0	552,8	2.450,00
24	2,78	TURL.24.S.B.00.SZ.000	647,8	542,8	2.382,00	713,9	598,2	2.620,00
25	3,00	TURL.25.S.B.00.SZ.000	700,3	589,9	2.631,00	771,8	650,1	2.894,00
26	3,29	TURL.26.S.B.00.SZ.000	767,5	636,0	2.696,00	845,8	700,9	2.965,00

Additional charge for galvanization 15 %

Casar Starlift

- Turning free lifting rope with thickened steel rope core
- High breaking strength
- Intensive lubrication
- High lifetime



Rope ø [mm]	Weight [kg/m]	Order-No.	1770 N/mm² RE BK [kN]	1770 N/mm² MI BK [kN]	Price blank €/% m	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m
7	0,23	STAL.07.S.B.00.SZ.000	44,2	34,1	474,00	49,0	37,8	569,00
8	0,30	STAL.08.S.B.00.SZ.000	58,1	44,5	524,00	64,3	49,3	546,00
9	0,37	STAL.09.S.B.00.SZ.000	72,2	55,4	594,00	80,0	61,3	619,00
10	0,47	STAL.10.S.B.00.SZ.000	91,5	69,2	671,00	101,3	76,6	699,00
11	0,56	STAL.11.S.B.00.SZ.000	110,2	83,1	765,00	122,0	92,1	797,00
12	0,67	STAL.12.S.B.00.SZ.000	130,9	99,9	784,00	145,0	110,7	817,00
13	0,78	STAL.13.S.B.00.SZ.000	153,7	117,3	870,00	170,3	129,8	906,00
14	0,90	STAL.14.S.B.00.SZ.000	177,8	135,9	955,00	196,8	150,5	994,00
15	1,04	STAL.15.S.B.00.SZ.000	205,3	156,3	1.049,00	227,4	173,0	1.093,00
16	1,19	STAL.16.S.B.00.SZ.000	234,1	178,1	1.067,00	259,3	197,2	1.112,00
17	1,33	STAL.17.S.B.00.SZ.000	261,5	200,1	1.186,00	289,6	221,6	1.236,00
18	1,49	STAL.18.S.B.00.SZ.000	293,0	222,6	1.310,00	324,4	246,5	1.365,00
19	1,68	STAL.19.S.B.00.SZ.000	330,3	250,9	1.414,00	365,7	277,8	1.473,00
20	1,85	STAL.20.S.B.00.SZ.000	362,9	277,7	1.586,00	401,8	307,5	1.652,00
21	2,04	STAL.21.S.B.00.SZ.000	401,2	306,3	1.697,00	444,3	339,2	1.768,00
22	2,25	STAL.22.S.B.00.SZ.000	442,5	337,0	1.849,00	490,0	373,2	1.925,00
23	2,44	STAL.23.S.B.00.SZ.000	480,0	366,5	1.899,00	531,5	405,9	1.979,00
24	2,66	STAL.24.S.B.00.SZ.000	523,8	400,5	2.054,00	580,1	443,5	2.139,00
25	2,88	STAL.25.S.B.00.SZ.000	566,2	431,9	2.255,00	627,0	478,3	2.348,00
26	3,12	STAL.26.S.B.00.SZ.000	614,2	469,2	2.421,00	680,2	519,5	2.523,00

Order example: surface (B=blank, Z=galvanised), strength (1770 N/mm², 1960 N/mm²) please enter usable length!
STAL.14.S.B.19.SZ.050 Starlift rope-Ø 14 mm blank 1960 N/mm² 50 m usable length
Additional charge for galvanization 20 %

Fields of application:

Lifting rope

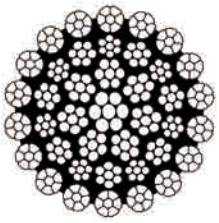
Electric hoist rope

Winch rope

Turning free

Casar Eurolift

- Turning free, flexible rope with thickened strands
- Extremely high break strength
- Good resistance against pressing on the barrel
- Intensive lubrication



Rope ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
10	0,49	EURL.10.S.B.00.SZ.000	110,1	89,6	**1108,00**	121,3	97,4	**1.198,00**
11	0,60	EURL.11.S.B.00.SZ.000	134,6	108,8	**1160,00**	148,3	118,4	**1.254,00**
12	0,71	EURL.12.S.B.00.SZ.000	160,7	130,8	**1141,00**	177,1	139,9	**1.231,00**
13	0,83	EURL.13.S.B.00.SZ.000	186,6	152,7	**1186,00**	205,6	165,4	**1.281,00**
14	0,96	EURL.14.S.B.00.SZ.000	216,4	179,1	**1228,00**	238,5	190,9	**1.327,00**
15	1,10	EURL.15.S.B.00.SZ.000	247,5	204,0	**1366,00**	272,7	219,5	**1.476,00**
16	1,27	EURL.16.S.B.00.SZ.000	285,4	230,6	**1411,00**	314,5	249,1	**1.524,00**
17	1,42	EURL.17.S.B.00.SZ.000	320,1	257,9	**1519,00**	352,8	280,6	**1.640,00**
18	1,60	EURL.18.S.B.00.SZ.000	360,0	293,9	**1611,00**	396,7	317,5	**1.740,00**
19	1,78	EURL.19.S.B.00.SZ.000	399,8	329,0	**1703,00**	440,6	352,8	**1.839,00**
20	1,98	EURL.20.S.B.00.SZ.000	445,9	362,2	**1818,00**	491,4	391,7	**1.964,00**
21	2,17	EURL.21.S.B.00.SZ.000	488,0	396,1	**1935,00**	537,8	430,9	**2.090,00**
22	2,38	EURL.22.S.B.00.SZ.000	536,9	441,4	**2094,00**	591,7	472,0	**2.261,00**
23	2,61	EURL.23.S.B.00.SZ.000	587,1	471,8	**2255,00**	647,0	513,2	**2.435,00**
24	2,84	EURL.24.S.B.00.SZ.000	640,6	524,3	**2325,00**	706,0	564,1	**2.511,00**
25	3,04	EURL.25.S.B.00.SZ.000	683,7	567,9	**2551,00**	753,5	609,4	**2.755,00**
26	3,29	EURL.26.S.B.00.SZ.000	740,7	614,9	**2741,00**	816,2	657,4	**2.960,00**
27	3,57	EURL.27.S.B.00.SZ.000	804,5	654,2	**2909,00**	886,6	711,7	**3.142,00**
28	3,85	EURL.28.S.B.00.SZ.000	867,4	712,9	**3153,00**	955,9	765,6	**3.405,00**

Order example: surface (B=blank, Z=galvanized), strength (1770 N/mm², 1960 N/mm², 2160 N/mm²) please enter usable length! **EURL.26.B.21.180** Eurolift rope-Ø 26 mm blank 2160 N/mm² 180 m usable length

Additional charge for galvanization 20 %

Fields of application:

Lifting rope

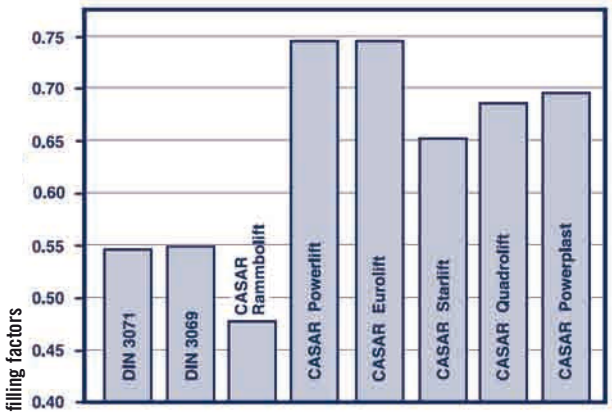
Lifting rope

Winch rope

Turning free

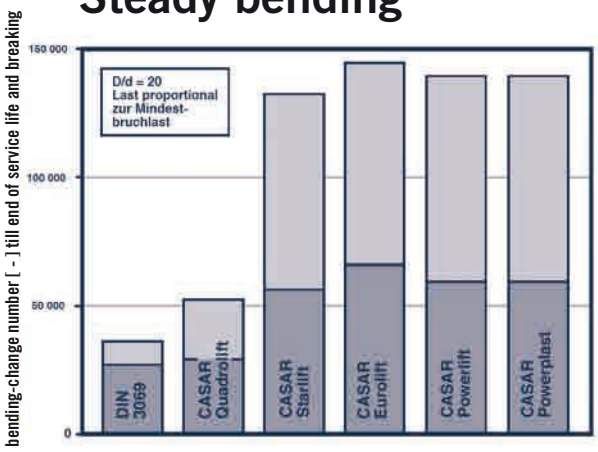
Crane technology

Breaking strength



Breaking strength 2: Comparison of the filling factors of low-turning and turning-free ropes. The filling factors of CASAR special wire ropes is usually significantly higher than the filling factors of DIN variants.

Steady bending



Breaking strength 2: Comparison of the bending-change-numbers till end of service life and breaking for low-turning and turning free ropes. Under the same experimental conditions the CASAR special wire ropes get significantly higher results than DIN ropes.

Casar Starlift Plus

- Twist-free flexible hoist wire with reinforced outer eyes and reinforced steel core wire
- Intensive lubrication
- High breakage force offering good resistance against pressure on the drum
- Specially constructed steel core wire avoided crossovers between the eyes and reducing the danger of damage to the core of the wire.

Rope ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
13	0,78	STAP.13.S.B.00.SZ.000			1.145,00			1.260,00
14	0,94	STAP.14.S.B.00.SZ.000			1.186,00			1.304,00
15	1,11	STAP.15.S.B.00.SZ.000			1.318,00			1.450,00
16	1,25	STAP.16.S.B.00.SZ.000			1.362,00			1.498,00
17	1,41	STAL.17.S.B.00.SZ.000			1466,00			1.612,00
18	1,54	STAP.18.S.B.00.SZ.000			1.555,00			1.710,00
19	1,71	STAP.19.S.B.00.SZ.000			1.644,00			1.808,00
20	1,90	STAP.20.S.B.00.SZ.000			1.754,00			1.930,00
21	2,09	STAP.21.S.B.00.SZ.000			1.868,00			2.054,00
22	2,28	STAP.22.S.B.00.SZ.000			2.021,00			2.223,00
23	2,61	STAP.23.S.B.00.SZ.000			2.176,00			2.393,00
24	2,72	STAP.24.S.B.00.SZ.000			2.244,00			2.468,00
25	3,07	STAP.25.S.B.00.SZ.000			2.462,00			2.708,00
26	3,23	STAP.26.S.B.00.SZ.000			2.644,00			2.909,00
27	3,56	STAP.27.S.B.00.SZ.000			2.807,00			3.088,00
28	3,88	STAL.28.S.B.00.SZ.000			3.042,00			3.688,00
29	4,17	STAP.29.S.B.00.SZ.000			3.228,00			3.550,00
30	4,43	STAP.30.S.B.00.SZ.000			3.423,00			3.765,00
32	5,10	STAP.32.S.B.00.SZ.000			3.847,00			4.231,00

Spelter socket for Liebherr crane ropes

CASAR spelter sockets are used alternatively
As replacements for Liebherr Crane ropes where the original Liebherr Spelter sockets should be used.

CASAR spelter sockets are cast with the dual component synthetic resin WIRE-LOCK® according to EN 13411-4 and can be used with free rotational wire ropes, Eurolift and StarliftPlus.

For the correct choice select the corresponding rope diameter and dimensions (diameter and length) for the spelter sockets.

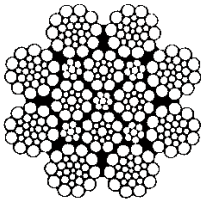
Type A

Type B

Type	Wire ø [mm]	Socket ø [mm]	Socket length [mm]	Max. nominal tensile strength [N/mm²]	Order-No.	Price €
A	13/15	30	90	2160	RSBLEB15.13.090	on request
A	17	36	108	2160	RSBLEB17.36.108	on request
A	21	44	126	2160	RSBLEB21.44.126	on request
B	23	52	175	2160	RSBLEB23.52.175	on request
B	25	52	175	2160	RSBLEB25.52.175	on request
B	28	58	203	2160	RSBLEB28.58.203	on request

Casar Alphalift

- Low tension
- Highly flexible
- 8-stranded rope in overlapping free double parallel construction
- High break strength



Info

Attention, must not be used with swivel!

Fields of application:

Lifting rope

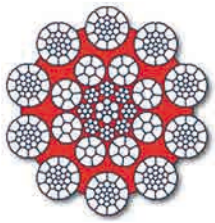
Mounting rope

Rope ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
4,0	0,07	AL.04.S.B.00.SZ.000	15,6	13,0	562,00	17,2	14,3	619,00
4,5	0,09	AL.45.S.B.00.SZ.000	19,6	16,7	483,00	21,6	18,4	531,00
5,0	0,11	AL.05.S.B.00.SZ.000	24,1	21,1	403,00	26,6	23,2	444,00
5,5	0,13	AL.55.S.B.00.SZ.000	29,1	26,1	556,00	32,1	28,8	612,00
6,0	0,16	AL.06.S.B.00.SZ.000	35,7	31,5	709,00	39,4	34,7	780,00
6,5	0,19	AL.65.S.B.00.SZ.000	43,9	37,9	610,00	48,4	41,8	672,00
7,0	0,21	AL.07.S.B.00.SZ.000	48,8	42,6	511,00	53,8	47,0	562,00
7,5	0,25	AL.75.S.B.00.SZ.000	55,8	49,6	553,00	61,5	54,6	609,00
8,0	0,28	AL.08.S.B.00.SZ.000	64,7	55,0	595,00	71,3	60,6	654,00
8,5	0,32	AL.85.S.B.00.SZ.000	72,7	58,7	596,00	80,1	64,6	656,00
9,0	0,36	AL.09.S.B.00.SZ.000	81,2	72,0	597,00	89,5	79,3	737,00
10,0	0,43	AL.10.S.B.00.SZ.000	98,4	84,0	696,00	108,4	92,5	765,00
11,0	0,52	AL.11.S.B.00.SZ.000	119,0	102,9	840,00	131,2	113,3	924,00
12,0	0,62	AL.12.S.B.00.SZ.000	141,7	123,2	875,00	156,1	135,8	963,00
13,0	0,73	AL.13.S.B.00.SZ.000	166,2	143,3	958,00	183,2	157,9	1.053,00
14,0	0,85	AL.14.S.B.00.SZ.000	192,8	166,4	1.129,00	212,5	183,4	1.242,00
15,0	0,97	AL.15.S.B.00.SZ.000	221,3	194,6	1.311,00	243,9	214,5	1.442,00
16,0	1,11	AL.16.S.B.00.SZ.000	251,8	217,1	1.287,00	277,5	239,3	1.415,00
17,0	1,25	AL.17.S.B.00.SZ.000	284,3	240,1	1.347,00	313,3	264,7	1.481,00
18,0	1,40	AL.18.S.B.00.SZ.000	318,7	273,4	1.486,00	351,2	301,3	1.635,00
19,0	1,56	AL.19.S.B.00.SZ.000	355,1	310,9	1.666,00	319,4	342,6	1.832,00
20,0	1,73	AL.20.S.B.00.SZ.000	393,5	341,7	1.806,00	433,6	376,5	1.987,00
21,0	1,90	AL.21.S.B.00.SZ.000	433,8	376,6	1.970,00	478,1	415,1	2.167,00
22,0	2,09	AL.22.S.B.00.SZ.000	476,1	410,4	2.113,00	524,7	452,3	2.324,00
23,0	2,28	AL.23.S.B.00.SZ.000	520,4	443,2	2.163,00	573,5	488,4	2.380,00
24,0	2,49	AL.24.S.B.00.SZ.000	566,6	482,5	2.290,00	624,4	531,7	2.519,00
25,0	2,70	AL.25.S.B.00.SZ.000	614,8	535,8	2.568,00	677,6	590,5	2.825,00

Additional charge for galvanization 20 %

Casar Superplast

- 10-stranded rope with tightened outer strands
- Corrosion safety of steel rope core by plastic layer between outer layer and steel core
- Good resistance against pressing on the rope barrel



Info

Attention, must not be used with swivel!

Rope ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
10	0,47	SUPP.10.S.B.00.SZ.000	107,0	90,9	1.176,00	117,9	99,6	1.294,00
11	0,57	SUPP.11.S.B.00.SZ.000	129,2	108,9	1.119,00	142,3	119,3	1.231,00
12	0,66	SUPP.12.S.B.00.SZ.000	151,0	127,2	1.191,00	166,4	139,4	1.310,00
13	0,79	SUPP.13.S.B.00.SZ.000	178,2	151,8	1.089,00	196,4	166,2	1.198,00
14	0,90	SUPP.14.S.B.00.SZ.000	203,6	173,8	1.182,00	224,4	190,4	1.301,00
15	1,04	SUPP.15.S.B.00.SZ.000	234,7	199,8	1.355,00	258,7	218,9	1.491,00
16	1,18	SUPP.16.S.B.00.SZ.000	268,6	226,5	1.394,00	296,0	248,1	1.533,00
17	1,35	SUPP.17.S.B.00.SZ.000	307,0	260,0	1.463,00	338,3	284,8	1.609,00
18	1,52	SUPP.18.S.B.00.SZ.000	345,0	289,8	1.580,00	380,2	320,8	1.738,00
19	1,66	SUPP.19.S.B.00.SZ.000	380,2	320,4	1.767,00	419,0	351,0	1.943,00
20	1,87	SUPP.20.S.B.00.SZ.000	422,2	359,4	1.857,00	465,3	393,8	2.043,00
21	2,06	SUPP.21.S.B.00.SZ.000	465,8	396,8	2.115,00	513,4	434,7	2.327,00
22	2,24	SUPP.22.S.B.00.SZ.000	509,7	432,2	2.217,00	561,7	473,5	2.439,00
23	2,46	SUPP.23.S.B.00.SZ.000	561,4	473,0	2.337,00	618,7	518,2	2.570,00
24	2,69	SUPP.24.S.B.00.SZ.000	611,8	517,4	2.480,00	674,3	566,9	2.728,00
25	2,91	SUPP.25.S.B.00.SZ.000	659,5	585,0	2.739,00	726,8	613,4	3.013,00
26	3,13	SUPP.26.S.B.00.SZ.000	712,9	604,9	2.808,00	785,6	662,7	3.088,00
27	3,36	SUPP.27.S.B.00.SZ.000	765,8	646,8	3.021,00	843,9	708,6	3.324,00
28	3,62	SUPP.28.S.B.00.SZ.000	823,7	720,0	3.236,00	907,7	822,0	3.560,00

Additional charge for galvanization 15 %

Fields of application:

Cross travel, adjustment, safety rope

Adjustment, safety, lifting, closing rope

Adjustment, lifing rope

Adjustment, safety rope

Lifting, contact wires

Closing, adjustment

Lifting rope

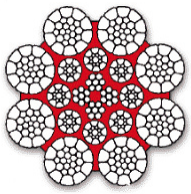
Boom, lifting rope

Lifting rope

Lifting rope closing, compensation, gripper, lifting rope

Casar Paraplast

- Is an 8 strand rope in double parallel construction from compressed outer strands
- Intensive lubrication
- Filled with synthetic material
- Extremely high resistance to breakage
- Should not work with eddy



Info

Attention, do not use with swivels!

Wire ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² RE BK [kN]	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² RE BK [kN]	2160 N/mm² MI BK [kN]	Price blank €/% m
10	46,1	PARP.10.S.B.00.SZ.000	106,3	93,5	863,00	117,1	100,7	949,00
11	55,9	PARP.11.S.B.00.SZ.000	128,8	113,4	937,00	142,0	122,1	1.031,00
12	67,6	PARP.12.S.B.00.SZ.000	155,9	137,2	942,00	171,8	147,8	1.036,00
13	78,7	PARP.13.S.B.00.SZ.000	181,5	159,7	1.089,00	200,0	172,0	1.198,00
14	91,1	PARP.14.S.B.00.SZ.000	210,0	184,8	1.182,00	231,4	199,0	1.301,00
15	104,6	PARP.15.S.B.00.SZ.000	241,2	212,3	1.355,00	265,8	228,6	1.491,00
16	118,5	PARP.16.S.B.00.SZ.000	273,2	240,4	1.394,00	301,0	258,9	1.533,00
17	134,7	PARP.17.S.B.00.SZ.000	310,6	273,3	1.463,00	342,3	294,4	1.609,00
18	150,0	PARP.18.S.B.00.SZ.000	345,8	304,3	1.369,00	381,1	327,7	1.738,00
19	168,6	PARP.19.S.B.00.SZ.000	388,7	342,0	1.767,00	428,3	368,4	1.943,00
20	187,1	PARP.20.S.B.00.SZ.000	431,4	379,7	1.857,00	475,5	408,9	2.043,00
21	204,3	PARP.21.S.B.00.SZ.000	471,2	414,7	2.115,00	519,3	446,6	2.327,00
22	225,1	PARP.22.S.B.00.SZ.000	519,1	456,8	2.217,00	572,0	491,9	2.439,00
23	254,8	PARP.23.S.B.00.SZ.000	587,6	517,1	2.337,00	647,6	556,9	2.570,00
24	276,9	PARP.24.S.B.00.SZ.000	638,4	561,8	2.480,00	703,5	605,0	2.728,00
25	300,1	PARP.25.S.B.00.SZ.000	692,1	609,0	2.739,00	762,7	655,9	3.013,00
26	326,3	PARP.26.S.B.00.SZ.000	752,4	662,2	2.808,00	829,2	713,1	3.089,00
27	350,4	PARP.27.S.B.00.SZ.000	808,0	711,0	3.021,00	890,5	765,8	3.324,00
28	374,8	PARP.28.S.B.00.SZ.000	864,3	760,6	3.236,00	952,5	819,1	3.560,00

Border example: Surface (B=blank, Z=zinc coated), tensile strength (1770 N/mm², 1960 N/mm², 2160 N/mm²) Length!
PARP.17.B.19.120 Paralift wire Ø 17 mm blank 1960 N/mm² 120 m length
Extra cost for zinc coating 15 %

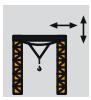
Areas of application:

Cross Adjustable

Adjustable Safety end wine

Adjustable Hoist rope

Adjustable Safety rope


Hoist drive rope

Closed Adjustable Hoist rope

Jib hoist rope

Adjustable Hoist rope

Hoist rope

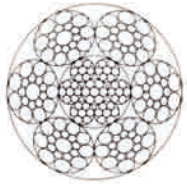
Closed balanced Claw hoist rope

Taurus Forest and Winch ropes

- Compressed outer cover
- Round surface
- Improved resistance to friction
- Long operational life
- Large length handling of the winches

Special rope Taurus Forest 6 S-V

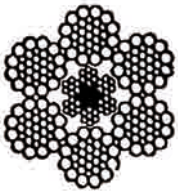
1960 N/mm²



Wire-Ø [mm]	Weight [kg/m]	1960 N/ mm² MI BK [kN]	Order-No.	Price/ blank €/%m
8	0,371	69,1	6S-V-08	484,00
9	0,453	84,3	6S-V-09	511,00
10	0,543	101,1	6S-V-10	548,00
11	0,642	119,5	6S-V-11	575,00
12	0,748	139,4	6S-V-12	636,00
13	0,863	160,8	6S-V-13	697,00

Taurus Forest 6-31WS-V

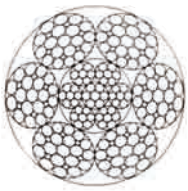
1960 N/mm² highly flexible



Wire-Ø [mm]	Weight [kg/m]	1960 N/ mm² MI BK [kN]	Order-No.	Price/ blank €/%m
8	0,40	69,2	6-31WS-V-08	564,00
9	0,49	84,5	6-31WS-V-09	605,00
10	0,58	100,3	6-31WS-V-10	643,00
11	0,68	117,9	6-31WS-V-11	674,00
12	0,80	138,9	6-31WS-V-12	736,00
13	0,91	156,9	6-31WS-V-13	785,00

Taurus Forest 6F-V

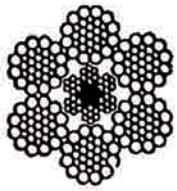
1960 N/mm² highly flexible



Wire-Ø [mm]	Weight [kg/m]	1960 N/ mm² MI BK [kN]	Order-No.	Price/ blank €/%m
8	0,38	70,4	6F-V-08	461,00
9	0,46	86,0	6F-V-09	510,00
10	0,55	103,2	6F-V-10	558,00
11	0,66	121,9	6F-V-11	583,00
12	0,76	142,2	6F-V-12	647,00
13	0,88	164,1	6F-V-13	708,00

Taurus Forest 6WS-V

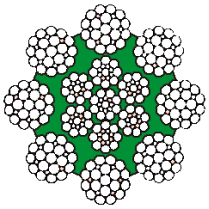
1960 N/mm²



Wire-Ø [mm]	Weight [kg/m]	1960 N/ mm² MI BK [kN]	Order-No.	Price/ blank €/%m
8	0,38	69,1	6WS-V-08	611,00
9	0,46	83,9	6WS-V-09	639,00
10	0,55	100,7	6WS-V-10	664,00
11	0,66	119,0	6WS-V-11	699,00
12	0,76	138,8	6WS-V-12	754,00
13	0,88	160,1	6WS-V-13	806,00

Globus Special wire rope with plastic core GP 826

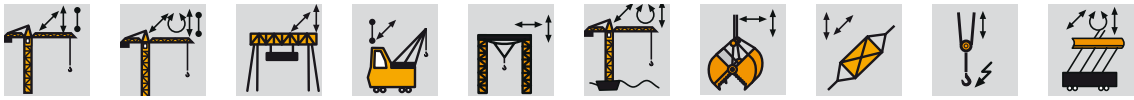
- High resistance to bending
- Low sensitivity to vibrations
- Corrosion protection of steel wire with plastic layer between the outer and inner strands
- Intensive lubrication



Wire ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² Min. breakage stress [kN]	Price blank €/% m
13	0,69	GP82.13.S.B.19.SZ.000	133	540,00
14	0,79	GP82.14.S.B.19.SZ.000	152	589,00
15	0,92	GP82.15.S.B.19.SZ.000	178	665,00
16	1,03	GP82.16.S.B.19.SZ.000	199	735,00
18	1,34	GP82.18.S.B.19.SZ.000	259	900,00
19	1,48	GP82.19.S.B.19.SZ.000	285	1.050,00
20	1,63	GP82.20.S.B.19.SZ.000	313	1.245,00
22	2,00	GP82.22.S.B.19.SZ.000	384	1.435,00
24	2,36	GP82.24.S.B.19.SZ.000	453	1.655,00
26	2,79	GP82.26.S.B.19.SZ.000	538	1.869,00

Zinc-coated version + 20 % larger diameters on request!

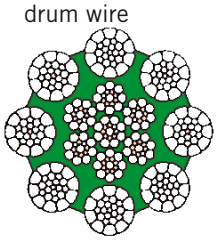
Areas of application:



Cross Adjustable | Adjustable Safety end wine | Adjustable Hoist rope | Adjustable Safety rope | Hoist drive rope | Closed Adjustable Hoist rope | Jib hoist rope | Adjustable Hoist rope | Hoist rope | Closed balanced Claw hoist rope

Globus Special wire rope with pressed plastic core, GPV

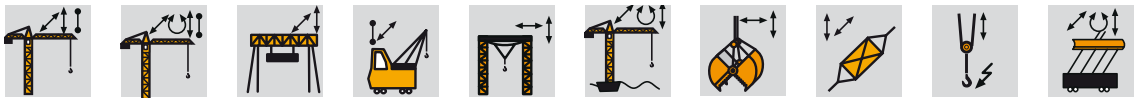
- 8 strand rope with pressed outer strands
- Corrosion protection of steel wire with plastic layer between the outer and inner strands
- Good resistance to pressure on the drum wire



Wire ø [mm]	Weight [kg/m]	Order-No.	1960 N/mm² Min. breakage stress [kN]	Price blank €/% m
13	0,77	GPV8.13.S.B.19.SZ.000	150	600,00
14	0,89	GPV8.14.S.B.19.SZ.000	172	679,00
15	1,03	GPV8.15.S.B.19.SZ.000	200	756,00
16	1,16	GPV8.16.S.B.19.SZ.000	224	771,00
18	1,49	GPV8.18.S.B.19.SZ.000	287	1.008,00
20	1,85	GPV8.20.S.B.19.SZ.000	358	1.188,00
22	2,23	GPV8.22.S.B.19.SZ.000	430	1.403,00
24	2,26	GPV8.24.S.B.19.SZ.000	513	1.631,00
26	3,10	GPV8.26.S.B.19.SZ.000	600	1.869,00

Zinc-coated version + 20 % larger diameters on request!

Areas of application:



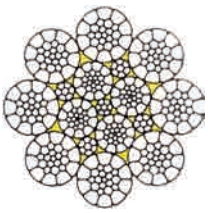
Cross Adjustable | Adjustable Safety end wine | Adjustable Hoist rope | Adjustable Safety rope | Hoist drive rope | Closed Adjustable Hoist rope | Jib hoist rope | Adjustable Hoist rope | Hoist rope | Closed balanced Claw hoist rope

Diepa SKZ8P - New H43

Pressed outer strands

Regular laid – regular lay with inner plastic core – Use without swivel (Drill protection)

Number of load stressed strands in the Outer strands:
56 (Ø 4-6 mm)
152 (Ø 7-15mm)
208 (Ø 16-75 mm) Total numbers of wires 347 (from Ø 16 mm)
Fill factor - 0,7403
Loss coefficient - 0,8400



Wire-Ø [mm]	Weight [kg/100m]	Order-No.	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² MI BK [kN]	Price blank €/% m
6,5	21	DIEP.H.043.065	40,4	394,00	44,6	492,00
7	25	DIEP.H.043.070	46,9	410,00	51,7	513,00
7,5	28	DIEP.H.043.075	53,8	455,00	59,3	568,00
8	32	DIEP.H.043.080	61,3	500,00	67,5	625,00
8,5	36	DIEP.H.043.085	69,2	544,00	76,2	680,00
9	40	DIEP.H.043.090	77,5	588,00	85,7	735,00
9,5	45	DIEP.H.043.095	86,5	604,00	94,9	755,00
10	49	DIEP.H.043.100	95,8	619,00	106	774,00
11	60	DIEP.H.043.110	116	703,00	128	878,00
12	71	DIEP.H.043.120	136	875,00	150	1095,00
13	83	DIEP.H.043.130	159	993,00	175	1243,00
14	98	DIEP.H.043.140	187	1094,00	206	1366,00
15	111	DIEP.H.043.150	212	1238,00	233	1548,00
16	128	DIEP.H.043.160	245	1391,00	270	1738,00
17	144	DIEP.H.043.170	275	1424,00	302	1778,00
18	163	DIEP.H.043.180	311	1541,00	343	1924,00
19	179	DIEP.H.043.190	343	1726,00	377	2158,00
20	200	DIEP.H.043.200	383	1790,00	421	2236,00
21	225	DIEP.H.043.210	430	2089,00	474	2609,00
22	245	DIEP.H.043.220	469	2148,00	516	2685,00
23	265	DIEP.H.043.230	507	2325,00	559	2907,00
24	287	DIEP.H.043.240	550	2474,00	606	3093,00
25	310	DIEP.H.043.250	593	2721,00	653	3400,00
26	333	DIEP.H.043.260	638	2809,00	701	3511,00

Higher load capacity on request.
The zinc coated version costs an additional 20 %

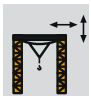
Areas of application:

Cross Adjustable

Adjustable Safety end wine

Adjustable Hoist rope

Adjustable Safety rope


Hoist drive rope

Closed Adjustable Hoist rope

Jib hoist rope

Adjustable Hoist rope

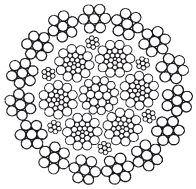
Hoist rope

Closed balanced Claw hoist rope

Diepa D1315C - New B45

Regular lay

Number of load bearing wires in the Outer strands: 105
Total number of wires 328 (of Ø 11 mm)
Fill factor - 0,6511
Loss-coefficient - 0,7800 at 1770 N/mm²
1960 N/mm²
- 0,7500 at 2160 N/mm²



Wire-Ø [mm]	Weight [kg/100m]	Order-No.	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² MI BK [kN]	Price blank €/% m
8	28	DIEP.B.045.080	49,5	474,00	53,0	512,00
8,5	32	DIEP.B.045.085	56,5	511,00	59,9	552,00
9	36	DIEP.B.045.090	62,8	547,00	67,0	593,00
9,5	40	DIEP.B.045.095	70,6	573,00	74,8	621,00
10	44	DIEP.B.045.100	78,0	599,00	82,9	648,00
11	55	DIEP.B.045.110	97,1	695,00	103	752,00
12	65	DIEP.B.045.120	115	768,00	122	832,00
13	75	DIEP. B.045.130	133	836,00	140	906,00
14	87	DIEP.B.045.140	154	908,00	163	983,00
15	99	DIEP.B.045.150	176	1022,00	185	1105,00
16	113	DIEP.B.045.160	199	1140,00	210	1234,00
17	128	DIEP.B.045.170	226	1210,00	238	1311,00
18	143	DIEP.B.045.180	252	1327,00	266	1437,00
19	160	DIEP.B.045.190	283	1441,00	300	1560,00
20	177	DIEP.B.045.200	313	1588,00	332	1719,00
21	196	DIEP.B.045.210	346	1769,00	366	1915,00
22	214	DIEP.B.045.220	379	1863,00	400	2015,00
23	234	DIEP.B.045.230	413	2056,00	437	2226,00
24	254	DIEP.B.045.240	449	2201,00	475	2383,00
25	277	DIEP.B.045.250	490	2361,00	518	2556,00
26	298	DIEP.B.045.260	527	2536,00	558	2745,00

Higher load capacities on request. The zinc coated version costs an additional 20 %

Areas of application:

Hoist rope

Motor rope

Hoist winch rope

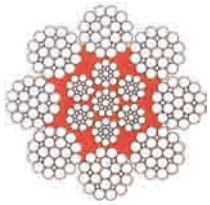
Rotation-free

Diepa P825

Pressed

Regular laid with plastic inner core – use without swivel (Drill protection)

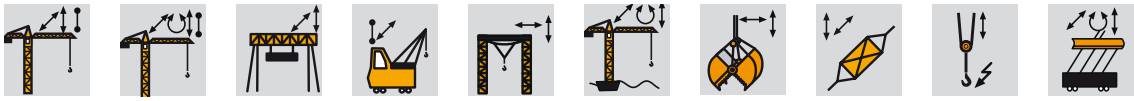
Number of load bearing wires in the Outer strands: 152
Total number of wires 321 (from Ø 15 mm)
Fill factor - 0,6226
Loss-coefficient - 0,8450 bei 1770 N/mm²
1960 N/mm²
- 0,8350 bei 2160 N/mm²



Higher load capacities on request.
The zinc coated version costs an additional 20 %

Wire-Ø [mm]	Weight [kg/100m]	Order-No.	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² MI BK [kN]	Price blank €/% m
8	27	DIEP.P.825.080	48,6	465,00	53,4	504,00
8,5	33	DIEP.P.825.085	58,5	506,00	63,7	549,00
9	35	DIEP.P.825.090	63,3	547,00	69,3	593,00
9,5	41	DIEP.P.825.095	73,1	562,00	79,6	609,00
10	42	DIEP.P.825.100	76,0	578,00	83,0	625,00
11	54	DIEP.P.825.110	96,1	654,00	105	709,00
12	65	DIEP.P.825.120	118	825,00	129	893,00
13	76	DIEP.P.825.130	136	915,00	148	989,00
14	85	DIEP.P.825.140	152	1080,00	166	1169,00
15	103	DIEP.P.825.150	184	1162,00	201	1257,00
16	116	DIEP.P.825.160	208	1230,00	227	1332,00
17	130	DIEP.P.825.170	233	1327,00	254	1437,00
18	146	DIEP.P.825.180	262	1441,00	286	1560,00
19	161	DIEP.P.825.190	289	1555,00	316	1682,00
20	178	DIEP.P.825.200	320	1709,00	348	1849,00
21	195	DIEP.P.825.210	351	1895,00	382	2051,00
22	223	DIEP.P.825.220	401	2081,00	437	2253,00
23	241	DIEP.P.825.230	434	2188,00	473	2368,00
24	261	DIEP.P.825.240	469	2218,00	511	2400,00
25	285	DIEP.P.825.250	513	2454,00	559	2657,00
26	307	DIEP.P.825.260	552	2658,00	601	2877,00

Areas of application:

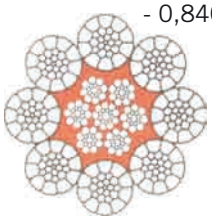


Cross adjustable | Adjustable safety end wine | Adjustable hoist rope | Adjustable safety rope | Hoist drive rope | Closed adjustable hoist rope | Jib hoist rope | Adjustable hoist rope | Hoist rope | Closed balanced claw hoist rope

Diepa PZ371

Regular laid with plastic inner core – use with swivel (Drill protection)

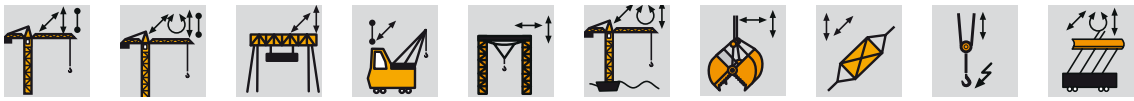
Number of load bearing wire in the Outer strands:
56 (Ø 4-6 mm)
152 (Ø 7-14 mm)
208 (Ø 15-75 mm) total number of strands 329 (ab Ø 15 mm)
Fill factor - 0,6750
Loss-coefficient - 0,8500 bei 1770 N/mm²
1960 N/mm²
- 0,8400 bei 2160 N/mm²



Higher load capacities on request.
The zinc coated version costs an additional 20 %

Wire-Ø [mm]	Weight [kg/100m]	Order-No.	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² MI BK [kN]	Price blank €/% m
8	30	DIEP.Z.371.080	56,5	507,00	61,6	549,00
8,5	34	DIEP.Z.371.085	63,8	552,00	69,5	598,00
9	38	DIEP.Z.371.090	71,5	596,00	77,9	644,00
9,5	43	DIEP.Z.371.095	79,7	612,00	86,5	662,00
10	47	DIEP.Z.371.100	88,4	628,00	96,6	680,00
11	57	DIEP.Z.371.110	107	713,00	117	772,00
12	68	DIEP.Z.371.120	128	899,00	139	975,00
13	80	DIEP.Z.371.130	150	996,00	163	1079,00
14	92	DIEP.Z.371.140	173	1178,00	188	1275,00
15	106	DIEP.Z.371.150	199	1266,00	217	1370,00
16	121	DIEP.Z.371.160	226	1340,00	246	1451,00
17	136	DIEP.Z.371.170	255	1447,00	278	1566,00
18	153	DIEP.Z.371.180	286	1570,00	312	1700,00
19	170	DIEP.Z.371.190	319	1693,00	347	1833,00
20	189	DIEP.Z.371.200	354	1863,00	385	2015,00
21	208	DIEP.Z.371.210	389	2066,00	424	2236,00
22	228	DIEP.Z.371.220	428	2270,00	465	2457,00
23	250	DIEP.Z.371.230	468	2384,00	509	2581,00
24	272	DIEP.Z.371.240	509	2416,00	554	2616,00
25	295	DIEP.Z.371.250	552	2675,00	601	2896,00
26	319	DIEP.Z.371.260	597	2897,00	650	3137,00

Areas of application:



Cross adjustable | Adjustable safety end wine | Adjustable hoist rope | Adjustable safety rope | Hoist drive rope | Closed adjustable hoist rope | Jib hoist rope | Adjustable hoist rope | Hoist rope | Closed balanced claw hoist rope

Diepa S417

Regular laid – use without Swivel (Drill protection)

Number of load bearing strands in the outer strands:
56 (Ø 4-6 mm)
152 (Ø 7-14 mm) otal number of strands 310 (ab Ø 16 mm)

Fill factor - 0,6648
Loss-coefficient - 0,8600 bei 1770 N/mm²
1960 N/mm²
- 0,8200 bei 2160 N/mm²

Wire Ø [mm]	Weight [kg/100m]	Order-No.	1960 N/mm² MI BK [kN]	Price blank €/% m	2160 N/mm² MI BK [kN]	Price blank €/% m
8	30	DIEP.S.417.080	55,4	453,00	57,9	530,00
8,5	34	DIEP.S.417.085	63,6	492,00	66,8	576,00
9	38	DIEP.S.417.090	70,1	532,00	73,6	623,00
9,5	42	DIEP.S.417.095	79,4	549,00	83,6	639,00
10	47	DIEP.S.417.100	86,8	565,00	91,2	655,00
11	58	DIEP.S.417.110	108	642,00	114	745,00
12	69	DIEP.S.417.120	129	809,00	135	939,00
13	80	DIEP.S.417.130	148	904,00	156	1038,00
14	95	DIEP.S.417.140	177	1066,00	185	1229,00
15	107	DIEP.S.417.150	199	1149,00	209	1319,00
16	123	DIEP.S.417.160	230	1229,00	241	1395,00
17	138	DIEP.S.417.170	258	1333,00	270	1510,00
18	153	DIEP.S.417.180	286	1453,00	301	1638,00
19	173	DIEP.S.417.190	324	1571,00	339	1765,00
20	190	DIEP.S.417.200	355	1731,00	373	1942,00
21	204	DIEP.S.417.210	382	1931,00	401	2154,00
22	234	DIEP.S.417.220	437	2131,00	458	2365,00
23	255	DIEP.S.417.230	477	2237,00	500	2487,00
24	276	DIEP.S.417.240	516	2287,00	541	2519,00
25	297	DIEP.S.417.250	555	2540,00	582	2790,00
26	318	DIEP.S.417.260	596	2756,00	625	3021,00

Higher load capacities on request. The zinc coated version costs an additional 20 %.

Areas of application:

Safety rope

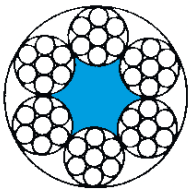
Safety rope

Hoist rope

Round stranded rope

6 x 7 M - FC

Fibre core
EN 12385-4
(DIN 3055)
Tab. 5



Fields of application:

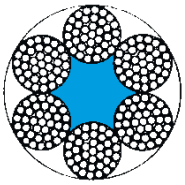
Guy rope

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit €/% m
2,0	0,014	2,35	067.M.02.F.Z.SZ.000	53,60
2,5	0,015	3,5	067.M.25.F.Z.SZ.000	62,00
3,0	0,032	5,29	067.M.03.F.Z.SZ.000	74,60
4,0	0,057	9,4	067.M.04.F.Z.SZ.000	85,10
5,0	0,089	14,7	067.M.05.F.Z.SZ.000	102,90
6,0	0,129	21,2	067.M.06.F.Z.SZ.000	132,30
7,0	0,175	28,8	067.M.07.F.Z.SZ.000	161,70
8,0	0,229	37,6	067.M.08.F.Z.SZ.000	194,30
9,0	0,289	47,6	067.M.09.F.Z.SZ.000	240,50
10,0	0,357	58,8	067.M.10.F.Z.SZ.000	288,80

Order example: please enter usable length!
067.M.09.F.Z.120 6 cords per 7 wires, rope-Ø 9 mm Fibre core, galvanised, 120 m usable length

6 x 37 M - FC

Fibre core
EN 12385-4
(DIN 3066)
Tab. 13



Fields of application:

Sling rope

Lifting wench rope

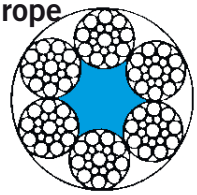
Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit €/% m
6	0,125	18,8	637.M.06.F.Z.SZ.000	280,00
7	0,170	25,6	637.M.07.F.Z.SZ.000	333,00
8	0,221	33,4	637.M.08.F.Z.SZ.000	360,00
9	0,280	42,3	637.M.09.F.Z.SZ.000	385,00
10	0,346	52,2	637.M.10.F.Z.SZ.000	405,00
11	0,419	63,2	637.M.11.F.Z.SZ.000	461,00
12	0,498	75,2	637.M.12.F.Z.SZ.000	513,00
13	0,585	88,2	637.M.13.F.Z.SZ.000	571,00
14	0,678	102,0	637.M.14.F.Z.SZ.000	665,00
15	0,779	121,0	637.M.15.F.Z.SZ.000	721,00
16	0,886	134,0	637.M.16.F.Z.SZ.000	781,00
18	1,120	169,0	637.M.18.F.Z.SZ.000	932,00
20	1,380	209,0	637.M.20.F.Z.SZ.000	1.103,00
22	1,670	253,0	637.M.22.F.Z.SZ.000	1.295,00
24	1,990	301,0	637.M.24.F.Z.SZ.000	1.512,00
26	2,340	353,0	637.M.26.F.Z.SZ.000	1.767,00
28	2,710	409,0	637.M.28.F.Z.SZ.000	2.029,00
30	3,170	487,0	637.M.30.F.Z.SZ.000	2.323,00
32	3,540	534,0	637.M.32.F.Z.SZ.000	2.638,00
36	4,480	676,0	637.M.36.F.Z.SZ.000	3.323,00
40	5,540	835,0	637.M.40.F.Z.SZ.000	4.148,00

Info

Attention:
Lubrication increases durability! We offer adequate products!

Round stranded rope

6 x 19 S - FC
Fibre core
EN 12385-4
– Seale
(DIN 3058)
Tab. 7



Fields of application:

Hoist rope

Jib hoist rope

Hoist rope

Sling rope

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit €/% m
6	0,134	21,0	619.S.06.F.Z.SZ.000	198,00
7	0,183	28,6	619.S.07.F.Z.SZ.000	225,00
8	0,238	37,4	619.S.07.F.Z.SZ.000	257,00
9	0,302	47,3	619.S.09.F.Z.SZ.000	321,00
10	0,373	58,4	619.S.10.F.Z.SZ.000	368,00
11	0,451	70,7	619.S.11.F.Z.SZ.000	405,00
12	0,537	84,1	619.S.12.F.Z.SZ.000	468,00
13	0,630	98,7	619.S.13.F.Z.SZ.000	533,00
14	0,730	114,0	619.S.14.F.Z.SZ.000	605,00
15	0,838	132,0	619.S.15.F.Z.SZ.000	727,00
16	0,954	150,0	619.S.16.F.Z.SZ.000	750,00
18	1,210	189,0	619.S.18.F.Z.SZ.000	901,00
20	1,490	234,0	619.S.20.F.Z.SZ.000	1.135,00

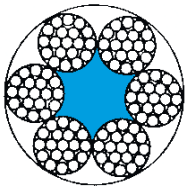
Conversion of the units for strength:

kp	=	Kilopond	1 kp	=	9,80665 N
N	=	Newton	1 kN	=	1000 N
kN	=	KiloNewton	1 kp/mm²	=	9,80665 N/mm²

Crane technology

Round stranded rope

Round stranded rope



6 x 19 M - FC
Fibre core
EN 12385-4
(DIN 3060)
Tab. 12

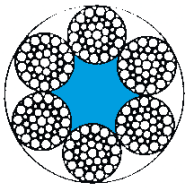
Fields of application:

Lifting rope

lifting, closing rope

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit €/% m
2,5	0,015	3,5	619.M.25.F.Z.SZ.000	104,00
3,0	0,031	4,9	619.M.03.F.Z.SZ.000	107,00
3,5	0,040	5,6	619.M.35.F.Z.SZ.000	137,00
4,0	0,055	8,7	619.M.04.F.Z.SZ.000	143,00
5,0	0,086	13,6	619.M.05.F.Z.SZ.000	169,00
6,0	0,125	19,6	619.M.06.F.Z.SZ.000	184,00
6,5	0,150	22,9	619.M.65.F.Z.SZ.000	207,00
7,0	0,170	26,6	619.M.07.F.Z.SZ.000	210,00
8,0	0,221	34,8	619.M.08.F.Z.SZ.000	240,00
9,0	0,280	44,1	619.M.09.F.Z.SZ.000	320,00
10,0	0,346	54,4	619.M.10.F.Z.SZ.000	338,00
11,0	0,419	65,8	619.M.11.F.Z.SZ.000	369,00
12,0	0,498	78,3	619.M.12.F.Z.SZ.000	425,00
13,0	0,585	91,9	619.M.13.F.Z.SZ.000	485,00
14,0	0,678	107,0	619.M.14.F.Z.SZ.000	549,00
16,0	0,886	139,0	619.M.16.F.Z.SZ.000	681,00

Round stranded rope



6 x 36 WS - FC
Fibre core
Warrington-Seale
EN 12385-4
(DIN 3064)
Tab. 9

Fields of application:

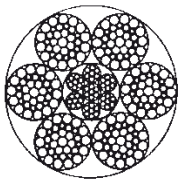
Adjustment, safety, lifting, closing rope

Elevator rope

Lifting rope

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit blank €/% m	Price/Unit galvanised €
8	0,243	37,4	636.08.F.B.17.SZ.000	342,00	396,00
10	0,380	58,4	636.10.F.B.17.SZ.000	385,00	492,00
11	0,460	70,7	636.11.F.B.17.SZ.000	427,00	507,00
12	0,547	84,1	636.12.F.B.17.SZ.000	477,00	567,00
13	0,643	98,7	636.13.F.B.17.SZ.000	527,00	629,00
14	0,745	114,0	636.14.F.B.17.SZ.000	612,00	727,00
15	0,856	136,0	636.15.F.B.17.SZ.000	662,00	793,00
16	0,973	150,0	636.16.F.B.17.SZ.000	710,00	854,00
18	1,230	189,0	636.18.F.B.17.SZ.000	841,00	1.020,00
20	1,520	234,0	636.20.F.B.17.SZ.000	1002,00	1.201,00
22	1,840	283,0	636.22.F.B.17.SZ.000	1162,00	1.415,00
24	2,190	336,0	636.24.F.B.17.SZ.000	1354,00	1.649,00
26	2,570	395,0	636.26.F.B.17.SZ.000	1589,00	1.931,00

Round stranded rope



6 x 36 WS - WSC
Steel core
Warrington-Seale
EN 12385-4
(DIN 3064)
Tab. 9

Fields of application:

Lifting, closing rope

Elevator rope

Lifting rope

Electric winch rope

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit blank €/% m
8	396,00	40,3	636.08.S.B.17.SZ.000	435,00
10	492,00	63,0	636.10.S.B.17.SZ.000	501,00
11	507,00	76,2	636.11.S.B.17.SZ.000	544,00
12	567,00	90,7	636.12.S.B.17.SZ.000	606,00
13	629,00	106,0	636.13.S.B.17.SZ.000	671,00
14	727,00	124,0	636.14.S.B.17.SZ.000	777,00
15	793,00	142,0	636.15.S.B.17.SZ.000	842,00
16	854,00	161,0	636.16.S.B.17.SZ.000	904,00
18	1.020,00	204,0	636.18.S.B.17.SZ.000	1.071,00
20	1.201,00	252,0	636.20.S.B.17.SZ.000	1.265,00
22	1.415,00	305,0	636.22.S.B.17.SZ.000	1.482,00
24	1.649,00	363,0	636.24.S.B.17.SZ.000	1.731,00
26	1.931,00	426,0	636.26.S.B.17.SZ.000	2.012,00

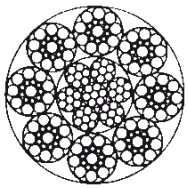
Groove control made easy:

rope-Ø Coin	
16 mm - 1 Cent	22 mm - 20 Cent
19 mm - 2 Cent	23 mm - 1 €
20 mm - 10 Cent	24 mm - 50 Cent
21 mm - 5 Cent	26 mm - 2 €

Info

Attention, mind the right rope mounting – error accumulation stems from wrong rope mounting.

Round stranded rope



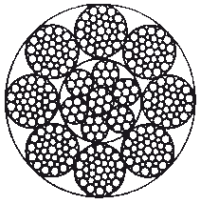
8 x 19 S - IWCR
Steel core
EN 12385-4
(DIN 3062)
Seale Tab. 8

Fields of application:

Adjustment, safety, lifting, closing rope | Elevator rope | Lifting rope

Rope-Ø [mm]	Weight SE [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
10	0,425	63,0	819.10.S.B.17.SZ.000	470,00
11	0,514	76,2	819.11.S.B.17.SZ.000	503,00
12	0,612	90,7	819.12.S.B.17.SZ.000	569,00
13	0,719	106,0	819.13.S.B.17.SZ.000	629,00
14	0,833	124,0	819.14.S.B.17.SZ.000	707,00
15	0,957	142	819.15.S.B.17.SZ.000	786,00
16	1,090	161,0	819.16.S.B.17.SZ.000	877,00
18	1,380	204,0	819.18.S.B.17.SZ.000	1.071,00
20	1,700	252,0	819.20.S.B.17.SZ.000	1.273,00
22	2,060	305,0	819.22.S.B.17.SZ.000	1.538,00
24	2,450	363,0	819.24.S.B.17.SZ.000	1.840,00
26	2,870	426,0	819.26.S.B.17.SZ.000	2.162,00

Round stranded rope



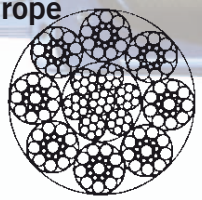
8 x 36 WS - WSC
Steel core
EN 12385-4
(DIN 3067 WS)
Seale
Tab. 10

Fields of application:

Adjustment, safety, lifting, closing rope | Elevator rope | Lifting rope | Lifting rope | Lifting wench rope | Hoist rope

Rope-Ø [mm]	Weight SE [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
13	0,736	106,0	836.13.S.B.17.SZ.000	812,00
16	1,110	151,0	836.16.S.B.17.SZ.000	1.084,00
18	1,410	204,0	836.18.S.B.17.SZ.000	1.240,00
20	1,740	252,0	836.20.S.B.17.SZ.000	1.476,00
22	2,100	305,0	836.22.S.B.17.SZ.000	1.694,00
24	2,510	363,0	836.24.S.B.17.SZ.000	1.978,00
25	2,720	405,0	836.25.S.B.17.SZ.000	2.112,00
26	2,940	426,0	836.26.S.B.17.SZ.000	2.233,00
28	3,410	494,0	836.28.S.B.17.SZ.000	2.983,00

Round stranded rope



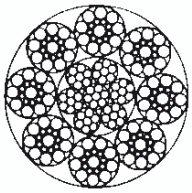
8 x 19 S - IWCR
Steel core
EN 12385-4
– Seale
(DIN 3062) Tab. 8

Fields of application:

Lifting, closing rope | Elevator rope | Lifting rope

Rope-Ø [mm]	Weight SE [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price blank €
6,5	0,140	25,2	819.06.S.B.17.SZ.000	310,00
7,0	0,160	28,9	819.07.S.B.17.SZ.000	314,00
7,5	0,220	33,0	819.75.S.B.17.SZ.000	407,00
8,0	0,260	40,3	819.08.S.B.17.SZ.000	369,00
9,0	0,330	51,0	819.09.S.B.17.SZ.000	408,00
11,0	0,490	76,2	819.11.S.B.17.SZ.000	503,00

Round stranded rope



8 x 19 S - IWCR
Steel core
EN 12385-4 – Seale
(DIN 3062) Tab. 8

Fields of application:

Lifting, closing rope | Elevator rope | Anschlagseil

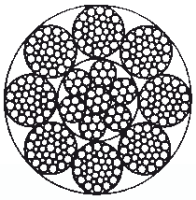
Rope-Ø [mm]	Weight SE [kg/m]	1960 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
7,5	0,240	41,0	819.07.S.B.19.SZ.000	420,00
9,0	0,330	56,5	819.09.S.B.19.SZ.000	471,00
11,0	0,490	84,4	819.11.S.B.19.SZ.000	578,00

Order example: Please enter using length!
819.09.S.B.120 8 Cords to 19 ropes, rope-Ø 9 mm, steel core, blank, 120 m using lenth

GLOBUS – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

Round stranded rope

Round stranded rope



8 x 36 WS - IWCR
Steel core
Warrington – Seale
EN 12385-4
(DIN 3067)
Tab. 10

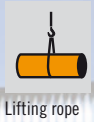
Rope-Ø [mm]	Weight SE [kg/m]	1960 N/mm² MI BK [kN]	Order-No.	Price/Unit blank €
13	0,705	118,0	836.13.S.B.19.SZ.000	812,00
14	0,817	137,0	836.14.S.B.19.SZ.000	853,00
16	1,070	179,0	836.16.S.B.19.SZ.000	1.084,00
20	1,670	279,0	836.20.S.B.19.SZ.000	1.476,00
25	2,720	423,0	836.25.S.B.19.SZ.000	2.112,00

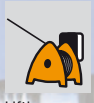
Fields of application:

Adjustment, lifting, closing rope

Lifting rope

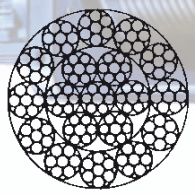
Elevator rope


Lifting rope


Lifting wench rope

Hoist rope

Spiral round stranded rope



18 x 7 - WSC
Steel core
Low turning
EN 12385-4
(DIN 3069)
Tab. 14

Rope-Ø [mm]	Weight SE [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit blank €/% m	Price/Unit galvanized* €/% m
4,0	0,064	9,2	187.04.S.B.17.SZ.000	-	228,00
5,0	0,100	14,5	187.05.S.B.17.SZ.000	271,00	296,00
5,5	0,120	17,8	187.55.S.B.17.SZ.000	291,00	339,00
6,0	0,145	20,9	187.06.S.B.17.SZ.000	281,00	294,00
6,5	0,150	24,4	187.65.S.B.17.SZ.000	-	425,00
7,0	0,197	28,4	187.07.S.B.17.SZ.000	298,00	332,00
8,0	0,257	37,2	187.08.S.B.17.SZ.000	349,00	387,00
9,0	0,326	47,0	187.09.S.B.17.SZ.000	413,00	463,00
10,0	0,402	58,1	187.10.S.B.17.SZ.000	480,00	538,00
11,0	0,486	70,2	187.11.S.B.17.SZ.000	518,00	540,00
12,0	0,579	83,6	187.12.S.B.17.SZ.000	597,00	677,00
13,0	0,679	98,1	187.13.S.B.17.SZ.000	676,00	772,00
16,0	1,030	149,0	187.16.S.B.17.SZ.000	946,00	1.080,00
18,0	1,300	188,0	187.18.S.B.17.SZ.000	1.163,00	1.336,00
20,0	1,610	232,0	187.20.S.B.17.SZ.000	1.449,00	1.649,00

Fields of application:

Lifting rope

Lifting rope

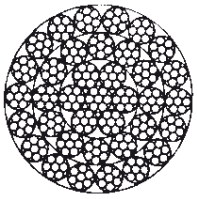
Info

Attention: low turning, not completely turning free ropes like for example the models 17 x7 and 18 x 7, must not be used on a swivel.

Info

In the EN 12385-4 no calculated breaking strengths are specified

Spiral round stranded rope



36 x 7 - WSC
Steel core
Low turning
EN 12385-4
(DIN 3071)
Tab. 15

Rope-Ø [mm]	Weight SE [kg/m]	1770 N/mm² MI BK [kN]	Order-No.	Price/Unit blank €/% m
12	0,579	81,1	367.12.S.B.17.SZ.000	657,00
13	0,679	95,1	367.13.S.B.17.SZ.000	743,00
14	0,788	110,0	367.14.S.B.17.SZ.000	828,00
16	1,030	144,0	367.16.S.B.17.SZ.000	1.041,00
18	1,300	182,0	367.18.S.B.17.SZ.000	1.279,00
20	1,610	225,0	367.20.S.B.17.SZ.000	1.602,00

Fields of application:

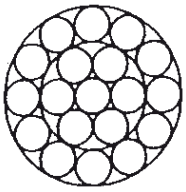
Lifting rope

Lifting rope

Stainless steel ropes

NIRO Round stranded rope

Made from stainless steel
Material-No. 1.4401
1 x 19 wires

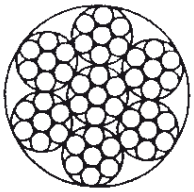


Rope-Ø [mm]	Weight SE [kg/% m]	1570 N/mm² RE BK [kN]	1570 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
2,0	2,0	3,7	3,3	NI.119.020.15.SZ.000	108,00
2,5	3,1	5,8	5,1	NI.119.025.15.SZ.000	126,00
3,0	4,5	8,4	7,4	NI.119.030.15.SZ.000	154,00
3,5	6,1	11,5	10,1	NI.119.035.15.SZ.000	222,00
4,0	8,0	15,0	13,2	NI.119.040.15.SZ.000	251,00
5,0	12,4	23,4	20,6	NI.119.050.15.SZ.000	410,00
6,0	17,8	33,7	29,7	NI.119.060.15.SZ.000	573,00

Pay attention to daily prices!

NIRO Round stranded rope

Made from stainless steel
Material-No. 1.4401
7 x 19 wires



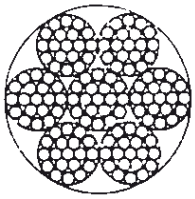
Rope-Ø [mm]	Weight SE [kg/% m]	1570 N/mm² RE BK [kN]	1570 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
2,0	1,7	2,8	2,5	NI.077.020.15.SZ.000	154,00
2,5	2,5	4,3	3,8	NI.077.025.15.SZ.000	169,00
3,0	3,8	6,5	5,7	NI.077.030.15.SZ.000	196,00
3,5	-	-	-	NI.077.035.15.SZ.000	-
4,0	7,0	12,2	10,7	NI.077.040.15.SZ.000	303,00
5,0	10,0	18,2	16	NI.077.050.15.SZ.000	419,00
6,0	15,0	25,2	22,3	NI.077.060.15.SZ.000	532,00
7,0		on request		NI.077.070.15.SZ.000	Auf Anfrage
8,0		on request		NI.077.080.15.SZ.000	Auf Anfrage
10,0		on request		NI.077.100.15.SZ.000	Auf Anfrage

Prices are apply for lengths below 20 m
Pay attention to daily prices!

Order example: Please enter using length!
NI.077.020.15.SZ.080 NIRO, 7 cords je 7 wires, rope-Ø 2 mm, tensile strength, lay direction, 80 m using length

NIRO Round stranded rope

Made from stainless steel
Material-No. 1.4401
7 x 7 wires



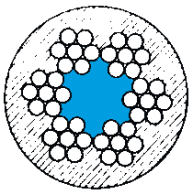
Rope-Ø [mm]	Weight SE [kg/% m]	1570 N/mm² RE BK [kN]	1570 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
2,0	1,6	2,7	2,4	NI.719.020.15.SZ.000	179,00
2,5	2,4	4,2	3,7	NI.719.025.15.SZ.000	254,00
3,0	3,7	6,5	5,7	NI.719.030.15.SZ.000	265,00
3,5	5,0	8,6	7,2	NI.719.035.15.SZ.000	315,00
4,0	6,3	11,1	9,7	NI.719.040.15.SZ.000	323,00
5,0	9,0	15,7	13,7	NI.719.050.15.SZ.000	425,00
6,0	15,0	26,2	23,0	NI.719.060.15.SZ.000	571,00
8,0	23,4	41,0	36,0	NI.719.080.15.SZ.000	951,00
10,0	39,7	69,3	60,8	NI.719.100.15.SZ.000	1.534,00

Prices are apply for lengths below 20 m
Pay attention to daily prices!

Special ropes (PVC) galvanized

Round stranded rope

PVC-coated
6 x 7 - FC
Fibre core
EN 12385-4
(DIN 3055)
galvanized



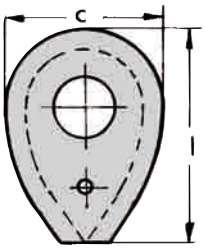
Rope-Ø [mm]	Weight [kg/% m]	1570 N/mm² MI BK [kN]	Order-No.	Price blank €/% m
1,8/2,5	1,8	-	PVC.067.0102.000	51,00
2,0/3,0	1,9	2,35	PVC.067.0203.000	62,00
3,0/4,0	3,8	5,29	PVC.067.0304.000	99,00
3,0/5,0	4,6	5,29	PVC.067.0305.000	130,00
4,0/5,0	5,5	9,41	PVC.067.0405.000	146,00
4,0/6,0	7,1	9,41	PVC.067.0406.000	233,00
5,0/6,0	10,8	14,70	PVC.067.0506.000	240,00

Other dimensions on request!

Wire rope accessories Custom

Full thimble

DIN 3091 raw
Type KAUV

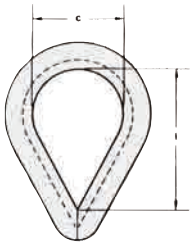


Nom. size=rope-Ø [mm]	Dimensions [mm] c	l	Drilling from/up to mm	Order-No.	Price/Unit € roh	gebohrt
8	40	66	14-20	KAUV.08.3091.00	9,60	12,80
10	50	82	18-25	KAUV.10.3091.00	13,00	16,50
12	60	98	21-30	KAUV.12.3091.00	17,50	21,50
14	70	114	25-35	KAUV.14.3091.00	28,50	32,70
16	80	130	28-40	KAUV.16.3091.00	33,90	38,70
18	90	145	31-45	KAUV.18.3091.00	39,70	45,00
20	100	161	35-50	KAUV.20.3091.00	48,10	54,30
22	110	177	38-55	KAUV.22.3091.00	59,30	68,30
24	120	193	41-60	KAUV.24.3091.00	65,80	74,60
26	130	209	44-65	KAUV.26.3091.00	87,30	100,30

Order example: Please enter hole-Ø!
KAUV.20.3091.00 Type KAUV, rope-Ø in mm

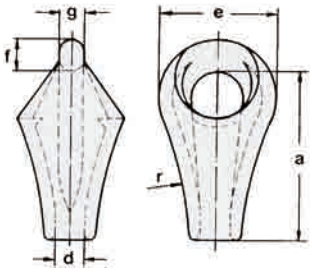
Special thimble

With big sparse width
Type KAUS



Nom. size=rope-Ø [mm]	Dimensions [mm] c	l	Order-No.	Price/Unit €
8	35	58	KAUS.08.0035.00	4,30
10	40	65	KAUS.10.0040.00	4,30
12	45	72	KAUS.12.0045.00	4,60
13	45	72	KAUS.13.0045.00	4,60
14	50	80	KAUS.14.0050.00	5,40
16	60	97	KAUS.16.0060.00	6,70
18	65	104	KAUS.18.0065.00	9,30
20	70	109	KAUS.20.0070.00	31,80
22	80	109	KAUS.22.0080.00	33,60
24	90	140	KAUS.24.0090.00	34,10
26	100	155	KAUS.26.0100.00	39,10

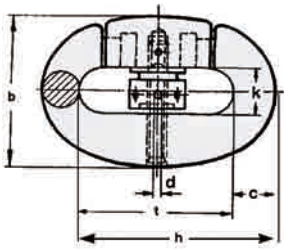
DEMAG rope bulbs



Nominal size No.	rope-Ø [mm]	WLL [kg]	Dimensions in [mm] d	e	a	g	Weight [kg]	Order-No.	Price/Unit €
1	10	1500	12	48	69	12	0,145	SE.IB.NG01.0010	94,90
2	11+12	2000	14	56	81	14	0,235	SE.IB.NG02.1112	132,30
3	13+14	2500	16	64	90	16	0,328	SE.IB.NG03.1314	157,50
4	15+16	3000	18	70	103	18	0,390	SE.IB.NG04.1516	163,80
5	18	4000	20	84	114	20	0,723	SE.IB.NG05.0018	169,10
6	19+20	4500	22	84	129	22	0,780	SE.IB.NG06.1920	175,40
7	22+24	6500	26	100	140	24	1,360	SE.IB.NG07.2224	180,60
8	26	8000	29	100	158	26	1,400	SE.IB.NG08.0026	184,80
9	28	9000	31	120	171	28	2,300	SE.IB.NG09.0028	214,20
10	32+33	12500	35	120	190	29	2,650	SE.IB.NG10.3233	226,80
11	35	14000	37	142	203	31	4,300	SE.IB.NG11.0035	309,80
12	36	16000	40	142	225	35	4,100	SE.IB.NG12.0036	372,80
13	40	18000	43	166	242	37	6,500	SE.IB.NG13.0040	533,40

DEMAG rope shackles

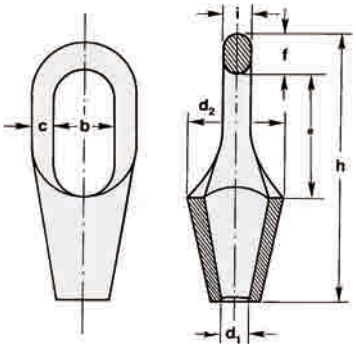
(only in connection with DEMAG rope bulb)



Nom. size No.	Effective Breaking load [kP]	Dimensions in [mm] b	c	h	t	k	Weight [kg]	Order-No.	Price/Unit €
1	7000	49	12	72	48	14	0,29	SCH.DE.001	219,50
2	10000	58	14	84	56	18	0,37	SCH.DE.002	230,00
3	13650	66	16	96	64	20	0,55	SCH.DE.003	234,20
4	15700	74	18	108	72	22	0,90	SCH.DE.004	248,90
5	20160	82	20	120	80	24	1,50	SCH.DE.005	255,20
6	22600	90	22	132	88	26	1,70	SCH.DE.006	272,00
7	33750	100	24	144	96	30	2,10	SCH.DE.007	280,40
8	40200	106	26	156	104	32	3,10	SCH.DE.008	297,20
9	47150	116	28	168	112	34	3,60	SCH.DE.009	323,40
10	62750	124	30	180	120	36	5,00	SCH.DE.010	382,20

Yoke rope bulbs

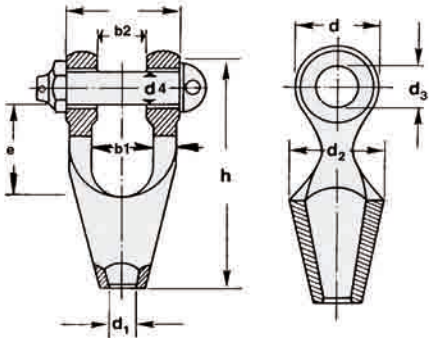
DIN 83313



Nom. size	Rope-Ø [mm]	WLL [kg]	Dimensions in [mm] b	d2	e	f	h	i	Weight [kg]	Order-No.	Price/Unit €
1,6	12-14	1600	37	55	76	19	155	15	0,7	BG.SH.016.1214	87,50
2,5	14-18	2500	45	62	89	24	182	19	1,2	BG.SH.025.1418	100,80
3,0	16-20	3150	50	69	98	26	202	21	1,5	BG.SH.030.1620	120,20
4,0	18-22	4000	54	76	106	30	220	24	2,0	BG.SH.040.1822	139,80
5,0	20-24	5000	60	85	117	34	245	27	3,1	BG.SH.050.2024	147,00
6,0	22-28	6300	67	94	131	38	275	30	4,2	BG.SH.060.2228	218,50
8,0	26-30	8000	73	103	143	42	300	33	5,8	BG.SH.080.2630	240,60
10,0	28-34	10000	80	112	160	45	330	36	8,0	BG.SH.100.2834	268,70
12,0	32-38	12500	89	125	179	51	370	41	11,0	BG.SH.120.3238	335,30
16,0	36-44	16000	100	140	200	56	415	46	15,0	BG.SH.160.3644	588,00
20,0	40-50	20000	110	156	224	62	460	50	20,0	BG.SH.200.4050	729,80

Fork rope hulls

DIN 83313 - Form C



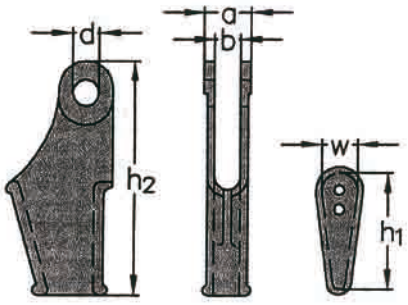
d2 + d1 look at
Yoke rope hull

Nom. size	Rope-Ø [mm]	WLL [kg]	Dimensions in [mm] b1	b2	d3	d4	e	h	Weight [kg]	Order-No.	Price/Unit €
1,6	12-14	1600	37	27	M20	20	55	147	1,1	GB.SH.016.1214	114,30
2,5	14-18	2500	45	33	M24	24	67	175	1,8	GB.SH.025.1418	136,30
3,0	16-20	3150	50	38	M27	27	73	195	2,4	GB.SH.030.1620	151,30
4,0	18-22	4000	54	42	M30	30	81	212	3,2	GB.SH.040.1822	180,20
5,0	20-24	5000	60	47	M36	36	88	237	5,0	GB.SH.050.2024	232,20
6,0	22-28	6300	67	53	M39	39	94	262	6,7	GB.SH.060.2228	294,50
8,0	26-30	8000	73	60	M45	45	104	289	9,5	GB.SH.080.2630	360,40
10,0	28-34	10000	80	66	M48	48	116	320	13,0	GB.SH.100.2834	477,00
12,0	32-38	12500	89	73	M52	52	130	356	17,0	GB.SH.120.3238	614,50
16,0	36-44	16000	100	81	M60	60	143	397	24,0	GB.SH.160.3644	779,60
20,0	40-50	20000	110	90	M68	68	157	435	31,0	GB.SH.200.4050	1.103,60

Order example:
GB.SH.200.4050 Fork rope hulls, WLL 20.000 kg, rope diameter 40-50 mm

Wedge clamp

Similar to DIN 43148/ EN 13411-6
with zinc-coated bolts and splints

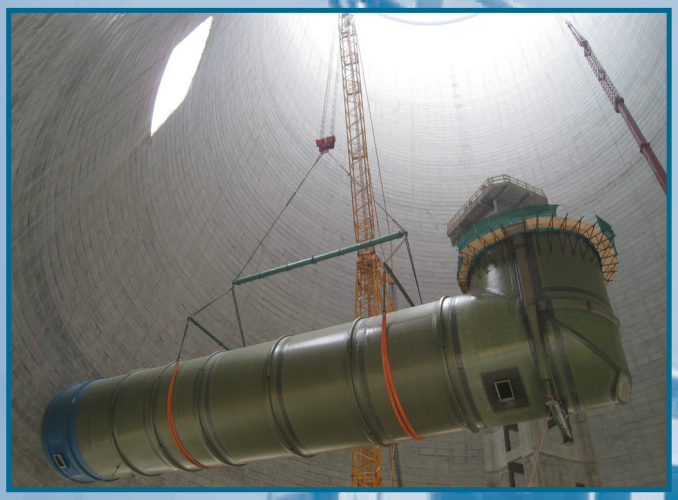


NG. = Wire-Ø [mm]	No. of hole matrix	load capacity [kg]	Size in [mm] a	b	d	h1	h2	w	Weight/Unit [kg]	Order-No.	Price/Unit €
Similar to DIN 43148											
4-5	0	250	23	12	12	67	108	16	0,4	KEK.04.05.BS	17,00
6-7	3	500	26	14	14	85	150	30	0,8	KEK.06.07.BS	21,00
8	2	500	26	14	14	81	150	24	0,7	KEK.00.08.BS	21,00
9-12	1	500	26	14	14	76	150	20	0,7	KEK.09.12.BS	22,00
10-12	2	1000	31	17	17	81	163	24	0,8	KEK.10.12.BS	27,70
12-14	1	1000	31	17	17	76	163	20	0,8	KEK.12.14.BS	28,80
12-15	0	2500	40	20	20	107	220	36	2,6	KEK.12.15.BS	60,10
Similar to EN 13411-6											
16-17	0	5500	52	24	25	148	273	56	6,3	KEK.16.17.BS	295,00
18	0	5500	52	24	25	136	273	49	6,3	KEK.00.18.BS	305,00
19-20	0	8000	63	29	25	161	276	52	7,5	KEK.19.20.BS	388,00
21	0	10000	66	30	33,5	218	370	80	12,9	KEK.00.21.BS	551,00
22-25	0	10000	66	30	33,5	190	370	78	12,9	KEK.22.25.BS	563,00
26-30	0	12000	91	37	48,5	212	486	88	27,0	KEK.26.30.BS	965,00

From nominal size16-17 see wedge clamp EN 13411-6. Wedge clamps similar to DIN 43148 not to be used in areas where frost may occur.

Crane technology

GLOBUS
HEBETECHNIK



Special and non-standard parts

Dynamische Lasttests an hydraulischer 1200-t-Testing Machine

Clamps, grippers and buckets

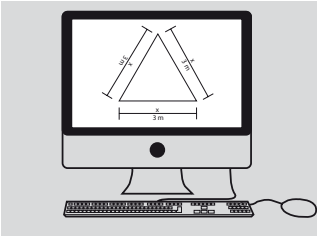
Hoisting devices

Special components	A 96 - A 106
Crane and special machinery construction	A 107
Hoisting devices	A 108 - A 110
Load turning devices, range of slings	A 111 - A 112
Claws and clamps	A 113 - A 115

GLOBUS – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

The 5 Steps for optimal load handling device

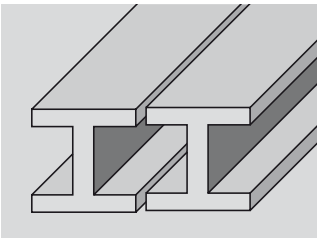
Q5



1. Construction

With our know-how we will find the correct solution and create this using construction with 3-D-CAD "SolidWorks". Some 70 % of our designs are special tailor-made solutions produced in accordance with the Machine Directive 2006/42/EC, DIN EN 13155 or DIN 5018:

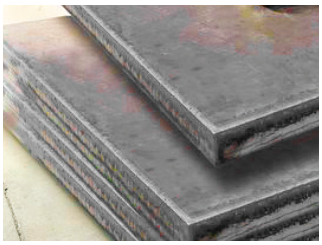
- Calculations must ensure that LAM 20.000 load change can be withstood.
- Special design for calculating offshore use.
- Competent client care for processing your special issues.

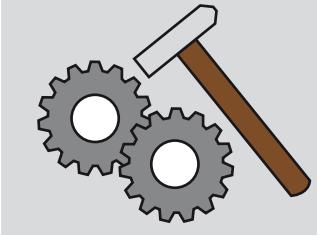


2. Material

The material is selected from expert manufacturers whose suppliers are certified optimally in accordance with EN 10204 3.1. For you that means:

- Higher demands for offshore use with 3.2 certificates in accordance with EN 10 204
- Special documentation also as a data file
- Use of tensile resistant materials, fine-grained structural steel up to STE 960





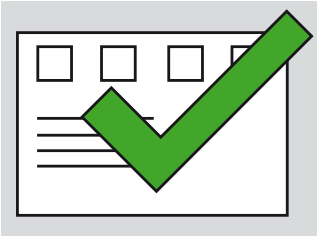
3. Production

Only good planning gives the best results.

- Major welding proof according to EN 18800-7:2008-11 is confirmed yearly by TÜV especially for all hoists in a non-static position – dynamic stress factoring
- Certified welding according to DIN EN 287
- Production monitoring by our welding experts, welding process and processes are laid down in the specifications
- Testing of welding joints and materials, magnetic powder test, penetrant flaw detection and ultra sound testing, absorbed energy impact test.

4. Documentation

According to the Machine Directive 2006/42/EC the documentation is a basic part of the hoisting device. Processing, welding, production, statics and tests must be fully documented. An operating manual must be made available for LAM operations and the corresponding work certificates and EC declaration of conformity must be attached in accordance with EN 10204.2.2



5. Testing

For some work it is important to provide proof of the durability of the hoisting operation. Particular in warm areas and offshore use, monitoring of the hoisting test is done additionally by international organisation such LLOYDS Register, "Germanischer LLOYD", ABS or another institution. We also carry out such tests on site.

Special components

According to BGR 500 Kap. 2.8 accordingly EN 13155

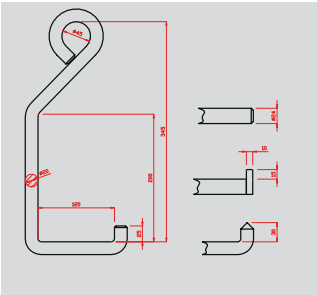
- Basic materials: GK 8
  high-strength, heat-resistant, Niro
- Own fabrication
- Manufacturer‘s qualification for welding of steel constructions according to DIN 18800-7:2002-09, Class
- Own construction/calculation
- Checking and testing of non-standard parts
- Load hook/special hooks have to be manufactured to fit the regulations BGR 500 Kap 2.8 / 3.6.3:
  Load hooks are to be used in a way that an unwanted hinge take off in the load-carrying equipment or the lifting gear accessory or load is prevented. This is not the case if due to special accident risks while setting the load down the unhinging is taking place without the necessary involvement of the lifting gear.

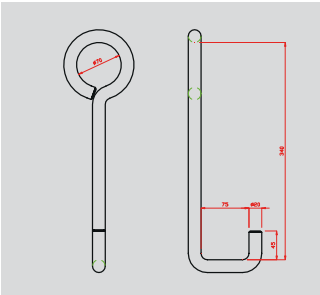
Checks for operating instructions Examples

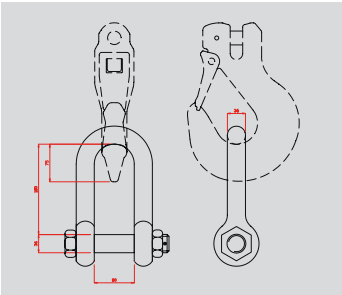
9. Provision: Equipment and product safety law 9. GPSGV 2008

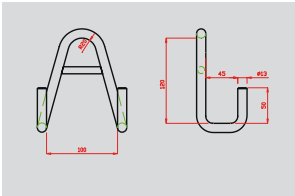
In §3 GPSGV requires that a product is constructed in such a way that with proper use or foreseeable improper use the safety and health of the user or third parties must not be put at risk.
§1 = Area of application
§2 = Safety requirements
§3 = Pre-requisites for commissioning
§4 = EC label
§5 = Infringements
§6 = Transitional provisions

Examples of execution:

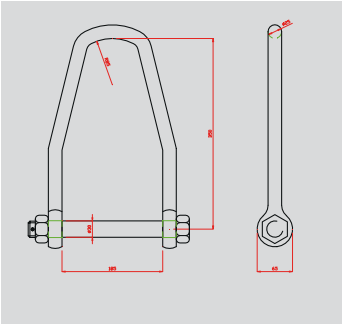


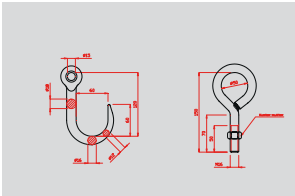


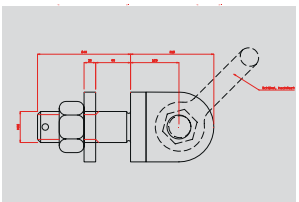




Testing special components





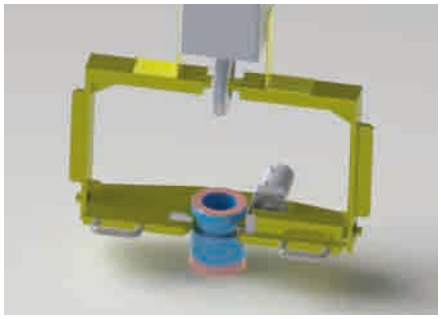


Construction in 3D

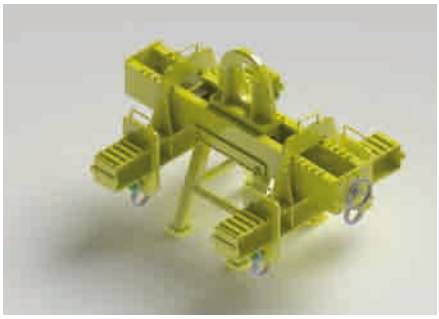
Painting rack

Three-armed traverse

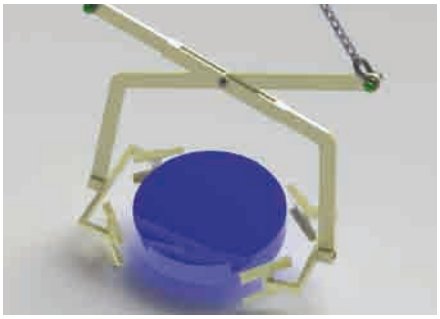
Turning mechanism
WLL 100 kg



Hoisting mechanism
WLL 3.000 kg



H-traverse with spindle



Cogged claw

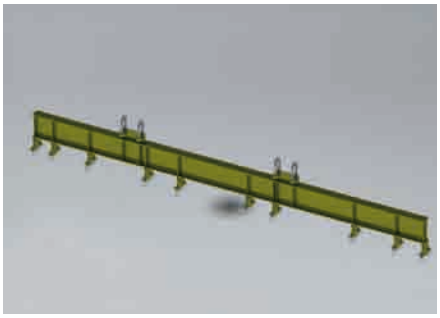
Wheel claw

Claw

F-traverse

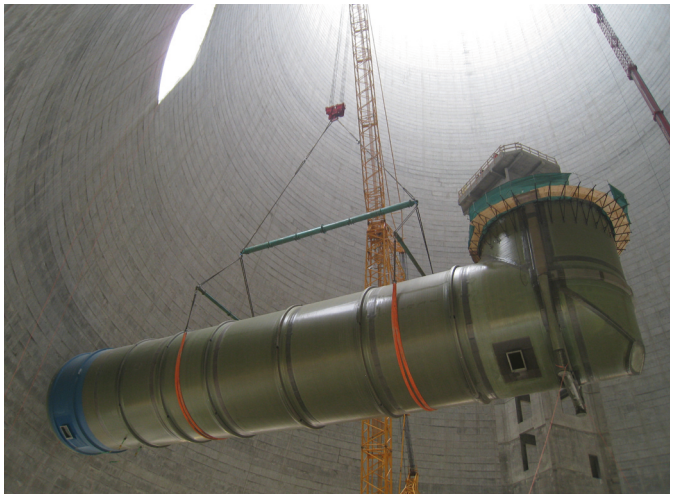
Inner claw for oily surface areas

Turning mechanism
WLL 40 t



Traverse

Special components

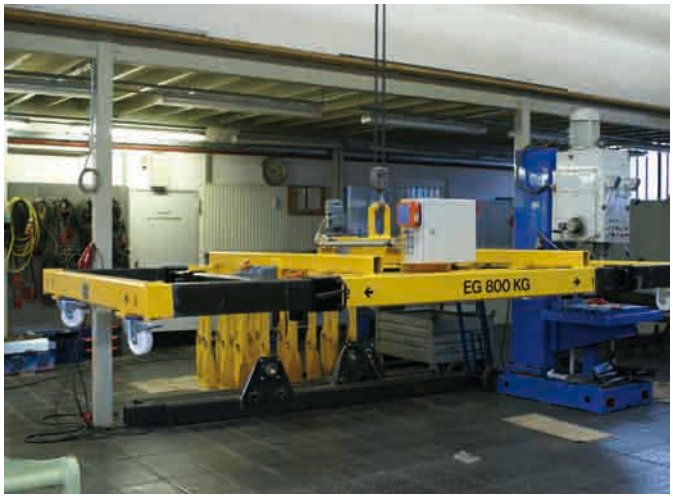


140-t-Double struts

16-t-Split traverse

10-t-Twisted traverse

160-t-Twisted traverse



Electrically adjustable traverse frame

Battery traverse

Special components

Belts for Big Willy

Claw for rolling

100-t-combination suspension gear Round sling/Grummet

A 100

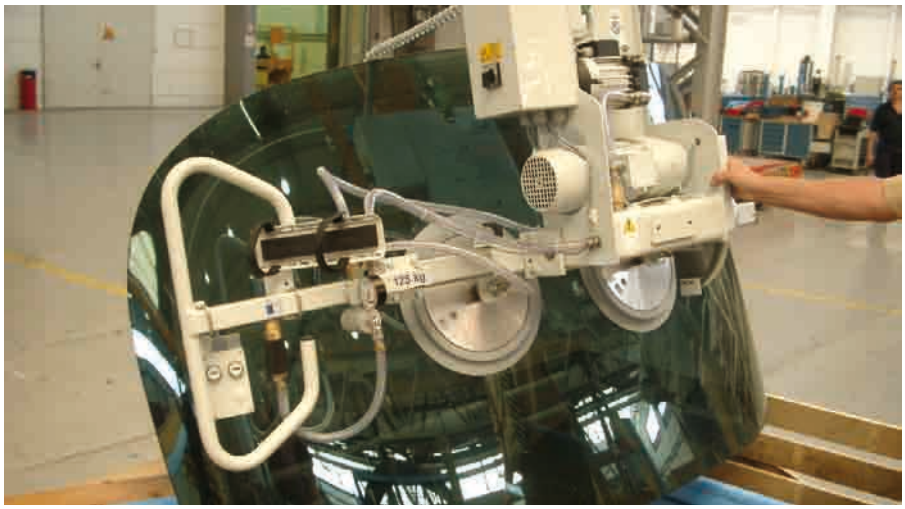
1-t-Bearing pincer grab

Special components

16-t-Chargier hooks

200-t-Double struts

ICE-Axle mounting cart



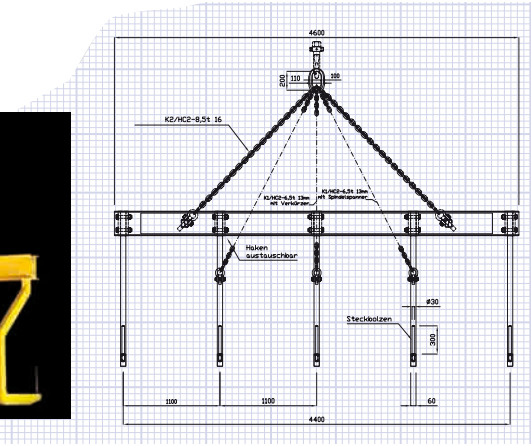
Vacuum traverse for ICE front pane

180-t-traverse

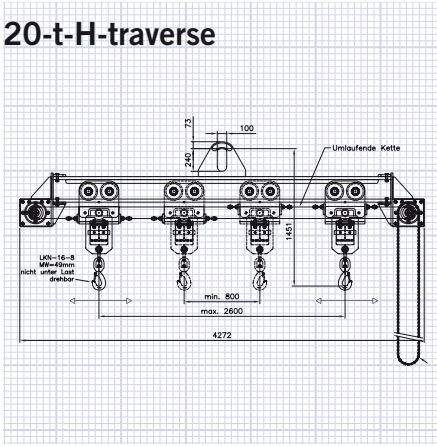
140-t-Double struts

Special components

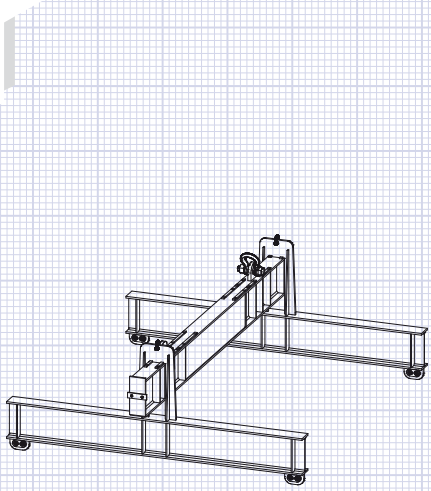
7-t-Curing oven-Fork lift



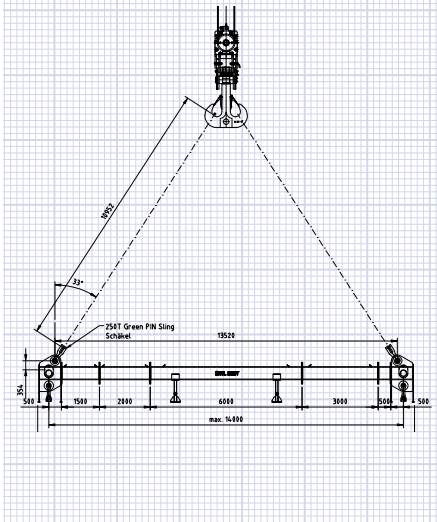
20-t-H-traverse



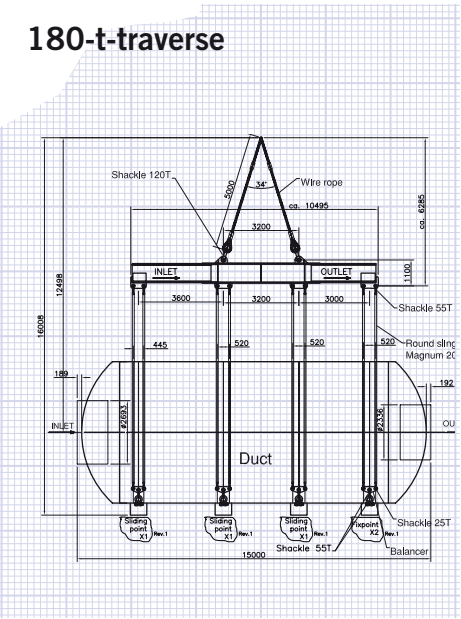
130-t-H-traverse



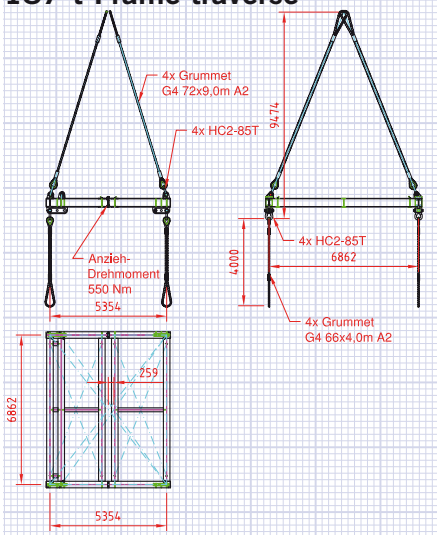
250-t-Split traverse



180-t-traverse

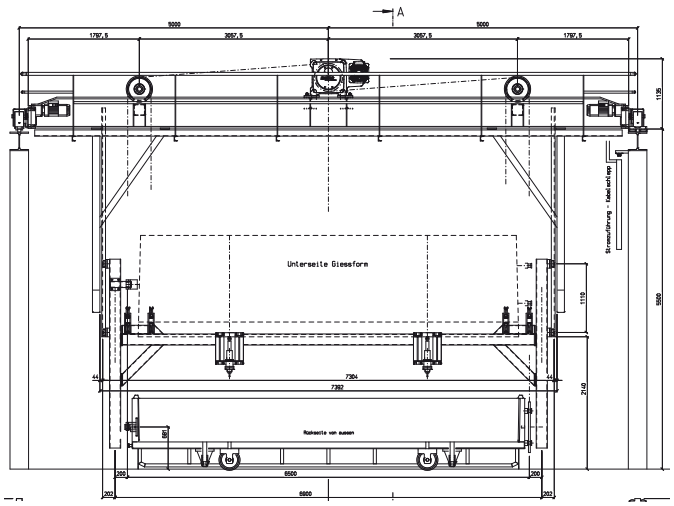


187-t-Frame traverse

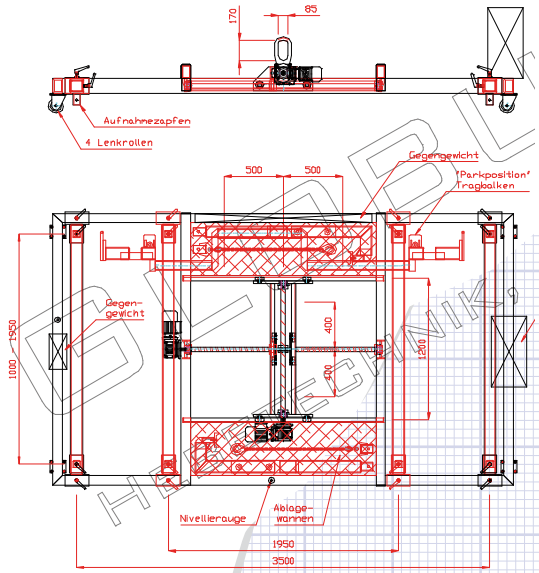


Load handling devices

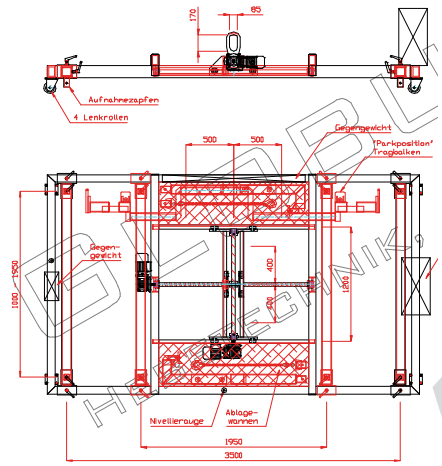
Slewing crane



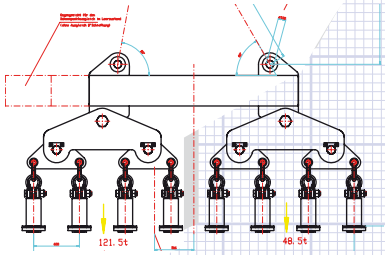
2-t-non-standard traverse



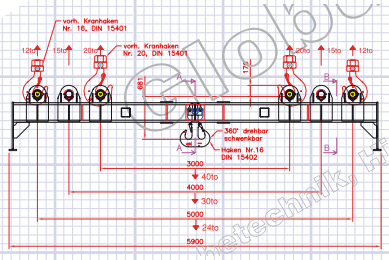
2-t-non-standard traverse



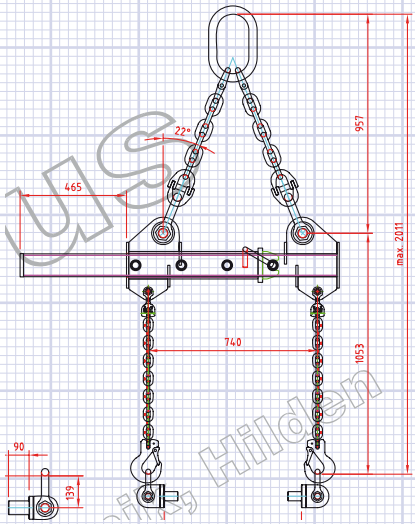
200-t-Alignment traverse



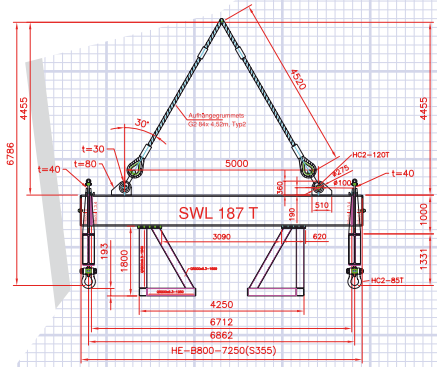
40-t-Twincrane-traverse



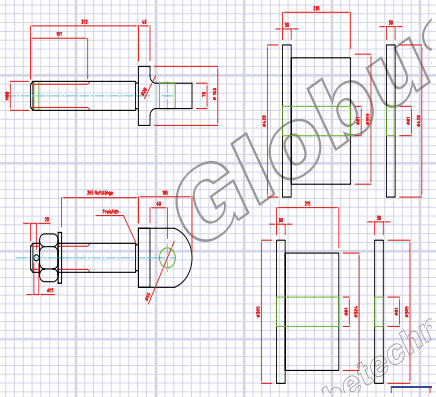
12,5-t-Split traverse



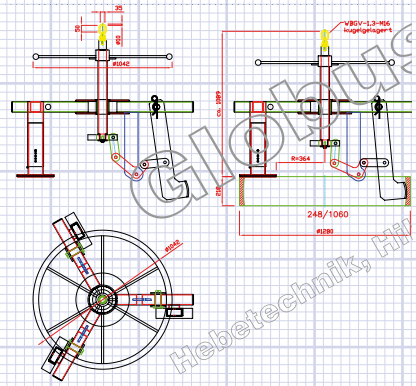
187-t-H-traverse



Bolts and shells



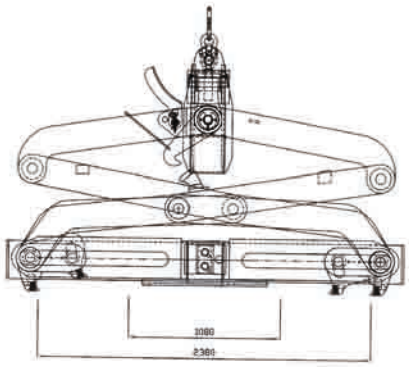
3-Arm-Grabber for TOZ-bearing



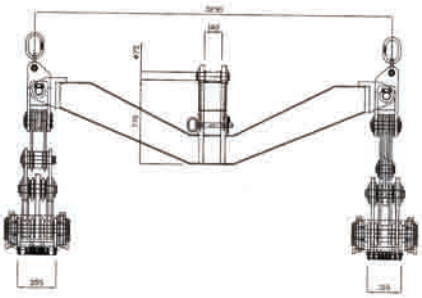
Load handling devices

Special components

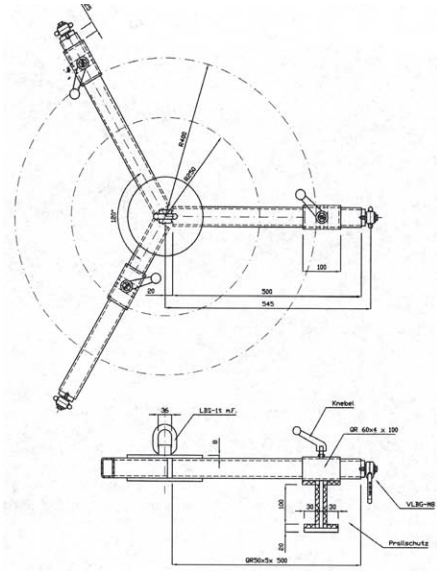
Sheet pliers traverse



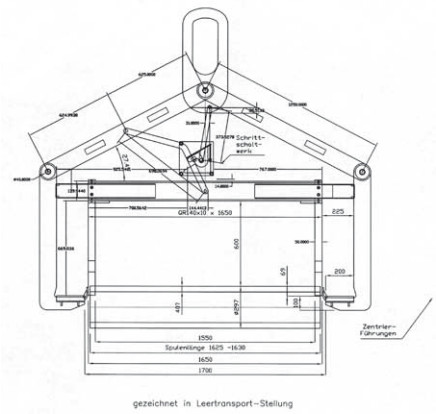
Side elevation Sheet pliers traverse



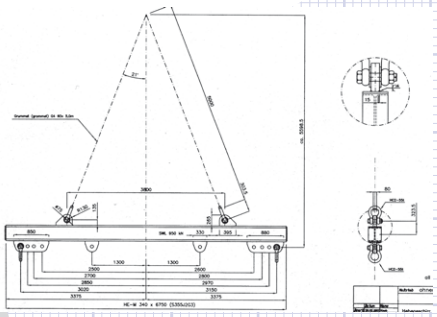
Disk grabber



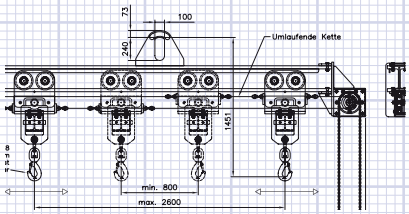
Return transport setting



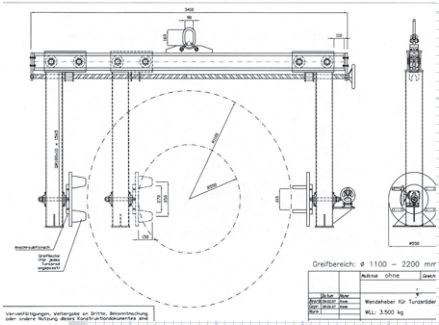
Lifting gear Zagros



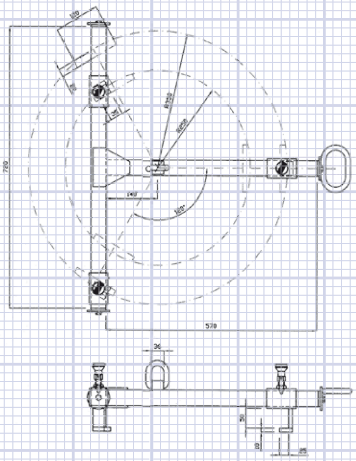
20 t H-traverse



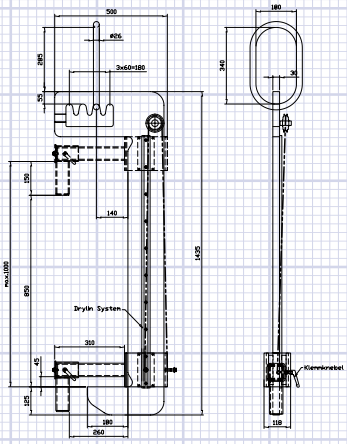
Turning lift for Turas wheels



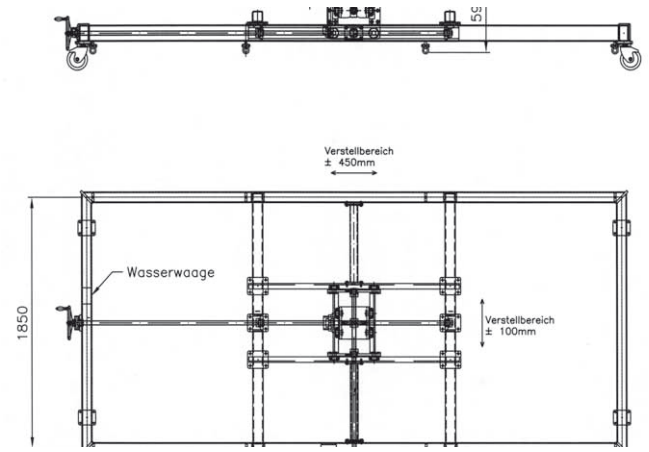
Disk grabber (outer)



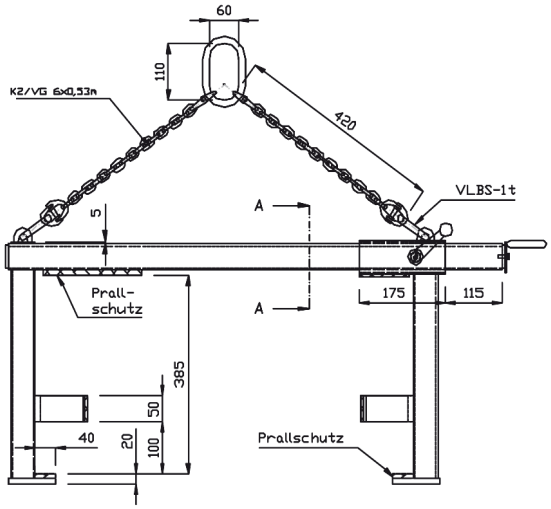
Coil hook with safety feature



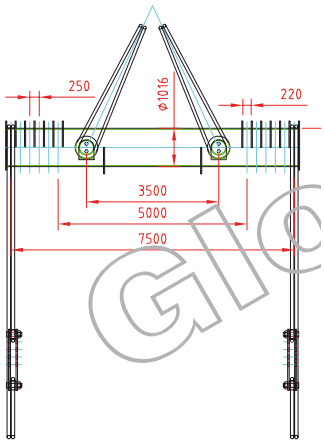
Frame traverse



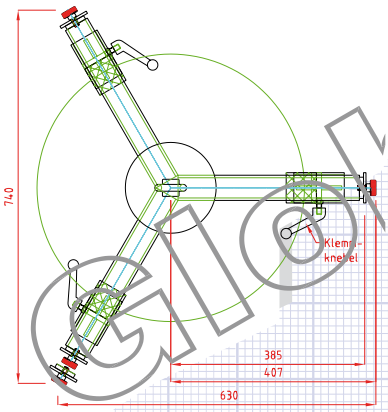
Twin arm grabber for rings



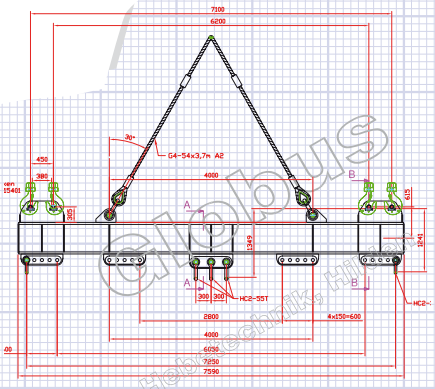
350-t-Split traverse



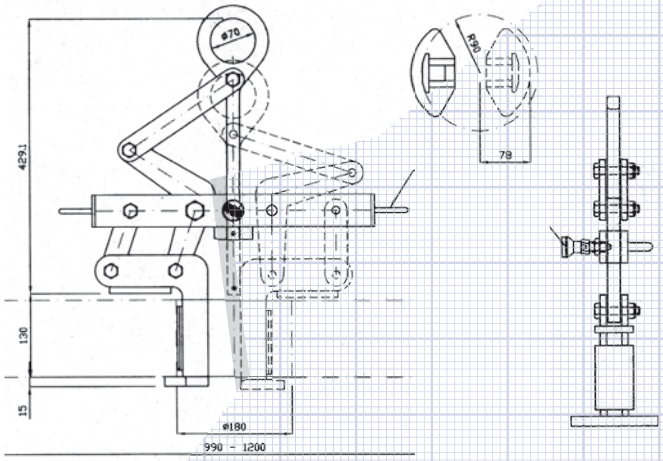
250-kg-Grabber



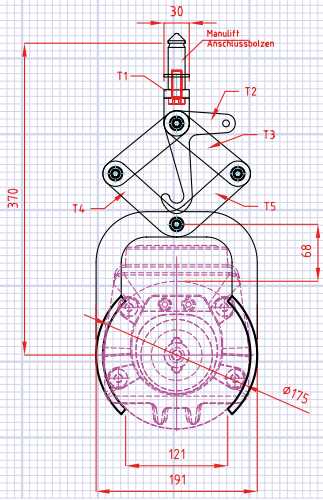
50-t-Bar traverse



Ring grabber (inner)

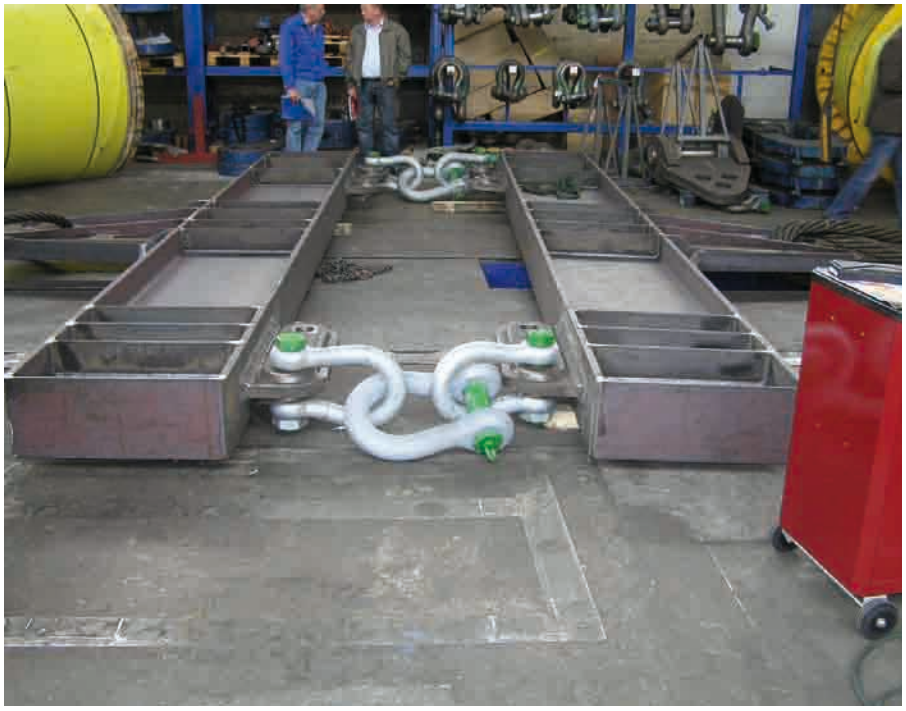


50-kg-non-standard pliers fore parts



Dynamic load tests on hydraulic 1200 t testing machine

GLOBUS stands for certified safety

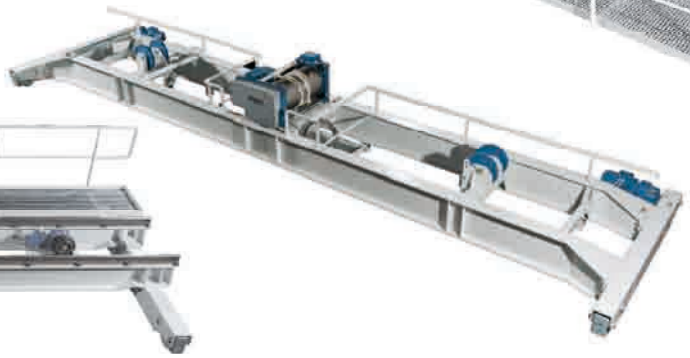


Load tests and weight measuring on cranes and traverses carried out globally by expert service staff.

Crane equipment

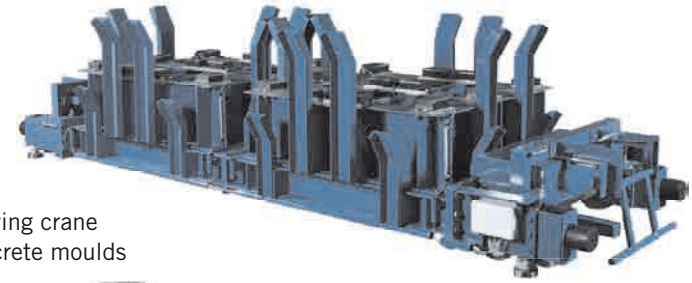
- Single load bridge cranes
- Double load bridge cranes
- Fully automatic cranes
- Ceiling walker cranes
- Wind trolleys in non-standard design
- Non-standard crane equipment
- Tests and repairs for aforementioned products

Transfer tables for porous concrete works



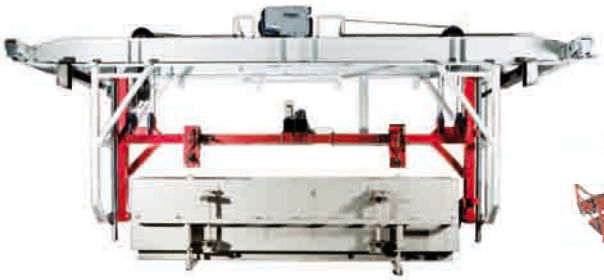
Materials handling facilities

Materials handling facilities
- Hydraulic lifting plate with and without handling equipment
- Chain conveyor for continuous operation
  e.g. heavy duty Carrying capacity 16 t
- Cable winch for steel cables
- Transport cart
  - for Chargier buckets, carrying capacity e.g. 40 t
  - for casting moulds, carrying capacity e.g. 16 t
  - for stone packages, carrying capacity e.g. 16 t
  - for handling carts, carrying capacity e.g. 16 t



Transport cart for Chargier buckets

Automatic slewing crane for porous concrete moulds



Non-standard design Wind trolley

Industrial electric systems

- Electrical controls
  - for crane facilities
  - for label printing machines
- Completely wired control boxes
- Mobile high frequency generators

Acclimatised control box for crane facilities

Hydraulic pliers for porous concrete stones

Load handling devices

Load-carrying equipment – Your inquiry

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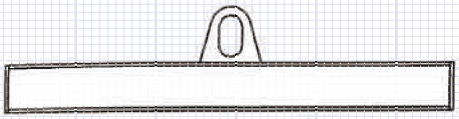
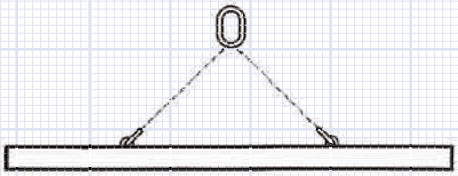
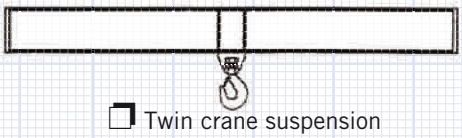


❒ Eye suspension



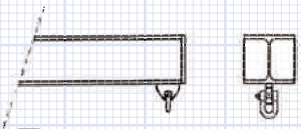
❒ Chain suspension

❒ Bolt suspension

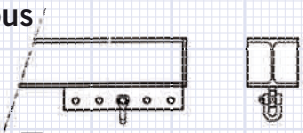


❒ Twin crane suspension

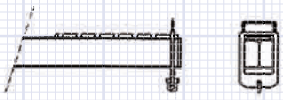
Globus



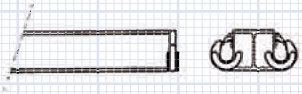
❒ Solid fixed stop



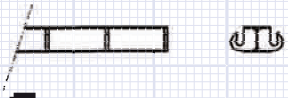
❒ Fixed multiple stop



❒ Frame adjustment



❒ Rigid eye hook



❒ Multi point rigid eye hook

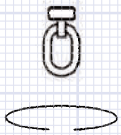
❒ Adjustable rigid eye hook

❒ Shackle

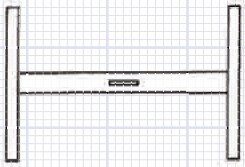
❒ Grommet hook

❒ Whirl hook

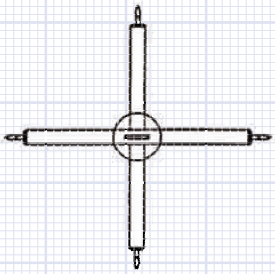
❒ Load stand



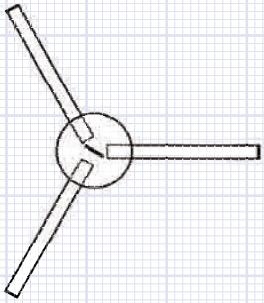
❒ Whirl stand



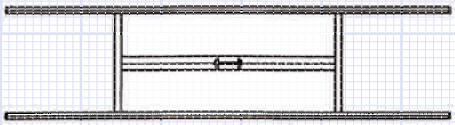
❒ H-traverse



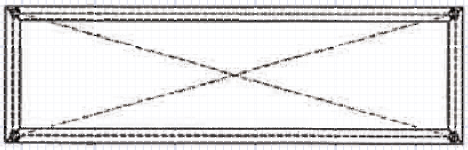
❒ Cross traverse



❒ Circular traverse



❒ Interconnection traverse



❒ Frame traverse

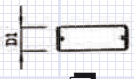
Load-carrying equipment – Your inquiry

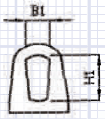
Copy pages and fax it to Globus +49 (0) 2103 40022

Carrying capacity for crane hooks [kg] Manufacturer [ ] Year of constr. [ ]

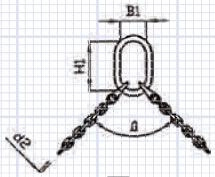
Simple hook [Nr.] Double hook [Nr.]

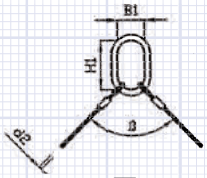
Description / Nr [ ]





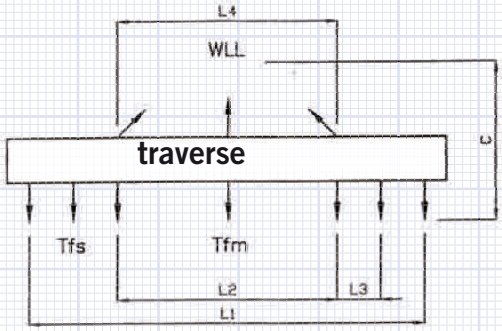
❒ One-point suspension ❒ Bolt ❒ Eye ❒ Other

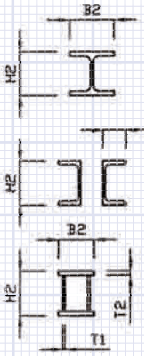




❒ Twin cable suspension ❒ Chain ❒ Steel cable ❒ Other

B1 [mm] H1 [mm] D1 [mm] d1 [mm] ß [ ]





❒ IPB ❒ IPBL ❒ IPE

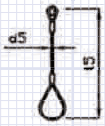
❒ U ❒ U

❒ Box ❒ Tube

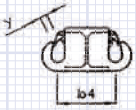
L1 [mm] L2 [mm] L3 [mm] L4 [mm] C [mm]

B2 [mm] H2 [mm] T1 [mm] T2 [mm]

Stop points Type [ ] Amount [St] Tfs [kg] Tfm [kg]



❒ Chain ❒ Steel cable ❒ Hook ❒ Whirl hook ❒ Shackle



❒ Rigid eye hook ❒ LBS ❒ Other

y [mm] d5 [mm] l5 [mm] b4 [mm]

Company: _____

Address/Postbox: _____

Area code/Location: _____

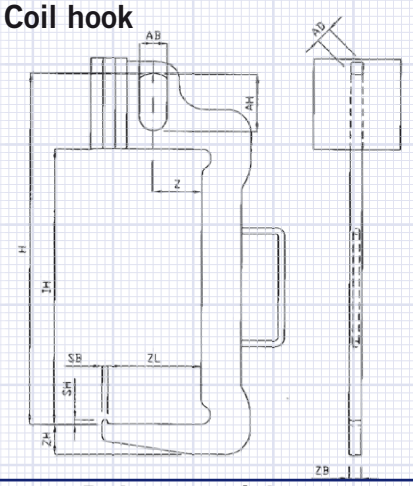
Telephone: _____

Fax: _____

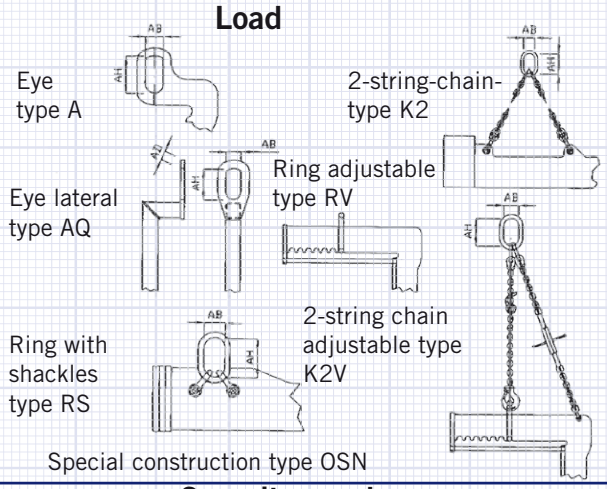
Coil hook/traverses – Your inquiry

Copy pages and fax it to Globus +49 (0) 2103 40022

Coil hook



Load



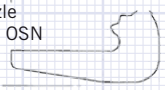
Balance weight

Coil hook without balance weight type C

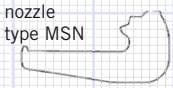
Coil hook with balance weight type CGG

Security nozzle

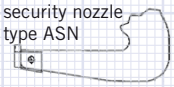
without security nozzle type OSN



with security nozzle type MSN



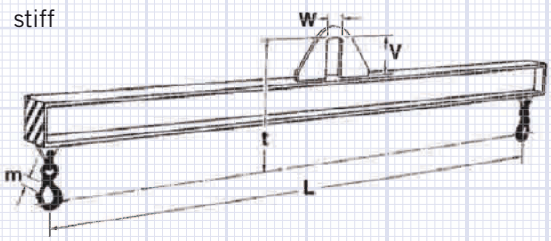
detachable security nozzle type ASN



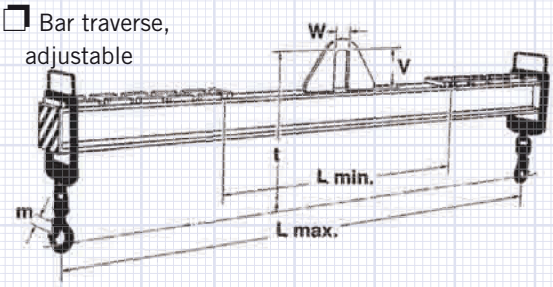
WLL kg	ZL mm	ZH mm	ZH mm	IB mm	Z mm	H mm	AB mm	AH mm	AD mm	SB mm	SH mm	Balance type	Security nozzle type	Load type

Traverse

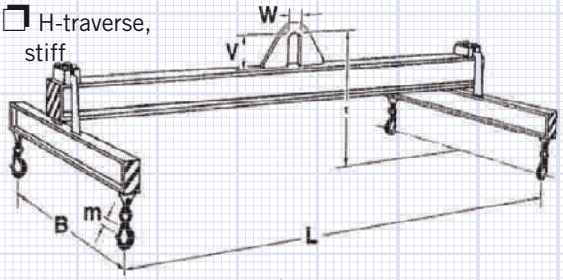
❒ Bar traverse, stiff



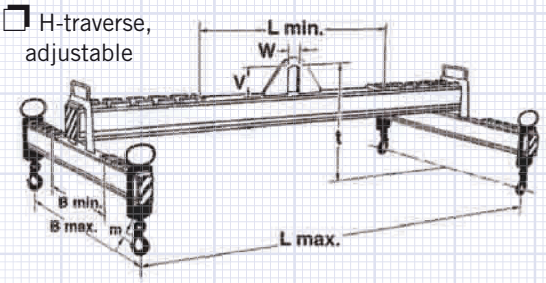
❒ Bar traverse, adjustable



❒ H-traverse, stiff



❒ H-traverse, adjustable



WLL kg	V mm	W mm	t mm	L mm	Lmin mm	Lmax mm	B mm	Bmin mm	Bmax mm

Company: _____

Address/Postbox: _____

Area code/Location: _____

Telephone: _____

Fax: _____

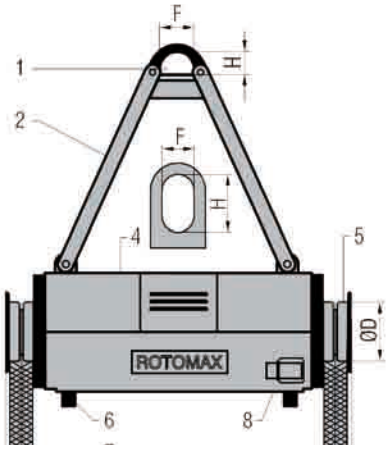
Rotomax® Load turning devices

Secure turning of loads

Simple, secure and fast load turning with Rotomax!

Ignorance while handling heavy or bulky parts is often the beginning of the end. When you move, turn and rotate with a „let's do it" attitude and inadequate work equipment, accidents, danger to life and limb and not least damage to the often-times expensive goods are the consequences. Here, Rotomax-load turning devices can help rotate and turn bulky goods safely and easily, gently and softly without damage and without accidents! Rotomax-load turning devices are manufactured for various applications, e.g. for turning of machine bodies, concrete parts, welded structures and casting molds for the foundry industry.

Type	Load capacity [kg]	Band distance [mm]	Heights [mm]	Rotating speed [m/min.]	Weight (without turning equipment) [kg]	Price / Unit €
Rotomax-Compact R with fixed band distance						
R3000/0.6	3000	600	770	2,5	190	on request
R3000/1.1	3000	1100	1210	2,5	235	on request
R3000/2.0	3000	2000	865	2,5	450	on request
R5000/0.6	5000	600	770	2,5	200	on request
R5000/1.1	5000	1100	1240	2,5	255	on request
R5000/2.0	5000	2000	865	2,5	470	on request
R10000/1.5	10000	1500	1880	2,5	1000	on request
R10000/3.0	10000	3000	1265	2,5	1350	on request
Rotomax-Vario RV with manual adjustable band distance						
RV5000/2.0	5000	800-2000	875	3,1	390	on request
RV5000/3.0	5000	800-3000	875	3,1	530	on request
RV5000/4.0	5000	800-4000	875	3,1	655	on request
RV10000/3.0	1000	1200-3000	1130	3,1	1500	on request



Rotomax-Compact R with fixed band distance. The part to be turned can be stopped in any position.

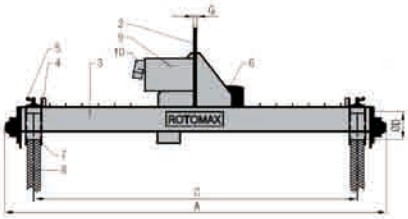
Rotomax-Vario RV with manual adjustable band distance

Other capacities or constructions on request!

- Capacity up to 150000 kg
- Band distance electrically adjustable
- Single device for tandem operation
- Automatic weight compensation bypressing a button or automatically
- Remote control
- Patent-shackle
- Special truss to shorten the height
- Lifting bands with PU-coating
- Opertion with chains

The basics include:

- Mounting for crane hooks
- CEE-plug, 5-poles
- Control panel including control cables
- Paint finish in daffodil yellow RAL 1007
- PES-special-bands (10 m long) with end and 2 in-between loops
- Patent-shackle



Stop means-wardrobe

Order at a reasonable price

In the everyday hustle and bustle of production, orders can easily be lost and the stop means are lying scattered in the way! Here, the new stop means-wardrobe can certainly be helpful. The strong steel frame in the colour RAL 5015 (sky blue) is used and serves with welded hooks as a central storage location for hanging-up stop means and it is also suitable for ropes, chains, lifting belts, slings, loading gear and much more. The stop means-wardrobe is delivered fully assembled and labelled on both sides and can immediately be put into operation. Well suited for use in the hall.

- Detached strong steel construction, neatly welded
- Coated in the colour RAL 5015 (sky-blue) - minimum layer thickness 70 µm with welded hook
- Suitable for ropes, chains, lifting bands, round slings and loading gear
- Floor mounting not required. Maximum load capacity of the stand 1.000 kg
- The stop means stand is fully assembled and labeled on both sides delivered
- Immediate commissioning possible

Stationary version

Type	Load Capacity [kg]	Hook amountl	Weight [kg]	Height [mm]	Width [mm]	Depth [mm]	Price €
AG1500	1000	13	ca. 80	1800	1520	920	on request
AG2000	1000	17	ca. 90	1800	2020	920	on request

If necessary, you can firmly mount the stop means-wardrobe with the provided holes to the ground.

Mobile version

Type	WLL [kg]	WLL per hook [kg]	Hook amount	Weight [kg]	Height [mm]	Width [mm]	Depth [mm]	Price €
AG1500	1000	75	13	ca. 90	1975	1520	1020	on request
AG2000	1000	75	17	ca. 100	1975	2020	1020	on request

The mobile version of the stop means-wardrobe is equipped with 4 hinged plastic steering wheels (360 °) including wheel stops and direction locks.

Wall version

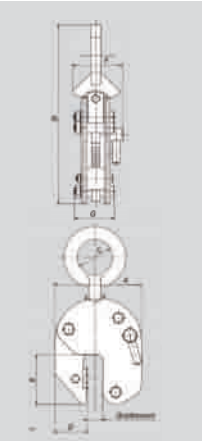
Type	WLL [kg]	WLL per hook [kg]	Hook amount	Weight [kg]	Height [mm]	Width [mm]	Depth [mm]	Price €
AG1500	400	60	7	ca. 10	132	1520	145	on request
AG2000	500	60	9	ca. 15	132	2020	145	on request

The mounting hardware for the wall design of the Stop means-wardrobe is NOT included and must be provided on site. For mounting, we recommend HVZ dynamic shear connector M12. The carrying capability of the wall must be provided in accordance with the existing vertical force of 3.5 kN at full load tested at 400 or 500 kg.

Metal sheet grabber

Metal sheet grabber TBL with security interlock

For the transport of individual vertical metal sheets and steel plates as well as to lift and turn. Thanks to the security interlock the fitted grabber stays clamped. The surface hardness of the transported material has to be below HRC 30!



Type	WLL [t]	Grabbing area [mm]	Weight [kg]	Size [mm] A	B	C	D	E	F	Order-No.	Price/Unit €
SK-TBL 0,5	0,5	0-16	1,4	96	194	30	31	48	-	HE.SK.TBL.05	175,00
SK-TBL 1,0	1,0	0-20	3,0	126	225	50	49	70	70	HE.SK.TBL.10	200,00
SK-TBL 2,0	2,0	0-32	8,0	192	312	80	74	96	82	HE.SK.TBL.20	247,00
SK-TBL 3,0	3,0	0-32	9,0	192	312	80	74	96	89	HE.SK.TBL.30	313,00
TBL 4,0 S	4,0	0-32	12	197	339	80	68	93	110	HE.TBL.S.40	371,00
TBL 4,0 L	4,0	30-60	18	228	339	80	68	100	110	HE.TBL.L.40	419,00
TBL 6,0 S	6,0	0-50	24	292	442	89	95	143	129	HE.TBL.S.60	531,00
TBL 6,0 L	6,0	50-100	30	362	482	89	116	143	129	HE.TBL.L.60	546,00

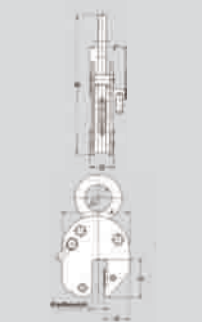
Higher WLL on request

Info

The surface hardness of the transportation goods should not exceed HRC 30. Minimum load is 10% of the given load capacity!

Metal sheet grabber TBS with slewing eye and safety lock

Can be assembled at different positions on the metal sheet due to the cardanic suspension (e.g. 2 twin grabbers can be used). Due to the swing slope slides the clamping strength is suitable on the diagonal pull. The surface hardness of the transportation material has to be below HRC 30!



Type	WLL [t]	Grabbing area [mm]	Weight [kg]	Size [mm] A	B	C	D	E	F	G	Order-No.	Price/Unit €
SK-TBS 1,0	1,0	0-20	4,5	126	270	50	49	70	95	63	HE.SK.TBS.1	306,00
SK-TBS 2,0	2,0	0-32	13,5	192	382	80	74	96	132	92	HE.SK.TBS.2	388,00
SK-TBS 3,0	3,0	0-32	13,5	192	382	80	74	96	132	92	HE.SK.TBS.3	422,00

Higher WLL on request

Metal sheet grabber Shark 1,0 - 2,0 t

For the vertical transport, for the lifting and turning of metal sheets and steel-plates at 180 degrees. The twistable flange guarantees the full connection with the gear tooth system. The surface hardness of the transported material has to be below HRC 40.

WLL [t]	Grabbing area [mm]	Order-No.	Price/Unit €
1,0	0 - 20	Shark 1,0	238,00
2,0	0 - 32	Shark 2,0	262,00

Higher WLL on request

Info

The surface hardness of the transportation goods should not exceed HRC 40. Can be used up to HRC with special gearing. The minimum load is 10% of the given load capacity!

All-round grabber

All-round grabber TAG

The big grabbing area enables the use for the diversity of transport duties in the steel and apparatus engineering, with the feeding of machine tools and production facilities etc. Through the spring tension of the clamp jaw the grabber is attached to the transport material in empty state. The grabbers are available with up to 1,25 t load capacity and a protective layer on the flanges. All-round grabbers are available up to 2,0 t load capacity and have round link chains and are equipped with Fleyer chains with 3,0 t load capacity. The surface hardness of the transportation material has to be below HRC 30!

WLL [t]	Grabbing area [mm]	Order-No.	Price/Unit €
0,35	0 - 100	TAG 0,35/100	469,00
0,35	90 - 200	TAG 0,35/200	634,00
0,75	0 - 100	TAG 0,75/100	513,00
0,75	90 - 200	TAG 0,75/200	692,00
1,25	0 - 100	TAG 1,25/100	570,00
1,25	90 - 200	TAG 1,25/200	756,00
2,00	0 - 100	TAG 2,0/100	708,00
2,00	90 - 200	TAG 2,0/200	913,00
3,00	5 - 90	TAG 3,0/90	921,00
5,00	5 - 90	TAG 5,0/90	1.148,00
5,00	80 - 170	TAG 5,0/170	1.326,00
10,00	0 - 100	TAG 10,0/100	2.431,00
10,00	100 - 200	TAG 10,0/200	2.894,00

Joist grabber

Joist grabber TTG

Suitable for the horizontal transport of joists, metal sheets, profiles etc. Due to the staggered suspension shackle the transport of joists can be mostly done in a horizontal way of positioning the carrier flange. With long joists a pair wise use is recommended in connection with a traverse.

WLL [t]	Grabbing area [mm]	Order-No.	Price/Unit €
0,5	0 - 20	TTG 0,5	341,00
1,5	0 - 30	TTG 1,5	375,00
3,0	0 - 35	TTG 3,0	469,00
4,5	0 - 40	TTG 4,5	719,00
7,5	0 - 45	TTG 7,5	955,00

Joist grabber TTR

For the vertical transport and for swap in and out of joists. Through the extensive salient suspension shackle on the joist the nearly vertical positioning of the carrier flange is reached.

WLL [t]	Grabbing area [mm]	Order-No.	Price/Unit €
0,75	5 - 16	TTR 0,75	371,00
1,5	5 - 25	TTR 1,5	393,00
3,0	5 - 28	TTR 3,0	539,00

SPG – Non-standard lifting gear for steel cover plates

- For cover and steel plates
- With truncation

The lifting accessorie's angle of inclination β must not exceed 45°!

Type	up to metal thickness [mm]	WLL 45° angle [t]	Order-No.	Price/Unit €
SPGZ-6x2m	35	1,5 t	KG.SPG2.06.0000	476,00
SPGZ-8x3m	40	2,8 t	KG.SPG2.06.0000	565,00

Lifting clamps

Lifting clamp THS

With security interlock is suitable for pair wise application for the horizontal transport of metal sheets as well as slightly bend metal sheets and as single clamp - for the feeding of scissors, presses, rollers etc. During pair wise application with a max. split angle of 60°

WLL [t]	grabbing area [mm]	Order-No.	Preis/Unit €
0,75	0 - 20	THS 0,75	322,00
1,5	0 - 35	THS 1,5	355,00
3,0	0 - 40	THS 3,0	467,00
4,5	0 - 40	THS 4,5	713,00

Lifting clamp TWH

Is suitable for pair wise application for the horizontal transport of individual metal sheets without bending and for bundled metal packages. Unsuitable for thin metal sheets with extensive bending. Lifting clamp with protective coating for optional shipping. The split angle between the chain and cable strings must not exceed 90°.

WLL/pair [t]	grabbing area [mm]	Order-No.	Preis/Unit €
1,5	5 - 60	TWH 30	178,00
2,5	10 - 70	TWH 50	224,00
3,5	10 - 80	TWH 70	277,00
5,0	10 - 102	TWH 100	515,00

Lifting clamp TCH

For horizontal metal sheet transport of individual rough metal sheets from approx. 5 mm thickness and for bundled metal sheet packages. The clamp's design TCH 1,0 is different from that of the displayed clamp. The load-carrying capacity refers to 2 clamps with a max. split angle of 90°.

WLL/pair [t]	grabbing area [mm]	Order-No.	Preis/Unit €
1,0	0 - 50	TCH 1,0	146,00
2,0	5 - 32	TCH 2,0	177,00
4,0	5 - 50	TCH 4,0	235,00
6,0	5 - 75	TCH 6,0	306,00

Wrench clamps

The clamp has to be adjuste to the transport material through the use of the threaded spindle. With the beginning of the crane traction a canting effect is reached through the pivoted mounting of the pawl which causes a strong clamping. Suitable for metal sheets with big surface hardness.

Twist clamp TSH

For vertical and horizontal pull is suitable for lifting, turning, pulling of metal sheets, joists, steel constructions etc.

WLL [t]	grabbing area [mm]	Order-No.	Price/Unit €
1,5	0 - 32	TSH 1,5	315,00
3,0	0 - 50	TSH 3,0	438,00
5,0	0 - 80	TSH 5,0	730,00

Gentle grab TSB with chain

Is especially suitable for sensitive surfaces made of plywood or steel plates. The bremsit®-protective layer has a high friction coefficient. Big grabbing area. The material has to be absolutely oil free without a drift layer.

WLL [t]	grabbing area [mm]	Order-No.	Price/Unit €
0,35	0 - 65	TSB 0,35/65	839,00
0,75	0 - 65	TSB 0,75/65	942,00
1,25	0 - 65	TSB 1,25/65	1.038,00

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GLOBUS – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

Globus introduces faster on-site Service

Enerpac Screwing Service – powered by Globus!

Enerpac has been our partner for 20 years in high pressure hydraulics. So they can offer their customers a better service, both companies have made an innovative step in the field of screwing devices: since February 2012, Enerpac screwing services – powered by Globus – leads in Germany.

Faster on-site service
The Globus screwing service enables the provision of services in the field of screwing devices and the solution of problems directly on-site. This ensures that the customer can easily and quickly benefit from usual quality.

The industry has responded very positively to this new service. The screwing service is housed in a transporter that is fully equipped with Enerpac screwing devices and the required calibration and repair equipment.

The screwing service provides excellent service and targeted, individual support, so that in each case the right tool for the controlled hydraulic tightening and loosening of screw connections can be selected. The Enerpac screwing device consist of a complete range of professional screwing tools. These include torque multiplier, torque wrench, tension cylinders, nut splitters, pumps, pipes, flange and maintenance tools that have been specifically developed for safe and efficient use to increase the productivity.

Demonstration, calibration and repair
The Globus screwing service will, on request and at no obligation, demonstrate the Enerpac screwing devices on site. In addition, the service transporter is equipped with all tools for calibration and repair of all manufacturers required screwing tools. This allows the high quality and precision to be maintained and meet all requirements.

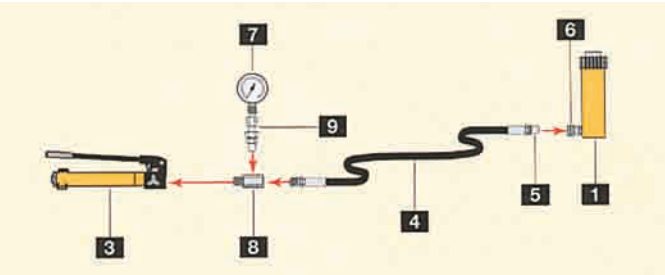
Trained staff provide the highest security
The staff of the screwing service was schooled in Enerpac's training center and are experts in the field of maintenance, repair and calibration of screwing devices. When the need arises, the employees of customers will be schooled in the safe and efficient handling of screwing devices.

Demonstration
The Globus screwing service transporter is on the road for our customers. Get to know the service. Make an appointment with:
Miss Elsbeth Löken
+49 (0) 2103 944218
E-Mail e.loeken@glds.de
or with:
Mr. Walter Beek
+49 (0) 152 22555046
E-Mail w.beek@glds.de

Hydraulic

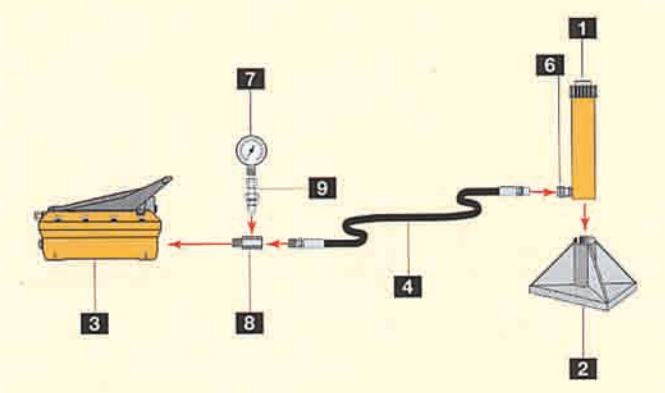
ENERPAC

Low-end pushing devices, e.g. with a press. The manual pump allows for controlled cylinder extension. However it may require numerous pump strokes in case of extended applications, when pressure force is equal to or exceeds 25 tons.

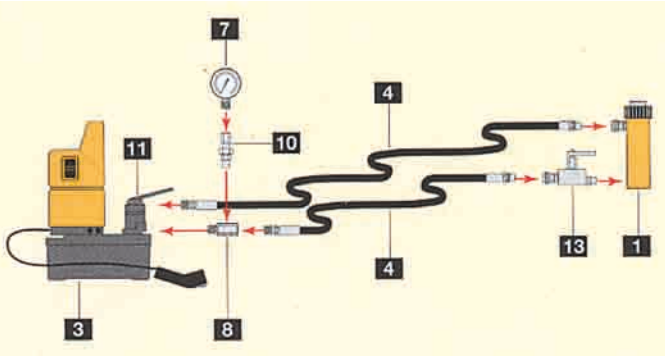


1 **Cylinder**
Facilitates transmission of hydraulic power.
2 **Cylinder base**
Used for lifting heavy loads where extra stability is required.
3 **Pump**
Provides hydraulic flow.
4 **Hydraulic tube**
For transportation of hydraulic liquid.
5 **Coupling plug**
Facilitates swift connection of the tube with system components.
6 **Coupling muff**
Facilitates swift connection of tube end with system components
7 **Manometer**
Facilitates surveillance of pressure in the installation.
8 **Manometer Adapter**
For swift and trouble-free manometer installation.
9 **Screwed joint**
Facilitates accurate adjustment of valves and/or manometers. Is used when connected units cannot be twisted.
10 **Self-absorbing Valve V-10**
Used to protect the manometer from damage by shock pressure under sudden release of the load in the hydraulic system. Enables accurate positioning of the manometer prior to tightening.
11 **4-way Control Valve**
Controls direction of motion in double-effective systems.
12 **3-way Control Valve**
Controls direction of motion in low-end systems.
13 **Security valve**
Controls the release of loads in lifting processes.
14 **Distributor**
Facilitate the connection of multiple cylinders to a power unit.
15 **Cut-off Valve**
Controls the flow of hydraulic liquid to or from the cylinders.

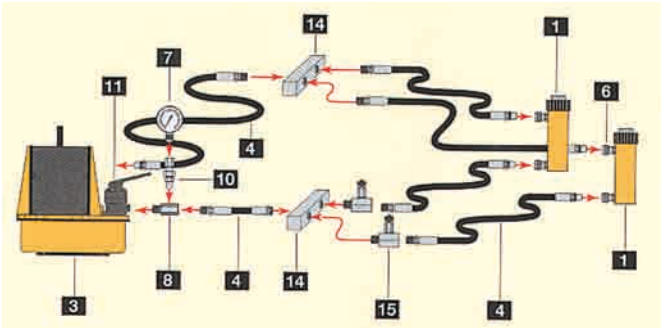
Low-end cylinders with long stroke to lift loads.



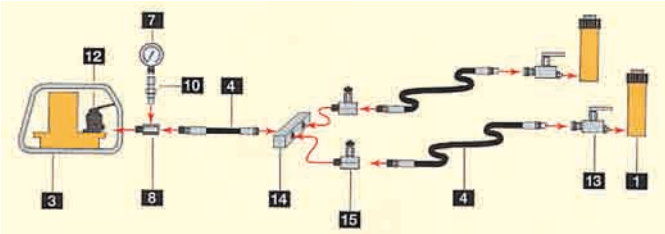
Setup of a double-efficient cylinder to lift loads, where slow and controlled lowering of the load must be enabled.



With double-effective cylinders for pushing/pulling.



Devices to lift a load in two locations with low-end end cylinders.



Hydraulic

Onshore

Enerpac has developed a range of products and solutions for the Wind Power Industry. Turbine and component manufacturers, installation companies as well as maintenance and service providers can rely on Enerpac as the provider of the solutions they need. Based on our experience in the oil and gas market, Enerpac is also in a position to provide appropriate solutions for high level requirements such as application in Offshore wind farms.

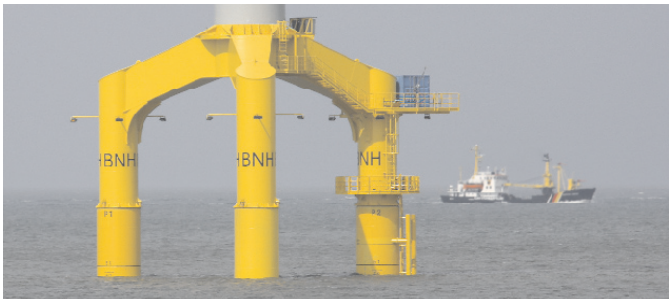
Calibration of the turbine base through an SPS-controlled synchronized stroke system.

Prestress cylinder for rotorblade screws.

Torque key for tightening the screws.

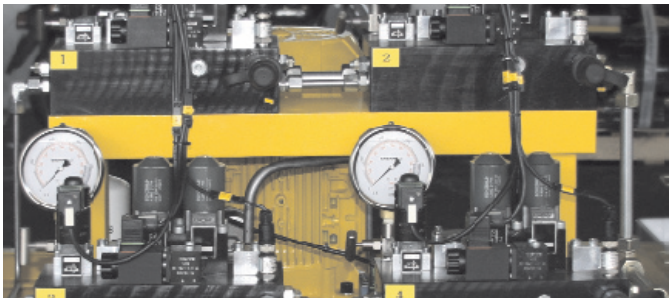
Offshore

Wind turbine manufacturers BARD Engineering GmbH developed a unique blueprint as a basis for their wind turbines. The tower is placed on a cross-bracing base which rests above the water surface on three main pillars. Upon accurate and swift horizontal leveling of this cross-bracing base, Enerpac's synchronized stroke system is used.



Unique wind turbine base concept: The tower rests on the triple connection piece.

One of the nine Standard-700-Bar hydraulic cylinders.



The hydraulic heart of the synchronized stroke equipment.

Single-acting cylinder 700 bar

Wear-resistant cylinders that are easy to install

From left to right:
RC-506, RC-2510, RC-154, RC-10010, RC-55, RC-1010

- Golden ring version, absorb excentric loads without wear to the cylinder parts
- Chrome-plated steel piston protects against rust and surface flaking
- Piston return spring allows rapid retraction of the piston
- All models have an enamel finish for increased corrosion protection
- External thread on the cylinder head, inside thread on the piston rods and female threaded mounting hole on the cylinder bottom allow for easy installation.

Cylinder type in t [kN]	Stroke [mm]	Effective piston surface [cm²]	Oil volume [cm³]	Height retracted [mm]	Weight [kg]	Order-No.	Price/ Unit €
5 (45)	16	6,5	10	41	1,0	RC.0050.00**	237,00
5 (45)	25	6,5	16	110	1,0	RC.0051.00	268,00
5 (45)	76	6,5	50	165	1,5	RC.0053.00	298,00
5 (45)	127	6,5	83	215	1,9	RC.0055.00*	331,00
5 (45)	177	6,5	115	273	2,4	RC.0057.00	366,00
5 (45)	232	6,5	151	323	2,8	RC.0059.00	407,00
10 (101)	26	14,5	38	89	1,8	RC.0101.00	281,00
10 (101)	54	14,5	78	121	2,3	RC.0102.00*	311,00
10 (101)	105	14,5	152	171	3,3	RC.0104.00*	345,00
10 (101)	156	14,5	226	247	4,4	RC.0106.00*	382,00
10 (101)	203	14,5	294	298	5,4	RC.0108.00	424,00
10 (101)	257	14,5	373	349	6,4	RC.1010.00*	471,00
10 (101)	304	14,5	441	400	6,8	RC.1012.00	524,00
10 (101)	356	14,5	516	450	8,2	RC.1014.00	580,00
15 (142)	25	20,3	51	124	3,3	RC.0151.00	388,00
15 (142)	51	20,3	104	149	4,1	RC.0152.00	431,00
15 (142)	101	20,3	205	200	5,0	RC.0154.00*	478,00
15 (142)	152	20,3	308	271	6,8	RC.0156.00*	530,00
15 (142)	203	20,3	411	322	8,2	RC.0158.00	589,00
15 (142)	254	20,3	516	373	9,5	RC.1510.00	652,00
15 (142)	305	20,3	619	423	10,9	RC.1512.00	725,00
15 (142)	356	20,3	723	474	11,8	RC.1514.00	804,00
25 (232)	26	33,2	86	139	5,9	RC.0251.00	463,00
25 (232)	50	33,2	166	165	6,4	RC.0252.00*	514,00
25 (232)	102	33,2	339	215	8,2	RC.0254.00*	570,00
25 (232)	158	33,2	525	273	10,0	RC.0256.00*	632,00
25 (232)	210	33,2	697	323	12,2	RC.0258.00	701,00
25 (232)	261	33,2	867	374	14,1	RC.2510.00	779,00
25 (232)	311	33,2	1033	425	16,3	RC.2512.00	864,00
25 (232)	362	33,2	1202	476	17,7	RC.2514.00	959,00
30 (295)	209	42,1	880	387	18,1	RC.0308.00	1.187,00
50 (498)	51	71,2	362	176	15,0	RC.0502.00	959,00
50 (498)	101	71,2	719	227	19,1	RC.0504.00	1.065,00
50 (498)	159	71,2	1131	282	23,1	RC.0506.00*	1.182,00
50 (498)	337	71,2	2399	460	37,6	RC.5013.00	1.571,00
75 (718)	156	102,6	1601	285	29,5	RC.0756.00	2.006,00
75 (718)	333	102,6	3417	492	59,0	RC.7513.00	2.666,00

* Available as set.
** RC-50-cylider have a non-removable, drilled pressure piece and no external thread

The predetermined standard of the industry

Press parts
All RC-cylinders are equipped with replacable, hardened and grooved pressure parts.

Couplings
All models are delivered with a CR-400-coupling for connecting to hoses of the HC-series.

Gauge
The window to the sole of your hydraulic. Do not overload your hydraulic devices, please contact us!

Short-stroke cylinder RSM/RCS

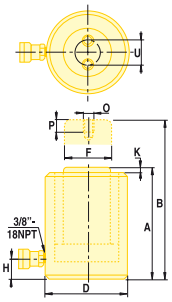
The maximal power/height ratio

- Hard chromed piston out of quality steel
- Compact, flat design for use where other cylinders are too large
- Grooved piston ends make press pieces obsolete
- All models with burned-in enamel

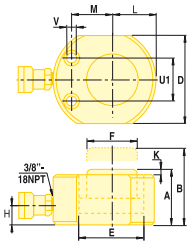
Cylinder type t [kN]	Stroke [mm]	Height retracted [mm]	Cylinder Outside-Ø [mm]	Oil volume [cm³]	Order-No.	Price/ Unit €
5 (45)	6	32	58 x 41	4	RSM.050.00*	231,00
10 (101)	12	43	82 x 55	18	RSM.100.00	299,00
20 (201)	11	51	101 x 76	32	RSM.200.00	388,00
30 (295)	13	58	117 x 95	55	RSM.300.00	504,00
45 (435)	16	66	140 x 114	99	RSM.500.00	655,00
75 (718)	16	79	165 x 139	164	RSM.750.00	942,00
90 (887)	16	85	178 x 153	203	RSM.1000.0	1.225,00
150 (1386)	16	100	215 x 190	317	RSM.1500.0	1.592,00
10 (101)	38	88	69	55	RCS.101.00	304,00
20 (201)	45	98	92	129	RCS.201.00	395,00
30 (295)	62	117	101	261	RCS.302.00	514,00
45 (435)	60	122	127	373	RCS.502.00	667,00
90 (887)	57	141	165	722	RCS.1002.0	953,00

* Equipped with AR-400-coupling

RCS-Series



RSM-Series



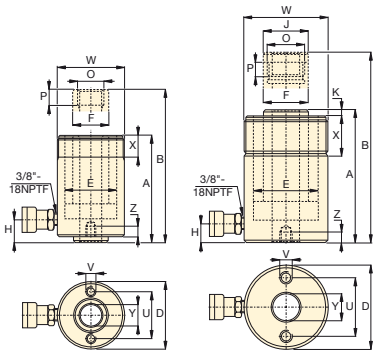
Hollow piston cylinder RCH

Ideal for press and pull work

The hollow piston design allows for the use of the cylinder for press and pull work

- The nickel-plated center pipe increases the life on models of over 20 tons
- Burned-in enamel finish for increased corrosion protection
- Mounting threads on the cylinder head for easy installation
- The RCH-120 is equipped with an AR-630 coupling-sleeve and 1/4" NPTF oil connecting thread
- The RCH-121 and RCH-1211 are delivered with a FZ-1630 reducer and AR-630 Coupling-sleeve, all other models with a CR-400 coupling-sleeve

Cylinder type t [kN]	Stroke [mm]	Outside-Ø D [mm]	Height retracted A [mm]	Center hole Y [mm]	Oil volume [cm³]	Order-No.	Price/ Unit €
13 (125)	8	69	55	19,6	14	RCH.120.00	371,00
13 (125)	42	69	120	19,6	75	RCH.121.00	482,00
13 (125)	42	69	120	19,6	75	RCH.121.10	482,00
13 (125)	76	69	184	19,6	136	RCH.123.00	626,00
20 (215)	49	98	162	26,9	150	RCH.202.00	727,00
20 (215)	155	98	306	26,9	476	RCH.206.00	1.016,00
30 (326)	64	114	178	33,3	298	RCH.302.00	779,00
30 (326)	155	114	330	33,3	722	RCH.306.00	1.181,00
60 (576)	76	159	247	53,8	626	RCH.603.00	1.460,00
60 (576)	153	159	323	53,8	1259	RCH.606.00	1.985,00
95 (931)	76	212	254	79,0	1011	RCH.100.30	3.205,00



RRH-Serie Hollow piston cylinder

- Relief valves prevent damage from excess pressure
- Burned-in enamel finish for increased corrosion protection
- Mounting threads on the cylinder head allow easy assembly (except RRH-1001, RRH-1508)
- Double-acting version for fast retraction of the cylinder
- Nickel-plated centre pipe in models for over 20 tons increase the life
- Hollow piston design allows the use of the cylinder for press and pull work
- All models come standard with a CR-400 coupling-sleeve and a dust cap
- Piston wipe ring reduces contamination and increases the life of the cylinder

Cylinder type [t]	Stroke [mm]	Max Cylinder power Pressure	Pull [kN]	Oil volume Pressure [cm³]	Pull [cm³]	Height retracted [mm]	Height extended [mm]	Outside-Ø [mm]	Hole-Ø [mm]	Weight [kg]	Order-No.	Price €
30	178	326	213	829	541	330	508	114	33,3	21	RRH-307	1.610,00
	258	326	213	1202	784	431	689	114	33,3	27	RRH-3010	2.011,00
60	89	576	380	733	482	247	336	159	53,8	28	RRH-603	1.791,00
	166	576	380	1366	900	323	489	159	53,8	35	RRH-606	2.238,00
	257	576	380	2115	1393	438	695	159	53,8	45	RRH-6010	2.799,00
95	38	931	612	505	333	165	203	212	79,2	33	RRH-1001	2.718,00
	76	931	612	1011	666	254	330	212	79,2	61	RRH-1003	3.399,00
	153	931	612	2035	1337	342	495	212	79,2	79	RRH-1006	4.247,00
	257	931	612	3420	2246	460	717	212	79,2	106	RRH-10010	5.310,00
145	203	1429	718	4144	2083	349	552	247	79,2	111	RRH-1508	9.914,00

CLL-Serie Heavy load cylinder

- Hollow piston design allows the use of the cylinder for press and pull work
- All models come standard with a CR- 400 coupling-sleeve and a dust cap
- Piston wipe ring reduces contamination and increases the life of the cylinder

- Relief valves prevent damage from excess pressure
- Burned-in enamel finish for increased corrosion protection
- Mounting threads on the cylinder head allow easy assembly (except RRH-1001, RRH-1508)
- Double-acting version for fast retraction of the cylinder
- Nickel-plated centre pipe in models for over 20 tons increase the life

Cylinder type t	Stroke [mm]	Effective piston surface [cm²]	Oil volume [cm³]	Height retracted [mm]	Height extended [mm]	Outside-Ø [mm]	Weight [kg]	Order-No.	Price €
50	50	70,9	355	164	214	125	15	CLL-502	914,00
	100	70,9	709	214	314	125	20	CLL-504	993,00
	150	70,9	1064	264	414	125	25	CLL-506	1.063,00
	200	70,9	1418	314	514	125	30	CLL-508	1.187,00
	250	70,9	1773	364	614	125	35	CLL-5010	1.218,00
	300	70,9	2127	414	714	125	40	CLL-5012	1.370,00
100	50	132,7	664	187	237	165	30	CLL-1002	1.300,00
	100	132,7	1327	237	337	165	39	CLL-1004	1.490,00
	150	132,.7	1991	287	437	165	48	CLL-1006	1.725,00
	200	132,7	2654	337	537	165	56	CLL-1008	1.910,00
	250	132,7	3318	387	637	165	64	CLL-10010	2.064,00
	300	132,7	3981	437	737	165	73	CLL-10012	2.215,00
150	50	198.6	993	209	259	205	53	CLL-1502	1.874,00
	100	198,6	1986	259	359	205	66	CLL-1504	2.064,00
	150	198,6	2979	309	459	205	78	CLL-1506	2.215,00
	200	198,6	3972	359	559	205	92	CLL-1508	2.409,00
	250	198,6	4965	409	659	205	104	CLL-15010	2.594,00
	300	198,6	5958	459	759	205	117	CLL-15012	2.980,00

Note: Cylinder capacities for over 150 tons on request.
You find cylinder collar ring out of aluminium in the RACL-series.

GLOBUS – Manufacturer of wire ropes of the highest quality

Aluminum cylinders RAC Series, low-end

- The compound prevents direct contact between different metals extends durability of the cylinder and enhances its resistance to lateral pressure by up to 10%
- The steel base and the compression piece protect from damages by pressure
- The integrated stop ring prevents the piston from extending too far and is built to support the full capacity of the cylinder
- The high performance return spring secures a swift retraction of the cylinder

Pressure [t]	[kN]	Stroke [mm]	Effective piston surface [cm²]	Oil volume [cm³]	Height retracted [mm]	Weight [kg]	Order-No.	Price €
20	218	50	31,2	156	174	3,6	RAC-202	729,00
20	218	100	31,2	312	224	4,1	RAC-204	809,00
20	218	150	31,2	468	274	4,6	RAC-206	899,00
20	218	200	31,2	624	324	5,1	RAC-208	999,00
20	218	250	31,2	780	374	5,6	RAC-2010	1.109,00
30	309	50	44,2	221	181	4,5	RAC-302	966,00
30	309	100	44,2	442	231	5,2	RAC-304	1.073,00
30	309	150	44,2	663	281	5,9	RAC-306	1.191,00
30	309	200	44,2	884	331	6,6	RAC-308	1.323,00
30	309	250	44,2	1105	381	7,3	RAC-3010	1.469,00
50	496	50	70,9	354	186	8,5	RAC-502	1.271,00
50	496	100	70,9	709	236	9,8	RAC-504	1.411,00
50	496	150	70,9	1063	286	11,1	RAC-506	1.566,00
50	496	200	70,9	1417	336	12,4	RAC-508	1.738,00
50	496	250	70,9	1771	386	13,7	RAC-5010	1.930,00
100	1002	50	143,1	715	221	17,3	RAC-1002	2.204,00
100	1002	100	143,1	1431	271	19,6	RAC-1004	2.447,00
100	1002	150	143,1	2147	321	21,9	RAC-1006	2.716,00
100	1002	200	143,1	2863	371	24,2	RAC-1008	3.016,00
100	1002	250	143,1	3578	421	26,5	RAC-10010	3.347,00
150	1589	50	227	1135	243	25,3	RAC-1502	3.351,00
150	1589	100	227	2270	293	29,3	RAC-1504	3.720,00
150	1589	150	227	3405	343	33,3	RAC-1506	4.130,00
150	1589	200	227	4540	393	37,3	RAC-1508	4.584,00
150	1589	250	227	5675	443	41,3	RAC-15010	5.089,00

Hollow piston cylinder Aluminium

- The hollow piston design enables traction and thrust forces
- The internal screw thread of the piston rod facilitates application of attachments
- The hardened surface coating protects from damages and increases durability of the cylinder
- The integrated stop ring prevents the piston from extending and is built
- The high performance return spring secures a swift retraction of the cylinder

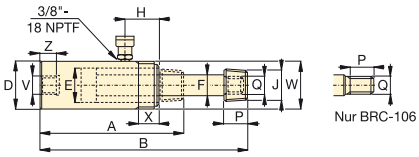
Pressure [t]	{kN}	Stroke [mm]	Effective piston surface [cm²]	Oil volume [cm³]	Height retracted A [mm]	Height retracted B [mm]	Outside-Ø D [mm]	Center-Ø Y [mm]	Weight [kg]	Order-No.	Price €
20	229	50	32,7	164	188	238	100	27	5,2	RACH-202	1.109,00
20	229	100	32,7	327	251	351	100	27	6,1	RACH-204	1.332,00
20	229	150	32,7	490	315	465	100	27	7,1	RACH-206	1.598,00
20	229	200	32,7	654	378	578	100	27	8	RACH-208	1.918,00
20	229	250	32,7	818	442	692	100	27	9	RACH-2010	2.302,00
30	358	50	51,1	256	208	258	130	34	8	RACH-302	1.355,00
30	358	100	51,1	511	267	367	130	34	9,5	RACH-304	1.627,00
30	358	150	51,1	766	333	483	130	34	11,2	RACH-306	1.952,00
30	358	200	51,1	1022	395	595	130	34	12,9	RACH-308	2.343,00
30	358	250	51,1	1277	458	708	130	34	14,5	RACH-3010	2.811,00
60	648	50	84,7	423	251	301	180	54	16,2	RACH-602	2.427,00
60	648	100	84,7	847	315	415	180	54	19,5	RACH-604	2.793,00
60	648	150	84,7	1270	380	530	180	54	22,8	RACH-606	3.213,00
60	648	200	84,7	1694	445	645	180	54	26	RACH-608	3.695,00
60	648	250	84,7	2117	510	760	180	54	29,6	RACH-6010	4.249,00
100	1068	50	164,6	823	258	308	250	79	33,8	RACH-1002	3.680,00
100	1068	100	164,6	1646	325	425	250	79	39,8	RACH-1004	4.086,00
100	1068	150	164,6	2487	391	541	250	79	46,2	RACH-1006	4.535,00
100	1068	200	164,6	3291	459	659	250	79	52,2	RACH-1008	5.035,00
150	1588	50	225,8	1129	280	330	275	79	48,9	RACH-1502	5.130,00
150	1588	100	225,8	2258	360	460	275	79	55,7	RACH-1504	5.695,00
150	1588	150	225,8	3387	430	580	275	79	63	RACH-1506	6.322,00
150	1588	200	225,8	4517	500	700	275	79	70,1	RACH-1508	7.018,00
150	1588	250	225,8	5646	570	820	275	79	77,2	RACH-15010	7.790,00

Traction cylinder BRC-/BRP-Series

For the assembly of precast parts and modules

Left to right: BRC-25, BRC-46, BRP-306, BRP-606, BRP-106C

- Made from high-strength alloyed steel
- Protects cylinder piston from being ejected in order to avoid overload
- Hard chromium plated pistons for high durability
- Version with enamel finish for enhanced protection from corrosion
- As a standard, all versions are equipped with CR-400 coupling muffs with dust cap
- A wiping seal around the piston prevents contamination and enhances the durability of the cylinder
- Low-end, spring return



BRC-25, -46, 106

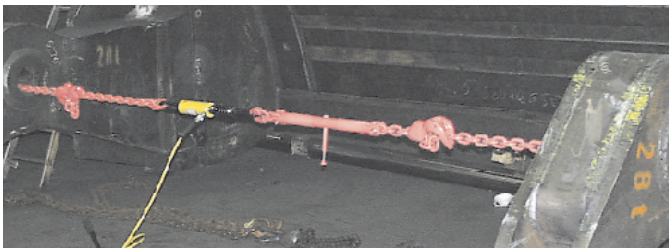
Assembly measurements of BRC cylinder [mm]

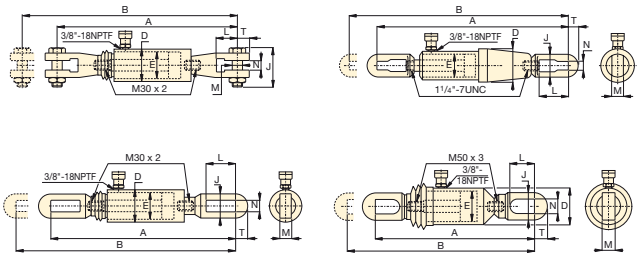
Type	Connector V	Fastening screw thread W	Fastening screw thread Length X	Ground thread Depth Z
BRC-25	3/4"-14 NPT	1 1/2"-16UN	24	17
	1 1/4"-11 1/2			
BRC-46	NPT	2 1/4"-14UN	26	24
BRC-106	M30x2	M85x2	25	24

Tensile force [t]	[kN]	Stroke [mm]	Oil volume [cm²]	Height retracted A [mm]	Height extended B [mm]	Outside ø C [mm]	Inner ø E [mm]	Piston rod F [mm]	Oil connection height H [mm]	Compression piece external thread J [NPT]	Bulb thread length P [mm]	Bulb thread Q [mm]	Weight [kg]	Order-No.	Price €
2,5	24	127	45	264	391	48	28,4	19,0	45	3/4"-14	28	1 1/16"-24	1,8	**BRC.25.0**	**444,00**
5	51	140	101	301	441	57	42,9	30,2	42	1 1/4"-11 1/2	32	1 3/16"-16	4,5	**BRC.46.0**	**729,00**
10	105	151	228	289	440	85	54,1	31,8	39	-	25	M30X2	9,5	**BRC.10.6**	**880,00**

Low-end Traction cylinder

BRP Series, Traction force 10 – 50 T





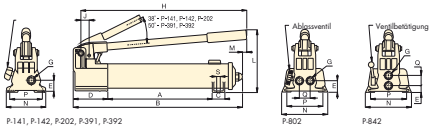
Tensile force [t]	[kN]	Stroke [mm]	Active piston surface [cm²]	Oil volume [cm³]	Eye distance retracted A [mm]	Eye distance extended B [mm]	Outer ø D [mm]	Inner ø E [mm]	Drawbar eye height J [mm]	Eye opening length L [mm]	Drawbar eye width M [mm]	Eye opening width N [mm]	Slit to drawbar eye end T [mm]	Weight [kg]	Order-No.	Price €
10	105	151	15,0	227	587	738	85	54,1	119	62	30	35	32	15,9	**BRP.10.6C**	**1.980,00**
10	105	151	15,0	227	541	692	85	54,1	67	115	22	30	32	13,2	**BRP.10.6L**	**1.370,00**
30	326	155	46,6	722	1085	1240	136	88,9	114	145	35	39	50	48,1	**BRP.30.6**	**2.900,00**
50	505	152	72,1	1096	719	871	140	110,0	130	149	39	50	70	53,5	**BRP.60.6**	**3.899,00**

Hand pump

High power, low weight

- Lightweight and compact design
- Nylon tank and nylon coated aluminium enclosure for maximum corrosion protection
- Two-step operation allows for 78% fewer strokes compared to pumps with a one-step operation
- Built-in 4-way valve on model P-842 for use with double acting cylinders
- Large oil capacities to power a wide range of cylinders and tools
- Built-in safety valve for protection against overload

Selection tables for cylinders and speed charts can be found on the yellow pages in the main catalogue E323e.



Pump type	Usable oil volume [cm³]	Max. pressure step [bar] 1. Step	2. Step	Output per stroke [cm³] 1. Step	2. Step	Max. leverage force [kg]	Weight [kg]	Order-No.	Price €
2-stepped	327	13	700	3,62	0,90	35,4	2,0	EP.142.000	308,00
2-stepped	901	13	700	3,62	0,90	28,6	3,4	EP.202.000	375,00
2-stepped	901	13	700	11,26	2,47	42,2	4,1	EP.392.000	414,00
2-stepped	2540	27	700	39,33	2,47	43,1	8,2	EP.802.000	762,00
2-stepped	2540	27	700	39,33	2,47	43,1	10,0	EP.842.000	1.362,00
1-stepped	327	N/Z	700	N/Z	0,90	32,7	2,0	EP.141.000	272,00
1-stepped	901	N/Z	700	N/Z	2,47	38,6	4,1	EP.391.000	326,00

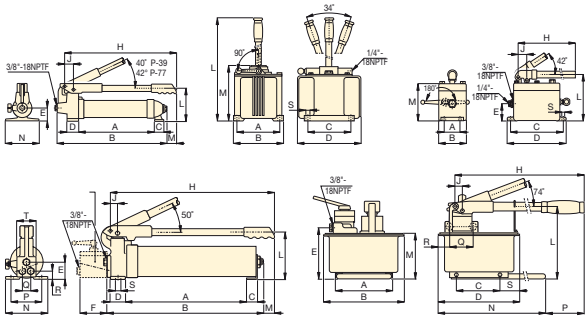
Steelhandpumpe

With quality, more performance

Many uses for testing, maintenance, and when pulling and tensioning

- Two-stage operation to relieve the operator (except P-39)
- P-84 and P-464 with 4-way valve for use with double acting cylinders
- All other models have an external drain valve for use with single acting cylinders
- Built-in safety valve for protection against overload
- Large oil capacities to power a wide range of cylinders and tools

Pump type	Usable oil volume [cm³]	Max. pressure step 1. step	2. step	Output per stroke [cm³] 1. step	2. step	Max. leverage force [kg]	Order-No.	Price €
1-step	655		700		2,62	50	EP.39.0000	301,00
2-step	770	14	700	16,00	2,41	43	EP.77.0000	463,00
2-step	2200	25	700	16,22	2,46	47	EP.80.0000	588,00
2-step	4080	25	700	16,22	2,46	47	EP.801.000	784,00
2-step	2200	25	700	16,22	2,46	47	EP.84.0000	928,00
2-step	7423	14	700	126,20	4,75	49	EP.462.000	1.393,00
2-step	7423	14	700	126,20	4,75	49	EP.464.000	1.709,00



Hydraulic

PU-Serie Compact-Elektrical pumps

- Lightweight and compact design: 11,8 to 18,6 kg
- Large, ergonomically designed handle for comfort
- Increased productivity by two-step operation
- The universal motor with230 V, 50/60 Hz is ready for use even at 60 Hz
- The motor remote control (24 volt control voltage) increases the ease of use
- Starts under full load
- The sturdy plastic casing with integral handle protects the motor from contamination and damage

For use with cylinder		Pump type		Usable oil volume	Delivery volume L/min.		Valve type / Valve function					Weight	Order-No.	Price/Pice
One	Dual	One-step	Two-step	(Liter)	1. Step	2. Step	Man.	Elect.	Off.	Stop	On.	[kg]		€
•	–	–	•	1,9	3,31	0,32	–	3/2**	•	–	•	11,8	PUD-1100E	2.392,00
•	–	–	•	3,8	3,31	0,32	–	3/2**	•	–	•	17,2	PUD-1101E	2.432,00
•	–	–	•	1,9	3,31	0,32	3/2	–	•	•	•	10,0	PUJ-1200E	2.047,00
•	–	–	•	3,8	3,31	0,32	3/2	–	•	•	•	15,4	PUJ-1201E	2.083,00
•	–	–	•	1,9	3,31	0,32	–	3/2	•	•	•	12,0	PUD-1300E	2.642,00
•	–	–	•	3,8	3,31	0,32	–	3/2	•	•	•	17,5	PUD-1301E	2.683,00
–	•	–	•	1,9	3,31	0,32	3/2	–	•	•	•	13,2	PUJ-1400E	2.511,00
–	•	–	•	3,8	3,31	0,32	3/	–	•	•	•	18,6	PUJ-1401E	2.547,00

* For use with 115 volts power supply please replace the „E“ at the end of model number with a „B“

** Electric drain valve for automatic retraction of the cylinder

BP-Serie Battery operated pumps

- Ultra-lightweight, compact design with integrated handle
- Two power levels and variable speed for preferred delivery volume and precise control
- With manual 3/2-valve (advance / retreat) for use with single-acting cylinders and tools
- High-performance 28-volt lithium-ion battery provides constant uniform power
- Direct recharge after use - charged in one hour
- The pump model consists of two 3,0 Ah batteries and quick charger

Pump type (for cylinder or tools)	Usable oil amount	Delivery volume (L/min)		Valve type	Voltage of the charger	Weight	Order-No.	Price/Unit
	[l]	14 bar	700 bar		[V]	[kg]		€
Single-acting	1,9	1,9	0,25	3/2	230	9,6	BP-122E	2.412,00
Single-acting	3,8	1,9	0,25	3/2	230	10,9	BP-124E	2.448,00
Single-acting	1,9	1,9	0,25	3/2	115	9,6	BP-122	2.412,00
Single-acting	3,8	1,9	0,25	3/2	115	10,9	BP-124	2.448,00

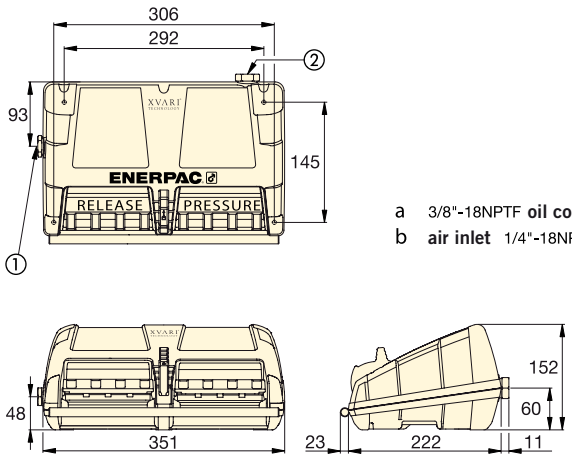
Ideally suited for small to medium size cylinders or hydraulic tools. The lightweight and ergonomic design is ideal for remote sites. The lithium-ion battery provides the cable-free pump at maximum output power for six minutes. Numerous applications can be run easily and quickly with this wireless pump.

- 75 Lifting movements with a WR-5-stacker
- 130 cuts of a 9.5-mm concrete-iron with the WHC-750-cutter
- Safe removal of 30 M24 nuts with the NC-3241-Nut splitter
- Multiple lift loads with the help of 5-95 t-cylinders.

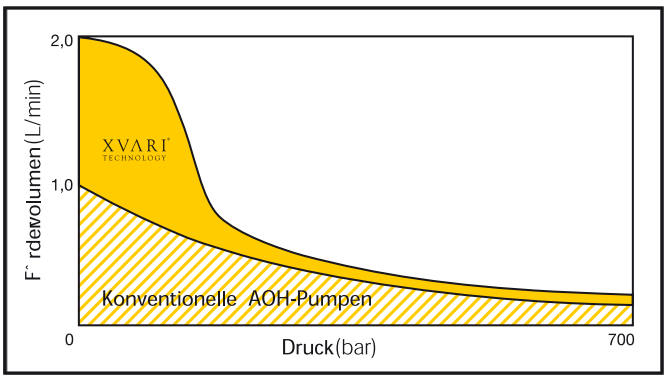
The actual number of cycles depends on the condition of the tool, the battery and the ambient conditions.

Air-hydraulic pump Productivity & Ergonomy

- Ergonomic design to prevent operator fatigue
- Variable delivery volume and adjustment for accurate controlling
- Higher delivery volume for increased productivity
- Closed hydraulic system prevents contamination and enables the use of the pump in any position
- Pedal lock for retraction
- Grounding screw for optimal ATEX explosion security
- Remotely controlled pressure valve
- Tank capacity: 1.0 l
- Delivery volume at nominal pressure: 0.25 l/min
- Air consumption: 283 - 991 l/min
- Maximum operational pressure: 700 bar



a 3/8"-18NPTF **oil connector**
b **air inlet** 1/4"-18NPTF



XVARI® TECHNOLOGY

For usage with cylinder or tool	Usable oil volume [l]	Maximal pressure [bar]	Delivery volume no charge [l/min]	Delivery volume charge [l/min]	3-way-3-pos.-valve	Dynamic air pressure [bar]	Weight [kg]	Order-No.	Price/ Unit €
single-acting	1,0	700	2,0	0,25	Extension/Stop/Retraction	2,1 - 8,6	8,6	**XA.11**	**679,00**

Hydraulic-accessories

High pressure hydraulic hoses

From top to bottom: HA7206B, HC-7206, H-7206

- For high load with safety factor of 4:1
- Max. allowable operating pressure 700 bar
- Four-layer design, including two robust wire mesh inserts
- Outer layer of polyurethane to withstand the wear caused by friction
- Low volumetric expansion under pressure to improve system effectiveness
- Provided with a pressed-rubber strain relief for long life and durability

To complete your system, you should use only Enerpac hydraulic hoses.

Hose connection		Length [m]	Weight [kg]	Order-No.	Price €
3/8"NPT	CH 604	0,90	0,8	HC.7203.00	83,00
3/8"NPT	CH 604	1,80	1,0	HC.7206.00	97,00
3/8"NPT	CH 604	3,00	1,5	HC.7210.00	121,00
3/8"NPT	CH 604	6,10	2,9	HC.7220.00	169,00
3/8"NPT	3/8"NPT	0,90	0,7	HO.7203.00	59,00
3/8"NPT	3/8"NPT	1,80	0,9	HO.7206.00	73,00
3/8"NPT	3/8"NPT	3,00	1,4	HO.7210.00	97,00
3/8"NPT	3/8"NPT	6,10	2,8	HO.7220.00	145,00

WARNING!
- Do not go over the max. allowable operating pressure of 700 bar
- Never handle pressurized hoses

Pressure and force gauges

- The GF-series gauges: pressure and fuel gauge with dual scale reading in kN and bar
- The GF-Series gauges: All pressure sensing parts are for long life trouble-free use, glycerol sealed and damped
- Excellent readability: gauge outside diameter of 100 mm
- Stainless steel gauge cases provide good corrosion protection

Usable for cylinder	Pressure [bar]	Force [kN]	Scale division	Connection threading NPTF	Needed gauges connection piece	Order-No.	Price €
All cylinders	0-700	-	10 bar; 100 psi	1/2 Zoll	GA1, GA2	HY.GP.010.S	138,00
All 5-t-cylinders	0-700	0-45	10 bar; 0,5 kN	1/2 Zoll	GA1, GA2	HY.GF.005.B	138,00
All 10-t-cylinders	0-700	0-100	10 bar; 1,0 kN	1/2 Zoll	GA1, GA2	HY.GF.010.B	138,00
All 20-, 30- und 50-t-cyl.	0-700	0-232/300/500	10 bar; 5,0 kN	1/4 Zoll	GA3	HY.GF.835.B	138,00

Gauge-adapter

Connections NPTF	Plug NPTF	Sleeve NPTF	Lenth [mm]	Order-No.	Price €
1/2 Zoll	3/8 Zoll	3/8 Zoll	71	HY.MM.GA.01	48,00
1/2 Zoll	3/8 Zoll	3/8 Zoll	155	HY.MM.GA.02	48,00
1/4 Zoll	3/8 Zoll	3/8 Zoll	133	HY.MM.GA.03	48,00

Hydraulic Oil

Content [l]	Type	Order-No.	Price €
1	HF.95.X	HF.95.01.00	18,40
5	HF.95.X	HF.95.05.00	67,00
60	HF.95.X	HF.95.60.00	543,00

Note: Only use Enerpac hydraulic oil. Using other liquids will void the warranty!

Viscosity index	100 minimum
Viscosity at 98°C (210°F)	42/45 S.U.S
Viscosity at 38°C (100°F)	
Viscosity at -18°C (0°F)	
API gravity	31,0/33,0
Flash Point	200°C (400°F)
Flow point	-31°C (-25°F)
Aniline point	98°C (210°F)
Parafinbasis color	blue

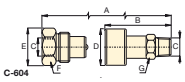
High pressure hydraulic coupling

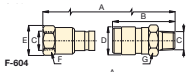
3/8” High flux couplings, 700 bar
- Standard equipment with most Enerpac cylinders

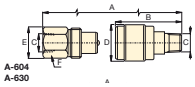
3/8” High pressure “Flush-face” couplings, 700 bar
- Snap-lock couplings always provide flawless connection

3/8” Spee-D Standard couplings®, 700 bar
- For medium-heavy duty operation, e.g. with manual pumps

1/4” Standard couplings, 700 bar
- For use with small cylinders and manual pumps







Type coupling muffle	Coupling connector	Dimensions [mm]							Order-No.	Price
		A	B	C	D	E	F	G		
CR-400	CH-400	83	64	3/8“NPTF	35	36	32	25	**C-604**	**55,00**
FR-400	FH-604	110	72	3/8“NPTF	31	31	26	28	**F-604**	**319,00**
AR-400	AH-604	77	42	3/8“NPTF	28	26	23	19	**A-604**	**36,00**
AR-630	AH-603	66	35	1/4“NPTF	22	20	19	15	**A-630**	**34,00**

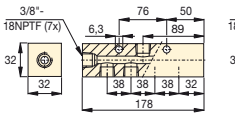
Block and bleed valves

178-mm-Distributor
369-mm-Distributor

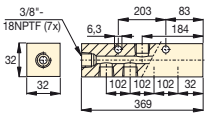
Hexagonal terminal blocks

Double closing valve

Description	Order-No.	Price / Unit €
178-mm distributor with 7 oil connectors	**A.64.00**	**122,00**
369-mm distributor facilitate the direct fitting of pilot valves in the distributor with seven oil connectors	**A.65.00**	**142,00**
Hexagonal distributor with 6 oil connectors	**A.66.00**	**93,00**
Block and bleed valves	**AM.21.00**	**350,00**
Facilitates control of the volume flows for 2 or 4 simple operating cylinders which run in parallel	**AM.41.00**	**676,00**



A.64.00



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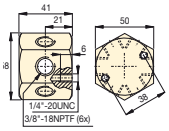
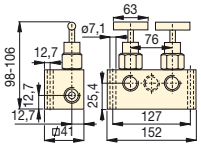
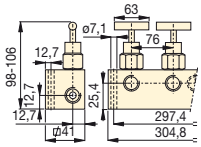




AM.21.00



AM.41.00

Hydraulic

S-Series Hydraulic torque wrench with square drive

Change quickly with snap closure of the square drive for attaching and releasing.

- Standard 360°-swivel coupling
- Optional TSP-swivel arm, 360°/160° turn
- Large screw rotation (35°), faster return and double acting
- Constant torque at the output with ± 3% accuracy over the full stroke
- Optional hex drives of 14 - 85 mm or 1/2 - 21/4 inches
- 700 bar maximal operating pressure

Socket Size [mm]	Socket Size [Zoll]	Square-drive [Zoll]	max. torque at 700 bar [Nm]	max. torque at 700 bar [Ft. lbs]	Weight [kg]	Optional inside hex drive [mm]	Optional inside hex drive [Zoll]	Order-No.	Price/Unit €
15-50	5/8-1 7/8	3/4	1898	1400	2,7	14-24	1/2-1	S1500	5.131,00
20-100	7/8-3 7/8	1	4339	3200	5	17-32	5/8-1 1/4	S3000	7.129,00
41-155	1 5/8-6 1/4	1 1/2	8144	6010	8,5	17-32	5/8-1 1/4	S6000	8.982,00
41-155	1 5/8-6 1/4	1 1/2	14914	11000	15	30-46	1 1/4-1 3/4	S11000	13.288,00
60-255	2 3/8-10	2 1/2	34079	25140	31	36-85	1 1/2-2 1/4	S25000	19.039,00

* Determine the maximum torque according to the size and grade of bolts (nuts)

W-Series Flat hex-head torque wrench

To replace the hex-cassettes, no tools are required. Individual 360° swivel coupling increases the manoeuvrability of the torque wrench and hose. Fast operation due to the large rotation per cycle (30° rotation angle) and rapid return.

- Standard 360° swivel coupling
- Large screw rotation (35°), faster return and double acting
- Constant torque and ± 3% accuracy
- Integrated support arm ensures accuracy by reducing internal deflections

Tension wheel application [mm]	Tension wheel application [Zoll]	max. torque at 700 bar [Nm]	Weight (drive unit without hex head) [kg]	Order-No.	Price/Unit €
36-60	1 1/8-2 3/8	2712	1,4	W2000	3.190,00
36-85	1 5/16-3 3/8	5423	2	W4000	3.990,00
50-105	1 7/8-3 7/8	10846	3	W8000	4.971,00
65-115	2 7/16-4 5/8	20337	4,9	W15000	5.826,00
75-135	2 3/16-5 3/8	30510	7,7	W22000	on request
80-155	3 1/8-6 1/8	47453	11,4	W35000	on request

Twin hoses

Use Enerpac twin hoses to connect a torque wrench. With 1/4“ swivel adapter for screwing devices.

Description	max. pressure [bar]	Order-No.	Price/Unit €
6 m length, 2 hoses	700	THQ-706T	632,00
12 m lenth, 2 hoses	700	THQ-712T	924,00

ZU4T-Series Torque wrench pumps

For use with 700 bar torque wrenches of any manufacturer and the Enerpac S and W series. Highly efficient Z-Class pump design; higher delivery volume and change-over pressure, lower operating temperature and 18% less current draw than comparable pumps. The LCD provides self-test, diagnosis and various displays. More powerful, universal 1.25 kW electric motor offers a high ratio of power to weight and excellent low-voltage operating characteristics. Extremely stable composite cover protects the motor and electronics, while providing an ergonomic, non-conductive handle for easy transport. Low-voltage remote control provides added security for the user.

Max. pressure [bar]	Usable oil volume [l]	Delivery volume [L/min] 50 bar	700 bar	Weight [kg]	Order-Nr. (230V-1ph)	Price €
700	4,0	8,8	1,0	32	ZU4204TE-Q	6.938,00
700	6,6	8,8	1,0	35	ZU4208TE-Q	7.067,00

Screwing aggregate

The function of automatic operation allows a continuous cycle of operation of the torque wrench as long as the forward button is pressed (the pump can be used with and without the function of automatic operation). The LCD allows pressure and torque readings and a different portable electric pump diagnosis and read functions. The protected by a housing-ventilated industrial motor guarantees for long life and is also suitable for demanding environmental conditions. The rugged control box protects electronics, power supplies and LCD display and also keeps in demanding environmental conditions.

Tension	Max. pressure [bar]	Usable oil volume [l]	Delivery volume [L/min] 50 bar	700 bar	Weight [kg]	Order-Nr. (230V-1ph)	Price €
230V-1ph	700	4,0	8,1	0,8	61	ZE4204TE-QHR	7.366,00
400V-3ph	700	4,0	11,2	1,6	65	ZE5204TW-QHR	7.740,00

ZA4T-Series Pneumatic pumps for a torque wrench

Two-speed operation and high switching pressure to reduce cycle times for increased productivity. Glycerin filled pressure gauge with transparent overlays in Nm and Ft.lbs scales for all Enerpac torque wrenches provide a quick torque reading. Maintenance unit with interchangeable tanks and automatic lubrication. Heat exchanger heats the exhaust air, to protect against freezing and cools the oil. Ergonomic cable remote control provides remote control from up to 6 m.

Air pressure [bar]	Max. pressure [bar]	Usable oil volume [l]	Delivery volume [L/min] 50 bar	700 bar	Weight [kg]	Order-No. (230V-1ph)	Price €
4,1-6,9	700	4,0	9,8	1,0	42	ZA4204TX-Q	6.633,00
4,1-6,9	700	6,6	9,8	1,0	47	ZA4208TX-Q	6.762,00

Height Safety Systems

Accessories for Connectivity,
SIP-part starting S. 376

GLOBUS
HEBETECHNIK

Catching Systems,
SIP-part starting S. 372

Running along stop point, page 139

Operation facilities from page A 145

Work protection from page A 140

Work protection/ Operation facilities

UNILINE Height safety systems	A 136 - A 138	Work protection products	A 140 - A 144
Running along stop point	A 139	Operation facilities	A 145 - A 147

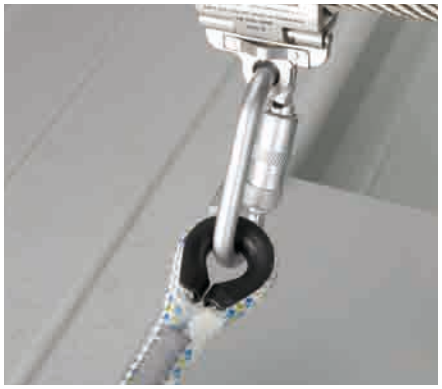
GLOBUS – Hotline: +49 (0) 2103 9442-0 E-Mail: info@glds.de

Overview

The RoofSafe Uniline provides unparalleled security for roof accesses during maintenance and inspection work.
An extensive product range, e.g. roof anchors, horizontal lifelines and horizontal rail systems offer comprehensive protection for workers on all types of roofs.

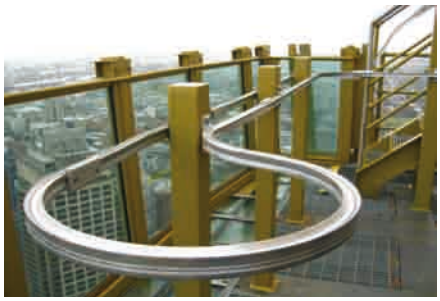
RoofSafe roof anchor and rope

RoofSafe anchors allow the installation of horizontal safety cables and single attachment points on modern, robust roof structures with minimal to no intrusion of these structures. The built-in power-limiting technology Workforce Management® allows the use of thin sheet metal roofs for structural anchoring. The RoofSafe cable system was designed to supplement the RoofSafe anchor and uses the lower level of strain on the system in the event of a fall. The system can hold more than one user if location, systems and the building parameter allow it. The cable system can cover a span of 12 m between anchors and provides continuous hands-free access for the user of the system. The components of the RoofSafe system include cable end anchor, interim holds, adjustable rope holds and corner holds, whereby the system design is very flexible so that workers have fully secured access to all parts of the roof for their inspection and maintenance work.



RoofSafe Rail system

RoofSafe rail systems are ideal for modern construction projects, and in particular for roof access and as a stop point for carrying out work while hanging high on walls, for inspection and maintenance. The roof-mounted rail meets the requirements for roping and fall protection standards and can be fixed with little penetration to the roof system through terminals. The low profile and unobtrusive design are therefore considered as a visually appealing anchor mounting solution that ensures that the appearance of a building is not disturbed by anchor points and ropes. When roofs are more than 15 degrees inclined, it provides a stable anchoring of the rail that does not bend if a worker is using his entire body weight on it. This provides a good sense of security and enables confident work. By a fall, the product is not deflected and distributed very low loads on the roof structure.



multisafe systems

MultiSafe – Overview

The systems are divided into two main product groups: Horizontal rail systems and horizontal cable systems. It is the world's most comprehensive system of ranges and consists of four known and proven market brands: UniRail, Uni-16 Uni-8 and Uni-8 overhead.

MultiSafe – Unirail

UniRail is ideal for modern construction projects and in particular for the internal and external facade access, inspection and maintenance, including catwalks and suspended catwalks.

MultiSafe – Uni-8

Uni-8 is best suited for modern construction projects, refurbishments as well as industrial safety applications. It is of high quality and offers excellent value-money ratio. Under typical operating conditions, the product can span up to 3 m between the support brackets. Uni-8 provides excellent functionality because of its freedom, and can run round corners and contours of the building structures.

MultiSafe – Uni-8 Overhead

The cable safety system Uni-8 Overhead has both collection and retention capabilities through an 8 mm, 1 x 19 stainless steel wire rope that is fastened with different anchoring pieces to a structure.

EasyClimber – Fall Protection System

With the Easy Climber vertical fall protection systems from Uniline, workers can climb with confidence tall buildings and ladders and again back down from them.

Running along stop-point for rails

S 49, R 50, S 54 according EN 795

The „running along stop-point for tilt ramps and rails“ is designed as personal protective equipment (PPE) to prevent falling. It prevents with proper use the person from falling in the range of the rail (e.g. for manual clean-up work on rail tracks) through the stop function with simultaneous use of a safety harness according to EN 361 in conjunction with a fall shock absorber according to EN 355 and optionally a connecting means according to EN 354.

The sop-point is construction tested by:
DEKRA EXAM GmbH
CE 0158

Description: Running along stop-point for rails S 49, R 50, S 54

Order-No.	Price €
ALA.MSB.120.23	1.870,00

Work protection and Operation facilities

Safety shoes

Safety boots with laces Firenze

- According toEN ISO 20345
- S3
- With steel cap and steel sole
- Upper material: Genuine Cow Leather
- 3D.Lining-filling
- Safety sole
- Anti-slip Duo-PU-sole
- Removable and antistatic Air-Relax foot bed
- Oil and acid resistant
- Anti-static
- Width 11

Size	Order-No.	Size	Order-No.	Price/Pair €
39	4000 372 399	44	4000 372 404	je 29,95
40	4000 372 400	45	4000 372 405	
41	4000 372 401	46	4000 372 406	
42	4000 372 402	47	4000 372 407	
43	4000 372 403			

on request Size: 35-38+48,
Over Size 49-52: Model Goliath € 85,95

Safety shoes Napoli

- According to EN ISO 20345
- S3
- With steel cap and steel sole
- Upper material: Genuine Cow Leather
- 3D.Lining-filling
- Safety sole
- Anti-slip Duo-PU-sole
- Removable and antistatic Air-Relax foot bed
- Oil and acid resistant
- Anti-static
- Width 11

Size	Order-No.	Size	Order-No.	Price/Pair €
38	4000 372 298	44	4000 372 304	je 28,95
39	4000 372 299	45	4000 372 305	
40	4000 372 300	46	4000 372 306	
41	4000 372 301	47	4000 372 307	
42	4000 372 302	48	4000 372 308	
43	4000 372 303			

on request Size: 35-37,
Over Size 49-52: Model Titan € 85,95

Safety boots with laces Torino

- According to EN ISO 20345
- S3
- With steel cap and steel sole
- Upper material: Genuine Cow Leather
- 3D.Lining- filling
- Integrated PU-upper cap
- Safety sole
- Anti-slip Duo-PU-sole
- Removable and antistatic Air-Relax foot bed
- Oil and acid resistant
- Anti-static
- Width 11

Size	Order-No.	Size	Order-No.	Price/Pair €
38	4000 372 408	44	4000 372 414	je 30,50
39	4000 372 409	45	4000 372 415	
40	4000 372 410	46	4000 372 416	
41	4000 372 411	47	4000 372 417	
42	4000 372 412	48	4000 372 418	
43	4000 372 413			

Gloves

Safety gloves out of furniture leather

- Material: furniture leather
- Large version
- Large cuff
- Back made of textile
- Palm reinforcement
- With elastic band

Size	VE	Colour	Order-No.	Price/Unit €
10 ½	12	bright	4000 3710 21	1,80
10 ½	12	dark	4000 3710 20	1,60

Safety gloves out of furniture leather, winter

- Material: furniture leather
- With fur lining
- Large version
- Large cuff
- Back made of textile
- Palm reinforcement
- With elastic band

Size	VE	Order-No.	Price/Unit €
10 ½	6	4000 3710 50	2,60

Nitrile Gloves Neckar

- According to EN 388
- EN 420
- Cat. II
- Material: durable, high quality nitrile fully coated, blue
- Robust when handling sharp edged materials
- Liquid-repellent
- Oil and grease resistant
- With safety cuff
- High abrasion resistance
- Application: concrete and construction material processing, such as paving, sheet metal, castings and metal processing, waste disposal plants
- Also in partially coated

Size	VE	Order-No.	Price/Unit €
10	12	4000 371 277	2,40

Nitrile Gloves Lippe

- According to EN 388
- EN 420
- Cat. II
- Material: durable, high quality nitrile fully coated, yellow
- Back partially coated
- With knitted wrist-sleeve
- Good wear properties
- Oil and grease resistant
- Simply immersed
- Application: assembly work, engineering, automotive, forestry, agriculture, plastics and metal processing

Size	VE	Order-No.	Price/Unit €
7	12	4000 371 280	1,30
8	12	4000 371 281	1,30
9	12	4000 371 282	1,30
10	12	4000 371 283	1,30

Safety gloves ‚Top‘

- According to EN 388
- Cat. II
- Material: Pig skin
- Yellow
- Large cuff
- Hand back made of textile
- Palm lined
- With elastic band

Size	VE	Order-No.	Price/Unit €
10 ½	12	4000 371 010	3,10
12	12	4000 371 012	3,15

Latex-gloves with special grip

- Central knit with natural latex coating
- According to EN 388
- Cat. II
- Material: Cotton / polyester
- Anatomical fit
- Hand back uncoated
- High grip and slip resistance
- Waterproof inner palm
- Comfortable and sweat-free wear comfort
- yellow/green

Size	VE	Order-No.	Price/Unit €
9	12	4000 371 001	1,25
10	12	4000 371 002	1,25

Work clothing

1 Work jacket, royal blue

- Diagonal twill made of 100% cotton; shrink fitted to SANFOR-Standard
- Weight approx. 300 g/m²
- Blouson shape with turn-down collar
- Concealed button placket
- 1 inside chest pocket
- 2 patched on chest pockets with flaps
- 2 patched on front pockets
- Waistband with concealed snap closure
- Sleeve width adjustable

Size	Order-No.	Price/Unit €
46	4000 375 301	20,50
48	4000 375 302	20,50
50	4000 375 303	20,50
52	4000 375 304	20,50
54	4000 375 305	20,50
56	4000 375 306	22,50
58	4000 375 307	22,50
60	4000 375 308	22,50
62	4000 375 309	22,50

2 Work pants, royal blue

- Diagonal twill made of 100% cotton; shrink fitted to SANFOR-Standard
- Weight ca. 300 g/m²
- Elastic waistband with 7 belt loops
- Pleated for greater wearing comfort
- Fly with buttons
- 2 side pockets
- 1 patched on back pocket with button
- 1 ruler pocket

Size	Order-No.	Price/Unit €
46	4000 375 311	19,95
48	4000 375 312	19,95
50	4000 375 313	19,95
52	4000 375 314	19,95
54	4000 375 315	19,95
56	4000 375 316	21,50
58	4000 375 317	21,50
60	4000 375 318	21,50
62	4000 375 319	21,50

3 Overall, royal blue

- Diagonal twill made of 100% cotton; shrink fitted to SANFOR-Standard
- Weight ca. 300 g/m²
- 1 inserted bib pocket with zipper
- 1 patched on bib pocket with Velcro closure
- Straps with resistant elastic
- 2- parts, stable carrier fix lock plastic buckle
- 2-manholes with lockable pass-through
- Adjustable waist on both sides to +6 cm
- Pulled high back prevents slipping of the strap
- 2 reinforced front pockets, 1 closable back pocket, 1 ruler pocket

Size	Order-No.	Price/Unit €
46	4000 375 321	22,95
48	4000 375 322	22,95
50	4000 375 323	22,95
52	4000 375 324	22,95
54	4000 375 325	22,95
56	4000 375 326	24,50
58	4000 375 327	24,50
60	4000 375 328	24,50
62	4000 375 329	24,50

4 Coverall, royal blue

- Diagonal twill made of 100% cotton; shrink fitted to SANFOR-Standard
- Weight ca. 300 g/m²
- Combined with rally-style
- Turn-down collar
- 2-way zipper
- 2 patched on chest pockets with zipper
- 2 patched on and reinforced front pockets
- 2 patched on back pocket with button
- 1 ruler pocket
- Sleeve width adjustable
- Back with pleats and adjustable elastic

Size	Order-No.	Price/Unit €
50	4000 375 400	36,50
52	4000 375 401	36,50
54	4000 375 402	36,50
56	4000 375 403	38,95
58	4000 375 404	38,95
60	4000 375 405	38,95
62	4000 375 406	38,95

Work clothing

Warning protection Parka 4in1

- EN 471/3, EN 343 Kl. 3/2 (Vest cl. 2)
- Wind and waterproof
- Highly breathable
- Taped seams
- Reflex stripes out of 3M™-Scotchlite™- Reflex material
- Rugged oxford fabric: oil and dirt-repellent, highly abrasion and tear resistant
- Inner jacket can be worn as a vest
- Removable hood
- Water column 5000 mm
- 100 % Polyester
- Outer jacket pockets: 2 breast and side pockets, 1 sleeve pocket and 1 cell phone pocket
- Inner jacket pockets: 2 breast and side pockets, 2 inside pockets

Version yellow-marine

Size	Order-No.	Price/Unit €
M/50–52	4000 3800 70	127,50
L/54–56	4000 3800 71	127,50
XL/58–60	4000 3800 72	127,50
XXL/62–64	4000 3800 73	127,50

Version orange-marin

Size	Order-No.	Price/Unit €
M/50–52	4000 3800 75	127,50
L/54–56	4000 3800 76	127,50
XL/58–60	4000 3800 77	127,50
XXL/62–64	4000 3800 78	127,50

Safety helmet Baumeister 80/6

- According to EN 397
- Made of thermoplastic specialty plastic PE
- Classic 5-rib design
- With 6-point belt interior 1/79 G
- With the proven, pulled down Nape
- Circulating eco leather sweatband
- With integrated 16 mm double-slots for hearing protection and face shield
- With rain gutter
- Weight: ca. 356 g
- Head circumference 53-61 cm

Colour	Order-No.	Price/Unit €
yellow	4000 370 531	8,25
red	4000 370 532	8,25
blue	4000 370 533	8,25
green	4000 370 534	8,25
white	4000 370 530	8,25

Company First aid kit, big - Oslo

- W 350 x H 250 x D 100 mm
- Sheet steel, painted white
- First aid kit SÖHNGEN
- Content according to DIN 13169

Order-No.	Price/Unit €
4000 386 015	82,50

Company First-aid kit, small - Kiel

- B 260 x H 160 x T 80 mm
- High impact plastic, black
- First aid kit SÖHNGEN
- Content according to DIN 13157

Order-No.	Price/Unit €
4000 386 010	19,75

Info

Further products on request. Request our work safety catalogue.

Work clothing

Welding safety jacket, corn blue, material weight 400 g/m²

- EN470-1, EN531, EN ISO 11611 Class 2 A1
- EN ISO 11612 A1 B1 C1
- Flame retardant
- Long form
- Turn-down collar
- Concealed snap button placket
- 1 chest pocket and 2 front pockets flap and press stud
- 1 inside chest pocket
- Also in 360 g/m² deliverable PLANAM

Size	Order-No.	Price/Pair €
46	4000 381 100	51,50
48	4000 381 101	51,50
50	4000 381 102	51,50
52	4000 381 103	51,50
54	4000 381 104	51,50
56	4000 381 105	56,95
58	4000 381 106	56,95

Welding safety Trousers, corn blue, material weight 400 g/m²

- EN470-1, EN531, EN ISO 11611 Class 2 A1
- EN ISO 11612 A1 B1 C1
- Flame retardant
- 2 side slash pockets with access directly into the side seam
- 1 pocket on right leg with access from the rear
- 1 right hip pocket with flap and button closure
- Belt loops at the waist
- Fly and waist to close with buttons
- Also in 360 g/m² deliverable PLANAM

Size	Order-No.	Price/Pair €
46	4000 381 110	51,50
48	4000 381 111	51,50
50	4000 381 112	51,50
52	4000 381 113	51,50
54	4000 381 114	51,50
56	4000 381 115	56,95
58	4000 381 116	56,95

Welding safety overall, corn blue, material weight ca. 360 g/m²

- According to EN 470-1/EN 531, 100 % cotton, diagonal twill
- 2 side slash pockets with access directly into the side seam, 1 pocket on right leg with access from the rear, inside bib pocket with flap
- 2 Full-elastic straps with buckles
- Overalls to close on the left side at the waist with 2 buttons
- Fly and waist to close with buttons

Info

On request-deliverable.

Safety welding boots Phebus

- According to EN ISO 20345
- S3 HRO
- Steel toe and steel sole
- Upper material: Genuine calf leather
- Air-Light® lining
- Anatomical and anti-static
- Abrasion resistant
- Heat resistant to 300°C
- Air-Light® Footbed
- Fusion sole HRO
- Quick release fastener
- Width 11

Size	Order-No.	Size	Order-No.	Price/Pair €
38	4000 373 228	43	4000 373 233	per 40,50
39	4000 373 229	44	4000 373 234	
40	4000 373 230	45	4000 373 235	
41	4000 373 231	46	4000 373 236	
42	4000 373 232	47	4000 373 237	

Operation equipment

Hand truck with pneumatic tire PROMAT

- Pneumatic tires
- Sturdy, welded steel tube construction height: 1150 mm
- Steel sheet shovel, size L250 x W320 mm
- Wheel protection and safety handles
- Powder-coated powder blue, RAL 5014
- Capacity 200 kg

Order-No.	Price €
9000 443 139	79,00

Platform cart PROMAT

- Welded steel pipe and profile steel
- Permanently protected surface
- Impact and scratch resistant
- Powder-coated powder blue, RAL 5014
- Platform made of wood-based panels, surface beech
- 2 swivel and 2 fixed rear castors, swivel castors with brakes in accordance with EN 1757-3
- Solid rubber tires
- Wheel-Ø 200 mm
- Hubs with roller bearings
- Capacity 500 kg
- Supplied flat pack

Load area [mm]	Weight [kg]	Order-No.	Price €
1000 x 700	33	9000 444 140	162,00
1200 x 800	38	9000 444 141	175,00

Steel band strapping set

For occasional steel strapping with a portable tape dispenser, comprising of:

- Steel band tensioner 16 mm
- Steel band crimping tongs 16 mm
- Portable band dispenser with storage compartment
- Steel band scissors
- Special role steel band blank, ca. 240 m long, 16 x 0,5 mm
- 1000 pieces of sealing sleeves 16 x 30 mm

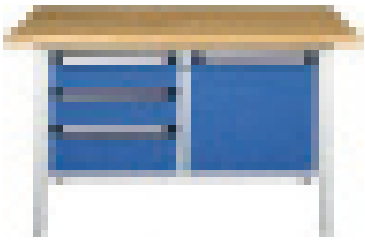
Version	VE	Order-No.	Price €
Set	1 pc.	9180 487 070	454,00
Steel band, 300 m	1 role	9180 487 075	57,20
sealing sleeves, 2000 pieces	1 box	9180 487 074	50,90

Tool wagon

- Sturdy steel sheet construction
- Powder coated
- With wide track chassis
- Axis with 2 fixed and 2 swivel casters with brakes
- Large push bar
- Table top selectable
- Housing selectable
- Capacity 35 kg
- 100% full extension of drawers
- Colour selection: red metallic/fire-anthracite, anthracite metallic / blue gentian
- Dimens. H860 x W700 x D390 mm
- Shown with metal shelf and drawer front
- On request model selection

Order-No.	Price €
9140 452 742	495,00

Work bench



- Sturdy frame made of square tube 45 x 45 x 2 mm
- Steel sheet housing
- High-quality powder coating
- Central lock
- Capacity 800 kg/m²
- Continuous handles with labelling strip
- Drawer is flush with housing
- Doors with spring hinges, opening angle 180°
- Table top selectable
- Colour: light grey / blue away
- Dimens. W1500 x D700 x H850 mm
- Figure with book plate and 3 drawers and 1 door with 1 shelf
- On request model selection

Order-No.	Price €
9141 452 274	668,00

Cabinets and shelves

Wardrobe

- Made from quality sheet
- Each compartment has 1 hat shelf and hanging rail with 2 sliding clothes hooks
- Compartment width 300 mm
- Lock: Lock for padlock. Housing and doors in light grey
- Feet 150 mm high / base 100 mm high. Dimensions W 610 x H 1850 / 1800 x D 500 mm
- Also available with 3 compartments

2 Compartments

Modell	Order-No.	Price €
with stand foot	9145 453 321	165,00
with socket	9145 453 320	165,00

Info

Other products on request. Look at our operation equipment catalogue.

Locker with hinged doors

- Sturdy sheet steel construction
- Door hinges with 100° opening angle
- Central door reinforcement
- Load capacity per shelf 70 kg
- With 4 shelves, adjustable in 15-mm-raster
- With a new depression handle cylinder lock with three point locking
- Colour: light grey / light grey, dark grey / dark grey, light grey / blue gentian
- Dimensions picture H 1950 x W 930 x D 400 mm
- Also available in depth 500 and 600 mm

Description	Dimensions [mm]	Colours	PE	VE	Order-No.	Price €
Cupboard	1950 x 930 x 400	Light grey / Light grey	1 piece	1 piece	9101 483 100	249,00
Shelf	930 x 400	Light grey	1 piece	1 piece	9101 484 480	21,10

Shelf unit META CLIP V 150

- Galvanised version
- Plug-in system allows quick installation without screws
- Also in depth 400 and 600 mm
- Capacity per shelf150 kg
- With 4 shelves
- Bay load 900 kg
- Nominal dimension: H 2000 x W 1000 x D 500 mm
- Plan dimensions of the basic shelf: nominal length + 56 mm, nominal depth + 36 mm
- Plan dimensions of the attachment shelf: nominal length + 6 mm, nominal depth + 36 mm

Version	Order-No.	Price €
Basic	9000 452 935	117,50
Attachment shelf	9000 452 936	89,70

Protection edge

- Protect shelf corners in the corner and drive-through area
- Also used as collision protection for partition and machine protection systems
- Version per ZH1/428
- Height 400 mm
- Powder coated in zinc yellow, RAL1018, with black warning markings
- Including sleeve anchors for the floor installation on concrete surfaces

Version	H x L mm	Order-No.	Price €
L-form	400x180/180	9192480126	42,60
U-form	400x160/160	9192480127	44,30

Aluminium ladders

Rung ladder, aluminium, rungs 6-24

- Sturdy square tube rails
- Permanent rail-rung connection
- Square rungs 30 x 30 mm with grooved tread on both sides
- Rung spacing 280 mm, max. total load 150 kg
- Outside width 420 mm
- Ladder shoe with 4x larger contact surface and a movable joint for added traction and slip resistance
- According to EN 131, operating safety association, BGV D 36 / GUV-V D 36 and BGI 694 GÜNZBURGER

Rungs	Length of the ladder [m]	Max. working height [m]	Weight [kg]	Order-No.	Price €
8	2,49	3,60	4,4	**9150 460 301**	**86,50**
10	3,05	4,10	5,4	**9150 460 302**	**106,00**
12	3,60	4,70	6,5	**9150 460 303**	**125,50**

Multi-purpose ladder, 4-piece, rung number 4x3

- Universal application as leaning or freestanding ladder and as a work platform when using accessories
- Automatic locking steel hinges
- Crossbar and non-slip ladder shoes
- Square rungs 30 x 30 mm with grooved tread
- Rung spacing 280 mm
- Max. total load 150 kg
- Dimensions when folded 350 x 990 x 250 mm
- According to EN 131, Operating Safety Association, BGV D 36 / GUV-V D 36 and BGI 694 GÜNZBURGER

Length of the ladder [m]	Max. working height [m]	Rungs	Weight [kg]	Order-No.	Price €
3,65	4,80	4 x 3	13,3	**9150 460 162**	**208,00**

Stepladder, aluminium, rungs 2x3-10

- Double sided access
- Clamping connection of high-strength Strap band
- Rungs 80 mm deep, grooved
- Rung spacing 235 mm
- Ladder inclination 20 °
- Max. total load 150 kg
- Ladder shoe with 4x larger contact surface and a movable joint for added traction and slip resistance
- With rail safety
- With ergo® grip-pad area at the optimal point of the ladder for ergonomic wearing comfort
- According to EN 131, Operating Safety Association, BGV D 36 / GUV-V D 36 and BGI 694 GÜNZBURGER

Rungs	Length of the ladder [m]	Width ladder (outside) [m]	Weight [kg]	Order-No.	Price €
2 x 4	0,92	0,49	5,8	**9000 460 502**	**131,00**
2 x 6	1,39	0,55	8,4	**9000 460 504**	**189,00**
2 x 8	1,86	0,60	11,5	**9000 460 506**	**261,50**
2 x 10	2,33	0,66	14,6	**9000 460 508**	**312,50**

SLING TECHNOLOGY

22-55 Textile Slings, Coatings, Edge Protection
56-107 Sling chains
108-131 Attachment Points
132-143 Sling Ropes
144-149 Accessories

SLING TECHNOLOGY

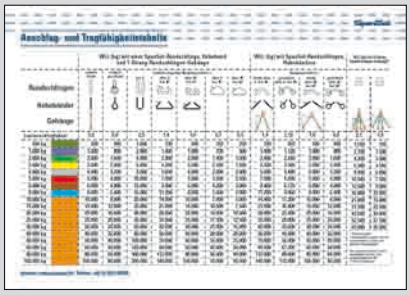
What you need to know about textile sling equipment

1. Legal basis

The technical requirements and the directions for manufacturing of round slings and lifting bands are codified all over Europe by EN 1492-1 and 1492-2. DIN EN standards are called as German National. For conformity marking as per Machinery Directive 2006/42 EC textile sling equipments, which conform to the European Standards, bear the CE-mark. In addition, the BG- guidelines BGR 500 will also apply.

Info

By request you'll receive the load capacity table as A1- poster for free from your SIP partner!



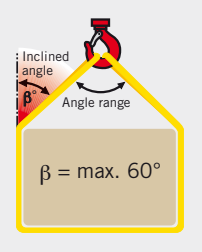
2. Load bearing capacity and load lifting factor

The load bearing capacity of the sling equipment is a result of load weight and lifting methods. Take the most frequently used lifting methods for lifting bands and round slings from the following table. Depending on the sling method the load bearing capacity of a sling equipment varies. Variations of the load bearing capacity are indicated by the load lifting factor. The nominal load bearing capacity of a sling equipment is included in the lifting method by "simple direct" indication. Please take the remaining load lifting factors for the remaining lifting methods from the table below.

Lifting methods		
easy direct	plain corded	up to 6°
Load lifting factor M		
1,0	0,8	2,0

Lifting methods				
up to 6°	above 6° up to 45°	ab. 45° up to 60°	above 6° up to 45°	ab. 45° up to 60°
Load lifting factor M				
2,0	1,4	1,0	0,7	0,5

Please note:
More than an angular range than 60° should not be fastened - the upcoming forces are thus uncontrollable



Info

Take advantage of the seminars to obtain the technology, comp. page A 22.

	WLL (kg) with a SpanSet– round sling, lifting band and 1 Leg round slings– suspension gear							WLL (kg) with a SpanSet – round slings, lifting bands and 2 leg round slings – suspension gear				WLL (Kg) with 4 leg round slings – suspension gear*	
	simple direct	plain corded	simple reverse inclination β					inclination β					
Round slings			up to 6°	over 6° up to 45°	over 45° upt to 60°	over 6° up to 45°	over 45° up to 60°	direct over 6° up to 45°	coderd over 6° up to 45°	direct over 45° up to 60°	corded over 45° up to 60°	direct over 6° up to 45°	direct over 45° up to 60°
Lifting bands													
Suspension gear													
Load lifting factor M	1,0	0,8	2,0	1,4	1,0	0,7	0,5	1,4	1,12	1,0	0,8	2,1	1,5
500 kg	500	400	1.000	700	500	350	250	700	560	500	400	1.050	750
1.000 kg	1.000	800	2.000	1.400	1.000	700	500	1.400	1.120	1.000	800	2.100	1.500
2.000 kg	2.000	1.600	4.000	2.800	2.000	1.400	1.000	2.800	2.240	2.000	1.600	4.200	3.000
3.000 kg	3.000	2.400	6.000	4.200	3.000	2.100	1.500	4.200	3.360	3.000	2.400	6.300	4.500
4.000 kg	4.000	3.200	8.000	5.600	4.000	2.800	2.000	5.600	4.480	4.000	3.200	8.400	6.000
5.000 kg	5.000	4.000	10.000	7.000	5.000	3.500	2.500	7.000	5.600	5.000	4.000	10.500	7.500
6.000 kg	6.000	4.800	12.000	8.400	6.000	4.200	3.000	8.400	6.720	6.000	4.800	12.600	9.000
8.000 kg	8.000	6.400	16.000	11.200	8.000	5.600	4.000	11.200	8.960	8.000	6.400	16.800	12.000
10.000 kg	10.000	8.000	20.000	14.000	10.000	7.000	5.000	14.000	11.200	10.000	8.000	21.000	15.000
15.000 kg	15.000	12.000	30.000	21.000	15.000	10.500	7.500	21.000	16.800	15.000	12.000	31.500	22.500
20.000 kg	20.000	16.000	40.000	28.000	20.000	14.000	10.000	28.000	22.400	20.000	16.000	42.000	30.000
25.000 kg	25.000	20.000	50.000	35.000	25.000	17.500	12.500	35.000	28.000	25.000	20.000	52.500	37.500
30.000 kg	30.000	24.000	60.000	42.000	30.000	21.000	15.000	42.000	33.600	30.000	24.000	63.000	45.000
40.000 kg	40.000	32.000	80.000	56.000	40.000	28.000	20.000	56.000	44.800	40.000	32.000		
50.000 kg	50.000	40.000	100.000	70.000	50.000	35.000	25.000	70.000	56.000	50.000	40.000		
60.000 kg	60.000	48.000	120.000	84.000	60.000	42.000	30.000	84.000	67.200	60.000	48.000		
80.000 kg	80.000	64.000	160.000	112.000	80.000	56.000	40.000	112.000	89.600	80.000	64.000		
100.000 kg	100.000	80.000	200.000	140.000	100.000	70.000	50.000	140.000	112.000	100.000	80.000		

3. Handling and use

Lifting bands and round slings are marked with a color defined by European standard indicating their nominal load bearing capacity. The user has therefore additional safety with allocation of load bearing capacity (see the load bearing capacity table below left). All nominal load bearing capacities from 10000 Kg are to be marked orange, all medium sizes are to be marked in a distinctly different color (with SpanSet oliv).

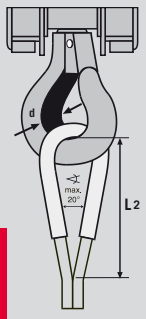
Info

Raw white, non-treated lifting bands are prohibited as per DIN EN 1492.

Lifting bands and round slings made of Polyester can be employed in a temperature range between -40 to +100° C. Utilization with chemicals is possible, too, following examination and manufacturer's approval. In case of slings with textile lifting bands and round slings the surface and the edges of the load must be considered, as sharp edges are hazardous and may damage the slinging equipment.

Info

The opening angle of the lifting band strapin crane hooks should not be more than 20° in crane hooks. Otherwise there is danger of the strap joint being ripped under load.



Rule of thumb: Strap length L 2 = maximum crane hook width b x 3.5

Info

Load bearing capacity controller indispensible and always at your fingertips: The SpanSet load bearing capacity controller for the vest pocket.

A sharp edge is always present if the edge radius „r" is smaller than the material thickness „d" of the sling equipment. If the load is sharp-edged or has a rough surface, the textile slinging equipment must be equipped with suitable abrasion protection straps, protection straps or solid coating

Caution:
In case of sharp-edged loads abrasion protection doesn't replace the cut-resistant protection. Basically, when applying round sling and lifting bands the user benefits from by low dead weight of the slinging equipment and the possibility of slinging the load employing the round slings and lifting bands.

Practical tip:
For elongation round slings can be used with „Joker"-hooks. Round slings should never be knotted or corded together since this would reducethe load bearing capacity beyond control.

ALLOWED

PROHIBITED

PROHIBITED

4. Inspection and maintenance

Chemical fiber lifting bands and round slings are to be inspected by an expert at least once a year. Depending on the conditions of use, shorter inspection intervals are required. The most frequent faults are cuts in the supporting fabric, fire damage due to flying sparks, mechanical damage of the supporting seam and the round sling tube. Repair work is restricted to the manufacturer or a person authorized by him.

EPIS 2.NET Professional increases work safety!
EPIS is the electronic production management and identification system with modern RFID technology. This new version of the EPIS-System 2.NET Professional consists of a comprehensive database, a mobile writing and reading device and various open RFID transponders with which the products for assembly, hoisting safety and height safety technology and other products requiring testing can be equipped.

The benefits of EPIS

- Greater efficiency through rapid reading of the products to be tested and the issue of testing certificates
- More flexibility through merging the product identification and administration into one device
- Greater data security on account of complete documentation of tests, repairs etc...
- Improved test routine through automatic planning and documentation for the maintenance and service intervals

Info

For further information contact us!

SLING TECHNOLOGY

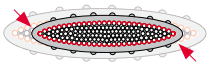
SupraPlus Quality round sling up to 8 t

More compact and robust than ever

115122

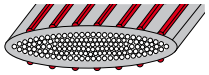
- Round slings as per DIN EN 1492-2
- Extra robust and wear resistant
- Tear resistant label with RFID-Chip
- Specification of load bearing capacity raised woven into the fabric.

New Design – compact cross section



SupraPlus is very compact due to the alignment of hose and clutch. The new SupraPlus is – according to WLL-25% narrower than the former model.
The most important advantage: the round sling is not squeezed on the small crane hooks – this would reduce tightness and therefore is forbidden.
Besides, the mounting on the load is facilitated offering more modes of application.

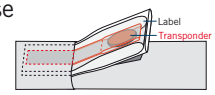
Ribbed strengthening By special fiber.



Two characteristics make SupraPlus extremely robust: Firstly, there is a textile wire woven into the external hose and secondly, there is a special ribbed profile. For the first time, in the new SupraPlus a high performance polyester is used in the raised ribs. This fiber is more resistant to abrasion than the material of the external hose, which had been resistant in first place. Thus the new SupraPlus easily lasts longer even under adverse conditions.

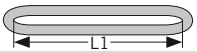
The second advantage of the special fiber: Its cut resistance is clearly superior to the previous model.

New label– Resilient and protected. In case of a missing label of the slingin equipment it must be put out of use. In order to avoid this we have sewn the label into the hose of the round sling using an additional fabric lining and additionally shrouded in an extra transparent protection hose. That way, the label is by far more tear resistantand still better protected against dirt and abrasion.



RFID standard
A RFID – chip with unmistakable code is serially incorporated into each round sling. It is integrated into the label to prevent damage or loss. The RFID chip matches exactly with the electronic product management and identification system EPIS.

Interwoven load bearing capacity information.
The load bearing capacity information is embossed in the woven cover – in addition to the label – of the new SupraPlus to make sure that you'll always grab the proper round sling. You'll be able to read it even if it is heavily soiled.



Description	Nominal lifting ability [kg]	Support thickness under load [mm]	Support width under load[mm]	L1 min. [m]	L1 max. [m]	approx. weight rg. m [kg]	Order no.	Usalbe length L1 1 m €	1,5 m €	2 m €	3 m €	4 m €	5 m €	Special length L1 1. m €	lfd. m €
SupraPlus 500	500	5	36	0,50	8,0	0,30	SP.005.00.0	17,80	24,20	30,55	43,35	-	-	20,25	13,40
SupraPlus 1000	1000	6	36	0,50	20,0	0,35	SP.010.00.0	21,60	29,15	36,55	51,80	66,80	81,90	24,00	15,65
SupraPlus 2000	2000	8	37	0,50	20,0	0,50	SP.020.00.0	27,55	37,20	46,80	66,30	85,70	105,00	30,20	20,25
SupraPlus 3000	3000	10	44	0,50	30,0	0,60	SP.030.00.0	35,25	48,95	62,60	89,80	117,00	144,50	38,65	28,35
SupraPlus 4000	4000	12	52	0,50	30,0	0,90	SP.040.00.0	45,70	63,00	80,10	115,00	149,50	184,00	50,80	35,75
SupraPlus 5000	5000	13	59	0,50	30,0	1,00	SP.050.00.0	52,70	73,00	93,50	134,50	175,50	216,50	58,60	42,50
SupraPlus 6000	6000	14	65	1,00	60,0	1,30	SP.060.00.0	-	-	-	-	-	-	59,90	42,80
SupraPlus 8000	8000	17	68	1,00	60,0	1,70	SP.080.00.0	-	-	-	-	-	-	80,30	55,10

24 h Delivery | Surcharge | CE

Ordering example: Enter usable length (when ordering)
SP.040.05.0 SupraPlus 4000 kg nominal carrying capacity, 5m usable length

* VE 2 pieces only

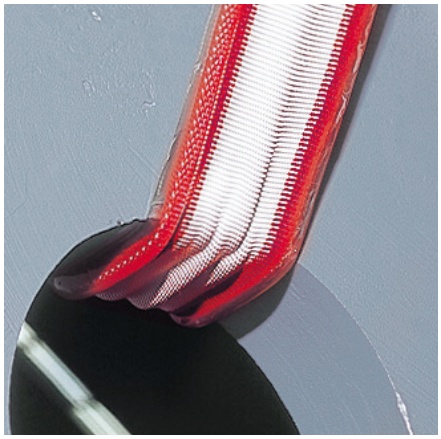
Standard stock items

MADE IN GERMANY

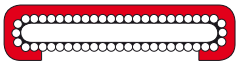
SLING TECHNOLOGY

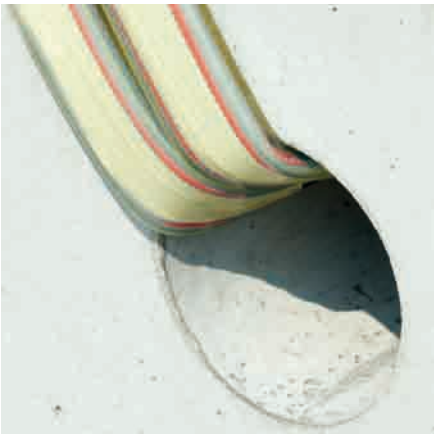
SupraPlus-accessories Sharp edges – no problem!

Abrasion protection and edge protection make the perfect addition to SupraPlus

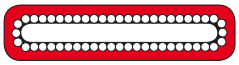


secutex SF-1
Cut resistant secutex-covering providing reliable protection from sharp edges.

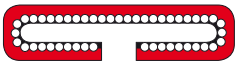




secutex SF-2
Double-face secutex-covering, suitable for very tough conditions.



secutex Clip-SC
One-face secutex-covering, rear opening of the hose for flexible use.



Protection hose for SupraPlus

	approx. width inside [mm]	approx. width inside [mm]	approx. height outside [mm]	approx. weight lin. m [kg]	Order.-No. SF-1 1,0 m	Price lin. m €	appr. width inside [mm]	appr. width outs. [mm]	appr. height outs. [mm]	appr. weight lin. m [kg]	Order.-No. SF-2 1,0 m	Price lin. m €	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight lin. m [kg]	Order.-No. Clip-SC 1,0 m	Price lin. m €
500	55	70	23	0,9	SF1.0050.3	50,30	55	70	25	1,2	SF2.0050.3	65,90	55	70	25	1,1	SC.00050.3	50,30
													55	70	25	1,1	SC.00050.5	47,70
1000	55	70	23	0,9	SF1.0050.3	50,30	55	70	25	1,2	SF2.0050.3	65,90	55	70	25	1,2	SC.00050.3	50,30
													55	70	25	1,2	SC.00050.5	47,70
2000	65	80	23	1,1	SF1.0065.3	58,50	65	80	25	1,5	SF2.0065.3	79,10	65	80	25	1,3	SC.00065.3	58,50
													55	70	25	1,2	SC.00050.5	47,70
3000	80	95	25	1,3	SF1.0075.3	63,20	80	95	25	1,8	SF2.0075.3	87,60	80	95	25	1,8	SC.00075.3	63,20
													65	80	25	1,3	SC.00065.5	47,70
4000	105	125	25	1,5	SF1.0100.3	77,00	105	125	25	2,1	SF2.0100.3	110,50	105	125	25	2,1	SC.00100.3	77,00
													65	80	25	1,3	SC.00065.5	47,70
5000	125	145	25	1,9	SF1.0125.3	89,00	125	145	25	2,6	SF2.0125.3	131,50	125	145	25	2,6	SC.00125.3	89,00
													80	95	25	1,8	SC.00075.5	63,20
6000	125	145	25	1,9	SF1.0125.3	89,00	125	145	25	2,6	SF2.0125.3	131,50	125	145	25	2,6	SC.00125.3	89,00
													80	95	25	1,8	SC.00075.5	63,20
8000	155	175	25	2,1	SF1.0150.3	100,50	155	175	25	3,0	SF2.0150.3	152,50	155	175	25	3,0	SC.00150.3	100,50
													105	125	25	2,1	SC.00100.5	77,00

Surcharge

Please supplement the order number with length and number of pieces of the protection hose.

Figure 3

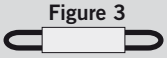
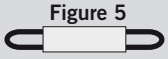


Figure 5



Info

SupraPlus with ExoSet shackles produced especially for this round sling – the tried and tested combination on which you can rely. You can read more about the Exo-Set shackles on Page 33.

Info

SupraPlus and adapter security hooks „Joker“: Always a suitable connection! From 1 to 6 t load bearingcapacity. More information available on page 32! Use sheathing for critical edges. Ask your SIP Partner!

SLING TECHNOLOGY

Twintex 1,0 t to 8,0 t Round slings

Quality at a reasonable price

095131

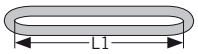
- Round sling as per DIN EN 1492-2
- Double hose cover with security chamber
- Chamber system prevents penetration of foreign bodies into the supporting fabric
- Interwoven tonstrips

Checked quality
The Twintex round slings metall the requirements of the DIN EN 1492-2 and are GS-tested. All necessary product features are present: Colour coding as per European standard as well as ancaptive-sewn-in safety label.

Furthermore, interwoven ton strips indicate the lifting capacity, allowing quick and unfailing recognition of the correct slings for your load.

Two-chamber system
Twintex-round slings are enclosed in a double hose for protection against damage, with layers interwoven in sections.

This way,"chambers" are built, which impede sliding and penetration of foreign bodies and dirt particles in case of damage of the outer cover.



Nominal-lifting capacity [kg]	Support-thickn. a. load [mm]	Support-width a. load [mm]	L1 min. [m]	L1 max. [m]	Weight approx. lin. m. [kg]	Order-No.	Usable length L1/Price 1 m €	1,5 m €	2 m €	3 m €	4 m €	5 m €	Special lengths 1. m €	lfd. m €
1000	9	45	0,50	15	0,4	TWIN.01.00	11,75	14,45	17,10	22,70	28,30	33,75	13,00	5,89
2000	12	50	0,50	15	0,6	TWIN.02.00	15,20	19,05	22,70	30,30	37,80	45,20	17,10	7,82
3000	12	55	0,50	15	0,8	TWIN.03.00	20,00	25,60	30,95	42,20	53,10	64,10	21,85	11,45
4000	14	65	0,50	15	1,0	TWIN.04.00	22,60	29,35	36,05	49,80	63,10	76,70	24,75	14,35
5000	16	70	0,50	20	1,0	TWIN.05.00	24,30	31,70	39,20	54,10	68,90	83,70	26,90	15,45
6000	18	85	1,00	60	1,4	TWIN.06.00	32,65	42,50	52,50	72,20	92,20	112,00	35,65	20,50
8000	21	85	1,00	60	1,8	TWIN.08.00	40,90	53,70	66,30	91,60	117,00	142,50	45,30	26,15

Surcharge *SUPERPRICE*

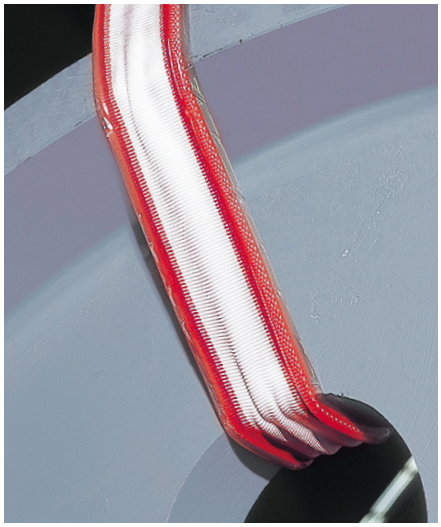
CE

MADE IN GERMANY

SLING TECHNOLOGY

Twintex-accessories Sharp edges – no problem!

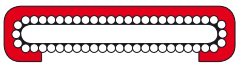
Edge protection for Twintex

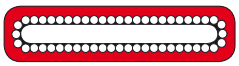


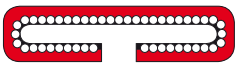
secutex SF-1
Cut resistant secutex-covering provides reliable protection from sharp edges.

secutex SF-2
Double-faced secutex-covering, suitable for very tough conditions.

secutex Clip-SC
Single-faced secutex-covering, rear Opening of hose for flexible use.







Protection hose for Twintex

	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight lin. m. [kg]	Order.-No. SF-1 1,0 m	Price lin. m €	appr. width inside [mm]	appr. width outs. [mm]	appr. height outs. [mm]	appr. weight lin. m [kg]	Order.-No. SF-2 1,0 m	Price lin. m €	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight lin. m [kg]	Oder.-No. Clip-SC 1,0 m	Price lin. m. €
1000	55	70	23	0,9	**SF1.0065.3**	**58,50**	55	70	25	1,2	**SF2.0065.3**	**79,10**	55	70	25	1,2	**SC.00050.3**	**50,30**
													55	70	25	1,2	**SC.00050.5**	**47,70**
2000	65	80	23	1,1	**SF1.0075.3**	**63,20**	65	80	25	1,5	**SF2.0075.3**	**87,60**	65	80	25	1,3	**SC.00065.3**	**58,50**
													55	70	25	1,2	**SC.00050.5**	**47,70**
3000	80	95	25	1,3	**SF1.0100.3**	**77,00**	80	95	25	1,8	**SF2.0100.3**	**110,50**	80	95	25	1,8	**SC.00075.3**	**63,20**
													65	80	25	1,3	**SC.00065.5**	**47,70**
4000	105	125	25	1,5	**SF1.0125.3**	**89,00**	105	125	25	2,1	**SF2.0125.3**	**131,50**	105	125	25	2,1	**SC.00100.3**	**77,00**
													65	80	25	1,3	**SC.00065.5**	**47,70**
5000	125	145	25	1,9	**SF1.0125.3**	**89,00**	125	145	25	2,6	**SF2.0125.3**	**131,50**	125	145	25	2,6	**SC.00125.3**	**89,00**
													80	95	25	1,8	**SC.00075.5**	**63,20**
6000	125	145	25	1,9	**SF1.0150.3**	**100,50**	125	145	25	2,6	**SF2.0150.3**	**152,50**	125	145	25	2,6	**SC.00125.3**	**89,00**
													80	95	25	1,8	**SC.00075.5**	**63,20**
8000	155	175	25	2,1	**SF1.0150.3**	**100,50**	155	175	25	3,0	**SF2.0150.3**	**152,50**	155	175	25	3,0	**SC.00150.3**	**100,50**
													105	125	25	2,1	**SC.00100.5**	**77,00**

Surcharge

Protection hose maybe fitted by user, following figure 3.
More lengths on request.

Please supplement the order number with length and number of pieces of the protection hose.

Figure 3

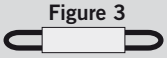
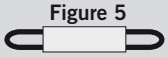


Figure 5



SLING TECHNOLOGY

Magnum Easy game with heavy loads

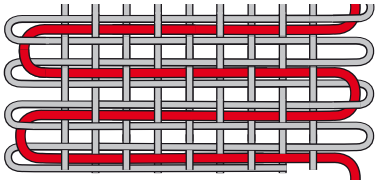
Load carrying capacity upto 100 t and usable length upto 60 m

095127

- Round sling as per DIN EN 1492-2
- Load carrying capacity from 10 to 100 t
- Abrasion resistant label with RFID – chip
- Extra-robust design
- Permanently legible, raised carrying capacity information

Strong hold for heavy loads
The SpanSet Magnum offers all advantages of a textile round sling: safe hold , optimum handling and high abrasion resistance. The Magnum Plus version these heavy load round slings will lift upto 100 t in direct haul. Previously this was achieved by wire cable grummets only, which weigh a lot more.

As heavy load also involves heavy stress, the outer fabric hose of Magnum and Magnum Plus is made to a tight lateral fit.
This way, wrinkles are kept to a minimum even under high load. In addition the interwoven textile wire protects the hose fabric from tearing.
All the sling equipment for heavy load categoryare uniformly colored orange.



Therefore we have the respective load bearing capacity visibly woven into the round sling. The captive load bearing capacity – marking reliably indicates the load bearing capacity even in case of heavy dirt.

The Maximum– 100 t load bearing capacity 60 m usable length
MagnumPlus really has sensational usable length upto 60 m and standard load bearing capacity up to 100t meaning that even the largest heavyweights will not remain on the spot.

Handling grade 1!
Loads of this weight class formerly could be tackled only with chains and steel ropes. In contrast, our MagnumPlus is almost a flyweight.

Compact and long lasting; capacity inside - protection outside.
The robust safety coat (outside) and the fabric (inside) were perfectly matched in MagnumPlus.
The laterally tightly fixed, well protected seam makes all the difference in this weight class. In practice this means: Incomparable compactness, better handling and reduced wear and tear!

Info

Take a look at the video clip to determine the load capacity with combined use of the MagnumPlus round slings and the ExoSet shackles on our website at www.spanset.de.

Description	Nominal lifting capacity [kg]	Support thickn. und. load [mm]	Support width und. load [mm]	L1 min. [m]	L1 max. [m]	approx.. weight lin. m	Order-No.	Usable length L1 4 m €	5 m €	6 m €	7 m €	8 m €	Spec. lengths L1 1. m €	lfd. m €
MagnumPlus 10000	10000	19	90	1	40	2,2	MG.0100.00	210,00	252,50	295,00	340,00	379,50	84,70	42,65
MagnumPlus 15000	15000	21	115	1	40	3,2	MG.0150.00	347,00	412,50	477,50	547,00	608,50	154,50	65,50
MagnumPlus 20000	20000	23	135	1	40	4,4	MG.0200.00	427,00	510,00	593,00	676,00	758,50	182,00	83,20
MagnumPlus 25000	25000	24	150	1	40	5,6	MG.0250.00	528,00	624,50	721,00	823,50	914,00	244,00	96,70
MagnumPlus 30000	30000	27	170	1	40	7,4	MG.0300.00	671,00	795,50	919,50	1.044,00	1.168,00	305,50	124,50
MagnumPlus 40000	40000	37	190	2	40	10,0	MG.0400.00	882,00	1.048,00	1.213,00	1.379,00	1.544,00	394,00	165,50
MagnumPlus 50000	50000	65	230	2	40	13,0	MG.0500.00	1.107,00	1.329,00	1.550,00	1.771,00	1.992,00	453,50	221,50
MagnumPlus 60000	60000	75	190	2	60	14,8	MG.0600.00	1.437,00	1.759,00	2.082,00	2.406,00	2.729,00	478,00	323,00
MagnumPlus 80000	80000	86	230	2	60	20,0	MG.0800.00	2.662,00	3.266,00	3.870,00	4.475,00	5.079,00	868,00	604,50
MagnumPlus 100000	100000	96	260	2	40	26,0	MG.1000.00	3.191,00	3.918,00	4.646,00	5.373,00	6.101,00	1.030,00	728,00

Surcharge

CE

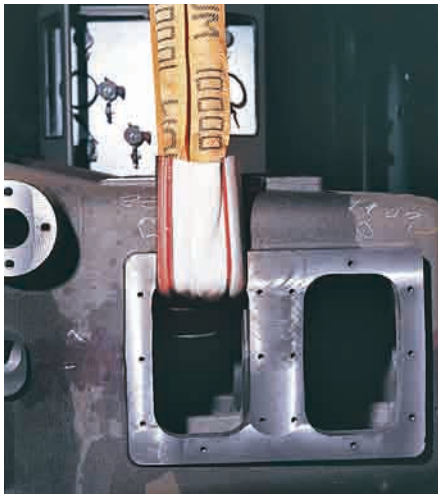
Order example: Enter usable length. MG.0400.05 Magnum 40000 kg nominal load bearing capacity, 5 m usable length

MADE IN GERMANY

SIP

Magnum-accessories Sharp edges no problem!

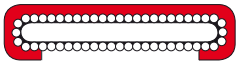
Edge protection for Magnum and MagnumPlus

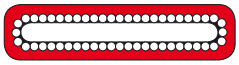


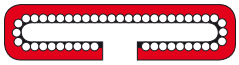
secutex SF-1
Cut resistant secutex-covering
Reliably protects from sharp edges.

secutex SF-2
Double-faced secutex-covering, suitable fortough conditions.

secutex Clip-SC
Single-faced secutex-covering, easily expandable due to opening on one side.







Protection hose for Magnum

	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight lin. m. [kg]	Order-No. SF-1 1,0 m	Price lin. m €	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight lin. m. [kg]	Order-No. SF-2 1,0 m	Price lin. m €	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight lin. m. [kg]	Best.-Nr. Clip-SC 1,0 m	Price lin. m €
10000	145	165	35	2,4	SF1.2020.3	122,50	145	220	35	3,3	SF2.2020.3	191,50	145	165	35	3,45	SC.20020.3	191,50
													95	110	35	2,3	SC.10020.5	110,50
15000	185	210	50	4,6	SF1.2520.3	146,00	185	270	40	4,2	SF2.2520.3	233,00	185	210	50	5,9	SC.20025.3	233,00
													105	125	50	3,7	SC.10025.5	131,50
20000	245	265	45	3,7	SF1.3020.3	241,00	245	325	45	6,0	SF2.3030.3	362,50	245	265	45	5,5	SC.30030.3	362,50
													125	145	50	4,2	SC.12530.5	131,50
25000	255	275	50	4,0	SF1.3020.3	241,00	255	325	50	6,0	SF2.3035.3	362,50	255	275	50	5,8	SC.20035.3	343,50
													135	155	50	3,6	SC.10035.5	124,50
30000	310	340	35	4,6	SF1.3020.3	241,00	310	325	55	6,2	SF2.3040.3	362,50	310	340	35	6,8	SC.30040.3	362,50
													155	175	60	5,2	SC.15040.5	152,50
40000	340	365	60	7,5	SF1.3520.3	271,50	340	370	65	8,1	SF2.3550.3	441,00	340	365	60	10,0	SC.35050.3	441,00
													185	210	70	6,5	SC.20050.5	191,50
50000													220	520	75	17,8	SC.40050.3	531,50
																	SC.22050.5	275,50
60000													220	520	100	25,5	SC.25050.3	627,50
80000													250	580	100	48,6	SC.22505.3	696,00
100000													280	640	120	65,3	SC.22805.3	745,00

Surcharge

Protection hose can be fitted by the user, following figure 3. Other lengths on request.

Info

MagnumPlus with ExoSet shackles produced especially for this round sling – the tried and tested combination which you can rely on. You can read more about the ExoSet shackles on Page 33.

Please supplement the order number with length and number of pieces of the protection hose.

Figure 3

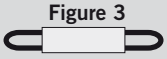
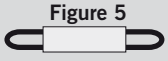


Figure 5



SLING TECHNOLOGY

Magnum-X Standard-Load bearing capacity up to 400 t

The new dimension in lifting technology

The new Magnum–X sets a standard regarding safety, comfort and durability. Signifying thorough innovation for the tonnage classes of 10 t to 150 t it is the technical pioneer.

While conventional round slings are woven, the Magnum-X has a compact hose cover made of special high performance polyester, from 50 t load bearing capacity onwards furnished with a lateral seam. This completely new type of design makes the new model much more compact, lighter and simpler to handle than its predecessors. This will considerably increase your work efficiency. And of course you'll benefit from safety and quality standards, as usual, which are a landmark in our industrial sector. Since your safety is our motivation.

- **X-tremly compact**
  Magnum-X upto 50% less in diameter than comparable round slings
- **X-tremely high loading capacity**
  Clearly more resilient high performance fiber. Thereby the round sling thickness is reduced approx. by 1/3 and the weight by upto 50%
- **X-tremely wear resistant**
  The protective coat is equipped with an extremely abrasion and cut resistant high performance polyester
- **X-tremely precise recognition**
  The Magnum-X carries an additional sleeve which has been provided with a raised woven load bearing capacity information
- **X-act verification**
  The label is tear resistant and safely sewn into the hose with a RFID-transponder

Type	Load bear. cap. simple direct [kg]	Supp. thickn. with WLL [mm]	Support width with WLL [mm]	weight [kg/m]	L min. [m]	L max. [m]	Order-No.	Price €
Magnum-X 10000	10000	12	55	1,0	2,5	30	MGX.010.00	on request
Magnum-X 20000	20000	15	80	2,3	2,5	30	MGX.020.00	on request
Magnum-X 30000	30000	20	90	3,5	2,5	30	MGX.030.00	on request
Magnum-X 40000	40000	24	110	5,1	2,5	30	MGX.040.00	on request
Magnum-X 50000	50000	23	117	5,5	4,0	30	MGX.050.00	on request
Magnum-X 60000	60000	30	150	7,9	4,0	30	MGX.060.00	on request
Magnum-X 80000	80000	40	200	10,9	4,0	30	MGX.080.00	on request
Magnum-X 100000	100000	47	233	16,8	4,0	30	MGX.100.00	on request
Magnum-X 125000	125000	53	267	20,4	4,0	30	MGX.125.00	on request
Magnum-X 150000	150000	62	308	25,4	4,0	30	MGX.150.00	on request
Magnum-X 200000*	200000				4,0	30	MGX.200.00	on request
Magnum-X 250000*	250000				4,0	30	MGX.250.00	on request
Magnum-X 300000*	300000				4,0	30	MGX.300.00	on request
Magnum-X 350000*	350000				4,0	30	MGX.350.00	on request
Magnum-X 400000*	400000				4,0	30	MGX.400.00	on request

Surcharge

CE

Info

Further load bearing capacities on request. Find the accessories for the Magnum-X on the following page.

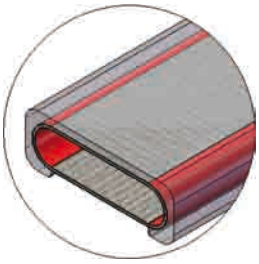
Comparisson: left side Magnum-X, right side „normal“ MagnumPlus

The „light one“ for heavy loads

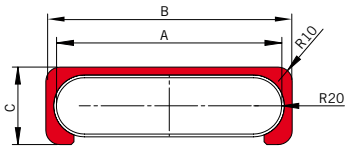
Magnum-X accessories Edge protection products

So sharp edges don't have a chance

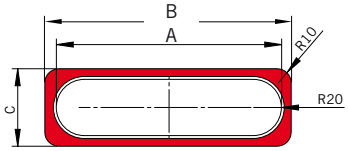
As a consequence of extremely high surface pressures becoming feasible due to the compact form of the new high performance round slings, extra protection is urgently required. The specially adapted secutex-protection hose has an oval internal contour, providing complete enclosure of the ropey round sling. The big lateral radii improve the flexibility, the secutex-Material protects the valuable Mangnum-X reliably from abrasion or cuts.



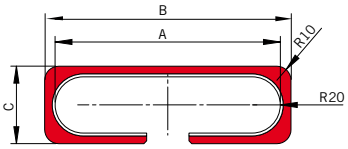
secutex SF-1
Cut resistant secutex-covering protects reliably form sharp edges



secutex SF-2
Double-faced secutex-covering, suitable for very demanding conditions



secutex Clip-SC
cut resistant secutex-covering easy to expand, given an opening on one side



Suitable for Magnum-X	appr. wid. A inside A [mm]	appr. wid. B outs. B [mm]	appr. heig. C outs. C [mm]	appr. weight lin. m [kg]	Order-No. SF-1 1,0 m	Price lin. m €	appr. wid. A inside A [mm]	appr. wid. B outs. B [mm]	appr. heig. C outs. C [mm]	appr. weig. lin. m [kg]	Best.-Nr. SF-2 1,0 m	Preis lfd. m €	appr. wid. A inside A [mm]	appr. wid. B outs. B [mm]	appr. heig. C outs. C [mm]	appr. weig. lin. m [kg]	Order-No. Clip-SC 1,0 m	Price lin. m €
10000	100	155	40	2,3	SF1.X.1000	on request	100	155	40	3,7	SF2.X.1000	on request	100	155	40	3,6	CSC.X.1000	on request
20000	120	135	45	2,2	SF1.X.2000	on request	120	135	45	3,5	SF2.X.2000	on request	120	135	45	3,3	CSC.X.2000	on request
30000	140	155	50	2,4	SF1.X.3000	on request	140	155	50	3,9	SF2.X.3000	on request	140	155	50	3,7	CSC.X.3000	on request
40000	160	175	55	2,7	SF1.X.4000	on request	160	175	55	4,4	SF2.X.4000	on request	160	175	55	4,2	CSC.X.4000	on request

Surcharge

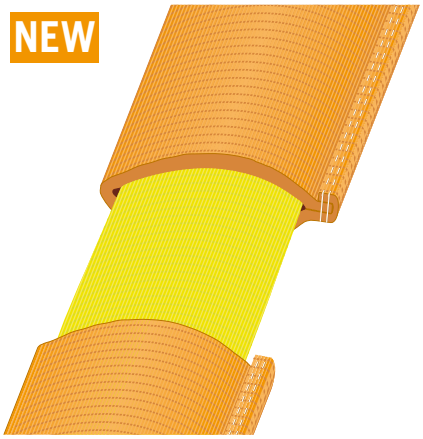
Info

MagnumPlus with ExoSet shackles produced especially for this round sling – the tried and tested combination which you can rely on. You can read more about the ExoSet shackles on Page 33.

SLING TECHNOLOGY

Magnum-X SMART High Performance Round Slings up to 40 t

Heavy lifting technology for wear-intensive applications



- **Sheath interchangeable**
- **Inner sheath protects the core**
- **After repair, practically new**
- **Long service life**
- **Good handling**
- **Standard RFID transponder**

Based on the Magnum-X high-performance sling, the SpanSet has developed a special heavy duty sling for extremely hard and wear-intensive applications, the new Magnum-X SMART.

Round slings in the capacity range of 20 to 40 t are in many areas of production essential stop means. Especially with the daily use, the Magnum-X SMART makes an extremely positive impact with its favourable weight and low cross-section. Especially in areas with edges or rough surfaces, the slings are particularly subject to high wear. Despite an extremely tough outer shell, it cannot always be avoided that damage of the outer shell will occur.

The optimal round slings for wear-intensive applications
The outer shell of the new round slings consists of a new, highly resistant heavy duty polyester. This outer shell protects the sling even by the toughest continuous use. It is characterized by its enormous compactness and ease, like you already know from the Magnum X.

Set up for damage
The special feature of the Magnum-X SMART round sling lies in its construction. Because damage cannot always be avoided, the new Magnum-X SMART is fitted with a replaceable outer shell. Below this shell is the real round sling with an additional shell tube in the yellow signal colour. So it is possible for the user to notice even the slightest damage to the outer shell immediately when the yellow signal colour can be seen through damage of the outer shell. The round sling is usually repairable and can still be used.

Repair desired
The outer shell of the Magnum-X SMART is sewn around the inner tube. In case of damage, the old outer shell is removed, the inner tube shell of the round sling is checked and then coated with a new outer fabric. The repaired sling is then practically new and the repair costs are only a fraction of a new sling. That way, in areas of high wear, an even longer life is reached.

RFID integrated
The Magnum-X SMART round sling is already equipped with an EPIS RFID transponder. This allows for easy product identification and management.

Info
You'll find more information about the EPIS from page 10 on.

Damaged, but repairable Magnum-X SMART

The figure shows a Magnum-X SMART after being damaged. The orange outer tube is through use contaminated and was opened through damage.
Due to the timely replacement of the outer shell, a long life of the Magnum-X SMART is achieved. Latest, when the yellow inner shell can be seen, the outer shell should be replaced.

Info
How to use the Magnum-X SMART securely and economically, you will learn in our seminars. Page A 18 - A23.

Version	Capacity Loop [kg]	Coating by WLL [mm]	Contact width by WLL [mm]	L min. [m]	L max. [m]	Order-No.	Price €
Magnum-X SMART 20000	20000	19	84	2,5	30	MGS.020.00	on request
Magnum-X SMART 30000	30000	24	94	2,5	30	MGS.030.00	on request
Magnum-X SMART 40000	40000	28	114	2,5	30	MGS.040.00	on request

ExoSet Round Sling-Shackles

Tested safety which you can rely on

NEW

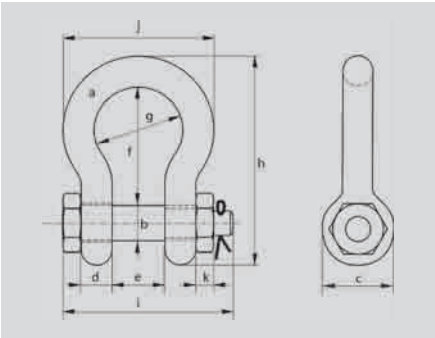
ExoSet round sling shackles are now also available with optional engraving!

NEW

Available on request with integrated EPIS transponder.

SpanSet has extensive tested the ExoSet shackles in combination with the SpanSet round slings. So, each round sling could be assigned the best shackle. This was achieved through the perfect coordination of the contact width in the shackle bracket, where shackle and round sling of the same capacity were tested. In addition, the ExoSet shackle offers a consistently high quality with low tolerances and deburring and polishing of the contact surfaces. By the cooperation of SpanSet with the DGUV, German Legal Accident Insurance, they were reviewed and approved. Optionally, you get the ExoSet shackles also with engraved individual data, such as a traceable code. With a capacity of 25 tons on, the ExoSet shackle can be fitted with an optional RFID transponder. Here, the new ultra-compact transponder PIN is used, see Figure.

So, perfectly matched round slings and shackles are available for maximum safety.



Info

Learn more about the shackles testing in the video on our website: www.spanset.de/ download.html.

For more Info on EPIS contact us.

Optionally, you can get shackles, nuts and bolts with additional engraving and/ or RFID transponder.

SLING TECHNOLOGY

ExoSet-round sling shackles for SupraPlus

Capacity [kg]	Weight [kg]	Stirrup Ø a [mm]	Bolt Ø b [mm]	Eye Ø c [mm]	Strength Eye d [mm]	inner width e [mm]	inner length f [mm]	Stirrup width g [mm]	outer length h [mm]	Bolt length i [mm]	outer width j [mm]	Width nut k [mm]	Order-No.	Price €
2000	0,42	13,5	16	34	13,5	22	51	32	91	83	63	13	ES.SP.0200	10,00
3250	0,74	16	19	40	16	27	64	43	114	99	79	17	ES.SP.0325	14,20
4750	1,18	19	22	47	19	31	76	51	136	115	94	20	ES.SP.0475	19,00
6500	1,77	22	25	53	22	36	83	58	157	131	107	23	ES.SP.0650	26,50
8500	2,58	25	28	60	25	43	95	68	176	151	124	25	ES.SP.0850	38,00

ExoSet-round sling-shackles for MagnumPlus

Capacity [kg]	Weight [kg]	Stirrup Ø a [mm]	Bolt Ø b [mm]	Eye Ø c [mm]	Strength Eye d [mm]	inner width e [mm]	inner length f [mm]	Stirrup width g [mm]	outer length h [mm]	Bolt length i [mm]	outer outer j [mm]	Width nut k [mm]	Order-No.	Price €
12000	4,91	32	35	74	32	51	115	83	218	179	154	31	ES.MG.1200	73,50
17000	8,19	38	42	89	38	60	146	99	262	202	183	19	ES.MG.1700	103,00
25000	14,22	45	50	104	45	74	178	126	314	244	226	24	ES.MG.2500	193,00
35000	19,85	50	57	111	50	83	197	138	358	270	250	27	ES.MG.3500	222,00
55000	39,59	65	70	145	65	105	260	180	463	330	329	33	ES.MG.5500	553,00
85000	62,00	75	83	163	75	127	329	190	556	376	355	40	ES.MG.8500	915,00

ExoSet-round sling-shackles for Magnum-X

Capacity [kg]	Weight [kg]	Stirrup Ø a [mm]	Bolt Ø b [mm]	Eye Ø c [mm]	Strength Eye d [mm]	inner width e [mm]	inner length f [mm]	Stirrup width g [mm]	outer length h [mm]	Bolt length i [mm]	outer outer j [mm]	Width nut k [mm]	Order-No.	Price €
12000	4,91	32	35	74	32	51	115	83	218	179	154	31	ES.MX.1200	73,50
17000	8,19	38	42	89	38	60	146	99	262	202	183	19	ES.MX.1700	103,00
25000	14,22	45	50	104	45	74	178	126	314	244	226	24	ES.MX.2500	193,00
35000	19,85	50	57	111	50	83	197	138	358	270	250	27	ES.MX.3500	222,00
55000	39,59	65	70	145	65	105	260	180	463	330	329	33	ES.MX.5500	553,00
85000	62,00	75	83	163	75	127	329	190	556	376	355	40	ES.MX.8500	915,00

SLING TECHNOLOGY

Round Sling Suspensions 1 strand

Economic Lifting with SpanSet Round Sling Suspensions

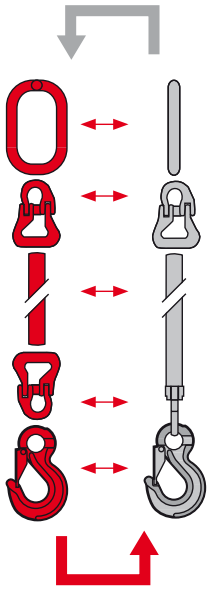
- According to DIN EN 1492-2
- Ideal in combination with attachment points
- High-strength fitting parts according to DIN 1677

If you have fixed attachment points at your loads, the selection of the optimum suspension equipment is easy: A round sling suspension can be adapted at low effort to all situations. Because, especially at precious machinery, job-tailed machinery, custom-built components or investment goods you want to be absolutely sure.

Fixed Anchoring
Therefore, SpanSet connects its textile suspension components with high-quality forged components. The high-strength connecting components are tested according to DIN EN 1677 and correspond to grade 8. The round sling rests along its full width on the surface – eliminating dangerous concentrated loads. This combination allows extreme capacities up to 63 t.

Safe Fastening
The fasteneers for the RS suspensions are forged out of high-strength steel. The used alloy is very tough and allows a compact design of the hook at optimum mouth width. This makes hanging up the loads at the attachment points very comfortable.

Simple Exchange
If parts should be damaged anyhow, you do not need to replace the whole suspension. Due to the proven unit construction system you can replace each individual components, be it the round sling, a connecting element or a hook. This saves purchasing costs and makes it easier to work at full safety. Much easier is the administration of your RS suspensions with the RFID transponder for the electronic product information system EPIS, which is optionally available.



1-Strand Round Sling Suspensions up to 30 t Load Capacity

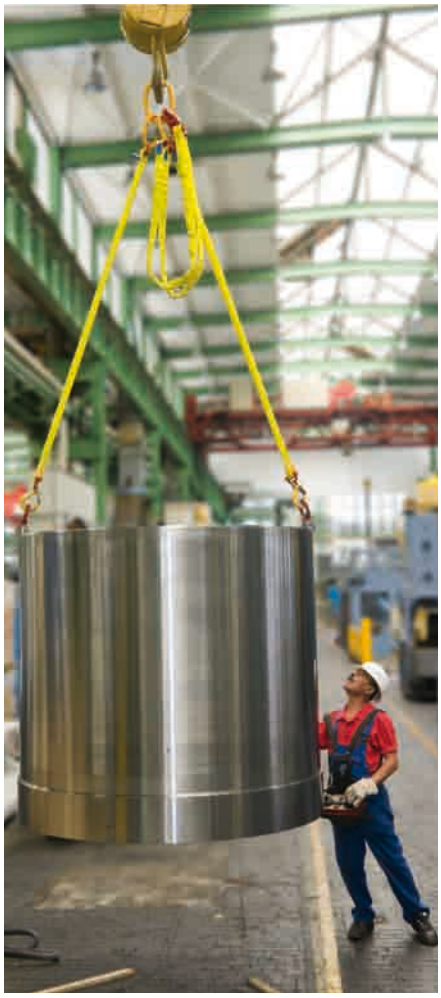
Design	Name	Nominal capacity [kg]	Load capacity (WLL) [kg]	L1 min. [m]	L1 max. [m]	Weight 1. m [kg]	Weight run. m [kg]	Fitting components	Order No.	Price € 1. m incl. assemb. fiting parts	Price € run. m
	RSG-1- 1000 LS/KE	1000	1.000	0,375	10,0	1,4	0,3	1xKR 1,25; 2xKE 2,0; 1xLS 1,5	E1.LS01.00	102,00	11,10
	RSG-1- 2000 LS/KE	2000	2.000	0,375	10,0	2,5	0,5	1xKR 2,5; 2xKE 2,0; 1xLS 2,5	E1.LS02.00	109,50	13,80
	RSG-1- 3000 LS/KE	3000	3.000	0,375	20,0	3,7	0,8	1xKR 4,0; 2xKE 3,15; 1xLS 4,0	E1.LS03.00	138,50	18,85
	RSG-1- 4000 LS/KE	4000	4.000	0,375	20,0	5,7	1,0	1xKR 4,0; 2xKE 5,3; 1xLS 4,0	E1.LS04.00	184,50	23,55
	RSG-1- 5000 LS/KE	5000	5.000	0,375	20,0	6,6	1,1	1xKR 7,5; 2xKE 5,3; 1x LS 6,7	E1.LS05.00	216,00	26,95
	RSG-1- 6000 LS/KE	6000	6.000	1,0	20,0	9,1	1,4	1xKR 7,5; 2xKE 8,0; 1x LS 6,7	E1.LS06.00	278,00	32,85
	RSG-1- 8000 LS/KE	8000	8.000	1,0	20,0	9,4	1,8	1xKR 10,0; 2xKE 8,0; 1x LS 10,0	E1.LS08.00	340,00	42,05
	RSG-1-10000 LS/KE	10000	10.000	2,5	50,0	23	2,5	1xKR 10,0; 2xKE 12,5; 1x LS 10,0	E1.LS10.00	526,00	59,90
	RSG-1-15000 LS/KE	15000	15.000	2,5	50,0	36	3,5	1xKR 17,0; 2xKE 15,0; 1x LS 15,5	E1.LS15.00	1.173,00	96,60
	RSG-1-20000 LS/KE	20000	20.000	2,5	50,0	56	5,0	1xKR 25,0; 2xKE 21,2; 1x LS 21,2	E1.LS20.00	1.839,00	142,00
	RSG-1-25000 LS/KE	25000	25.000	2,5	50,0	89	6,0	1xKR 25,0; 2xKE 31,5; 1x LS 31,5	E1.LS25.00	2.227,00	171,50
	RSG-1-30000 LS/KE	30000	30.000	2,5	50,0	94	8,0	1xKR 43,0; 2xKE 31,5; 1x LS 31,5	E1.LS30.00	2.406,00	226,50

Surcharge Inspection service CE

Order example: Enter working length L1! E1.LS08.06 1-Stranded suspension, 8,000 kg load capacity, 6 m working length

Please note: The working length refers to the net round sling length! During the catalogue life-time, the colour of the fitting parts is subject to change without notice!

Round Sling Suspensions 2 strand



Reliably Protected
For a longer lifetime all strands of the SpanSet RS suspensions are enclosed by a protection tube. The tube in load capacity colour according to DIN EN is sewn fixed and reduces wearing. At the same time, it improves the handling by bundling the round slings.

Everything in Balance
If longer loads are lifted at only one attachment point, they easily start to swing – which is dangerous for all present persons and therefore is not allowed. With a 2-stranded round sling suspension you can be sure that the load stays in balance. This way, you have a better control on the movement of the load.

In addition, you exploit the advantage of the higher mode factor. At 2 strands load capacities up to 1.4 times higher – as long as the inclination angle is below 45°. With that, loads up to 42 t can be moved in a controlled and safe way.

- According to DIN EN 1492-2
- Ideal in combination with attachment points
- High-strength fitting parts according to DIN 1677

Info

Note the maximum inclination angle of 60° at round sling suspensions!

2-Stranded Round Sling Suspensions up to 42 t Load Capacity

Design	Name	Nominal capacity [kg]	Load capacity (WLL) up to 45° [kg]	up to 60° [kg]	L1 max [m]	L1 min [m]	Weight 1. m [kg]	Weight run. m [kg]	Fitting parts	Order No.	Price € 1. m incl. assemb. fitting parts	Price € run. m
	RSG-2-1400 LS/KE	1400	1.400	1.000	10,0	0,375	3,8	0,6	1xKR 2,5; 4x KE 2,0; 2xLS 1,5	E2.LS01.00	195,00	22,25
	RSG-2-2800 LS/KE	2800	2.800	2.000	10,0	0,375	5,6	1,0	1xKR 4,0; 4x KE 2,0; 2xLS 2,5	E2.LS02.00	211,50	27,60
	RSG-2-4200 LS/KE	4200	4.200	3.000	20,0	0,375	9,0	1,6	1xKR 7,5; 4x KE 3,15; 2xLS 4,0	E2.LS04.00	265,00	37,65
	RSG-2-5600 LS/KE	5600	5.600	4.000	20,0	0,375	12,9	2,0	1xKR 7,5; 4x KE 5,3; 2xLS 4,0	E2.LS05.00	357,00	47,10
	RSG-2-7000 LS/KE	7000	7.000	5.000	20,0	0,375	13,3	2,2	1xKR 7,5; 4x KE 5,3; 2xLS 6,7	E2.LS07.00	404,50	53,90
	RSG-2-8400 LS/KE	8400	8.400	6.000	20,0	1,0	22,9	2,8	1xKR 10,0; 4x KE 8,0; 2xLS 6,7	E2.LS08.00	543,50	65,70
	RSG-2-11200 LS/KE	11200	11.200	8.000	20,0	1,0	24,9	3,6	1xKR 17,0; 4xKE 8,0; 2xLS 10,0	E2.LS11.00	688,00	84,10
	RSG-2-14000 LS/KE	14000	14.000	10.000	50,0	2,5	40	5	1x KR 17,0; 4x KE 12,5; 2x LS 10,0	E2.LS14.00	996,00	119,50
	RSG-2-21000 LS/KE	21000	21.000	15.000	50,0	2,5	69	7	1x KR 25,0; 4x KE 15,0; 2 x LS 15,5	E2.LS21.00	2.314,00	193,00
	RSG-2-28000 LS/KE	28000	28.000	20.000	50,0	2,5	108	10	1xKR 28,0; 4x KE 21,2; 2xLS 21,2	E2.LS28.00	3.606,00	285,00
	RSG-2-35000 LS/KE	35000	35.000	25.000	50,0	2,5	143	12	1xKR 43,0; 4x KE 31,5; 2xLS 31,5	E2.LS35.00	4.427,00	343,50
	RSG-2-42000 LS/KE	42000	42.000	30.000	50,0	2,5	156	16	1xKR 43,0; 4x KE 31,5; 2xLS 31,5	E2.LS42.00	4.522,00	453,50

Surcharge | Inspection service | CE

Order example: Enter working length L1! E2.LS08.04 2-Stranded Suspension, 8,400 kg load capacity, 4 m working length

Please note: The working length refers to the net round sling length! During the catalogue life-time, the colour of the fitting parts is subject to change without notice!

SLING TECHNOLOGY

Round Sling Suspensions 4 strands

Certainly a Fixed Connection

- According to DIN EN 1492-2
- Ideal in combination with attachment points
- High-strength fitting parts according to DIN 1677

Perfect Balance
If you want to lift particularly bulky or precious loads, you want to have full control about the position – at any time. Exactly this is provided by the 4-stranded round sling suspensions. Four round slings in SpanSet quality, each in an exactly defined length, make symmetrical lifting as easy as ever before. The suspension at four attachment points ensures that the load cannot tilt neither longitudinal nor lateral. At inclinations below 45° you can use a load capacity up to 63 t.

Unit Construction Saves Costs
All fitting parts of our round sling suspensions are manufactured out of robust steel of grade 8. Due to the proven unit construction system you can replace each individual component, be it the round sling or a fitting element. This reduces your maintenance costs significantly.

Information

Note the maximum inclination angle of 60° at round sling suspensions!

4-Stranded Round Sling Suspensions up to 63 t Load Capacity

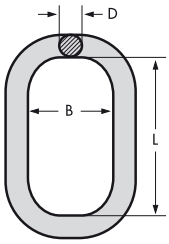
Design	Name	Nominal-capacity [kg]	Load cap. (WLL) up to 45° [kg]	up to 60° [kg]	L1 min. [m]	L1 max. [m]	Weight 1. m [kg]	Weight run. m [kg]	Fitting parts	Order No.	Price € 1. m incl. assemb. fitting parts	Price € run. m
	RSG-4-2100 LS/KE	2100	2.100	1.500	0,375	10,0	9,1	1,2	1xKRR 3,5; 8x KE 2,0; 4xLS 1,5	E4.LS02.00	414,50	44,55
	RSG-4-4200 LS/KE	4200	4.200	3.000	0,375	10,0	11,8	2,0	1xKRR 5,5; 8x KE 2,0; 4xLS 2,5	E4.LS04.00	450,50	55,20
	RSG-4-6300 LS/KE	6300	6.300	4.500	0,375	20,0	18,4	3,2	1xKRR 11,5; 8x KE 3,15; 4xLS 4,0	E4.LS06.00	602,50	75,30
	RSG-4-8400 LS/KE	8400	8.400	6.000	0,375	20,0	27,1	4,0	1xKRR 11,5; 8x KE 5,3; 4xLS 6,7	E4.LS08.00	786,00	94,20
	RSG-4-10500 LS/KE	10500	10.500	7.500	0,375	20,0	32,0	4,4	1xKRR 17,0; 8x KE 5,3; 4xLS 6,7	E4.LS10.00	881,00	108,00
	RSG-4-12600 LS/KE	12600	12.600	9.000	1,0	20,0	43,0	5,6	1xKRR 17,0; 8x KE 8,0; 4xLS 6,7	E4.LS12.00	1.226,00	131,50
	RSG-4-16800 LS/KE	16800	16.800	12.000	1,0	20,0	46,3	7,2	1xKRR 17,0; 8x KE 8,0; 4xLS 10,0	E4.LS16.00	1.412,00	168,00
	RSG-4-21000 LS/KE	21000	21.000	15.000	2,5	50,0	102	10	1xKRR 28,0; 8x KE 12,5; 4xLS 10,0	E4.LS21.00	2.216,00	239,50
	RSG-4-31500 LS/KE	31500	31.500	22.500	2,5	50,0	168	14	1xKRR 35,0; 8x KE 15,0; 4xLS 15,5	E4.LS31.00	4.956,00	386,50
	RSG-4-42000 LS/KE	42000	42.000	30.000	2,5	50,0	260	20	1xKRR 53,0; 8x KE 21,2; 4xLS 21,2	E4.LS42.00	7.446,00	569,00
	RSG-4-52500 LS/KE	52500	52.500	37.500	2,5	50,0	343	24	1xKRR 53,0; 8x KE 31,5; 4xLS 31,5	E4.LS52.00	8.991,00	687,00
	RSG-4-63000 LS/KE	63000	63.000	45.000	2,5	50,0	363	32	1xKRR 70,0; 8x KE 31,5; 4xLS 31,5	E4.LS63.00	9.552,00	906,50

Surcharge Inspection service CE

Order example: Enter working length L1! E4.LS06.05 4-Stranded suspension, 6,300 kg load capacity, 5 m working length

Please note: The working length refers to the net round sling length! During the catalogue life-time, the colour of the fitting parts is subject to change without notice!

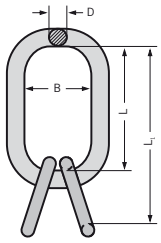
Accessory Fitting Parts



KR

Type	Dimensions [mm] B	D	L	Load capacity WLL [kg]	Weight [kg]	Order No.	Price/ piece €
KR 1,25	60	11	100	1.250	0,2	E0.KR0.010	11,10
KR 2,5	70	14	125	2.500	0,4	E0.KR0.020	13,70
KR 4,0	80	17	140	4.000	0,7	E0.KR0.032	19,65
KR 7,5	95	22	160	7.500	1,5	E0.KR0.050	27,60
KR 10,0	110	28	190	10.000	2,3	E0.KR0.080	42,90
KR 17,0	140	34	240	17.000	5,3	E0.KR0.150	93,70
KR 25,0	150	40	250	25.000	7,0	E0.KR0.212	156,00
KR 28,0	150	42	250	28.000	8,0	E0.KR0.315	239,00
KR 43,0	200	50	300	43.000	15,0	E0.KR0.400	288,00

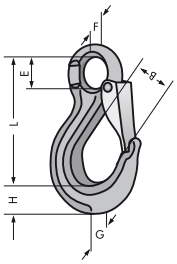
Inspection service



KRR

Type	Dimensions [mm] B	D	L	L1	Load capacity WLL [kg]	Weight [kg]	Order No.	Price/ piece €
KRR 3,5	90	19	150	270	3.500	1,8	E0.KRR.021	51,20
KRR 5,5	95	22	160	300	5.500	3,1	E0.KRR.042	66,20
KRR11,5	120	30	200	360	11.500	6,5	E0.KRR.067	127,50
KRR17,0	150	40	250	450	17.000	15,0	E0.KRR.100	224,00
KRR28,0	200	50	300	500	28.000	23,0	E0.KRR.236	412,50
KRR35,0	200	55	300	550	35.000	33,0	E0.KRR.315	640,00
KRR53,0	200	60	350	610	53.000	46,0	E0.KRR.450	713,50
KRR70,0	250	70	450	730	70.000	71,0	E0.KRR.670	1.754,00

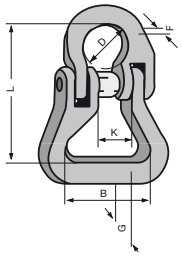
Inspection service



LS

Type	Dimensions [mm] B	E	F	G	H	L	Load capacity WLL [kg]	Weight [kg]	Order No.	Price/ piece €
LS 1,5	24	22	10	16	19	94	1.500	0,4	E0.LS0.010	23,45
LS 2,5	28	25	11,5	17	22	105	2.500	0,6	E0.LS0.020	25,00
LS 4,0	37	32	13,5	19	29	131	4.000	1,0	E0.LS0.032	30,80
LS 6,7	42	40	17,5	27	36	161	6.700	2,3	E0.LS0.050	50,20
LS 10,0	52	50	22	34	44	197	10.000	3,8	E0.LS0.080	81,70
LS 12,5	60	60	26	37	52	229	16.000	7,3	E0.LS0.125	167,00
LS 15,5	77	64	31	42	67	267	15.000	9,4	E0.LS0.155	363,00
LS 21,2	81	66	32	51	75	301	21.200	12,6	E0.LS0.212	622,00
LS 31,5	93	76	38	61	80	333	31.500	17,9	E0.LS0.315	900,00

Surcharge Inspection service



KE

Type	Dimensions [mm] B	D	F	G	K	L	Load capacity WLL [kg]	Weight [kg]	Order No.	Price/ piece €
KE 2,0	43	24	9	25	19	61	2000	0,3	E0.KE.01.00	21,80
KE 3,15	47	26	12	29	24	76	3150	0,6	E0.KE.03.15	27,50
KE 5,3	53	33	15	35	29	94	5300	1,1	E0.KE.05.30	46,50
KE 8,0	67	36	22	44	35	115	8000	1,9	E0.KE.08.00	71,90
KE 12,5	80	48	22	52	43	134	12500	3,0	E0.KE.12.50	135,00
KE 15,0	125	59	24	70	50	185	15000	6,7	E0.KE.15.00	279,50
KE 21,2	150	61	29	86	58	210	21200	11,1	E0.KE.21.20	425,00
KE 31,5	170	65	39	100	70	250	31500	16,0	E0.KE.31.50	449,50

Please note: During the catalogue life-time, the colour of the fitting parts is subject to change without notice!

Information

You need additional accessories, e.g. a wide mouth hook? Talk to your SIP partner!

Information

Conjure a suspension with the „Joker“ in seconds! How? Refer to page 38.

SLING TECHNOLOGY

Joker Hooks The Perfect Connection with Double Benefit

Simple Handling, Safe Application

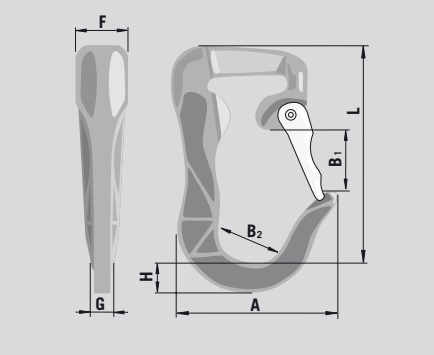
A Hook with Double Benefits
Joker hooks are the ideal supplement for your round slings and lifting belts. They are real multi-talents: They can either be used to enlarge the suspension equipment or as end hook, which ensures a safe fixation at the attachment points. In combination with one or more round slings a suspension of round sling suspensions can be created.
The joker is designed for the operation with textile suspension equipment in terms of all construction features. The objective is a simple handling with a reliable functionality. Intelligent details such as the special formed hook tip make the hanging into the fixed attachment points easier. And the alleviated lateral cams at the head of the hook lead the textile suspension equipment as in a groove. This avoids abrasion at the edges.

Safety is On Top
The steel of special grade 8-Plus is forged and therefore particularly robust. The construction of the joker according to the skeleton principle saves weight at the 1-, 2- and 3-t-jokers and makes the handling pleasant. To exclude errrors the hooks are painted in the same colour as the suspension equipment with the corresponding load capacity. Thus, you can recognize the correct hook for your application at one sight.

Functional Details:
- Suitable as connector between suspension equipment
- Safe hanging into fixed attachment points
- Particularly robust: Forged steel of special grade 8-Plus
- Skeleton principle saves weight and makes the handling (up to 3 t-version) easier
- With safety trap for more operation safety
- No danger of confusion: Colour corresponds to the colour code for textile suspension equipment.

Load capacity WLL [kg]	A [mm]	B1 [mm]	B2 [mm]	F [mm]	G [mm]	H [mm]	L [mm]	Weight [kg]	Order No.	Price/piece €
1000	89	29	31	31	14	19	113	0,66	ASH.1t.000	40,85
2000	105	36	40	36	21	24	132	1,06	ASH.2t.000	46,10
3000	125	38	47	47	23	29	145	1,60	ASH.3t.000	51,90
4000	130	44	60	56	33	37	180	3,92	ASH.4t.000	109,00
5000	130	44	60	56	33	37	180	3,88	ASH.5t.000	118,50
6000	130	44	60	56	33	37	180	3,83	ASH.6t.000	125,00

Surcharge Inspection service



SLING TECHNOLOGY

Liftfix Round Sling Lifting According to Euro-Standards

The Low-Price Alternative

- Unmistakable colour coding according to Euro-standard
- Interwoven ton strip
- Standard design according to EN 1492-2
- Quality checked

Info

NEW **The Liftfix round slings are available immediately for the additional tonnages of 60 t, 80 t and 100 t.**

Nominal load capacity [kg]	Order No.	Working length L1 1 m €	1,5 m €	2 m €	3 m €	4 m €	5 m €	Price 1. m €	Price run. m €
500	RS.005.000	6,93	8,61	10,20	13,45	-	-	8,30	3,57
1000	RS.010.000	8,40	10,65	12,85	17,25	21,75	26,15	9,77	4,73
2000	RS.020.000	10,30	13,35	16,30	22,05	28,05	33,95	12,20	6,30
3000	RS.030.000	13,80	18,20	22,70	31,65	40,55	49,35	15,75	9,45
4000	RS.040.000	18,90	24,15	29,40	40,25	50,90	61,40	22,05	11,05
5000	RS.050.000	-	27,65	33,75	46,35	58,80	71,30	24,80	13,05
6000	RS.060.000	-	-	40,05	55,00	70,10	85,20	29,20	15,65
8000	RS.080.000	-	-	-	71,30	91,00	111,00	37,20	20,50
10000	RS.100.000	-	-	-	91,30	115,50	139,00	43,80	24,05
15000	RS.150.000	-	-	-	173,00	211,50	250,00	95,60	38,65
20000	RS.200.000	-	-	-	247,00	303,50	360,50	133,00	57,10
25000	RS.250.000	-	-	-	302,50	371,00	439,50	165,50	68,80
30000	RS.300.000	-	-	-	346,50	437,00	527,50	204,50	90,80
40000	RS.400.000	-	-	-	517,00	641,50	766,00	268,00	125,00
50000	RS.500.000	-	-	-	660,50	831,50	1.003,00	317,50	171,50
60000	RS.600.000	-	-	-	-	977,00	1.190,00	346,50	210,00
80000	RS.800.000	-	-	-	-	1.260,00	1.550,00	409,50	283,50
100000	RS.1000.00	-	-	-	-	1.530,00	1.860,00	514,50	336,00

SUPER PRICE | Inspection service | Surcharge

095130

Liftfix Lifting Belt In Accordance With DIN and More

- Unmistakable colour coding according to Euro-standard
- Reinforced crane loops
- Standard design according to EN 1492-1
- Quality checked

Nominal load capacity [kg]	Order No.	Working length L1 2 m €	3 m €	4 m €	5 m €	6 m €	8 m €	Price 1. m €	Price run. m €
500	HB.0050.00	13,45	17,05	20,60	24,40	28,05	35,40	12,00	3,99
1000	HB.0100.00	15,90	20,50	25,20	30,15	34,90	44,25	13,65	4,94
1500	HB.0150.00	20,50	26,90	33,30	40,05	46,35	59,15	17,25	6,93
2000	HB.0200.00	27,00	35,10	42,90	50,90	58,60	74,50	23,65	8,51
3000	HB.0300.00	45,40	59,90	74,40	88,70	103,50	132,00	37,95	15,15
4000	HB.0400.00	74,90	95,90	117,00	138,00	159,00	201,00	66,70	21,85
5000	HB.0500.00	98,90	126,00	153,50	181,00	208,00	262,50	88,50	28,50
6000	HB.0600.00	118,00	154,50	191,00	227,00	263,00	336,00	101,00	37,50
8000	HB.0800.00	156,00	201,00	246,00	291,00	336,00	426,00	137,00	46,75
10000	HB.1000.00	-	257,50	314,50	371,00	427,50	540,50	178,50	58,30

SUPER PRICE | Inspection service | Surcharge

095130

SpanSet®

SLING TECHNOLOGY

VarioWeb Continuous Length Adjustment of Belt Suspensions

Use Textile Lifting Belts Even More Flexible ...

With VarioWeb we offer a practical solution the continuous length adjustment of belt suspensions. The drop-forged VarioWeb in special grade quality will simply be integrated into the individual strands of the belt suspension.

No. 1 at Handling
The handling is as simple as possible. For adjusting the length, you only have to take out the belt from the guiding slit. Then, both halves are folded – nearly automatically – into a V shape and the VarioWeb can be shifted up and down to adjust the belt length.

If the belt length is adjusted correctly, the VarioWeb is set into the original position and the belt is fixed in the guiding slit. Ready!

VarioWeb – Adjust Belts Coninuously
VarioWeb is ideal for lifting asymmetrical loads: The reducing elements are inserted into the strands of the belt suspension. Due to the elaborated mechanics, the individual strands can be adjusted continuously. This way, you can optimally balance each load and ensure an even power transmission.

Adjustable and Safe
The VarioWeb elements are drop-forged out of special grade steel and are therefore very robust. In addition, they have no crates or edges, which could damage the the belt. Also, all parts are formed in a way that the belts are supported over full surface. This minimises the abrasion at the edges and your suspension equipment lasts longer. For additional safety, the load capacity of the belt suspension is labeled according to the colour codes of DIN EN 1492-1 in order to exclude confusions. We manufacture the VarioWeb suspensions exactly according to your instructions and deliver them fully assembled, of course.

VarioWeb – Variable and Efficient
VarioWeb is flexible not only in terms of the application, but also at maintenance. If your VarioWeb suspension is damaged, exploit the benefits of the unit construction system: Replace only the defect parts and use the other components further on – this saves costs.

Functional Details:
- Continuously adjustable belt suspension
- For lifting asymmetrical loads
- Particularly robust: forged special grade steel
- Intelligent design minimises wearing

Info

Your SIP partner would like to inform you about the application options and special benefits of VarioWeb!

O-ring	VarioWeb	TA	VB	Hook	Name	Nominal capacity [kg]	Fitting parts	L1 min [m]	Reducable to [mm]	Weight 1. m [kg]	Order No.	Price € 1. m run. m [kg]	Price incl. assembled fitting parts	run. m €
	1x	1x	2x	1x	VW1-1000-1LS	1000	1xKR · 1xVW · 1xTA · 2xVB · 1xLS	2.000	730	2,62	W1.1L10.00	0,2	140,50	3,99
					VW1-2000-1LS	2000	1xKR · 1xVW · 1xTA · 2xVB · 1xLS	2.000	880	5,35	W1.1L20.00	0,3	204,00	7,98
	1x	1x	1x	1x	VW1-1000-1ASH	1000	1xKR · 1xVW · 1xTA · 1xVB · 1xASH	2.000	960	2,82	W1.1A10.00	0,2	150,00	3,99
					VW1-2000-1ASH	2000	1xKR · 1xVW · 1xTA · 1xVB · 1xASH	2.000	1290	6,15	W1.1A20.00	0,3	208,50	7,98
	1x	3x	4x	2x	VW2-1400-1LS	1400	1xKR · 1xVW · 3xTA · 4xVB · 2xLS	2.000	730	3,95	W2.1L14.00	0,4	230,50	7,77
					VW2-2800-1LS	2800	1xKR · 1xVW · 3xTA · 4xVB · 2xLS	2.000	880	8,34	W2.1L28.00	0,6	325,00	15,75
	1x	2x	2x	2x	VW2-1400-1ASH	1400	1xKR · 1xVW · 2xTA · 2xVB · 2xASH	2.000	960	4,24	W2.1A14.00	0,5	225,50	7,77
					VW2-2800-1ASH	2800	1xKR · 1xVW · 2xTA · 2xVB · 2xASH	2.000	1290	9,10	W2.1A28.00	0,7	311,00	15,75
					VW2-1400-2LS	1400	1xKR · 2xVW · 2xTA · 4xVB · 2xLS	2.000	730	5,04	W2.2L14.00	0,4	273,50	7,77
	2x	2x	4x	2x	VW2-2800-2LS	2800	1xKR · 2xVW · 2xTA · 4xVB · 2xLS	2.000	880	10,30	W2.2L28.00	0,6	401,00	15,75
					VW2-1400-2ASH	1400	1xKR · 2xVW · 2xTA · 2xVB · 2xASH	2.000	960	5,24	W2.2A14.00	0,5	291,50	7,77
	2x	2x	2x	2x	VW2-2800-2ASH	2800	1xKR · 2xVW · 2xTA · 2xVB · 2xASH	2.000	1290	11,50	W2.2A28.00	0,7	410,00	15,75
					VW4-2100-2LS	2100	1xKRR · 2xVW · 4xTA · 8xVB · 4xLS	2.000	890	7,58	W4.2L21.00	0,8	476,00	15,25
	2x	6x	8x	4x	VW4-4200-2LS	4200	1xKRR · 2xVW · 4xTA · 8xVB · 4xLS	2.000	1060	18,63	W4.2L42.00	1,2	669,50	31,30
					VW4-2100-2ASH	2100	1xKRR · 2xVW · 4xTA · 4xVB · 4xASH	2.000	1120	8,28	W4.2A21.00	1,2	467,00	15,25
					VW4-4200-2ASH	4200	1xKRR · 2xVW · 4xTA · 4xVB · 4xASH	2.000	1510	18,60	W4.2A42.00	1,6	640,50	31,30
	2x	4x	4x	4x	VW4-2100-4LS	2100	1xKRR · 4xVW · 4xTA · 8xVB · 4xLS	2.000	890	10,08	W4.4L21.00	0,8	563,50	15,25
					VW4-4200-4LS	4200	1xKRR · 4xVW · 4xTA · 8xVB · 4xLS	2.000	1060	20,00	W4.4L42.00	1,2	821,50	31,30
	4x	4x	8x	4x	VW4-2100-4ASH	2100	1xKRR · 4xVW · 4xTA · 4xVB · 4xASH	2.000	1120	10,48	W4.4A21.00	1,2	599,00	15,25
	4x	4x	4x	4x	VW4-4200-4ASH	4200	1xKRR · 4xVW · 4xTA · 4xVB · 4xASH	2.000	1510	23,60	W4.4A42.00	1,6	839,50	31,30

Surcharge | Inspection service | CE

Order example: Enter working length L1! W2.1A14.03 2-Stranded suspension, 1,400 kg load capacity, 3 m working length

Please note: During the catalogue life-time, the colour of the fitting parts is subject to change without notice!

MADE IN GERMANY

SLING TECHNOLOGY

PCS-Lifting Belt 4-ply Heavy Load Lifting Belt

Power belt with four times the strength as per DIN EN 1492-1

Version A | Version B | Version C | Version D

More lifting strength
This powerful package is woven from high tenacity PES yarns and sewn into four layers. The effect: a lifting belt that has significantly more capacity by less belt width than one or two ply belts. CS-lifting belts are ideal for heavy duty applications that require a narrow belt – as for passage under a load, or when only a small contact area is available. With the D-brackets you gain additional application comfort, e.g. when hanging the lifting means on a crane hook.

RFID standard
An RFID chip with a unique code is incorporated as standard in each PCS sling. It is integrated into the label to prevent damage or loss. The RFID chip is exactly tuned to the Electronic Product Management and Identification System, EPIS.

- Particularly stable across
- Have sewn-in carrying capacity
- According to DIN EN 1492-1
- Equipped with EPIS transponder

Info

Matching accessories such as, e.g. suitable protection tubes are available from your SIP partner! Custom lengths are available upon request

New Stirrup types are available! Talk to us! Please note: Version C cannot be used with a choke hitch!

		WLL [kg]	Sling Width [mm]	Sling length [mm]	L1 min. [m]	Belt width [mm]	Belt thickness [mm]	ca. Weight 1. m [kg]	ca. Weight lfd. m [kg]	Order-No.	Standard lengths 2 m €	3 m €	4 m €	5 m €	6 m €	8 m €	1. m €	lfd. m €
Ausführung A		2.000	30	350	1,1	30	11,2	0,50	0,4	PCS.02.10X	71,20	91,60	112,00	132,50	153,00	194,00	57,60	21,30
		4.000	60	400	1,3	60	11,2	1,00	0,8	PCS.04.10X	125,50	154,50	184,00	213,00	242,00	301,00	108,50	30,25
		6.000	50	600	1,7	90	12,0	1,50	1,2	PCS.06.10X	179,50	223,00	267,00	311,00	354,50	442,00	153,50	45,15
		8.000	65	800	2,2	120	12,4	2,20	1,6	PCS.08.10X	-	259,00	310,00	361,00	412,50	516,00	175,50	53,50
		10.000	80	900	2,4	150	12,8	2,90	2,0	PCS.10.10X	-	334,50	403,50	473,00	541,50	679,50	222,50	71,40
		12.000	95	1.100	2,8	180	15,2	3,60	2,4	PCS.12.10X	-	438,50	538,00	637,50	736,00	935,00	272,00	102,50
		16.000	125	1.200	3,0	240	15,2	4,00	3,2	PCS.16.10X	-	562,00	699,00	836,00	973,00	1.247,00	341,00	141,50
		20.000	155	1.400	3,4	300	15,2	7,00	4,4	PCS.20.10X	-	-	882,50	1.059,00	1.236,00	1.589,00	402,00	182,00
Ausf. B		2.000	-	-	1,1	30	11,2	1,77	0,4	PCS.02.20X	131,00	151,50	171,50	206,00	212,50	253,50	117,50	21,30
		4.000	-	-	1,3	60	11,2	3,00	0,8	PCS.04.20X	225,00	254,00	284,00	313,00	342,50	400,50	208,50	30,25
		6.000	-	-	1,7	90	12,0	6,64	1,2	PCS.06.20X	351,00	395,50	438,50	483,00	527,00	614,50	325,00	45,15
Ausführung C		8.000	-	-	2,2	120	12,4	11,20	1,6	PCS.08.30X		612,00	663,50	715,50	767,00	870,00	542,50	53,50
		10.000	-	-	2,4	150	12,8	14,90	2,0	PCS.10.30X		892,00	962,00	1.030,00	1.100,00	1.238,00	795,50	71,40
		12.000	-	-	2,8	180	15,2	21,50	2,4	PCS.12.30X		1.154,00	1.253,00	1.352,00	1.451,00	1.650,00	1.005,00	102,50
		16.000	-	-	3,0	240	15,2	39,00	3,2	PCS.16.30X		1.507,00	1.644,00	1.781,00	1.918,00	2.192,00	1.306,00	141,50
		20.000	-	-	3,4	300	15,2	63,00	4,4	PCS.20.30X				2.521,00	2.697,00	3.050,00	1.893,00	182,00
Ausführung D		8.000	-	-	2,2	120	12,4	11,20	1,6	PCS.08.50X		691,00	743,00	795,00	846,00	949,00	606,50	53,50
		10.000	-	-	2,4	150	12,8	14,90	2,0	PCS.10.50X		1.107,00	1.173,00	1.245,00	1.314,00	1.453,00	992,50	71,40
		12.000	-	-	2,8	180	15,2	21,50	2,4	PCS.12.50X		1.340,00	1.439,00	1.538,00	1.638,00	1.836,00	1.171,00	102,50
		16.000	-	-	3,0	240	15,2	39,00	3,2	PCS.16.50X		1.650,00	1.787,00	1.924,00	2.061,00	2.335,00	1.425,00	141,50
		20.000	-	-	3,4	300	15,2	63,00	4,4	PCS.20.50X				2.744,00	2.921,00	3.274,00	2.085,00	182,00

Surcharge | Inspection service | CE

Order example: Enter standard length! PCS.02.104 PCS-Lifting belt, 2000 kg Capacity, 4 m usable length

SLING TECHNOLOGY

PowerStar Lifting Belt out of powerful high quality fibre

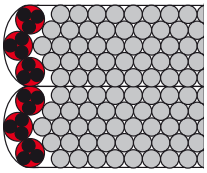
Powerful Lifting, Gentle for the Loads

Type PowerStar | Type PowerStar DD

Broad Supporting Surface

PowerStar lifting belts are manufactured out of high-strength PES yarns. The weave structure provides for a good support of the suspension equipment at the load, so that the surfaces are stressed less.

Strong Against Wearing



A transparent PU-coating provides a 3 times increased protection against abrasion and wearing. Even better preserved are the lifting belts by the integrated edge protection: Enormously non-abrasive High-Tech yarns out of spider black yarn are woven into the outer surface of the belts.

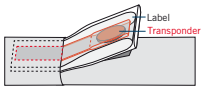
Fixation Without Compromising

The loops of a lifting belt are always heavily stressed. the solution is a loop reinforcement with high-performance yarns. The bearing tissue gets a multiple increase of anti-abrasion-strength by the robust fibre layer.

Flexible Application Options

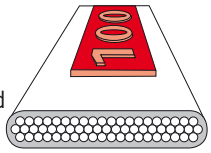
Lifting belts are usually hung directly around the load. An additional frequent application is lacing, whereby the load is secured best against slipping. The optional D hangers are ideally fitted to the width of the belts and thus reduce the wearing significantly. The hangers fit optimally into the crane hooks.

Robust Label with RFID Chip



The quality lifting belts of SpanSet are equipped with a protected label, which cannot be torn out. SpanSet equips many labels as standard with an RFID chip. This allows for the electronic identification and administration of the suspension equipment and saves much time at the UVV check.

Interwoven Load Capacity Spec.



For additional application safety, the load capacity specification is sewn onto all lifting belts. So the load capacity can be read even at heavy soiling of the suspension equipment.

Info

NEW **On request you can receive the power bands in the 15-t to 40-t versions, see Page 44.**

	Name	Nominal capacity [kg]	Shling width [mm]	Sling length [mm]	L1 min. [m]	Band width [mm]	Band thickn. [mm]	c. Weight 1. m [kg]	c. Weight r. m [kg]	Order No.	Working length L1 2 m €	3 m €	4 m €	5 m €	6 m €	Special lengths 1 8 m €	1. m €	lfd. m €
	PB 1000 STAR	1000	30	300	1,0	30	5,6	0,3	0,2	PS.0010.00	53,40	64,90	76,60	88,10	99,70	123,00	47,40	11,95
	PB 2000 STAR	2000	35	300	1,0	60	5,6	0,6	0,4	PS.0020.00	80,70	99,30	117,50	136,50	155,50	192,00	70,20	19,15
	PB 3000 STAR	3000	50	400	1,3	90	6,0	1,0	0,6	PS.0030.00	117,50	150,00	182,00	213,50	245,50	309,50	97,40	32,95
	PB 4000 STAR	4000	65	400	1,3	120	6,2	1,4	0,8	PS.0040.00	155,00	195,50	237,00	278,00	319,00	401,00	128,50	42,60
	PB 5000 STAR	5000	80	500	1,5	150	6,4	1,7	1,0	PS.0050.00	214,00	266,50	319,00	371,50	424,00	529,00	182,50	54,20
	PB 6000 STAR	6000	70	700	1,9	180	7,6	2,2	1,2	PS.0060.00	247,00	315,50	383,50	452,00	520,00	656,50	203,00	70,40
	PB 8000 STAR	8000	90	800	2,2	240	7,6	2,9	1,6	PS.0080.00	-	405,00	489,00	573,50	658,00	826,50	268,00	87,00
	PB 10000 STAR	10000	160	1.000	2,6	300	7,6	4,1	2,2	PS.0100.00	-	532,50	630,50	728,00	826,00	1.022,00	381,00	101,00
	PB 1000 STAR DD	1000	–	–	1,0	30	5,6	1,4	0,2	PD.0010.00	111,00	123,00	134,50	145,50	157,50	180,50	107,50	11,95
	PB 2000 STAR DD	2000	–	–	1,0	60	5,6	2,2	0,4	PD.0020.00	178,00	196,00	215,00	233,50	252,00	289,50	170,00	19,15
	PB 3000 STAR DD	3000	–	–	1,0	90	6,0	4,2	0,6	PD.0030.00	285,00	317,00	348,50	380,50	412,50	476,50	269,50	32,95
	PB 4000 STAR DD	4000	–	–	1,2	120	6,2	5,4	0,8	PD.0040.00	356,50	398,00	438,50	480,00	520,50	603,00	337,00	42,60
	PB 5000 STAR DD	5000	–	–	1,5	150	6,4	9,0	1,0	PD.0050.00	564,50	617,00	669,50	722,50	775,00	880,00	543,50	54,20
	PB 6000 STAR DD	6000	–	–	1,8	180	7,6	15,2	1,2	PD.0060.00	643,50	712,00	780,00	848,50	916,50	1.053,00	611,00	70,40
	PB 8000 STAR DD	8000	–	–	2,2	240	7,6	22,6	1,6	PD.0080.00	-	852,50	937,00	1.021,00	1.106,00	1.274,00	728,50	87,00
	PB 10000 STAR DD	10000	–	–	2,6	300	7,6	35,2	2,2	PD.0100.00	-	1.092,00	1.190,00	1.289,00	1.387,00	1.583,00	958,00	101,00

Surcharge | 24 h Delivery

Order example: Enter working length L1! PD.0100.08 Power STAR with D hanger 10,000 kg nominal load capacity, 8 m

Standard stock items

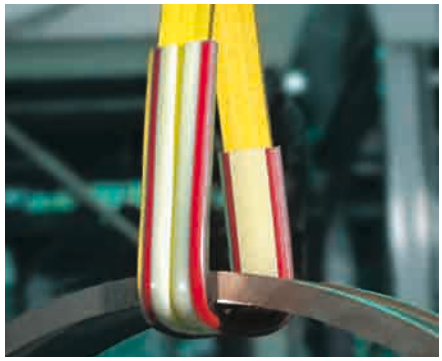
085104
095129

MADE IN GERMANY

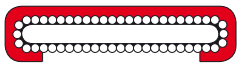
SLING TECHNOLOGY

PowerStar Accessory Sharp Edges are No Problem!

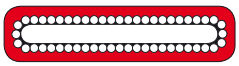
Edge Protection as Perfect Supplement of PowerStar



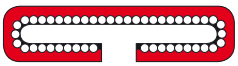
secutex SF-1
Cut-resistant secutex coating protects reliably against sharp edges.



secutex SF-2
Double-sided secutex coating, suitable for toughest conditions.



secutex Clip-SC
Cut-resistant secutex coating, simply to be upgraded due to one-sided opening.



Protection tubes for PowerStar

	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight run. m [kg]	Order no. SF-1 1.0 m	Price run. m €	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight run. m [kg]	Order no. SF-2 1.0 m	Price run. m €	approx. width inside [mm]	approx. width outside [mm]	approx. height outside [mm]	approx. weight run. m [kg]	Order no. Clip-SC 1.0 m	Price run. m €
1000	35	55	20	0,6	SF1.0030.1	50,30	35	55	20	0,9	SF2.0030.1	65,90	35	55	20	0,9	SC.00030.1	50,30
2000	65	80	23	1,0	SF1.0060.1	58,50	65	80	23	1,4	SF2.0060.1	79,10	65	80	23	1,4	SC.00060.1	58,50
3000	95	110	25	1,5	SF1.0090.1	77,00	95	110	25	2,2	SF2.0090.1	110,50	95	110	25	2,2	SC.00090.1	77,00
4000	125	145	25	2,0	SF1.0120.1	89,00	125	145	25	2,9	SF2.0120.1	131,50	125	145	25	2,9	SC.00120.1	89,00
5000	155	175	25	2,3	SF1.0150.1	100,50	155	175	25	3,4	SF2.0150.1	152,50	155	175	25	3,4	SC.00150.1	100,50
6000	185	210	30	2,9	SF1.0180.1	122,50	185	210	30	4,2	SF2.0180.1	191,50	185	210	30	4,2	SC.00180.1	191,50
8000	245	270	35	3,7	SF1.0240.1	146,00	245	270	35	5,5	SF2.0240.1	233,00	245	270	35	5,5	SC.00240.1	233,00
10000	310	340	35	4,6	SF1.0300.1	241,00	310	340	35	6,8	SF2.0300.1	362,50	310	340	35	6,8	SC.00300.1	362,50

Surcharge

Other lengths on request.
You can assemble the protection tubes on your own according to fig. 1.

Please supplement the order no. by length and number of protection tube pieces.

Figure 1

SpanSet®

450/600-mm-Lifting Belt Program as per DIN EN 1492-1

Lift heavy loads gently and economically

- Heavy load lifting belts as per DIN EN 1492-1
- Extremely loadable high performance fabric
- Because of the large bearing surface ideal for heavy, fragile loads
- Available on request with soft coating
- Equipped with RFID-transponder

Optimal protection of the load
The large width of the new lifting belt leads to a large-area load distribution of the bearing surfaces. This is particularly helpful by sensitive materials and finishes, such as in shipyards, paper mills, wind wheels and products with stainless steel or aluminium surfaces. But also painted surfaces of a container or in mechanical engineering are suspended at relatively low pressure.

Proven version
The new 450/600-mm-lifting belt program is based on the SpanSet lifting belt design. It can therefore be produced particularly economically.

Flexible connection to the crane hook
Through two robust truss structures in combination with two Magnum X round slings made from high performance fibres, the 450/600mm lifting belt program in safely hooked to the crane hook. This ensures an optimal and appropriate connection to the crane without additional expensive equipment.

Reach high capacities economically
The new lifting belts are due to the standardized version very inexpensive. Through the 1-, 2- or 4-ply construction, very high load capacities of up to 40 t simply direct and 80 t simply folded can be reached.

Tested quality
The new 450/600-mm-lifting belt program meets all requirements of DIN EN 1492-1. The colour coding is based on Euro standard and of course also has a sewn in safety label that can't be lost and a transponder. In addition, the trusses are separately equipped with transponders.

Additional equipment is no problem
If desired, the new lifting belt program can, for example, be provided with an extra soft coating for extremely sensitive loads need to be lifted. We, as experts in coating, offer you also other alternatives in the area of special equipment, so that you can use the right lifting belt for your application. Please contact us for details.

Info

With the standard equipped transponder, the new heavy-lifting belt program is ideal for the management with EPIS. For more information contact us.

Load Capacity [kg]	Sling width [mm]	Sling length [mm]	L1 min. [mm]	L1 max. [mm]	Belt thickness [mm]	Weight 1. m [kg]	Weight lfd. m [kg]	Type	Order-No.	Price €
15000	225	1300	3,8	450	8,2	1,65	3,5	HB 15 t	HB.15.SS.00	on request
15000	450	400	2	450	8,2	1,65	3,5	HB 15 t TB/TB	HB.15.TB.00	on request
20000	300	1500	4,6	600	8,2	2,37	5	HB 20 t	HB.20.SS.00	on request
20000	600	450	2,5	600	8,2	1,65	5	HB 20 t TB/TB	HB.20.TB.00	on request
30000	450	400	2,2	450	16,4	1,65	7	HCS 30 t TB/TB	HB.30.TB.00	on request
40000	450	450	2,5	600	16,4	2,37	10	HCS 40 t TB/TB	HB.40.TB.00	on request

MADE IN GERMANY

SLING TECHNOLOGY

ASG-Runner For lifting of finished parts

SpanSet-ASG-runners are especially well-priced load securing devices for single use at timber-frame and prefabricated house construction. They are produced according to customer`s choice of length.

According to UVV, they have a firmly insewed label containing all necessary information as well as the load-bearing capacity in case of multiple use.

Normally, ASG-runners are applied just once in pre-slung transport and then will be cut off.

In single use, it is principally allowed to use the higher load-bearing capacity mentioned below.

Info

Common lengths L1 of 0,30 and 0,35 m as well as 0,40 and 0,425 m are on stock!

Quantity	ribbon width [mm]	simple direct load bearing capacity [kg] single use	simply redirected load bearing capacity [kg] single use*	Order-No.	Usable length L1 € 0,3 m	0,325 m	0,4 m	0,425 m	1. m	lfd. m
1 - 99	ca. 50	750	1500	AS.099.000	2,25	2,30	2,40	2,44	3,32	1,53
100 - 499	ca. 50	750	1500	AS.499.000	1,58	1,62	1,68	1,72	2,33	1,07
500 - 999	ca. 50	750	1500	AS.999.000	1,33	1,35	1,46	1,47	2,00	0,90
ab 1000	ca. 50	750	1500	AS.000.000	1,10	1,12	1,20	1,22	1,65	0,76
1 - 99	ca. 50	1500	3000	D.5.099.000	6,90	7,05	7,46	7,60	10,75	5,52
100 - 499	ca. 50	1500	3000	D.5.499.000	4,85	4,92	5,22	5,31	7,53	3,86
500 - 999	ca. 50	1500	3000	D.5.999.000	4,11	4,19	4,44	4,53	6,41	3,29
ab 1000	ca. 50	1500	3000	D.5.000.000	3,41	3,48	3,70	3,76	5,32	2,72

Surcharge

*According to UVV-VBG9a, safety factor 5 is valid in pre-slung transport.

CE

Example of order: Enter quantity and length! AS.327.040 ASG-runner ordered quantity 327 pieces, effective length L1 0,400 m.

Lifting Belt Sling 1-ply

Affordable lifting belt sling for single-use

NEW

Lifting belt slings for single use are needed, e.g. when a heavy or bulky product will be delivered over long distances. After the load comes to the end consumer, the stop-means are disposed of after their use. Your advantage: You save money because the lifting belt slings for single use are much cheaper than those for the daily use.

- Affordable the lifting belt slings for single use
- According to DIN 60005
- Label in standard-compliant signal colour
- Belt colour selected by the manufacturer

Info

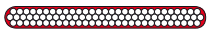
WARNING: Only for single-use!

Rated capacity* [kg]	Capacity simply folded [kg]	ca. Belt width* [mm]	ca. Belt thickness [mm]	Order-No.	St. 1-99 Price / Piece € 1 m	run. m	St. 100-499 Price / Piece € 1 m	run. m	St. 500-999 Price / Piece € 1 m	run. m	St. from 1000 Price / Piece € 1 m	run. m
400	800	25	1,3	EB.04.000.0	3,15	1,31	2,21	0,92	1,89	0,79	1,63	0,67
750	1500	45-50	1,3	EB.07.000.0	3,32	1,53	2,33	1,07	2,00	0,90	1,65	0,76
1500	3000	50	1,3	EB.15.000.0	10,75	5,52	7,53	3,86	6,41	3,29	5,32	2,72

* Other capacities and bandwidth on request - and single use lifting belts with slings!

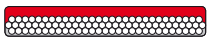
Order example: Enter amount and length! EB.07.178.7
Lifting belt sling order amount 178 pieces, usage length L1 7 m

Coated lifting slings



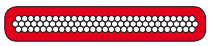
Powerflex P2

PowerStarliftings lingcircumc oatedw ith Powerflex coating guarantees superior abrasion resistance and minimization of wear and tear. Optimally suited for rough surfaces.



Secuflex SX

PowerStar with combined secuflex-coating (min. thickness: 5 mm) PU-thick layer coating on the load-securing side guarantees extreme cut resistance, and the Powerflex-coating on the rear side protects against abrasion.

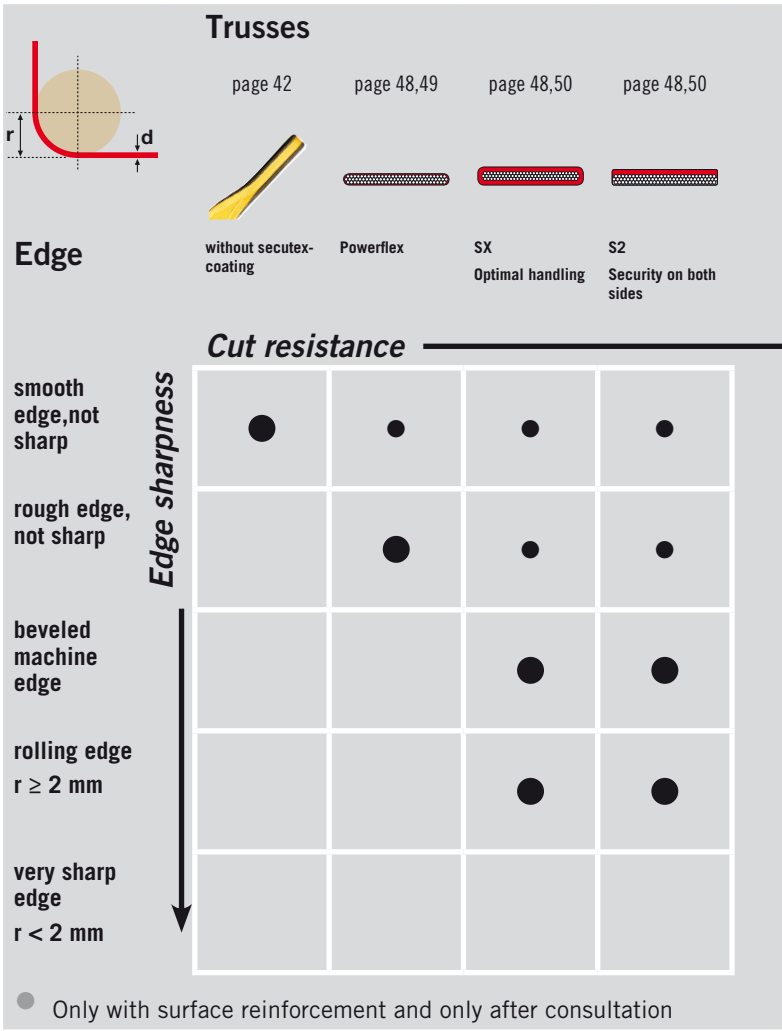


PowerStar S2

PowerStar double faced secutex thick coating (min. thickness: 5 mm) PowerStar truss with strongest cut resistance on both sides!

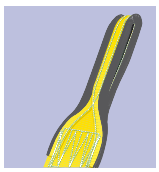
Some reasons why you shouldn't abandon this extra coating:

- Extremely strong cut resistance and flexibility
- Nearly no wear and tear or abrasion
- Careful handling of cargo

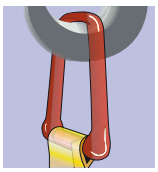


Variability due to different end fittings

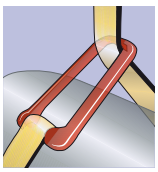
Lifting slings P2, SX and S-2 may be combined with the different end fittings: loops, hangers type C and D



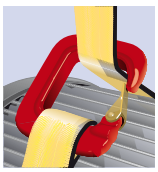
Loop



D-hanger



D-hanger below



C-hanger below

Info

Round slings with protective hose SF-1, SF-2 and Clip-SC Round slings may be combined with protective hoses:

up to 150 tons at loads with max. beveled machine edge

Info

Lifting slings for split strips

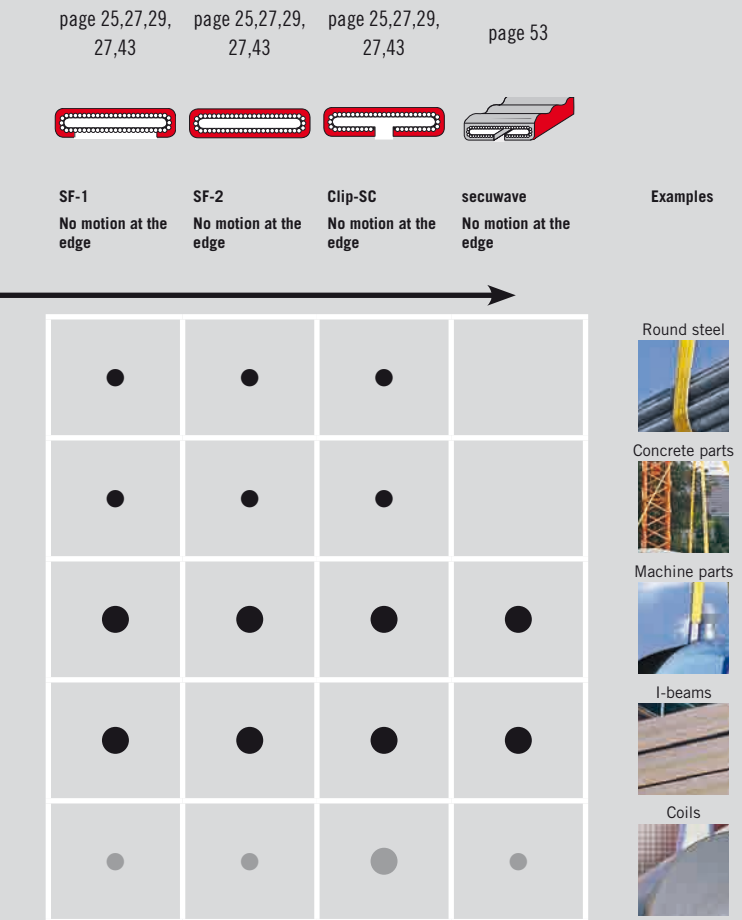
For especially narrow interspaces Lifting sling with extra narrow loop dimensions, especially tailored to the very narrow inter-spaces of split strips.

For further information see page 53!

Coated protective hoses

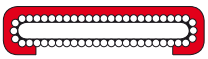
- Excellent handling due to low dead weight
- Meets most exacting standards with regard to workplace safety.

Protective hoses



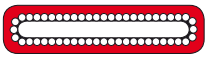
At turning of coils, secutex protective hoses are indispensable. Advantage: During turning, the truss can slide through the protective hose whereas protective hose and load remain in close contact.
Rule of thumb 1: turning the coil through 90°: Protective hose max. 2/3 of mere truss length between the loops. Rule of thumb 2: turning the coil through 180°: Length of protective hose ½ of mere truss length Between the loops.

SF-1



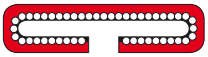
Protective hose, single faced
coating min. thickness of coating: 5 mm
Lift sharp-edged loads without any problems. The coated protective hose is just pulled over the truss.

SF-2



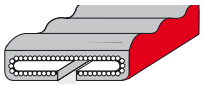
Protective hose, double faced
coating min. thickness of coating: 5 mm
The double faced secutex-coating of the SF-2 protective hose guarantees all around protection of the truss. This means double safety.

Clip-SC



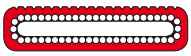
The convenient clip lifting sling SC
min. coating layer: 5 mm
The secutex Clip-SC can be rapidly mounted due to the rear side assembly slot. The Clip-SC offers easy handling, short set-up times and little utilization of material!

secuwave



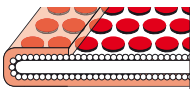
Increases the redirecting radius at sharp edges. The sharp edge does not come into contact with the protective hose. Minimum coating layer thickness 5 mm + undulation. High flexibility due to the undulation, clip hose passage. For further information see page 45!

Grinding Finish

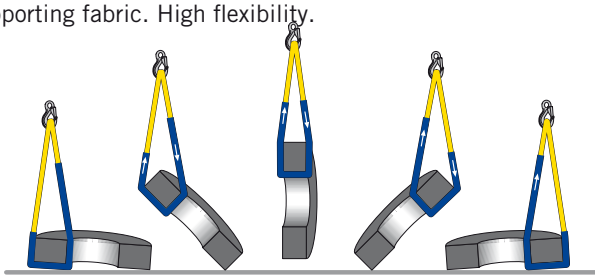


Good adhesion to humid and oily surfaces.

Surface Reinforcement



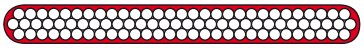
Intermediate layer of small steel plates against penetration of sharp edges into the supporting fabric. High flexibility.



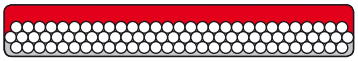
The three musketeers of load securing technology

Powerflex, secuflex and secutex S2 provide optimum protection

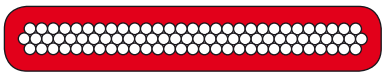
PowerStar lifting sling circumcoated with Powerflex = P2
Powerflex coating guarantees extreme abrasion resistance and minimization of wear and tear. Therefore it is optimally suited for rough surfaces.



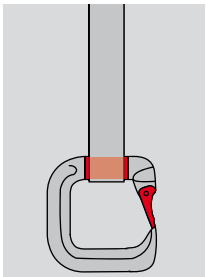
PowerStar lifting sling with combined secuflex-coating = SX
PU-thick layer coating on the load-securing side provides strong cut resistance, while the Powerflex-coating on the rear side reduces abrasion.

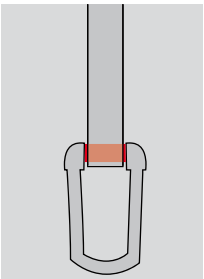


PowerStar lifting sling with double face secutex thick coating = S2
Strongest cut resistance on both sides!



Fortunately, it' got a catch! That is the well-tried hanger type C or the hanger type D for fast and easy load-securing – both types with wear-reducing forging cam which at the same time restricts the belt strap from slipping.


C-Haken


D-Bügel

Info

Application of secutex on video: Sharp objects but safe! Just place an order with your SIP-partner!

Info

For more detailed information about coatings on lifting devices please refer to the secutex catalogue which you will get for free from your SIP-partner! Just give him a ring!

Powerflex For a long term working life

Thin coated lifting sling according to DIN EN 1492-1

Type P2 | Type P2-C | Type P2-DD

Info

EPIS with transponder technology! For further information please contact us.

Info

Combination of hangers type C and D is possible as well. Please contact your SIP-partner!

Designation	Rated lifting capacity [kg]	Width of loop [mm]	Length of loop [mm]	L1 min. [m]	Width of the truss [mm]	Gauge of the truss [mm]	appr. weig. 1. m [kg]	appr. weig. lin. m [kg]	Order-No.		Effective length L1 2 m €	3 m €	4 m €	5 m €	6 m €	8 m €	Spec.length L1 1. m €	lfd. m €
PB 1000-P2	1000	30	300	1,0	30	7	0,4	0,3	P2.01.00.00		58,40	70,90	83,50	96,00	108,50	133,50	51,80	13,05
PB 2000-P2	2000	35	300	1,0	60	7	1,0	0,6	P2.02.00.00		88,20	108,50	129,00	149,50	170,00	211,00	76,60	21,10
PB 3000-P2	3000	50	400	1,3	90	7	1,3	0,8	P2.03.00.00		129,00	164,00	199,00	234,00	269,00	339,00	106,50	36,15
PB 4000-P2	4000	65	400	1,3	120	7	1,8	1,1	P2.04.00.00	L1	169,50	214,50	259,50	304,50	349,50	439,50	140,50	46,45
PB 5000-P2	5000	80	500	1,5	150	7	2,4	1,4	P2.05.00.00		234,00	291,50	349,00	406,50	464,00	579,00	199,50	59,20
PB 6000-P2	6000	70	700	1,9	180	7	3,0	1,7	P2.06.00.00		271,00	345,50	420,00	495,00	569,50	719,00	222,00	76,90
PB 8000-P2	8000	90	800	2,2	240	7	4,3	2,3	P2.08.00.00		-	443,50	536,00	628,00	720,00	904,50	293,00	95,10
PB 10000-P2	10000	160	1.000	2,6	300	7	7,2	2,8	P2.10.00.00		-	583,00	690,50	797,50	904,50	1.119,00	417,00	110,50
PB 1000-P2-C	1000	30	300	1,0	30	7	0,9	0,3	P2.01.0C.00		161,00	173,50	186,50	199,00	211,50	236,50	156,50	13,05
PB 2000-P2-C	2000	35	300	1,0	60	7	2,5	0,6	P2.02.0C.00	L1	205,00	225,50	246,00	266,50	287,00	328,00	193,50	21,10
PB 3000-P2-C	3000	50	400	1,0	90	7	4,3	0,8	P2.03.0C.00		268,50	303,50	338,00	373,00	408,00	478,00	248,50	36,15
PB 5000-P2-C	5000	80	500	1,5	150	7	10,2	1,4	P2.05.0C.00		419,00	476,50	534,00	591,00	648,50	763,50	384,50	59,20
PB 1000-P2-DD	1000	–	–	1,0	30	7	1,0	0,3	P2.01.DD.00		113,50	126,00	138,50	151,00	163,50	188,50	108,50	13,05
PB 2000-P2-DD	2000	–	–	1,0	60	7	2,0	0,6	P2.02.DD.00		181,00	201,50	222,00	242,50	263,00	304,00	172,00	21,10
PB 3000-P2-DD	3000	–	–	1,0	90	7	3,7	0,8	P2.03.DD.00		288,00	323,00	358,00	393,00	428,00	498,00	270,00	36,15
PB 4000-P2-DD	4000	–	–	1,2	120	7	5,4	1,1	P2.04.DD.00	L1	361,50	407,00	452,00	497,00	542,00	632,00	338,50	46,45
PB 5000-P2-DD	5000	–	–	1,5	150	7	8,7	1,4	P2.05.DD.00		568,00	625,50	683,00	740,50	798,00	913,00	543,50	59,20
PB 6000-P2-DD	6000	–	–	1,8	180	7	14,8	1,7	P2.06.DD.00		648,00	722,50	797,50	872,00	947,00	1.096,00	610,00	76,90
PB 8000-P2-DD	8000	–-	–	2,2	240	7	22,8	2,3	P2.08.DD.00		-	869,50	962,00	1.054,00	1.146,00	1.331,00	731,50	95,10
PB 10000-P2-DD	10000	–	–	2,4	300	7	34,0	2,80	P2.10.DD.00		-	1.117,00	1.224,00	1.331,00	1.438,00	1.653,00	966,00	110,50

Surcharge

115121
075127

Example of order: Enter effective length! P2.06.DD.05 Secutex P2, 6000 kg load bearing capacity hanger type DD, 5 m effective length

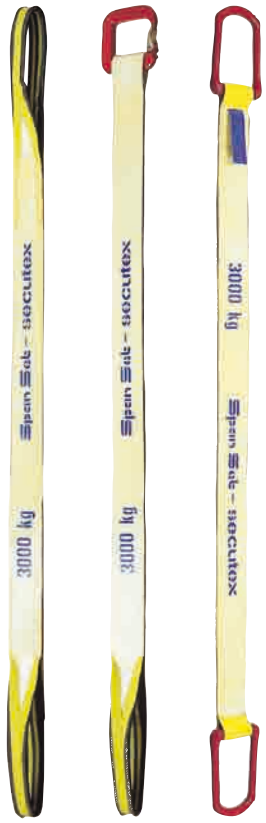
secutex®

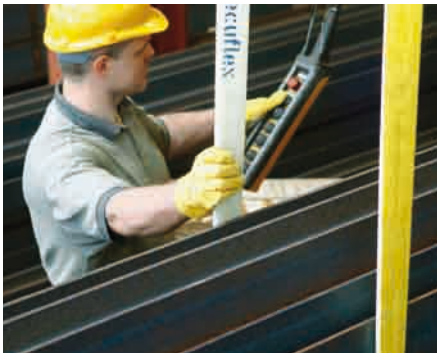
SLING TECHNOLOGY

secuflex Double protection simply is superior!

Thick coated truss according to DIN EN 1492-1

Type SX | Type SX-C | Type SX-DD





Info

Combination of hangers type C and D is feasible as well. Please contact your SIP-partner!

Info

EPIS with transponder technology! For further information please contact us.

Designation	Rated lifting capacity [kg]	Width of loop [mm]	Length of loop [mm]	L1 min. [m]	Width of the truss [mm]	Gauge of the truss [mm]	appr. weig. 1. m [kg]	appr. weig. lin. m [kg]	Order-No.	Effective length L1 2 m €	3 m €	4 m €	5 m €	6 m €	8 m €	Spec.length L1 1. m €	lfd. m €
PB 1000-SX	1000	30	300	1,0	30	13	0,5	0,4	SX.01.00.00	113,50	154,50	195,50	236,50	277,50	360,00	79,40	41,05
PB 2000-SX	2000	35	300	1,0	60	13	1,2	0,8	SX.02.00.00	157,50	215,00	273,00	331,00	389,00	504,50	109,00	57,90
PB 3000-SX	3000	50	400	1,3	90	13	1,6	1,3	SX.03.00.00	212,50	294,50	376,00	457,50	539,50	703,00	143,50	81,70
PB 4000-SX	4000	65	400	1,3	120	13	2,2	1,8	SX.04.00.00	259,50	366,00	472,00	578,00	684,50	896,50	169,50	106,00
PB 5000-SX	5000	80	500	1,5	150	13	2,8	2,2	SX.05.00.00	322,00	455,00	588,00	720,50	853,50	1.120,00	209,50	133,00
PB 6000-SX	6000	70	700	1,9	180	13	3,3	2,7	SX.06.00.00	374,00	538,00	702,50	867,00	1.031,00	1.360,00	233,00	155,50
PB 8000-SX	8000	90	800	2,2	240	13	4,2	3,8	SX.08.00.00	-	646,00	838,00	1.029,00	1.221,00	1.604,00	292,00	191,50
PB 10000-SX	10000	160	1.000	2,6	300	13	6,8	4,8	SX.10.00.00	-	799,00	1.020,00	1.242,00	1.463,00	1.905,00	394,50	221,00
PB 1000-SX-C	1000	30	300	1,0	30	13	1,0	0,4	SX.01.0C.00	208,50	250,00	291,00	332,00	373,00	455,00	175,00	41,05
PB 2000-SX-C	2000	35	300	1,0	60	13	2,7	0,8	SX.02.0C.00	266,00	323,50	381,50	439,50	497,50	613,00	217,50	57,90
PB 3000-SX-C	3000	50	400	1,0	90	13	3,6	1,3	SX.03.0C.00	338,50	420,00	502,00	583,50	665,00	828,50	269,00	81,70
PB 5000-SX-C	5000	80	500	1,5	150	13	10,6	2,2	SX.05.0C.00	580,50	713,50	846,50	979,50	1.113,00	1.379,00	468,50	133,00
PB 1000-SX-DD	1000	–	–	1,0	30	13	1,1	0,4	SX.01.DD.00	167,50	208,50	249,50	290,50	332,00	414,00	133,50	41,05
PB 2000-SX-DD	2000	–	–	1,0	60	13	2,2	0,8	SX.02.DD.00	265,00	323,00	381,00	439,00	497,00	612,50	217,00	57,90
PB 3000-SX-DD	3000	–	–	1,0	90	13	4,0	1,3	SX.03.DD.00	388,50	470,50	552,00	634,00	715,50	879,00	319,50	81,70
PB 4000-SX-DD	4000	–	–	1,2	120	13	5,6	1,8	SX.04.DD.00	484,00	590,50	696,50	802,50	909,00	1.121,00	393,50	106,00
PB 5000-SX-DD	5000	–	–	1,5	150	13	9,1	2,2	SX.05.DD.00	708,50	841,50	974,50	1.107,00	1.240,00	1.506,00	596,00	133,00
PB 6000-SX-DD	6000	–	–	1,8	180	13	15,1	2,7	SX.06.DD.00	808,00	972,50	1.137,00	1.301,00	1.466,00	1.794,00	667,00	164,50
PB 8000-SX-DD	8000	–	–	2,2	240	13	23,0	3,8	SX.08.DD.00	-	1.123,00	1.314,00	1.506,00	1.698,00	2.081,00	768,50	191,50
PB 10000-SX-DD	10000	–	–	2,4	300	13	34,1	4,8	SX.10.DD.00	-	1.377,00	1.598,00	1.819,00	2.040,00	2.483,00	972,50	221,00

Surcharge

115120
075126

Example of order: Enter effective length! SX.05.DD.03 Secutex SX, 5000 kg hanger type DD, 3 m effective length

S2 Double protection for the truss!

SpanSet Powertruss with double face secutex-coating S2

Type S2 | Type S2-C | Type S2-DD

Info

Combination of hangers type C and D is feasible as well. Please contact your SIP-partner!

Info

secutex-coated trusses with EPIS transponder technology!

Designation	Rated lifting capacity [kg]	Width of loop [mm]	Length of loop [mm]	L1 min. [m]	Width of the truss [mm]	Gauge of the truss [mm]	appr. weig. 1. m [kg]	appr. weig. lin. m [kg]	Order-No.	Effective length L1 2 m €	3 m €	4 m €	5 m €	6 m €	8 m €	Spec.length L1 1. m €	lfd. m €
PB 1000-S2	1000	30	300	1,0	40	18	0,9	0,8	S2.01.00.00	147,50	204,50	262,00	319,00	376,00	490,50	100,00	57,60
PB 2000-S2	2000	35	300	1,0	70	18	1,4	1,4	S2.02.00.00	208,50	293,00	377,50	462,00	546,50	715,50	136,50	85,00
PB 3000-S2	3000	50	400	1,3	100	18	2,0	2,1	S2.03.00.00	279,00	397,00	514,50	632,00	750,00	985,50	177,50	118,00
PB 4000-S2	4000	65	400	1,3	130	18	2,7	2,9	S2.04.00.00	328,00	474,50	621,50	768,50	915,00	1.209,00	200,50	148,00
PB 5000-S2	5000	80	500	1,5	160	18	3,4	3,7	S2.05.00.00	397,00	583,00	769,00	955,00	1.141,00	1.513,00	236,50	187,00
PB 6000-S2	6000	70	700	1,9	190	18	3,8	4,4	S2.06.00.00	451,50	669,00	886,50	1.104,00	1.322,00	1.756,00	262,50	218,50
PB 8000-S2	8000	90	800	2,2	250	18	4,6	6,1	S2.08.00.00	–	812,00	1.074,00	1.335,00	1.597,00	2.120,00	323,00	263,00
PB 10000-S2	10000	160	1.000	2,6	310	18	7,0	7,6	S2.10.00.00	–	1.000,00	1.309,00	1.617,00	1.926,00	2.543,00	427,50	310,00
PB 1000-S2-C	1000	30	300	1,0	40	18	1,4	0,8	S2.01.0C.00	247,50	304,50	362,00	419,00	476,00	590,50	200,50	57,60
PB 2000-S2-C	2000	35	300	1,0	70	18	2,9	1,4	S2.02.0C.00	324,00	408,50	493,00	577,50	662,00	831,00	252,50	85,00
PB 3000-S2-C	3000	50	400	1,0	100	18	5,0	2,1	S2.03.0C.00	412,00	529,50	647,00	764,00	881,50	1.204,00	311,00	118,00
PB 5000-S2-C	5000	80	500	1,5	160	18	11,2	3,7	S2.05.0C.00	675,00	861,00	1.047,00	1.233,00	1.419,00	1.792,00	515,50	187,00
PB 1000-S2-DD	1000	–	–	1,0	40	18	1,4	0,8	S2.01.DD.00	209,00	266,50	323,50	380,50	438,00	552,00	162,00	57,60
PB 2000-S2-DD	2000	–	–	1,0	70	18	2,6	1,4	S2.02.DD.00	328,00	412,50	497,00	581,50	666,00	835,00	257,00	85,00
PB 3000-S2-DD	3000	–	–	1,0	100	18	4,5	2,1	S2.03.DD.00	469,00	586,50	704,00	821,50	939,00	1.174,00	368,50	118,00
PB 4000-S2-DD	4000	–	–	1,2	130	18	6,4	2,9	S2.04.DD.00	574,00	720,50	867,50	1.014,00	1.161,00	1.455,00	447,50	148,00
PB 5000-S2-DD	5000	–	–	1,5	160	18	9,8	3,7	S2.05.DD.00	821,00	1.007,00	1.193,00	1.379,00	1.565,00	1.938,00	662,50	187,00
PB 6000-S2-DD	6000	–	–	1,8	190	18	15,8	4,4	S2.06.DD.00	920,50	1.138,00	1.356,00	1.573,00	1.790,00	2.225,00	734,50	218,50
PB 8000-S2-DD	8000	–	–	2,2	250	18	23,6	6,1	S2.08.DD.00	–	1.326,00	1.587,00	1.849,00	2.110,00	2.634,00	839,00	263,00
PB 10000-S2-DD	10000	–	–	2,4	310	18	34,3	7,6	S2.10.DD.00	–	1.615,00	1.924,00	2.232,00	2.540,00	3.157,00	1.045,00	310,00

Surcharge

115119
075125

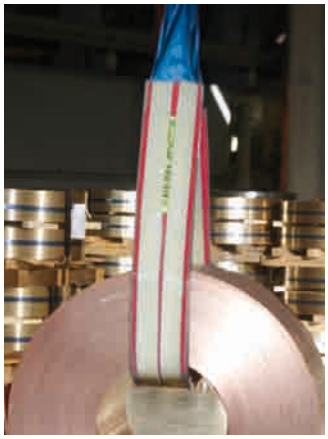
Example of order: Enter effective length! S2.01.DD.02Secutex S2, 1000 kg hanger type DD, 2 m effective length

secutex®

SLING TECHNOLOGY

secumove Liftung Sling with Unlosable Protective Hose

... one more coat above



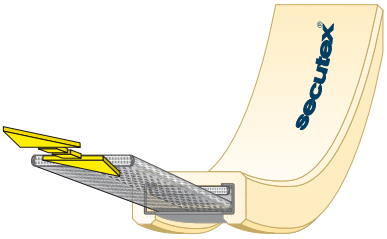
The cut-resistant protective hose is firmly fitted to the edge, the textile lifting sling runs through the protective hose, there is no motion at the sharp edge due to truss extension and load positioning. Thus, the protective hose cannot be lost any more when being pulled out
on one side with a crane since it is firmly connected to the truss.

In secumove, the protecting secutex-coating is firmly fitted to a loop of the truss. The other layer of the truss is loosely sliding through the hose, ensuring length adjustment. Thus, secumove is safeguarding that there is no motion at the sharp edge. No movement means no wear or tear. Therefore, the running life in heavy duty of the recently developed secumove-coating is markedly increased.

Important fields of operation are the careful lifting of machine parts, girder collars, laminations, coils, etc. In case of insecurity, please do not hesitate to contact our expert service personnel.

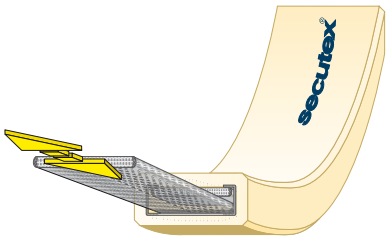
secumove lifting sling, single face coating, with loop

Lifting capacity [kg]	Width of loop [mm]	Length of loop [mm]	L1 min. [m]	Width of the hose [mm]	Gauge of the hose [mm]	approx. weight 1. m [kg]	appr. weight lin. m [kg]	Order-No.	Price €
1000	30	600	2000	55	25	0,3	0,8	PB.001.FS1	113,00
2000	35	600	2000	80	25	0,6	1,1	PB.002.FS1	156,50
3000	50	800	2500	110	25	1,0	1,6	PB.003.FS1	293,00
4000	65	800	2500	145	25	1,4	2,0	PB.004.FS1	364,00
5000	80	1000	3000	175	25	1,7	2,4	PB.005.FS1	452,50
6000	70	1400	4000	210	30	2,2	2,9	PB.006.FS1	699,00
8000	90	1600	4000	270	35	2,9	3,9	PB.008.FS1	833,00
10000	160	2000	5000	340	35	4,1	5,9	PB.010.FS1	1.235,00
2000	30	700	2000	55	25	0,5	1,0	PCS.02.FS1	182,00
4000	60	800	2500	85	35	1,0	1,9	PCS.04.FS1	335,50
6000	50	1200	3000	110	35	1,5	2,4	PCS.06.FS1	435,50
8000	65	1600	4000	145	40	2,2	3,3	PCS.08.FS1	615,00
10000	80	1800	5000	210	40	2,9	4,3	PCS.10.FS1	765,50
12000	95	2200	6000	230	40	3,6	5,4	PCS.12.FS1	1.135,00
16000	125	2400	6000	280	45	4,0	6,3	PCS.16.FS1	1.383,00
20000	155	2800	7000	340	45	7,0	8,2	PCS.20.FS1	2.238,00



secumove lifting sling, double face coating, with loop

Lifting capacity [kg]	Width of loop [mm]	Length of loop [mm]	L1 min. [m]	Width of the hose [mm]	Gauge of the hose [mm]	approx. weight 1. m [kg]	appr. weight lin. m [kg]	Order-No.	Price €
1000	30	600	2000	55	25	0,3	1,0	PB.001.FS2	147,50
2000	35	600	2000	80	25	0,6	1,9	PB.002.FS2	208,50
3000	50	800	2500	110	25	1,0	2,9	PB.003.FS2	397,00
4000	65	800	2500	145	25	1,4	3,6	PB.004.FS2	474,50
5000	80	1000	3000	175	25	1,7	4,4	PB.005.FS2	583,00
6000	70	1400	4000	210	30	2,2	5,2	PB.006.FS2	886,50
8000	90	1600	4000	270	35	2,9	7,2	PB.008.FS2	1.074,00
10000	160	2000	5000	340	35	4,1	8,7	PB.010.FS2	1.617,00
2000	30	700	2000	55	25	0,5	1,2	PCS.02.FS2	235,50
4000	60	800	2500	85	35	1,0	2,2	PCS.04.FS2	441,50
6000	50	1200	3000	110	35	1,5	3,4	PCS.06.FS2	562,50
8000	65	1600	4000	145	40	2,2	5,0	PCS.08.FS2	783,50
10000	80	1800	5000	210	40	2,9	6,0	PCS.10.FS2	969,00
12000	95	2200	6000	230	40	3,6	6,6	PCS.12.FS2	1.374,00
16000	125	2400	6000	280	45	4,0	8,8	PCS.16.FS2	1.693,00
20000	155	2800	7000	340	45	7,0	11,0	PCS.20.FS2	2.737,00

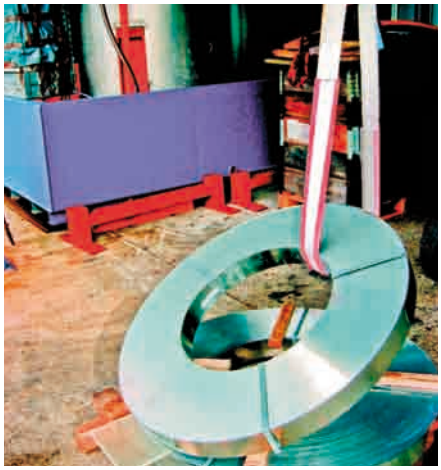


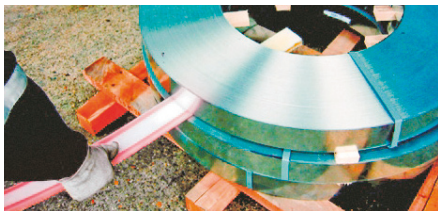
Surcharge

CE

Lifting Sling for split strips

Ideal for especially narrow interspaces





The Problem
Turn-over of stacked coils on the pile is prohibited! Therefore, the first choice in erecting packets with split strips delivered in horizontal position is always a coil turning chair. However, a firm installation for turning narrow coils is not always at hand. Therefore, we offer a solution which, however, may be applied only in exceptional cases and strictly after previous thorough training of the person responsible for load securing.

Our solution
An end loop of the secutex lifting sling for split strips is manufactured as a plane version and may easily be inserted into the gap between the split strips. The plane end loop then is just hung into the forged hanger type C. The protective hose will be positioned at the sharp edges of the coil. When the load is lifted, the lifting sling is moving unrestrictedly in the protective hose whereas the latter is firmly attatched to the load. Thus, there will be no motion on the sharp edges and nearly no wear or tear. There is a high risk of accidents when turning stacked coils on the pile, since the split strip may slip off the lower edge in the process of erecting. Therefore, there is always a slip resistant secutex turnover mat included in the set, which is simply slid under the tipping line. Positive side effect: the windings of the coil lying at the bottom will not be damaged during turn over action.

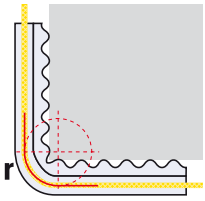
Set consisting of:
- Coil KR 3,2 with hanger type C with VG 8-8 and shackle 8-8
- Lifting sling PB 2000 with KK 8
- secutex protective hose SF1-60 without edge
- secutex mat SPGF-F-10, 200 x 300 mm

Lifting capacity [kg]	Width of truss [mm]	Width of protective hose [mm]	Length of truss PB-2000 [m]	Leng. of secutex-protective hose SF1-OK [m]	Order-No.	Price/Set €
2000	60	70	2	1,2	PB.2.20.SWB	372,00
2000	60	70	2,5	1,5	PB.2.25.SWB	397,00
2000	60	70	3	1,8	PB.2.30.SWB	423,50
2000	60	70	4	2,5	PB.2.40.SWB	482,50

CE

secuwave The protective hose with undulation

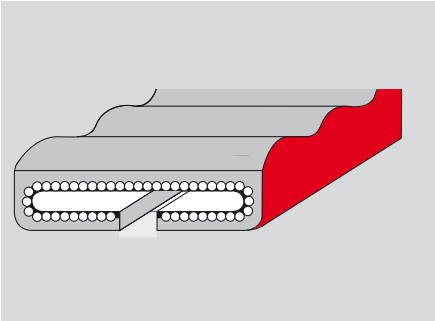
for PowerStar and PowerStarDD



Secuwave is the thick-layer coated protective hose with undulation for lifting slings. Secuwave increases the redirecting radius at sharp edges. The sharp edge does not contact the protective hose. Minimum thickness of coating 5 mm + undulation. High flexibility due to undulation of the protective hose. Secuwave is delivered in clip hose version. Thus, there is no problem pushing it on the truss even subsequently.

For PowerStar WLL [kg]	Width [mm]	Height [mm]	Weight lin. m [kg]	Order-No.	Price lin. m €
1000	65	45	1,6	SWS.0030.1	95,40
2000	90	40	2,7	SWS.0060.1	118,00
3000	120	40	4,0	SWS.0090.1	155,50
4000	155	40	4,9	SWS.0120.1	186,00
5000	185	40	6,0	SWS.0150.1	225,50
6000	220	50	7,0	SWS.0180.1	270,00
8000	280	50	9,5	SWS.0240.1	326,00
10000	350	50	11,3	SWS.0300.1	472,00

Surcharge



CE

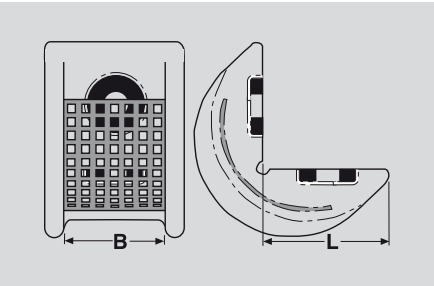
SpanSet®

SLING TECHNOLOGY

Edge protection more safety at sharp edges

Edge protection SWH for trusses

- Using magnet clamp for simple fixing at the load
- Prevents load and load securing device from damages
- Extraordinary robustness, additional reinforcement by punched sheet
- Lateral guide for the load securing device
- Perfectly fitted for use with SpanSet load securing devices



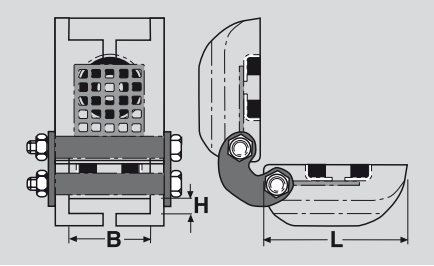
Execution	B max. [mm]	Magnets per blade	Order-No.	Price/ Piece €
Type A w/o magnetic cohesion	30	0	SWH.A.0030	37,40
	60	0	SWH.A.0060	44,95
	90	0	SWH.A.0090	52,40
	120	0	SWH.A.0120	59,80
	150	0	SWH.A.0150	67,40
	180	0	SWH.A.0180	74,80
	240	0	SWH.A.0240	89,80
	300	0	SWH.A.0300	105,00

Execution	B max. [mm]	Magnets per blade	Order-No.	Price/ Piece €
Type B magnetic cohesion, 1 blade	30	1	SWH.B.0030	52,20
	60	1	SWH.B.0060	59,60
	90	1	SWH.B.0090	67,20
	120	1	SWH.B.0120	74,60
	150	2	SWH.B.0150	96,80
	180	2	SWH.B.0180	104,50
	240	3	SWH.B.0240	134,00
	300	3	SWH.B.0300	149,00

Execution	B max. [mm]	Magnets per blade	Order-No.	Price/ Piece €
Type C magnetic cohesion, 2 blades	30	1	SWH.C.0030	66,90
	60	1	SWH.C.0060	74,40
	90	1	SWH.C.0090	81,90
	120	1	SWH.C.0120	89,40
	150	2	SWH.C.0150	126,50
	180	2	SWH.C.0180	134,00
	240	3	SWH.C.0240	178,50
	300	3	SWH.C.0300	193,50

Edge protection with joint SKB for trusses

- With joint for better adaptation to the geometry of the load



Execution	B max. [mm]	Magnets per blade	Order-No.	Price/ Piece €
Type A w/o magnetic cohesion	30	0	SKB.A.0030	81,20
	60	0	SKB.A.0060	101,00
	90	0	SKB.A.0090	121,00
	120	0	SKB.A.0120	141,00
	150	0	SKB.A.0150	161,00
	180	0	SKB.A.0180	229,00
	240	0	SKB.A.0240	337,50
	300	0	SKB.A.0300	478,00

Execution	B max. [mm]	Magnets per blade	Order-No.	Price/ Piece €
Type B magnetic cohesion, 1 blade	30	1	SKB.B.0030	96,00
	60	1	SKB.B.0060	116,00
	90	1	SKB.B.0090	135,50
	120	1	SKB.B.0120	155,50
	150	2	SKB.B.0150	190,00
	180	2	SKB.B.0180	258,50
	240	3	SKB.B.0240	381,50
	300	3	SKB.B.0300	522,50

Execution	B max. [mm]	Magnets per blade	Order-No.	Price/ Piece €
Type C magnetic cohesion, 2 blades	30	1	SKB.C.0030	111,00
	60	1	SKB.C.0060	130,50
	90	1	SKB.C.0090	150,50
	120	1	SKB.C.0120	170,50
	150	2	SKB.C.0150	220,00
	180	2	SKB.C.0180	288,00
	240	3	SKB.C.0240	426,00
	300	3	SKB.C.0300	567,00

SecuWave edge protection SWK

Width	Blade length	Order-No.	Price/ Piece €	Price/ Meter €
200 mm	300 mm	SWK.0200.3	225,50	376,00
250 mm	300 mm	SWK.0250.3	279,00	465,00
300 mm	400 mm	SWK.0300.4	443,50	554,50
400 mm	400 mm	SWK.0400.4	586,50	733,00
500 mm	500 mm	SWK.0500.5	911,50	911,50
600 mm	500 mm	SWK.0600.5	1.090,00	1.090,00

Delivery without magnetic cohesion only

Surcharge

Info

Optimal for one-hand control:

secutex edge protection with magnetic adhesion. Special versions on request. Please do not hesitate to contact us!

VarioFIX Storage Rack

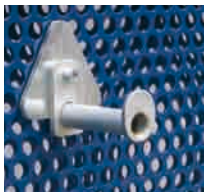
The new organisational system for stop-means

Chains, lifting belts and wire ropes are hanging, in accordance with the applicable safety rules, clearly arranged on the individual combinable hanging points, and improvised solutions that are not approved are no longer necessary.

Modular system
The VarioFix storage rack is fully equipped and can be changed any time. Added stop-means find their place reliably and the user will find the appropriate hanger without having to search for it. Several racks can be placed side by side and with the additional option of „roles“, the VarioFix storage rack can be moved completely to the application site. The adapter plate of VarioFix is hung in the hole pattern of the selected fixed point and attached with the central screw, done. Of course, the adapter plate of VarioFix can be installed for other attachment points, e.g. for tools, warehouse parts, etc. Additional benefits: The VarioFix storage rack shows on both sides readable information boards with important safety tips and essential load carrying charts for lifting belts, wire ropes, chains and stop-mean points

The VarioFix storage rack for lifting accessories has a robust design, with bolt-on latches, load capacity: 2.400 kg, width: 1.500 mm, height: 2.500 mm, complete with 16 x VarioFix-adapter plate, 8 x VarioFix-hanging bolt, short, 4 x VarioFix-hanging bolt, long, 2 x VarioFix-hang up bags for crane rings (Pair)

Version	WLL [kg]	Order-No.	Price/piece €
VarioFix complete system (incl. accessories)	2400	SE.240.15.0	1.920,00
Optional: swivel castors/fixed castors with stopper		SE.240.15.R	240,00
VarioFix adapter plate	125	SE.240.100	9,00
VarioFix attachment bolts short	125	SE.240.200	12,00
VarioFix attachment bolts long	125	SE.240.300	18,00
VarioFix hang up bags for crane ings (pair)	250	SE.240.400	24,00
VarioFix case mounting for metal boxes (set)	250	SE.240.500	36,00
VarioFix chain bag	125	SE.240.600	36,00



SLING TECHNOLOGY

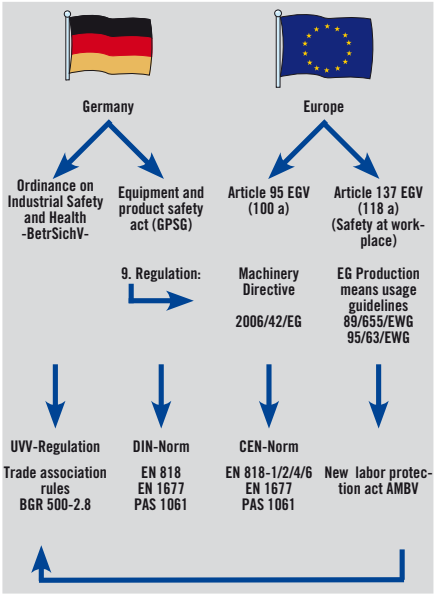
What you need to know about sling chain!

1. Legal basis

For the use of sling chains the following German and European regulations and standards essentially apply:

Machinery Directive 2006/42/EC,
Equipment and Product Safety Act (GPSG) BGR 500-2.8
EN 818
EN 1677

Established legally protected interests for sling equipment in Germany/ Europe (Dual security system)



Info

Unmarked chains must not be used!

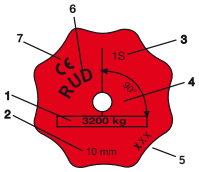
2. Marking

For deployment in the lifting division only standardized and corresponding to DIN/EN marked sling chains must be used.

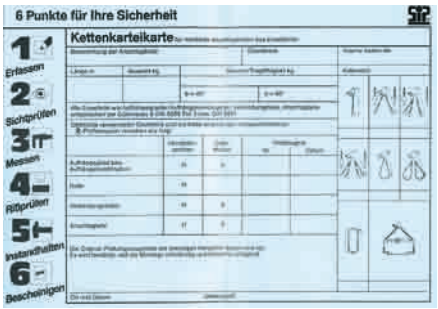
Sling Chains Chain Standards and Grades - Examples

Grade	2	4	8	VIP -10	ICE 120 -12
Standard	DIN 32891	EN 818 part 3/5	EN 818 part 2/4/6	EN 818 PAS 1061	EN 818 PAS 1061
Fracture stress	250 N/mm²	400 N/mm²	800 N/mm²	>1000 N/mm²	1200 N/mm²
Material DIN 17115	U-St 35	non-alloyed steel	Stainl. steel (quenched and tampered steel)	Ni 0,4% Cr 0,4% Mo 0,15%	Patented special steel
Load bearing capacity test force	1 2 4			1 2,5 4	
Quality mark manufacturer	K	B * 4	1 8	VIP 1 10	ICE D 1 12
Marking for sling chains	○	◆	⬢		

Example of sling chains in grade 8, marked according to the rules, single leg as per EN 818.



1 Maximum permissible load-bearing capacity of the chain
2 Nominal diameter of the used chain
3 Marking for the number of chain leg (here 1-leg)
4 Symbol of (1-leg chain)
5 Individual marking number, related to Certificate of Compliance with the order
6 Manufacturer - name or symbol
7 CE – marking



3. Types of sling chains

1-leg chains

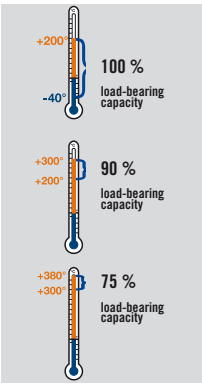
2-leg chains

4-leg chains

crown chains

SLING TECHNOLOGY

4. Deployment according to the rules



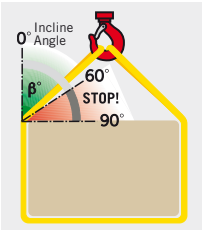
High strength sling chains (grade 8, please note manufacturer's data in case of grade 10 and 12) may be principally deployed in the temperature range from - 40° C up to +200° C. The sling chains may be deployed up to + 400° C considering the reduction in the load-bearing capacity.

Info

RUD chains in grade 12 are deployable up to -60°C!

Note:
In case of combination with other sling equipment, acceptable deployment temperatures should be observed. The sling chain may be used as single sling equipment without edge protectors around a sharp edge, if the required 20% reduction of load bearing capacity is adhered to or the next largest thick chain is used. Otherwise an edge protector must be used. A sharp edge is present, if the edge radius „r" is smaller than the thickness „d" of the sling chain. The load bearing capacity of the sling chains is to be taken from the load bearing capacity tables or from the marking tag of the chain.

Important:
On fastening the incline angular range may not exceed 60°. The forces occurring above these incline angles are not permissible!



5. Safety-relevant instructions

Prior to deployment, the chain should be checked for identifiable defects. Twisted chains should be straightened before deployment.

Note:
To avoid twisted chains use a whirl adapter.

ALLOWED **PROHIBITED**

Important:
- The attachment should not be at the tip of the crane hook!
- The incline angles β should never exceed 60°!
- Edge protectors should be used in case of sharp edges!
- Follow the deployment temperature as per BGR 500!
- Damaged sling chains should never be used (BGR 500)!
- Mixing of chain elements of different grades is not permitted.

PROHIBITED **ALLOWED**

Info

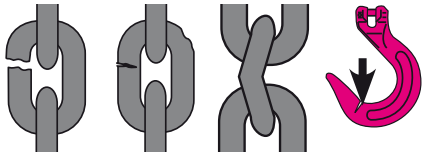
Mixing of components from different manufacturers in grade 10 and grade 12 not permitted.

6. Inspection

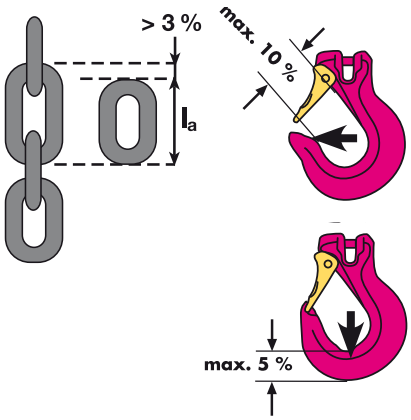
Compulsory inspections for sling chains are regulated by BGR 500. Repair work should be carried out by experts only, as per BGR 500-2.8.

Discard criteria examples:

Breakage chain link | Cracks due to corrosion | Deformations | Damages at hook



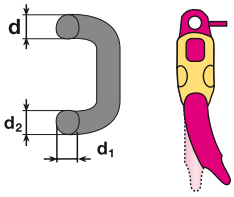
Edge elongation



Ascertainment of discard criteria of chain link:

$$\frac{dm = d1 + d2}{2}$$

max. 10 %



Info

1 x anual inspection of the sling chain and documentation of the inspection as well as 3 years destruction free inspection as legally required by BGR 500 and machine guideline 2006/42/EG.

Your SIP-Partner offers you a contractual regulation of the inspection service and the maintenance of your sling gear.

12-ICE The best in chain technology

The (R)evolution in the hoisting technology SIP introduces the chain generation of grade 12. RUD, globally being the first manufacturer to achieve this, is capable of manufacturing round steel chains and the corresponding components in grade 12. Thus RUD has been the first manufacturer to receive an approval stamp for a grade higher than 10, awarded by the relevant trade association inspection and certification authority of the metal experts' committee metal and surface technology of the Berufsgenossenschaft Metall Nord Süd (Metal North South trade association). This is documented on each ICE- chain and the components by way of the approval stamp specially created for this purpose.

If things are getting rough during extreme action, in particular during transshipment at ports, construction work with ropeway deployment and in arctic temperatures the ICE-chain is of advantage to the user. This chain generation is explicitely laid-out for extreme strain. The ICE – chain possesses a better tenacity and impact values > 55 J at 60°C. In chains grade 8 this value exists at 40 J.

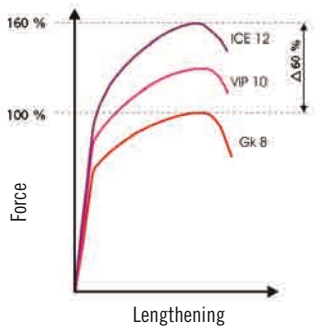
Sling chains in quality class 12-ICE

More load bearing capacity with lower weight. The sling chain generation 12-ICE offers up to 60 % more load bearing capacity as compared to a grade-8-chain with identical nominal thickness. Compared to a grade10-chain this is still an advantage of up to 25%. Thus, using a 12-ICE-chain you'll get the load bearing capacity of a grade-8-chain, however with less nominal thickness.

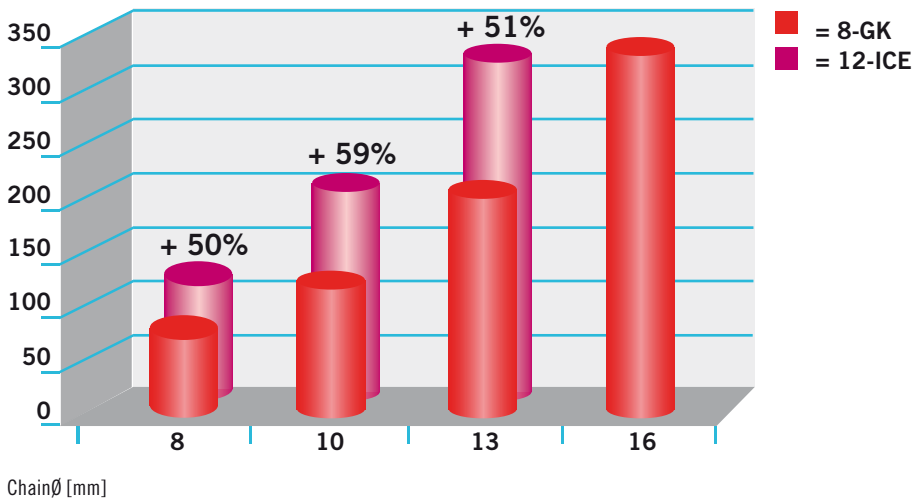
Hard-wearing up to - 60°C Chain generation 12-ICE is has its special field of operation in polar and arctic zones at extremely low temperatures down to -60°C. The 12-ICE chain achieves this by sensational improvements in the patented steel, including completely new options without negative influence.

- Enormously high breaking strain
- Optimal cryo-tenacity
- Optimum brittle fracture transition temperature
- Highest fatigue strength with minimum of 20,000 load changes with 50% overload relative to nominal load bearing capacity
- As unsusceptible to hydrogen embrittlement as grade 8
- Low deadweight
- Ecosensitive
- Avoids health impairment due to excessive heavy lifting
- Markedly less material
- Better handling due to Lightweight design

Force/Path diagram



Min. elongation breaking force [kN]



12-ICE ICE, which convinces

Mix-up excluded: guaranteed

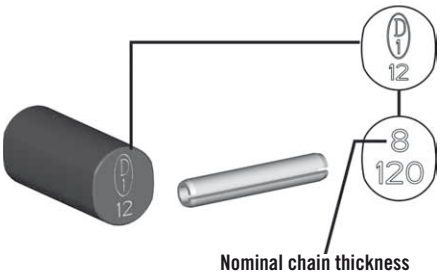
The 12-ICE-chain, due to its build-up, defies mix-up as consequently as do other RUD- chain programs. This includes the ICE- marking on each chain link as well as the ICE- embossment on each ICE-component. Each back of a chain link has been stamped with ICE. In addition, the novel, x-shaped marking tag also serves as control gauge and control instrument for testing the chain links.

The striking coloring

The 12-ICE-chain is easily discerned from the chain systems grade 10 (magenta) and grade 8 (red) by traffic purple coloring of chain and components. By means of the Heat-Indicator-Patent the ICE-chain also changes its coloring with temperatures exceeding 300°C and conveys impermissible overheating by deep black coloring with small blisters.

Faulty combinations ruled out

The successful and often copied RUD fork head system has been continued with ICE grade 12. Dimensional and color adjustment allow unmistakable attribution of the exact chain nominal thickness. The novel ICE-conneciting pin – oval design – may not be combined with other RUD-grades or vice versa. Thus wrong fittings are ruled out.



Innovation: tested now in the ICE

Thanks to the major expansion of the ICE construction set the multi contracting claws (IMVK) and the contracting hooks (IVH) are available.
In addition the nominal thickness ICE 6 and 16 mm are also part of the ICE-Star hooks and the ICE automatic fork-head hooks ICE range.
New ICE applications are available in the form of the ICE bob, the ICE trough automatic fork-head hook and the ICE trough insertion piece.

G8, VIP and ICE chains differ in coloring:

ICE-Chain =

VIP-Chain =

G8-Chain =

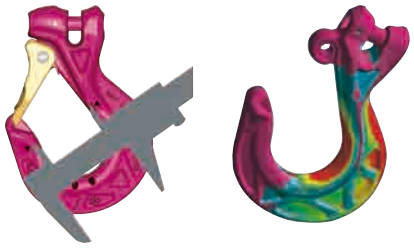
Special attachment links

Attachment links with 40° angled flattening are available for ICE only – for installation of ICE-connector and ICE shortening-Coupler!

Making things lighter

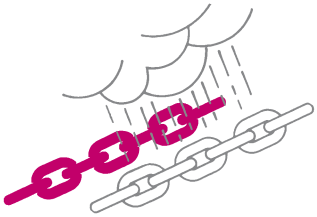
Due to FEM supported construction optimization the ICE-star-hook weighs 25% less than the GK-8-hook of equal load bearing capacity. This is achieved with equal rim width and web height.

Grade	8	12
Chain-Ø	13	10
WLL [kg]	5000	5000
Rim width [mm]	40	40
Web heigh [mm]	37	37
Weight [kg]	2,5	1,7



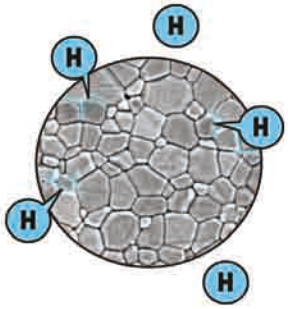
High quality surface

The high quality ICE-chains and ICE-components receive a special ICE-pink powder coating (Color: Traffic purple). Thanks to the two components system (pre-treatment and ICE pink powder coating) a considerably improved surface protection is achieved, as compared to a sheer chain or an electrogalvanized chain.



Well protected

ICE-chains are as unsusceptible to hydrogen embrittlement as is grade 8. Stress - corrosion cracking - endurance has been proven according to PAS 1061.



Contingency Preparedness

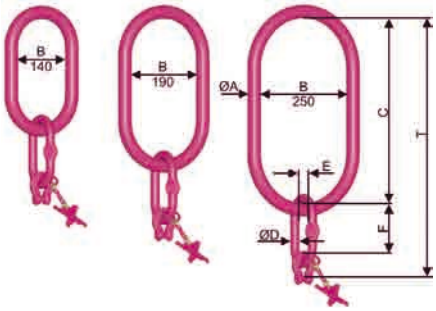
The ICE-chain program comprises a complete and sophisticated, modular construction system. This includes components like suspension heads, also in special sizes, shortening coupler etc. as known with other grades.

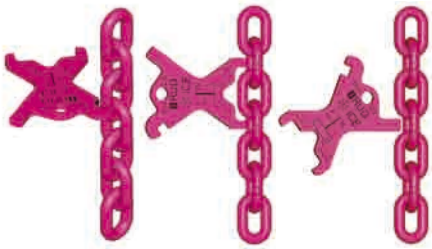
Know-how will make it easier

All components of the ICE-chain program have again been precisely designed and optimized with respect to weight. For instance the shortening coupler, coupling and shortener are integrated into one component. This way, material is saved the same as installation expenditure, testing and spare parts.

Testing made easy

With the patented identification tag, the review of the chains is child's play. With the X-shaped pendant, the chain can be tested for wear, improper elongation or plastic elongation by means of overload.



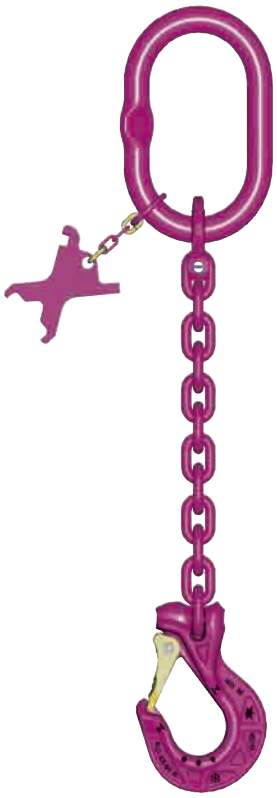


Info

Further Information about the RUD ID System you find on the pages 417.

12-ICE sling chain RUD 12-ICE ultra light and ultra strong

Always one nominal thickness less than grade 8 - permitting use down to -60 °C



1 leg, with safety hooks ICE-Star-Hook

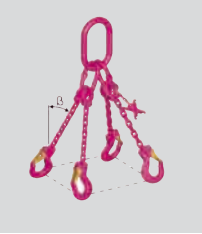
Chain thickness [mm]	Load bearing capacity single direct [kg]	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	1.800	ICE.0.1.01.0	126,70	IKM.06.000	19,30
8	3.000	ICE.0.1.03.0	143,70	IKM.08.000	20,10
10	5.000	ICE.0.1.05.0	182,40	IKM.10.000	25,20
13	8.000	ICE.0.1.08.0	261,40	IKM.13.000	42,40
16	12.500	ICE.0.1.12.0	439,60	IKM.16.000	68,50

2 leg, with safety hooks ICE-Star-Hooks

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	2.500	1.800	ICE.0.2.02.0	219,90	IKM.06.000	19,30
8	4.250	3.000	ICE.0.2.04.0	255,40	IKM.08.000	20,10
10	7.100	5.000	ICE.0.2.07.0	330,60	IKM.10.000	25,20
13	11.200	8.000	ICE.0.2.11.0	504,60	IKM.13.000	42,40
16	17.000	12.500	ICE.0.2.17.0	774,60	IKM.16.000	68,50

4 leg, with safety hooks ICE-Star-Hooks

Chain thickness [mm]	Load bearing capacity [kg]tilt angle 4 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	3.750	2.700	ICE.0.4.03.0	439,00	IKM.06.000	19,30
8	6.300	4.500	ICE.0.4.06.0	502,80	IKM.08.000	20,10
10	10.600	7.500	ICE.0.4.10.0	683,30	IKM.10.000	25,20
13	17.000	11.800	ICE.0.4.17.0	978,90	IKM.13.000	42,40
16	26.500	19.000	ICE.0.4.26.0	1.509,40	IKM.16.000	68,50



Surcharge

MADE IN GERMANY

SLING TECHNOLOGY

12-ICE Sling chain, shortable

With multi shortener ICE-MVK

1 leg, mit multi shortener ICE-MVK and safety hook ICE-Star-Hook

Chain thickness [mm]	Load bearing capacity single direct [kg]	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	1.800	I.V1.MVK.01	192,10	IKM.06.000	19,30
8	3.000	I.V1.MVK.03	217,60	IKM.08.000	20,10
10	5.000	I.V1.MVK.05	280,10	IKM.10.000	25,20
13	8.000	I.V1.MVK.08	413,00	IKM.13.000	42,40
16	12.500	I.V1.MVK.12	685,30	IKM.16.000	68,50

2 leg, mit multi shortener ICE-MVK and safety hook ICE-Star-Hooks

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	2.500	1.800	I.V2.MVK.02	350,70	IKM.06.000	19,30
8	4.250	3.000	I.V2.MVK.04	403,10	IKM.08.000	20,10
10	7.100	5.000	I.V2.MVK.07	526,10	IKM.10.000	25,20
13	11.200	8.000	I.V2.MVK.11	807,90	IKM.13.000	42,40
16	17.000	12.500	I.V2.MVK.17	1.266,20	IKM.16.000	68,50

4 leg, mit multi shortener ICE-MVK and safety hook ICE-Star-Hooks

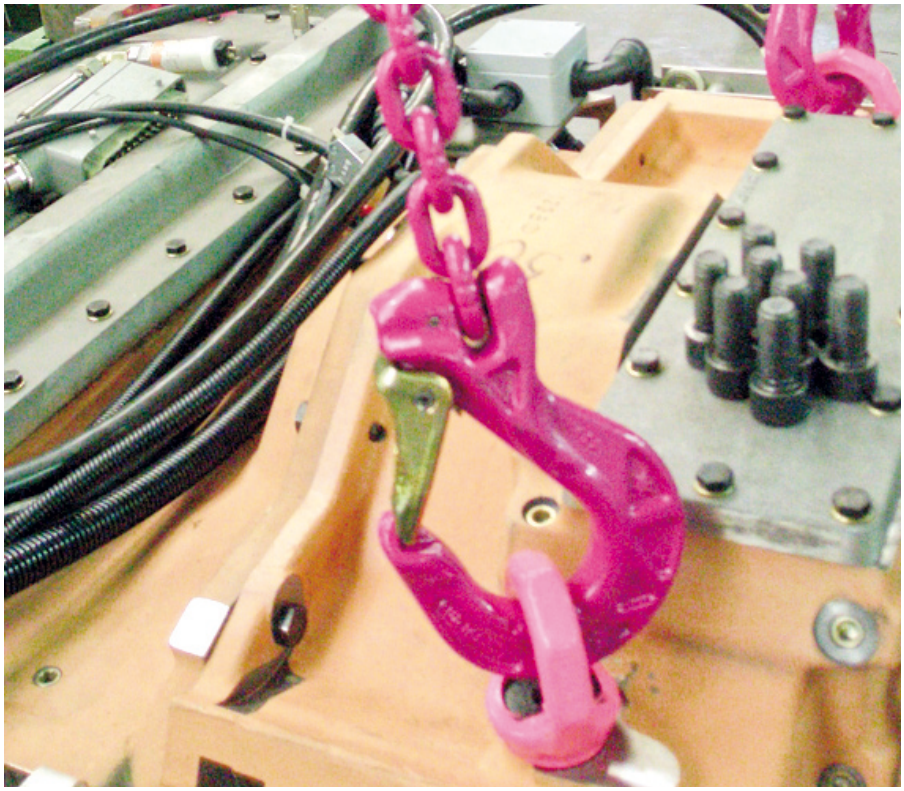
Chain thickness [mm]	Load bearing capacity [kg] tilt angle 4-Str. 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	3.750	2.700	I.V4.MVK.02	700,70	IKM.06.000	19,30
8	6.300	4.500	I.V4.MVK.04	798,20	IKM.08.000	20,10
10	10.600	7.500	I.V4.MVK.07	1.074,20	IKM.10.000	25,20
13	17.000	11.800	I.V4.MVK.11	1.585,30	IKM.13.000	42,40
16	26.500	19.000	I.V4.MVK.19	2.492,40	IKM.16.000	68,50

Surcharge

SLING TECHNOLOGY

12-ICE Sling chain, shortable

With shortening hook ICE-VH



1 leg, with shortening hook ICE-VH and safety hook ICE-Star-Hook

Chain thickness [mm]	Load bearing capacity single direct [kg]	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	1.800	I.V1.IVH.01	189,10	IKM.06.000	19,30
8	3.000	I.V1.IVH.03	216,80	IKM.08.000	20,10
10	5.000	I.V1.IVH.05	270,90	IKM.10.000	25,20
13	8.000	I.V1.IVH.08	417,17	IKM.13.000	42,40
16	12.500	I.V1.IVH.12	612,00	IKM.16.000	68,50

2 leg, with shortening hook ICE-VH and safety hook ICE-Star-Hooks

Chain thickness [mm]	load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
6	2.500	1.800	I.V2.IVH.02	344,50	IKM.06.000	19,30
8	4.250	3.000	I.V2.IVH.04	401,40	IKM.08.000	20,10
10	7.100	5.000	I.V2.IVH.07	507,70	IKM.10.000	25,20
13	11.200	8.000	I.V2.IVH.11	817,40	IKM.13.000	42,40
16	17.000	12.500	I.V2.IVH.17	1.119,60	IKM.16.000	68,50

Surcharge

12-ICE sling chain RUD 12-ICE suspension, shortable

Highest grade with integrated shortening

1 leg, with shortener ICE-SC and safety hooks ICE-Star-Hook

Chain thickness [mm]	Load bearing capacity single direct [kg]	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
8	3.000	ICE.V.1.03.0	183,20	IKM.08.000	20,10
10	5.000	ICE.V.1.05.0	227,80	IKM.10.000	25,20

2 leg, with shortener ICE-SC and safety hooks ICE-Star-Hooks

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
8	4.250	3.000	ICE.V.2.04.0	334,30	IKM.08.000	20,10
10	7.100	5.000	ICE.V.2.07.0	421,40	IKM.10.000	25,20

4 leg, with shortener ICE-SC and safety hooks ICE-Star-Hooks

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 4 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per leg €
8	6.300	4.500	ICE.V.4.06.0	660,60	IKM.08.000	20,10
10	10.600	7.500	ICE.V.4.10.0	864,90	IKM.10.000	25,20

Surcharge

SLING TECHNOLOGY

12-ICE suspension head with pre-assembled ICE-Connector (connector bracket), without shortening

All suspension heads on this side are equipped with movably mounted, complete marking tag with integrated chain control gauge.

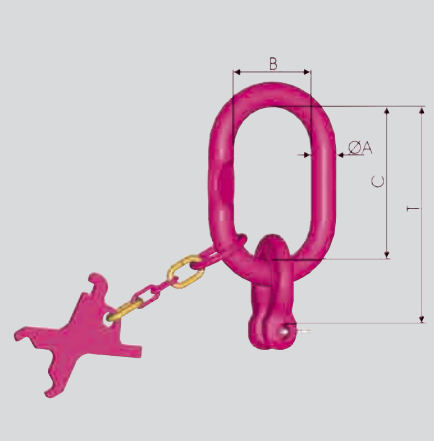
IAK – suspension heads
Measurements correspond to suspension link Form A as per DIN 5688, but at one more grade of nominal thickness.

IBK – suspension head
The inner width of the IBK- suspension head is sufficient to mount on high-strength load hook to a hoisting gear.

IAK-1- and IBK-1-suspension head with pre-assembled ICE-connector

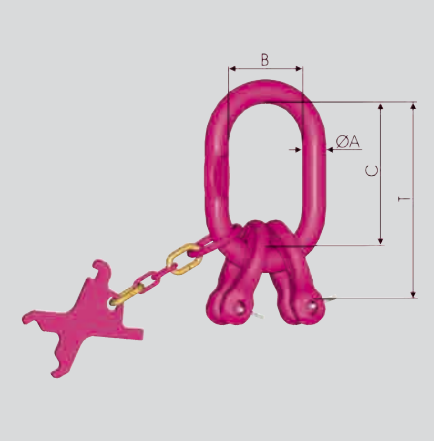
Chain thickness [mm]	Load bearing capacity [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
								For standard load hooks	
6	1.800	IAK-1-6	13	60	110	145	0,6	IC.IAK.1.06	64,40
8	3.000	IAK-1-8	18	75	135	179	1,4	IC.IAK.1.08	74,50
10	5.000	IAK-1-10	22	90	160	214	2,5	IC.IAK.1.10	91,20
13	8.000	IAK-1-13	26	100	180	252	4,2	IC.IAK.1.13	121,20
16	12.500	IAK-1-16	32	140	260	348	8,0	IC.IAK.1.16	212,70
								For small load hooks	
6	1.800	IBK-1-6	13	40	85	120	0,6	IC.IBK.1.06	63,40
8	3.000	IBK-1-8	18	60	110	154	1,3	IC.IBK.1.08	70,40
10	5.000	IBK-1-10	22	65	140	194	2,2	IC.IBK.1.10	94,30
13	8.000	IBK-1-13	26	75	135	207	3,7	IC.IBK.1.13	154,90
16	12.500	IBK-1-16	32	90	160	248	6,5	IC.IBK.1.16	207,90

- Pre-assembled ICE-connecting pin and spring dowel pin
- Also deliverable as end link (IA-1), without marking tag



IAK-2- and IBK-2-suspension head with 2 pre-assembled ICE–connectors

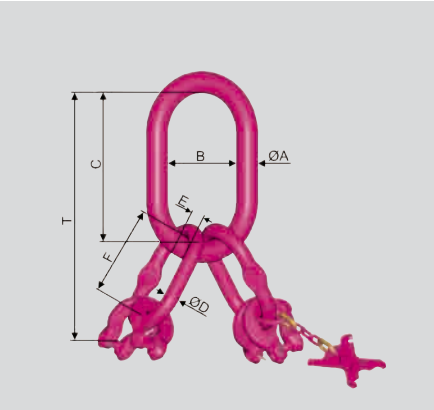
Chain thickness [mm]	Load bearing capacity 0-45° /45-60°[kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
								For standard load hooks	
6	2.500/1.800	IAK-2-6	16	75	135	170	1,1	IC.IAK.2.06	91,50
8	4.250/3.000	IAK-2-8	22	90	160	204	2,4	IC.IAK.2.08	113,10
10	7.100/5.000	IAK-2-10	26	100	180	234	4,0	IC.IAK.2.10	141,20
13	11.200/8.000	IAK-2-13	32	110	200	272	7,5	IC.IAK.2.13	221,90
16	17.000/12.500	IAK-2-16	36	180	340	428	14,1	IC.IAK.2.16	322,80
								For small load hooks	
6	2.500/1.800	IBK-2-6	13	40	85	120	0,7	IC.IBK.2.06	88,50
8	4.250/3.000	IBK-2-8	18	60	110	154	1,6	IC.IBK.2.08	101,30
10	7.100/5.000	IBK-2-10	22	65	140	194	2,1	IC.IBK.2.10	132,10
13	11.200/8.000	IBK-2-13	26	75	135	207	5,1	IC.IBK.2.13	206,60
16	17.000/12.500	IBK-2-16	32	90	160	248	9,0	IC.IBK.2.16	280,80



IAK-3-/-4- leg – suspension head with 3 or 4 ICE–connectors pre-assembled in 2 interlinks.

Chain thickness [mm]	Load bearing capacity 0-45° /45-60°[kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	3.750/2.700	IAK-3-6	22	90	160	13	40	85	280	2, 9	IC.IAK.3.06	160,20
8	6.300/4.500	IAK-3-8	26	100	180	18	60	110	334	5,0	IC.IAK.3.08	189,60
10	10.600/7.500	IAK-3-10	32	110	2 00	22	65	140	394	9,0	IC.IAK.3.10	277,70
13	17.000/11.800	IAK-3-13	36	140	260	26	75	135	467	15,1	IC.IAK.3.13	379,20
16	26.500/19.000	IAK-3-16	46	190	350	32	90	160	598	28,7	IC.IAK.3.16	572,10
6	3.750/2.700	IAK-4-6	22	90	160	13	40	85	280	3,1	IC.IAK.4.06	185,30
8	6.300/4.500	IAK-4-8	26	100	180	18	60	110	334	5,4	IC.IAK.4.08	220,50
10	10.600/7.500	IAK-4-10	32	110	200	22	65	140	394	9,7	IC.IAK.4.10	315,50
13	17.000/11.800	IAK-4-13	36	140	260	26	75	135	467	16,6	IC.IAK.4.13	430,90
16	26.500/19.000	IAK-4-16	46	190	350	32	90	160	598	31,3	IC.IAK.4.16	645,00

Surcharge



12-ICE special suspension head with pre-assembled ICE-connector (connector bracket), without shortening

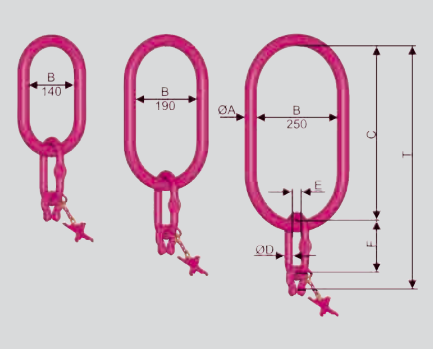
All suspension heads on this side are equipped with movably mounted, complete marking tag with integrated chain control gauges. Major grading of the inner width „B“ prevents undue usage (BGR 500, Ch. 2.8) and reduces the wear and tear on the crane hook.

ISAK special suspension head: usable up to hook no. (DIN 15401)

Size	Hook
ISAK Maß B=140	Nr. 16
ISAK Maß B=190	Nr. 32
ISAK Maß B=250	Nr. 50

ISAK -1- leg – suspension head with ICE – connector pre-assembled in the interlink

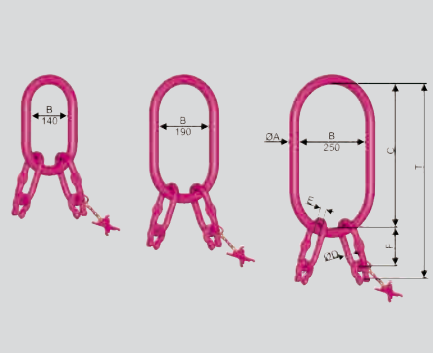
Chain thickness [mm]	Load bearing cap. [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
6	1.800	ISAK-1-6/140	18	140	260	13	40	85	380	2,4	S1.IAK.1.06	140,50
8	3.000	ISAK-1-8/140	22	140	260	18	60	110	414	4,2	S1.IAK.1.08	150,20
10	5.000	ISAK-1-10/140	26	140	260	22	65	140	455	6,7	S1.IAK.1.10	200,90
13	8.000	ISAK-1-13/140	32	140	260	26	75	135	467	9,8	S1.IAK.1.13	286,20
6	1.800	ISAK-1-6/190	22	190	350	13	40	85	470	3,9	S2.IAK.1.06	160,50
8	3.000	ISAK-1-8/190	26	190	350	18	60	110	504	6,3	S2.IAK.1.08	170,70
10	5.000	ISAK-1-10/190	32	190	350	22	65	140	545	10,4	S2.IAK.1.10	242,50
13	8.000	ISAK-1-13/190	36	190	350	26	75	135	557	14,3	S2.IAK.1.13	332,80
16	12.500	*IAKL-1-16/180	36	180	340	-	-	-	428	11,5	S2.IAK.1.16	249,20
8	3.000	ISAK-1-8/250	36	250	460	18	60	110	614	13,1	S3.IAK.1.08	260,20
10	5.000	ISAK-1-10/250	36	250	460	22	65	140	655	14,7	S3.IAK.1.10	309,20
13	8.000	ISAK-1-13/250	36	250	460	26	75	135	667	16,8	S3.IAK.1.13	364,10
16	12.500	ISAK-1-16/250	40	250	460	32	90	160	708	23,7	S3.IAK.1.16	581,40



* without intermediate link

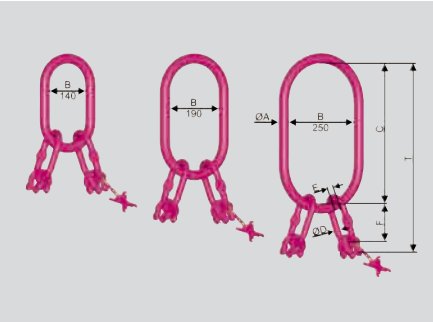
ISAK -2- leg – suspension head with 2 ICE-connector pre-assembled in each interlink

Chain thickness [mm]	Load bearing capacity 0-45° /45-60°[kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
6	2.500/1.800	ISAK-2-6/140	18	140	260	13	40	85	380	2,5	S1.IAK.2.06	165,70
8	4.250/3.000	ISAK-2-8/140	22	140	260	18	60	110	414	4,5	S1.IAK.2.08	181,10
10	7.100/5.000	ISAK-2-10/140	26	140	260	22	65	140	455	7,4	S1.IAK.2.10	227,00
13	11.200/8.000	ISAK-2-13/140	32	140	260	26	75	135	467	11,3	S1.IAK.2.13	337,90
6	2.500/1.800	ISAK-2-6/190	22	190	350	13	40	85	470	4,1	S2.IAK.2.06	185,70
8	4.250/3.000	ISAK-2-8/190	26	190	350	18	60	110	504	6,6	S2.IAK.2.08	201,60
10	7.100/5.000	ISAK-2-10/190	32	190	350	22	65	140	545	10,1	S2.IAK.2.10	280,30
13	11.200/8.000	ISAK-2-13/190	36	190	350	26	75	135	557	15,8	S2.IAK.2.13	384,50
8	4.250/3.000	ISAK-2-8/250	36	250	460	18	60	110	614	13,5	S3.IAK.2.08	291,10
10	7.100/5.000	ISAK-2-10/250	36	250	460	22	65	140	655	15,4	S3.IAK.2.10	347,10
13	11.200/8.000	ISAK-2-13/250	36	250	460	26	75	135	667	18,2	S3.IAK.2.13	418,10
16	17.000/12.500	ISAK-2-16/250	40	250	460	32	90	160	708	26,3	S3.IAK.2.16	672,40



ISAK – 4-leg suspension head with 4 ICE- connectors pre-assembled in 2 interlinks

Chain thickness [mm]	Load bearing capacity 0-45° /45-60°[kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
6	3.750/2.700	ISAK-4-6/140	22	140	260	13	40	85	380	3,5	S1.IAK.4.06	226,20
8	6.300/4.500	ISAK-4-8/140	26	140	260	18	60	110	414	6,1	S1.IAK.4.08	252,40
10	10.600/7.500	ISAK-4-10/140	32	140	260	22	65	140	455	10,7	S1.IAK.4.10	350,60
6	3.750/2.700	ISAK-4-6/190	26	190	350	13	40	85	470	5,6	S2.IAK.4.06	250,90
8	6.300/4.500	ISAK-4-8/190	32	190	350	18	60	110	504	9,8	S2.IAK.4.08	297,70
10	10.600/7.500	ISAK-4-10/190	36	190	350	22	65	140	545	14,2	S2.IAK.4.10	391,10
13	17.000/11.800	ISAK-4-13/190	40	190	350	26	75	135	557	20,7	S2.IAK.4.13	488,00
8	6.300/4.500	ISAK-4-8/250	36	250	460	18	60	110	614	14,1	S3.IAK.4.08	352,90
10	10.600/7.500	ISAK-4-10/250	36	250	460	22	65	140	655	16,6	S3.IAK.4.10	422,70
13	17.000/11.800	ISAK-4-13/250	40	250	460	26	75	135	667	23,7	S3.IAK.4.13	534,90
16	26.500/19.000	ISAK-4-16/250	47	250	460	32	90	160	708	35,2	S3.IAK.4.16	955,80



Surcharge

SLING TECHNOLOGY

12-ICE Suspension Head

IAK/IBK- Suspension head with pre-assembled ICE connecting lock

All suspension heads on the following pages are equipped with moveable mounted, complete identification tag with integrated chain testing gauge. **Sizes 13 and 16 have a Universal-KZA and included testing gauge.**

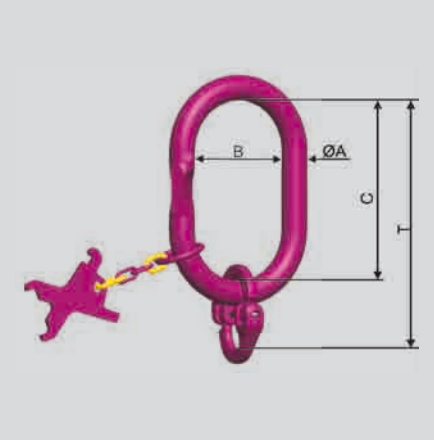
IAK-Suspension heads
The dimensions correspond to suspension link design A according to DIN 5688, but are a nominal thickness greater.

IBK-Suspension heads
The internal width of the IBK-suspension links is sufficient to hang high strength load hooks on hoists.

NEW

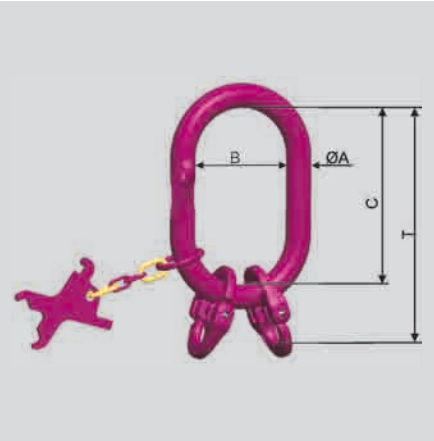
IAK-1 and IBK-1-suspension head with pre-assembled ICE connecting lock

Chain thickness [mm]	WLL [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
								For standard load hooks	
6	1.800	IAK-IVS-1-6	13	60	110	155	0,6	AK.IVS.1.06	66,10
8	3.000	IAK-IVS-1-8	18	75	135	196	1,3	AK.IVS.1.08	73,50
10	5.000	IAK-IVS-1-10	22	90	160	234	2,2	AK.IVS.1.10	89,00
13	8.000	IAK-IVS-1-13	26	100	180	273	3,4	AK.IVS.1.13	114,60
16	12.500	IAK-IVS-1-16	32	140	260	368	7,4	AK.IVS.1.16	218,10
								For small load hooks	
6	1.800	IBK-IVS-1-6	13	40	85	130	0,5	BK.IVS.1.06	65,00
8	3.000	IBK-IVS-1-8	18	60	110	171	1,2	BK.IVS.1.08	69,40
10	5.000	IBK-IVS-1-10	22	65	140	214	1,9	BK.IVS.1.10	92,10
13	8.000	IBK-IVS-1-13	26	75	135	228	2,9	BK.IVS.1.13	148,40
16	12.500	IBK-IVS-1-16	32	90	160	268	5,9	BK.IVS.1.16	213,30



IAK-2 and IBK-2-suspension head with two pre-assembled ICE connecting locks

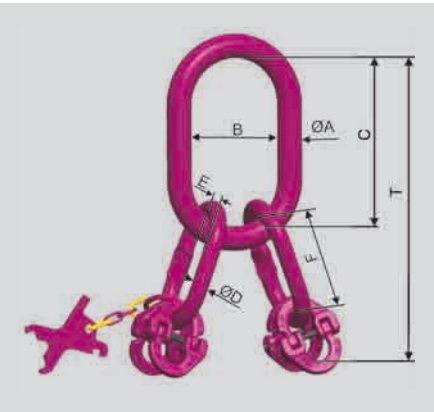
Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
								For standard load hooks	
6	2.500/1.800	IAK-IVS-2-6	16	75	135	180	1	AK.IVS.2.06	94,80
8	4.250/3.000	IAK-IVS-2-8	22	90	160	221	2,3	AK.IVS.2.08	111,10
10	7.100/5.000	IAK-IVS-2-10	26	100	180	254	3,5	AK.IVS.2.10	136,80
13	11.200/8.000	IAK-IVS-2-13	32	110	200	293	5,9	AK.IVS.2.13	208,90
16	17.000/12.500	IAK-IVS-2-16	36	180	340	448	12,9	AK.IVS.2.16	332,80
								For small load hooks	
6	2.500/1.800	IBK-IVS-2-6	13	40	85	130	0,6	BK.IVS.2.06	91,80
8	4.250/3.000	IBK-IVS-2-8	18	60	110	171	1,5	BK.IVS.2.08	99,20
10	7.100/5.000	IBK-IVS-2-10	22	65	140	214	2,3	BK.IVS.2.10	127,80
13	11.200/8.000	IBK-IVS-2-13	26	75	135	228	3,5	BK.IVS.2.13	193,60
16	17.000/12.500	IBK-IVS-2-16	32	90	160	268	7,9	BK.IVS.2.16	291,50



IAK-4-strand suspension head with 4 in 2 intermediate links pre-assembled ICE connecting locks

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
6	3.750/2.700	IAK-IVS-4-6	18	90	160	13	40	85	290	3,1	AK.IVS.4.06	191,90
8	6.300/4.500	IAK-IVS-4-8	26	100	180	18	60	110	351	5,2	AK.IVS.4.08	216,30
10	10.600/7.500	IAK-IVS-4-10	32	110	200	22	65	140	414	8,7	AK.IVS.4.10	306,90
13	17.000/11.800	IAK-IVS-4-13	36	140	260	26	75	135	488	13,4	AK.IVS.4.13	404,90
16	26.500/19.000	IAK-IVS-4-16	46	190	350	32	90	160	618	28,9	AK.IVS.4.16	666,50

Surcharge



IAK-IVS-suspension heads: usable up to crane hook-Nr. (DIN 15401)

Size	6	8	10	13	16
IAK-IVS 1	Nr. 2,5	Nr. 5	Nr. 6	Nr. 8	Nr. 16
IAK-IVS 2	Nr. 5	Nr. 6	Nr. 8	Nr. 10	Nr. 25
IAK-IVS 3/4	Nr. 6	Nr. 8	Nr. 10	Nr. 16	Nr. 32

12-ICE Special suspension head

ICE-Special suspension heads with pre-assembled ICE connecting lock

All suspension heads on this page are equipped with pre-assembled ICE connecting locks and with a moveable mounted, complete identification tag with integrated chain testing gauge. **Sizes 13 and 16 have a Universal-KZA and included testing gauge.**

NEW

ISAK-suspension heads. The dimensions correspond to suspension link design A according to DIN 5688, but are a nominal thickness greater.
ISAK-IVS suspension heads. The internal width of the ISAK-SC- suspension heads is sufficient to hang high strength load hooks on hoists.

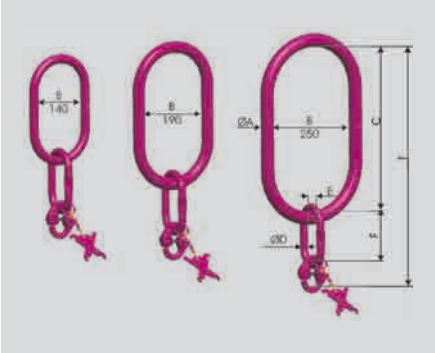
IAK-IVS- suspension heads: usable for crane hooks-Nr. (DIN 15401)

Size	Hook
ISAK-IVS Size B=140	Nr. 16
ISAK-IVS Size B=190	Nr. 32
ISAK-IVS Size B=250	Nr. 50

SLING TECHNOLOGY

ISAK-1-strand suspension head within the intermediate link pre-assembled ICE connecting locks

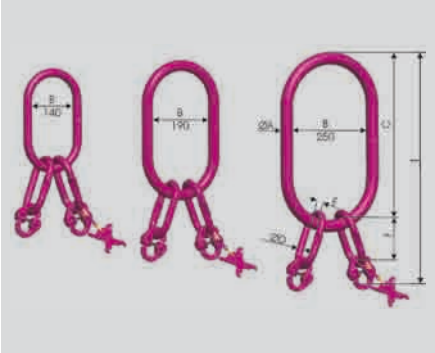
Chain thickness [mm]	WLL [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order No.	Price/ piece €
6	1.800	ISAK-IVS-1-6/140	18	140	260	13	40	85	390	2,4	S1.IVS.1.06	142,50
8	3.000	ISAK-IVS-1-8/140	22	140	260	18	60	110	431	4,1	S1.IVS.1.08	149,20
10	5.000	ISAK-IVS-1-10/140	26	140	260	22	65	140	475	6,5	S1.IVS.1.10	198,70
13	8.000	ISAK-IVS-1-13/140	32	140	260	26	75	135	487	9,0	S1.IVS.1.13	279,70
6	1.800	ISAK-IVS-1-6/190	22	190	350	13	40	85	480	3,9	S2.IVS.1.06	162,20
8	3.000	ISAK-IVS-1-8/190	26	190	350	18	60	110	521	6,2	S2.IVS.1.08	169,70
10	5.000	ISAK-IVS-1-10/190	32	190	350	22	65	140	565	10,1	S2.IVS.1.10	240,30
13	8.000	ISAK-IVS-1-13/190	36	190	350	26	75	135	578	13,5	S2.IVS.1.13	326,40
16	12.500	*IAKL-IVS-1-16/180	36	180	340	-	-	-	448	10,9	S2.IVS.1.16	249,20
8	3.000	ISAK-IVS-1-8/250	36	250	460	18	60	110	631	13,1	S3.IVS.1.08	259,20
10	5.000	ISAK-IVS-1-10/250	36	250	460	22	65	140	675	14,6	S3.IVS.1.10	307,10
13	8.000	ISAK-IVS-1-13/250	36	250	460	26	75	135	688	15,9	S3.IVS.1.13	357,60
16	12.500	ISAK-IVS-1-16/250	40	250	460	32	90	160	728	23,1	S3.IVS.1.16	586,70



* without intermediate link

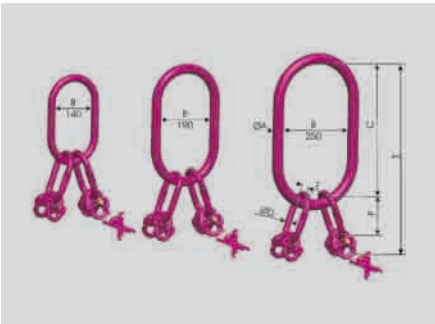
ISAK-2-strand suspension head with each one in two intermediate links pre-assembled ICE connecting locks

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order No.	Price/ piece €
6	2.500/1.800	ISAK-IVS-2-6/140	18	140	260	13	40	85	390	2,5	S1.IVS.2.06	169,00
8	4.250/3.000	ISAK-IVS-2-8/140	22	140	260	18	60	110	431	4,4	S1.IVS.2.08	179,10
10	7.100/5.000	ISAK-IVS-2-10/140	26	140	260	22	65	140	475	6,9	S1.IVS.2.10	234,40
13	11.200/8.000	ISAK-IVS-2-13/140	32	140	260	26	75	135	487	9,7	S1.IVS.2.13	324,90
6	2.500/1.800	ISAK-IVS-2-6/190	22	190	350	13	40	85	480	4,0	S2.IVS.2.06	189,00
8	4.250/3.000	ISAK-IVS-2-8/190	26	190	350	18	60	110	521	6,5	S2.IVS.2.08	199,60
10	7.100/5.000	ISAK-IVS-2-10/190	32	190	350	22	65	140	565	10,6	S2.IVS.2.10	276,00
13	11.200/8.000	ISAK-IVS-2-13/190	36	190	350	26	75	135	578	14,1	S2.IVS.2.13	371,60
8	4.250/3.000	ISAK-IVS-2-8/250	36	250	460	18	60	110	631	13,3	S3.IVS.2.08	289,10
10	7.100/5.000	ISAK-IVS-2-10/250	36	250	460	22	65	140	675	14,9	S3.IVS.2.10	342,70
13	11.200/8.000	ISAK-IVS-2-13/250	36	250	460	26	75	135	688	16,6	S3.IVS.2.13	405,10
16	17.000/12.500	ISAK-IVS-2-16/250	40	250	460	32	90	160	728	25,1	S3.IVS.2.16	683,10



ISAK-3/4-strand suspension head with 3 or 4 within the intermediate links pre-assembled ICE connecting locks

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order No.	Price/ piece €
6	3.750/2.700	ISAK-IVS-4-6/140	22	140	260	13	40	85	390	3,4	S1.IVS.4.06	232,80
8	6.300/4.500	ISAK-IVS-4-8/140	26	140	260	18	60	110	431	5,9	S1.IVS.4.08	248,30
10	10.600/7.500	ISAK-IVS-4-10/140	32	140	260	22	65	140	475	9,8	S1.IVS.4.10	341,90
6	3.750/2.700	ISAK-IVS-4-6/190	26	190	350	13	40	85	480	5,5	S2.IVS.4.06	257,40
8	6.300/4.500	ISAK-IVS-4-8/190	32	190	350	18	60	110	521	9,6	S2.IVS.4.08	293,60
10	10.600/7.500	ISAK-IVS-4-10/190	36	190	350	22	65	140	565	13,2	S2.IVS.4.10	382,50
13	17.000/11.800	ISAK-IVS-4-13/190	40	190	350	26	75	135	578	17,5	S2.IVS.4.13	462,00
8	6.300/4.500	ISAK-IVS-4-8/250	36	250	460	18	60	110	631	13,9	S3.IVS.4.08	348,80
10	10.600/7.500	ISAK-IVS-4-10/250	36	250	460	22	65	140	675	15,7	S3.IVS.4.10	414,00
13	17.000/11.800	ISAK-IVS-4-13/250	40	250	460	26	75	135	688	20,5	S3.IVS.4.13	509,00
16	26.500/19.000	ISAK-IVS-4-16/250	47	250	460	32	90	160	728	32,8	S3.IVS.4.16	898,90



Surcharge

SLING TECHNOLOGY

12-ICE Hoisting head

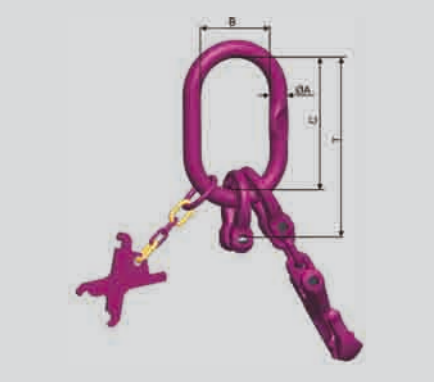
IAK-VH-hoisting head with pre-assembled (connector)

All the hoisting heads of these pages are fitted with rotating complete labled hoists with integrated control gauge: **All the hoisting heads of these pages are fitted with rotating complete labled hoists with integrated control gauge:** The dimensions correspond to the master link Form A according to DIN 5688, however they are

NEW

ICE-hoisting head IAK-VH-1-strand with shortening hook

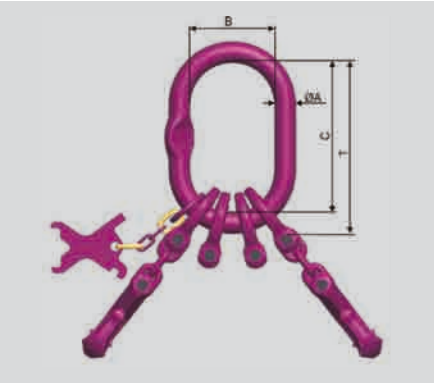
Chain thickness [mm]	Load bearing capacity [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
6	1.800	IAK-VH-1-6	13	60	110	145	1,08	IAK.VH.1.06	122,80
8	3.000	IAK-VH-1-8	18	75	135	179	2,35	IAK.VH.1.08	141,20
10	5.000	IAK-VH-1-10	22	90	160	214	4,59	IAK.VH.1.10	169,00
13	8.000	IAK-VH-1-13	26	100	180	252	8,64	IAK.VH.1.13	233,10
16	12.500	IAK-VH-1-16	32	140	260	348	15,94	IAK.VH.1.16	398,40



ICE-hoisting head IAK-VH-2-strand with shortening hook

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
6	2.500/1.800	IAK-VH-2-6	16	75	135	170	2,06	IAK.VH.2.06	208,30
8	4.250/3.000	IAK-VH-2-8	22	90	160	204	4,3	IAK.VH.2.08	246,40
10	7.100/5.000	IAK-VH-2-10	26	100	180	234	8,18	IAK.VH.2.10	296,70
13	11.200/8.000	IAK-VH-2-13	32	110	200	272	16,38	IAK.VH.2.13	446,00
16	17.000/12.500	IAK-VH-2-16	36	180	340	428	29,98	IAK.VH.2.16	693,30

Surcharge



Info

Instead of ICE connector also available with ICE connecting lock.

Examples – ICE-VH – with IVS connecting lock

Connector with shortening hook in the chain

Connector with shortening hook in IA- or IB-link

Connector with IVH-3/4-strand

12-ICE suspension head with a pre-assembled shortening (ICE-Shortening-Coupler)

All suspension heads

- Pre-assembled ICE-Shortening-Coupler
- Easy shortening of the sling chain without reduction of the load-carrying capacity. Loosening of the shortened chain is avoided by an additional rubber seal interlock

one nominal thickness larger.

- Just one erection bolt with a protection instep shell necessary (pre-assembled)
- Complete identification tag with an integrated chain testing gauge, moveably mounted

ICE-suspension heads

The measures of the ICE-suspension heads correspond to DIN 5688, but are adapted to nominal thickness.

IAK-suspension heads

The inner width of the IAK-suspension heads is sufficient for suspension hooks and fixed hook on hoisting device.

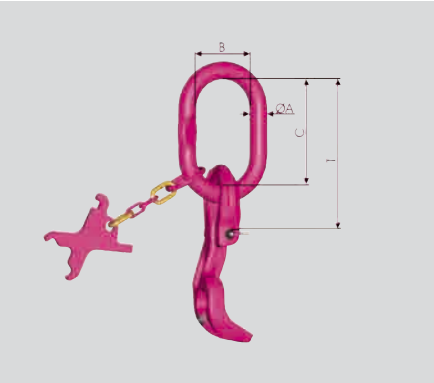
IBK-suspension heads

The inner width of the IBK-suspension heads is adequate for hooking into high-tensile load hooks on hoisting devices.

SLING TECHNOLOGY

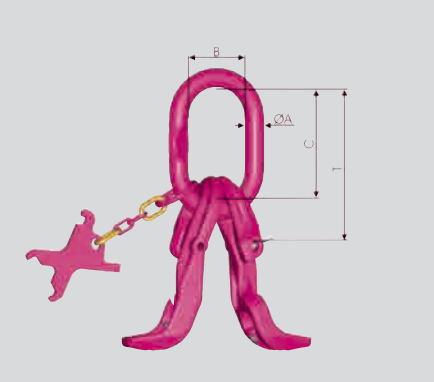
IAK-SC-1 and IBK-SC-1-suspension head with a pre-assembled ICE-Shortening-Coupler

Chain thickness [mm]	Load bearing capacity [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
								For standard load hooks	
8	3.000	IAK-SC-1-8	18	75	135	179	2,0	IV.IAK.1.08	114,00
10	5.000	IAK-SC-1-10	22	90	160	214	3,6	IV.IAK.1.10	136,60
								For small load hooks	
8	3.000	IBK-SC-1-8	18	60	110	154	1,8	IV.IBK.1.08	109,80
10	5.000	IBK-SC-1-10	22	65	140	194	3,3	IV.IBK.1.10	139,70



IAK-SC-2- and IBK-SC-2-suspension head with two pre-assembled ICE-Shortening-Couplers

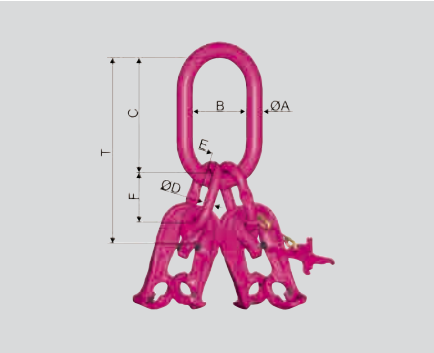
Chain thickness [mm]	Load bearing capacity 0-45° /45-60°[kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
								For standard load hooks	
8	4.250/3.000	IAK-SC-2-8	22	90	160	204	3,6	IV.IAK.2.08	192,00
10	7.100/5.000	IAK-SC-2-10	26	100	180	234	6,3	IV.IAK.2.10	232,00
								For small load hooks	
8	4.250/3.000	IBK-SC-2-8	18	60	110	154	2,7	IV.IBK.2.08	180,20
10	7.100/5.000	IBK-SC-2-10	22	65	140	194	4,5	IV.IBK.2.10	222,90



IAK-SC-3-/4-suspension head with three or four pre-assembled ICE-Shortening-Couplers

Chain thickness [mm]	Load bearing capacity 0-45° /45-60°[kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weig. [kg]	Order-no.	Price/piece €
8	6.300/4.500	IAK-SC-3-8	26	100	180	18	60	110	334	6,8	IV.IAK.3.08	307,80
10	10.600/7.500	IAK-SC-3-10	32	110	200	22	65	140	394	12,5	IV.IAK.3.10	414,00
8	6.300/4.500	IAK-SC-4-8	26	100	180	18	60	110	334	7,7	IV.IAK.4.08	378,30
10	10.600/7.500	IAK-SC-4-10	32	110	200	22	65	140	394	14,3	IV.IAK.4.10	497,20

Surcharge



SLING TECHNOLOGY

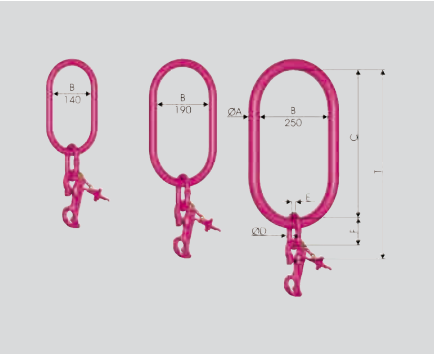
12-ICE special suspension head with pre-assembled shortening (ICE-Shortening-Coupler)

- Pre-assembled ICE-Shortening-Coupler
- Easy shortening of the sling chain without reduction of load-carrying capacity. Loosening of the shortened chain is avoided by an additional rubber seal interlock.
- Just one erection bolt with a protection instep shell necessary (pre-assembled)
- More differentiated grading of the inner width "B" avoids incorrect use (BGR 500, Chap. 2.8) and minimizes wear at the load hook.

Size	Hook
ISAK-SC Size B = 140	Nr. 16
ISAK-SC Size B = 190	Nr. 32
ISAK-SC Size B = 250	Nr. 50

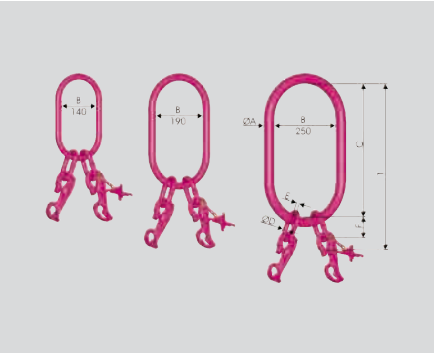
ISAK-SC-1-string-suspension head with ICE-Shortening-Coupler, pre-assembled into one interlink

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
Special suspension head with a shortening, 1-leg, 140 mm												
8	3.000	ISAK-SC-1-8/140	22	140	260	18	60	110	414	4,7	S1.IAV.1.08	189,70
10	5.000	ISAK-SC-1-10/140	26	140	260	22	65	140	455	7,8	S1.IAV.1.10	246,30
Special suspension head with a shortening, 1-leg, 140 mm												
8	3.000	ISAK-SC-1-8/190	26	190	350	18	60	110	504	6,9	S2.IAV.1.08	210,20
10	5.000	ISAK-SC-1-10/190	32	190	350	22	65	140	545	11,5	S2.IAV.1.10	287,90
Special suspension head with a shortening, 1-leg, 250 mm												
8	3.000	ISAK-SC-1-8/250	36	250	460	18	60	110	614	13,7	S3.IAV.1.08	299,70
10	5.000	ISAK-SC-1-10/250	36	250	460	22	65	140	655	15,8	S3.IAV.1.10	354,70



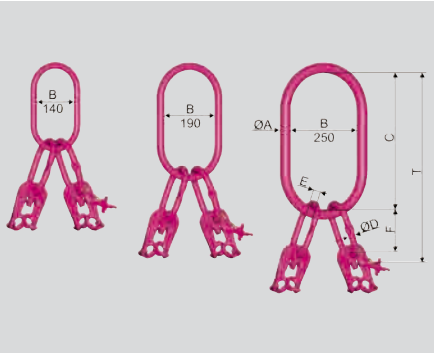
ISAK-SC-2-string-suspension head with two ICE-Shortening-Couplers, pre-assembled into one interlink

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
Special suspension head with a shortening, 2-leg, 140 mm												
8	4.250/3.000	ISAK-SC-2-8/140	22	140	260	18	60	110	414	5,7	S1.IAV.2.08	260,00
10	7.100/5.000	ISAK-SC-2-10/140	26	140	260	22	65	140	455	9,7	S1.IAV.2.10	329,50
Special suspension head with a shortening, 2-leg, 190 mm												
8	4.250/3.000	ISAK-SC-2-8/190	26	190	350	18	60	110	504	7,8	S2.IAV.2.08	280,50
10	7.100/5.000	ISAK-SC-2-10/190	32	190	350	22	65	140	545	13,3	S2.IAV.2.10	371,10
Special suspension head with a shortening, 2-leg, 250 mm												
8	4.250/3.000	ISAK-SC-2-8/250	36	250	460	18	60	110	614	14,5	S3.IAV.2.08	370,00
10	7.100/5.000	ISAK-SC-2-10/250	36	250	460	22	65	140	655	17,6	S3.IAV.2.10	437,90



ISAK-SC-4-string-suspension head with four ICE-Shortening-Couplers, pre-assembled into two interlinks

Chain thickness [mm]	WLL 0-45°/45-60° [kg]	Designation	Dimensions A Ø [mm]	B [mm]	C [mm]	Ø D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
Special suspension head with a shortening, 4-leg, 140 mm												
8	6.300/4.500	ISAK-SC-4-8/140	26	140	260	18	60	110	414	8,4	S1.IAV.4.08	410,20
10	10.600/7.500	ISAK-SC-4-10/140	32	140	260	22	65	140	455	15,3	S1.IAV.4.10	532,30
Special suspension head with a shortening, 4-leg, 190 mm												
8	6.300/4.500	ISAK-SC-4-8/190	32	190	350	18	60	110	504	12,1	S2.IAV.4.08	455,50
10	10.600/7.500	ISAK-SC-4-10/190	36	190	350	22	65	140	545	18,8	S2.IAV.4.10	572,80
Special suspension head with a shortening, 4-leg, 250 mm												
8	6.300/4.500	ISAK-SC-4-8/250	36	250	460	18	60	110	614	14,1	S3.IAV.4.08	510,70
10	10.600/7.500	ISAK-SC-4-10/250	36	250	460	22	65	140	655	21,2	S3.IAV.4.10	604,40



Surcharge

12-ICE Construction Kit

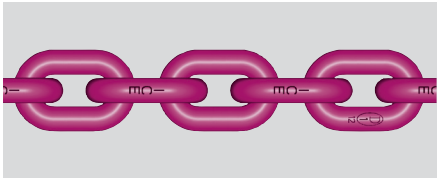
ICE-identification tag

with integrated chain testing gauge

for chain [mm]	Designation	Order-no.	Price/piece €
6	IKZA-6	ICE.KZA.06	8,38
8	IKZA-8	ICE.KZA.08	8,59
10	IKZA-10	ICE.KZA.10	9,42
13	IKZA-13	ICE.KZA.13	11,50
16	IKZA-16	ICE.KZA.16	12,00

ICE-chain bulk stock

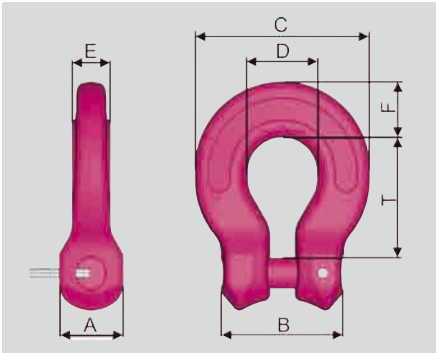
Nominal thickness of chain[mm]	Load bearing capacity [kg]	Designation	Weight [kg/m]	Order-no.	Price/m €
6	1800	ICE-6	0,98	IKM.06.000	19,30
8	3000	ICE-8	1,66	IKM.08.000	20,10
10	5000	ICE-10	2,62	IKM.10.000	25,20
13	8000	ICE-13	4,25	IKM.13.000	42,40
16	12500	ICE-16	6,72	IKM.16.000	68,50



ICE-Connector

ICE-connection bail for the original-RUD-ICE-suspension heads with 40° sloped flattening for easy insertion of the chain-connection-element. Expanded offer in suspension head-widths
When coupling watch out forcorrect correlation – rope number, load-carrying capacity, and nominal thickness!

Nominal chain thickn. [mm]	Load-bearing cap.[kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1800	ICE-C-6	18	34	51	21	11	16	35	0,15	ICE.CON.06	25,05
8	3000	ICE-C-8	24	45	64	26	14	21	44	0,3	ICE.CON.08	25,95
10	5000	ICE-C-10	30	56	80	32	18	26	54	0,6	ICE.CON.10	33,15
13	8000	ICE-C-13	38	73	104	42	23	33	72	1,44	ICE.CON.13	46,35
16	12500	ICE-C-16	46	92	132	52	26	40	88	2,58	ICE.CON.16	73,00



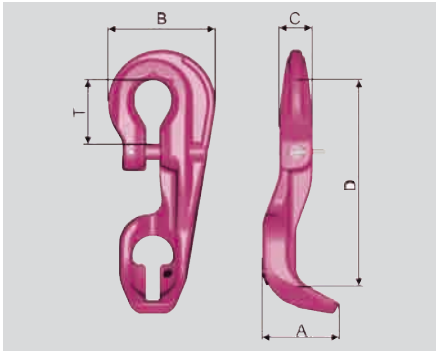
ICE-Shortening-Coupler

Successful optimization of coupling systems for original RUD-ICE-suspension heads with a 40° sloped flattening for easy insertion of the coupling elements. Just one component in light-weight build with concomitant chain-connection and captive modes ofshortening.
An erection bolt with protection instep shell.
Wrong employment of the erections bolts is ruled out. Minimaltime for check-up of the supporting components required. Perfect pocket-edition for the shortened chain link - no reduction of the load-carrying capacity during static and dynamic use.

Info

For other sizes please use IMVK or IVH.

Nominal chain thickness [mm]	Load bearing capacity [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
8	3000	ICE-SC-8	54	75	23,5	150	44	1,0	ICE.SC.008	66,70
10	5000	ICE-SC-10	67	94	29	187	54	1,9	ICE.SC.010	79,80



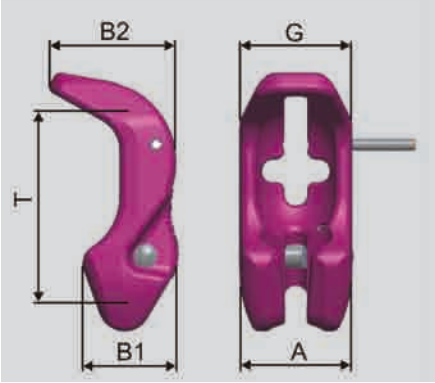
Surcharge

SLING TECHNOLOGY

12-ICE Construction Kit

ICE-MVK – ICE-Multi shortening claw

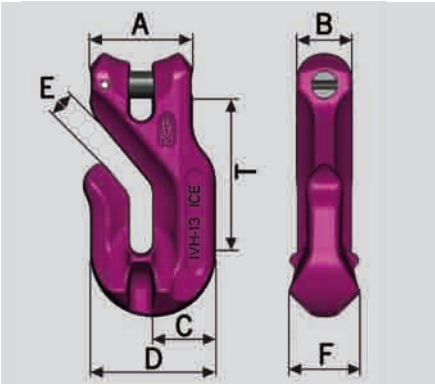
Development and adaptation to the ICE requirements. Installed in the continuous chain strand so you can't lose it. Placeable or movable at any point of the chain strand. No additional chain and coupling piece required. Ideal support for the chain by link-shaped pockets and thus no load reduction. The durable, spring-loaded locking pin prevents an automatic release of hinged chains in the unloaded state, and under load.



Chain thickness [mm]	WLL [kg]	Description	Dimensions A [mm]	B1 [mm]	B2 [mm]	G [mm]	T [mm]	Weight [kg]	Order-No.	Price/ piece €
6	1800	IMVK-6	35	34	40	36	66	0,3	ICE.MVK.06	65,40
8	3000	IMVK-8	46	41	52	48	88	0,55	ICE.MVK.08	73,80
10	5000	IMVK-10	58	50	64	60	110	1,1	ICE.MVK.10	97,70
13	8000	IMVK-13	74	64	86	76	143	2,4	ICE.MVK.13	151,50
16	12500	IMVK-16	91	79	105	98	176	4,4	ICE.MVK.16	246,00

ICE-VH – ICE Shortening Hook

No reduction in the ICE-carrying capacity. High dynamic strength. Through angled insertion it is difficult for the chain to slip loose. Wider hook tip for improper use prevention, for example, wrongly hanging the chain. According to DIN
5692. Chain groove depth > 5 x chain nominal thickness. Completely pre-assembled with connecting bolt and tensioning sleeve.



Chain thickness [mm]	WLL [kg]	Description	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-No.	Price/ piece €
6	1800	IVH-6	34	18	20	44	7,5	22	53	0,27	ICE.VH.006	31,75
8	3000	IVH-8	43	24	26	55	9,5	29	67	0,5	ICE.VH.008	33,75
10	5000	IVH-10	55	30	34	71	12	38	86	1,2	ICE.VH.010	36,85
13	8000	IVH-13	70	38	43	90	15	48	105	2,5	ICE.VH.013	53,70
16	12500	IVH-16	86	46	53	110	18,5	59	128	4,5	ICE.VH.016	99,50

Surcharge

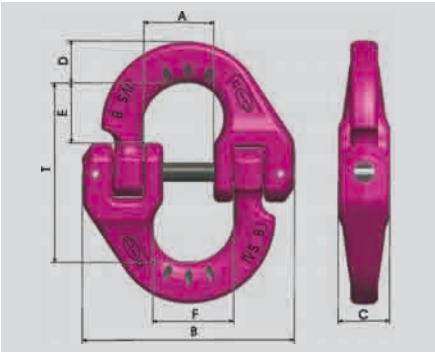
12-ICE Construction Kit

IVS ICE-Connecting Lock

The universal usable ICE-connecting lock

In the shackle stirrup halves, foreign connections such as, anchor points, shackles, sheet clamp etc., as well as the chain can be mounted.

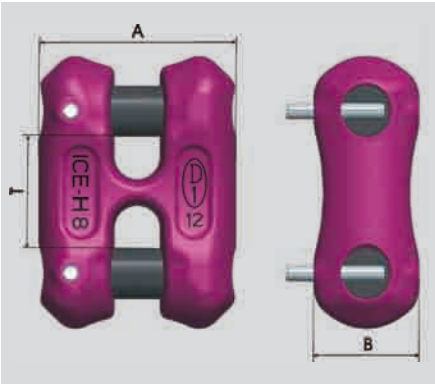
- Form and function patent registered
- No binding of the assembled chain possible
- The stirrup halves are able to be combined with each other
- No moving, no damage of the usual safety spring or the sleeves of the retaining bolt
- Patent wear marks



Chain thickness [mm]	WLL [kg]	Description	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-No.	Price/ piece €
6	1800	IVS-6	18	55	13	11	17	21	46	0,12	ICE.IVS.06	26,80
8	3000	IVS-8	24	70	17,5	14	23	27,5	61	0,29	ICE.IVS.08	29,90
10	5000	IVS-10	28	88	22	17	27	32	74	0,57	ICE.IVS.10	35,70
13	8000	IVS-13	34	111	28	23	33	40	93	1,2	ICE.IVS.13	45,30
16	12500	IVS-16	39	130	33	27	37	46	108	2,0	ICE.IVS.16	78,30

ICE-H-Connector

- Quick, easy and economical splicing of crown chains
- Division H-connector analogue division chain
- More compact and easier to handle than commonly
- Chain locks
- Tempered body, thus wear-resistant
- Ergonomically shaped
- Improved gliding over edges
- Very flexible: fits both the chain form and the component on it.



Chain	Description	A	B	T	Weight [kg]	Order-No.	Price/piece €
6	IH-6	34	19,6	18	0,11	ICE.HC.06.0	32,00
8	IH-8	45	25,5	24	0,26	ICE.HC.08.0	35,90
10	IH-10	56	31,5	30	0,55	ICE.HC.10.0	43,80
13	IH-13	73	40	39	1,16	ICE.HC.13.0	58,80
16	IH-16	89	49	48	2,16	ICE.HC.16.0	99,90

Surcharge

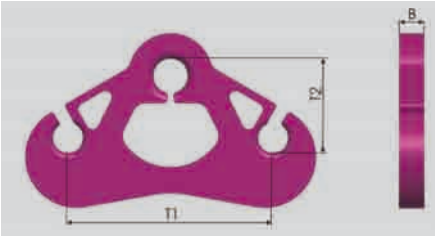
SLING TECHNOLOGY

12-ICE Construction Kit

ICE Rocker IW-13

NEW

- 11,2 t capacity at a tilt angle of 0-45°
- 16 t capacity when both chain strands run parallel.
- Tension optimization design.
- Clear detection of the border-tilt angle of 10° by special design on the under-side of the rocker
- Rocker top connection: connection by shackle or connecting lock
- Rocker bottom connection: Tool-free assembly of the lower strands by simply hanging the ICE-suspension links in the rocker.
- Balancing rocker equipped with an RFID chip
- Powder coated in ICE pink



Chain	WLL [t]	Descrip-tion	A [mm]	B [mm]	C [mm]	D mm]	E [mm]	F [mm]	Fmax [mm]	T1 [mm]	T2 [mm]	Weight [kg/p.]	Order-No.	Price/piece €
13	11,2 t (0-45°)	IW-13		30						240	110	7,9	ICE.IW.13.0	o. request

ICE-CURT- Ratchet Tensioner for lifting - lightweight and durable

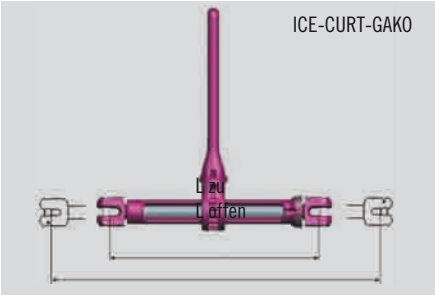
ICE-CURT-GAKO / ICE-CURT-SL

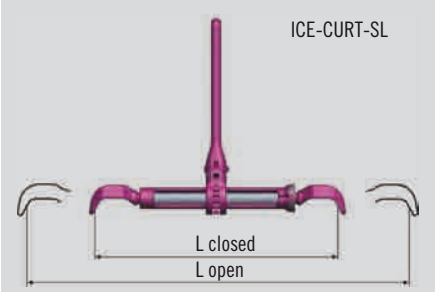
Exceeds the requirements of EN 12195-3. All parts, drop forged, with preparation for theft by a padlock (ABUS type 85/40HB), 100% crack tested. Easy to clean and lubricate, innovative forging form - lightweight and robust. Patent registered, innovative, practical locking device. Made In Germany. Easy handling - even with gloves.

ICE-CURT-GAKO:
with fork head connection

ICE-CURT-SL:
with shortening connection

ICE-T-GAKO
Fork head connection. Internally placed thread, grease nipple





Chain thickness [mm]	WLL [kg]	Description	L open [mm]	L closed [mm]	Range [mm]	Weight [kg]	Order-No.	Price/ piece €
6	1800	ICE-CURT-6-SL		in preparation			in preparation	
6	1800	ICE-CURT-6-GAKO		in preparation			in preparation	
8	3000	ICE-CURT-8-SL	623	453	170	4,4	I.C08.SL.00	201,00
8	3000	ICE-CURT-8-GAKO	520	350	170	3,9	I.C08.GA.00	185,50
10	5000	ICE-CURT-10-SL	671	501	170	5,2	I.C10.SL.00	216,50
10	5000	ICE-CURT-10-GAKO	532	362	170	4,3	I.C10.GA.00	208,50
13	8000	ICE-T-GAKO-13*	695	445	250	7,5	I.C13.T0.00*	
13	8000	ICE-CURT-13-GAKO		in preparation			in preparation	
16	12000	ICE-CURT-16-GAKO		in preparation			in preparation	

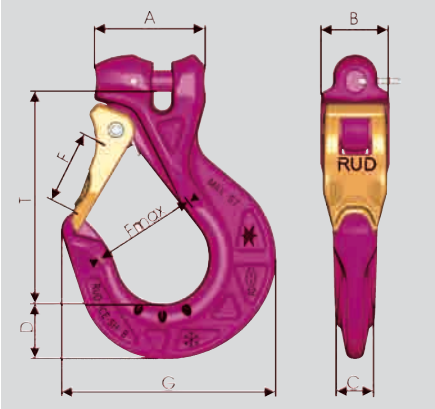
Surcharge

* discontinued model

12-ICE Construction Kit

ICE-Star-Hook

Thanks to an innovative structural build, finite elements are leightweight by 25% compared with hooks grade 8 of equal load-carrying capacity, which is the next chain nominal thickness.
Broad jaw opening like in the million times tried granit-superhook – of the nominal thickness next in size – no money was saved here.
Folding protections of the RUD-hook-line GSH, SH, Cobra and ICE-Star-hook may be inter-assembled (attention to the nominal thickness leap) – easy replacement purchase.
Apart from that the characteristics of the VIP-Cobra-hook have been adopted and improved.

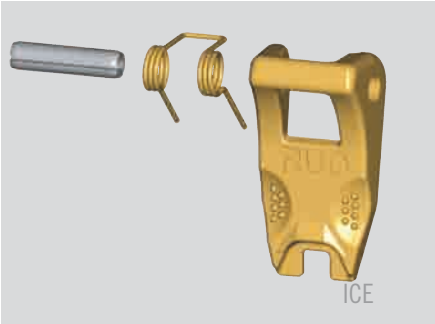


Nominal chain thickness[mm]	Load bearing cap.[kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	F [mm]	F max. [mm]	G [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
6	1800	ICE-SH-6	48	28	18	26	30	51	97	97	0,69	ICE.SH.006	47,20
8	3000	ICE-SH-8	45	36	20	29	36	58	112	110	1,1	ICE.SH.008	53,90
10	5000	ICE-SH-10	56	43	25	37	41	66	135	127	1,9	ICE.SH.010	73,30
13	8000	ICE-SH-13	85	52	31	48	50	80	163	153	3,5	ICE.SH.013	110,50
16	12500	ICE-SH-16	94	58	38	56	58	96	196	184	5,5	ICE.SH.016	187,50

ICE-Safety-Set

Consisting of forged safety fall, three-fold wound non-corroding double yoke spring and safety pin.

The entire set only is for sale.
Simple assembling/disassembling may be done with a hammer and a drift punch.

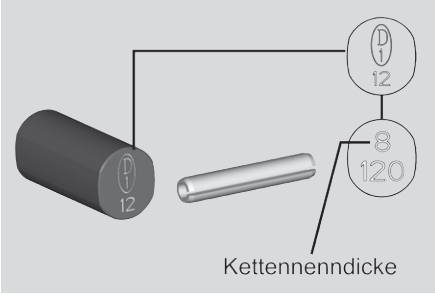


for chain [mm]	Designation	Weight [kg]	Order-no.	Price/piece €
6	Si-Set ICE-SH-6	0,09	ICE.SIS.06	10,05
8	Si-Set ICE-SH-8	0,11	ICE.SIS.08	13,15
10	Si-Set ICE-SH-10	0,15	ICE.SIS.10	16,15
13	Si-Set ICE-SH-13	0,24	ICE.SIS.13	23,60
16	Si-Set ICE-SH-16	0,4	ICE.SIS.16	42,45

ICE-Oval-G-bolt with a protection instep shell

As a 10 pack only for sale. Use the original RUD-ICE-components only.

No confusing with RUD-erection bolts of different quality classes possible.



for chain [mm]	Designation	Order-no.	Price/piece €
6	IOG-6/clamp sleeve 6	ICE.IOG.06	4,86
8	IOG-8/clamp sleeve 8	ICE.IOG.08	5,49
10	IOG-10/clamp sleeve 10	ICE.IOG.10	7,32
13	IOG-13/clamp sleeve 13	ICE.IOG.13	9,79
16	IOG-16/clamp sleeve 16	ICE.IOG.16	13,15

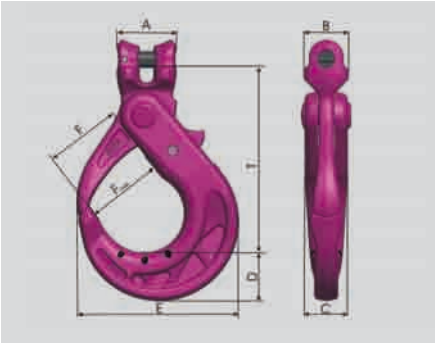
Surcharge

SLING TECHNOLOGY

12-ICE Construction Kit

ICE-AGH automatic-fork-head-hook

- ICE-AGH: applicable up to -60° C
- By innovative structural construction method, finite elements are up to 30% lighter than automatic –fork-head-hooks of the quality class 8 of identical load-carrying capacity, that means of the subsequent chain nominal thickness.
- Wide jaw opening as with the grade 80-hooks of the subsequent nominal thickness – no sparing here!.
- Ergonomically designed locking lever, user-friendly and with an anti-slipping surface – no danger of squeezing.
- Wear ribs, which protect the first chain link
- Thickened point of the hook – avoids dangerous points of the hook
- Approved marker points for check-ups of the jaw opening (often copied).
- Patent-registered wear brand, which show the compulsory rope discard; no need to remeasure.

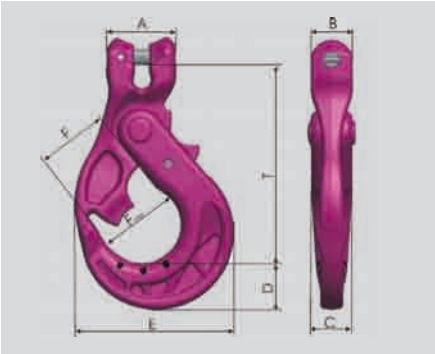


Chain	WLL [t]	Descrip-tion	A [mm]	B [mm]	C [mm]	D mm]	E [mm]	F [mm]	Fmax [mm]	T [mm]	Weight [kg]	Order-No.	Price/piece €
6	1,8	IAGH-6	34	24	27	28	97	44	60	113	0,9	ICE.AGH.06	???
8	3	IAGH-8	45	31	30	31	106	48	66	124	1,2	ICE.AGH.08	118,50
10	5	IAGH-10	50	38	36	40	133	61	81	154	2,4	ICE.AGH.10	142,00
13	8	IAGH-13	73	50	44	51	173	78	107	200	4,9	ICE.AGH.13	209,50
16	12,5	IAGH-16	90	61	49	53	192	85	121	232	7,4	ICE.AGH.16	???

IMAGH - ICE-Trough-automatic fork head hook

NEW

- Suitable for standard trough peg.
- Easy use of the bolt or hook safety
- Confusion-free connection chain
- Connecting bolts and safety pin are pre-assembled
- Marking points for testing of the hook trough width
- Patented wear marks that show the discarding time without remeasuring
- Nonslip operation of the safety lever without risk of injury



Chain	WLL [t]	Description	A [mm]	B [mm]	C [mm]	D mm]	E [mm]	F [mm]	Fmax [mm]	T [mm]	Weight [kg]	Order-No.	Price/piece €
10	5	IMAGH - 10	61	37	36	40	137	50	81	171	2,2	IMAGH.10.5	145,30

IMEG - ICE-Trough-hanging link

NEW

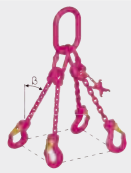
- Fast, robust and user-friendly
- Quick hanging hook without extra unlocking
- Simplified hanging and removal of the trough link through ergonomically designed locking flap
- Locking flap with slip-resistant design
- Protection ribs protect the locking flap from damage and shocks
- Suitable for standard trough peg according to DIN/EN 30720

Chain	WLL [t]	Description	A [mm]	B [mm]	C [mm]	D mm]	E [mm]	F [mm]	Fmax [mm]	G [mm]	T [mm]	Weight [kg]	Order-No.	Price/piece €
10	5	IMEG-10	37	66	128	20	64	46			153	2,2	IMEG.10.05	133,70

Surcharge

Quality in pink!

Load-carrying capacity of high-tensile sling chains in comparison: EN 818, quality class 8, quality class 10-VIP and quality class 12-ICE

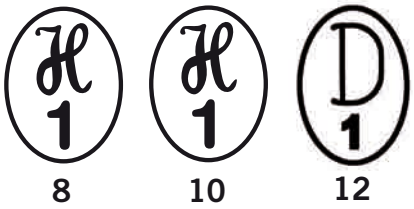
Sling types		Load-carrying capacity of one- and multi-legged sling chains with different collector slopes on symmetrical loading of the strings (in kg)				
		1-leg	2-leg		3- and 4-leg	
						
Tilt angle β		0	0-45°	45-60°	0-45°	45-60°
Stress factor		1	1,4	1,0	2,1	1,5
Quality class	Nom.chain thickn.					
VIP-10	4	630	880	630	1320	950
GK-8	6	1120	1600	1120	2360	1700
VIP-10	6	1500	2100	1500	3150	2250
ICE-12*	6	1800	2500	1800	3750	2700
GK-8	8	2000	2800	2000	4200	3000
VIP-10	8	2500	3500	2500	5250	3750
ICE-12	8	3000	4250	3000	6300	4500
GK-8	10	3150	4250	3150	6700	4750
VIP-10	10	4000	5600	4000	8400	6000
ICE-12	10	5000	7100	5000	10600	7500
GK-8	13	5300	7500	5300	11200	8000
VIP-10	13	6700	9500	6700	14000	10000
ICE-12	13	8000	11200	8000	17000	11800
GK-8	16	8000	11200	8000	17000	11800
VIP-10	16	10000	14000	10000	21000	15000
ICE-12*	16	12500	17000	12500	26500	19000
GK-8	18	10000	14000	10000	21200	15000
VIP-10	20	16000	22400	16000	33600	24000
GK-8	22	15000	21200	15000	31500	22400
VIP-10	22	20000	28000	20000	42000	30000
GK-8	26	21200	30000	21200	45000	31500

* in progress

With asymmetrical loading = load-carrying capacity reduced to 50% of the declared value!

When used in choke = reduce load-carrying capacity by 20%!

Quality classes



Rationale in favor of the 12-ICE-chain:

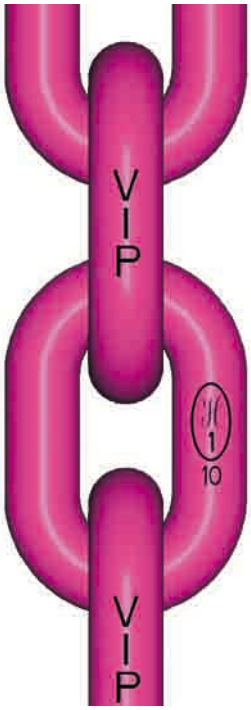
- Saved weight : 33%
- up to 60% higher breaking load/load-carrying capacity as compared to GK 8
- extremely temperature-resistant: -60°C to +300°C
- Your price advantage with a shortening: 40%
- Always one nominal thickness less than GK 8. For example: with a load-carrying capacity of 8 t just 13 mm instead of 16 mm diameter.
- And a many more advantages

Info

All in all the sling chain in quality class 10-VIP and 12-ICE offers an optimal handling.

10-VIP The extensive and approved chain program

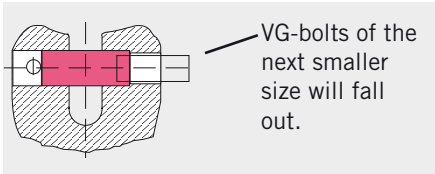
Higher load-carrying capacity or one nominal thickness less than quality class 8, respectively!



Embossing unequivocal **Unmistakable in pink**

Heat-indicator patented
The pink-powder-coating changes its hue with temperature rising above 200°C. In case of impermissible overheating to more than 400°C the hue is dark black with small blister formation.

No mix-up in VIP-assembling
VIP-chain and fork-head-connection prevent wrong assembling of VIP hangers.



- Eye-catching fluorescent **pink-powder-coating** and **distinct identification mark** "VIP" in every chain link and component. prevents mix-up with other quality classes.
- **10-BG-tested**
  The approval of the RUD-special-performance VIP by the appropriate BG is documented in short chain link intervals.
  H1 10 means number of manufacturer 1=RUD and **quality class 10**.
- **Up to 30% more**
  Material: CrNiMo-stainless steel, special lytempered, high toughness, minimum elongation, nature black ≥ 25%, pink-coated ≥ 20%.
  Non-susceptible tonotch and **hydrogen-embrittlement** like quality class 8. The bending test according to standards EN 818-2, deflection min. F = 0,8 x d is exceeded by far. The ratio of the load-: production-testing-: breakage stress 1 : 2,5 : 4.
- **Five suspension head sizes for unmistakable linking with every chain nominal thickness**
  adequate for all load hooks

- **More than 270 variants of components**
  The right sling gear for any use: Wide-jaw opening, automatic hooks, highly dynamic unmistakable shackles and combinations, spherical vortices, unmistakable connection-feeder-selecting devices, spindle spanner and seesaw balancing.

VAK

VCGH

VGSCH

VIP-identification tag with an integrated testing gauge

Testing, Ø-abrasion

Testing, distribution extension by abrasion of the nominal thickness

Testing, ductile elongation by overload

Info

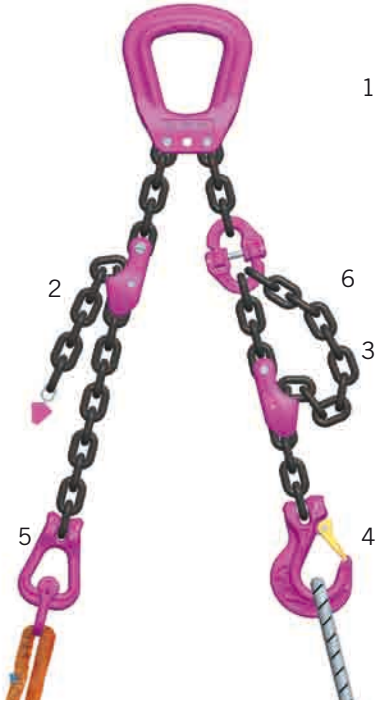
Please go to page 88 for reference number and price of the tag.

VIP MAXI 28 x 84 Chain hanger for loads up to 126 t

The heavy-duty solution in GK 10

G1-V1-VCGH-28 x L

G2-V2-VCGH/VB-28 x L



Round sling
Magnum-X
30 t (or bigger)

Grommet endless
30 t rope-Ø 48
mm (or bigger)

Capacity for balanced load:
ß 0-30° | 55 t
ß 30-45° | 45 t

Strand length easily adjustable by hand

1. VIP >MAXI< VAK 1/2-28,
for 1 - or 2-strand chain with integrated crane connection for crane hook sizes up to 50, with forged in load limit indication.

2. VIP >MAXI< Contracting claw VV 28,
With chain-gentle pocket and spring-loaded safety bolt, no self-loosening.

3. VIP >MAXI< Round steel link 28 x 84,
Class 10, made from patented ICE-steel with special low-temperature properties of -60° C > 56 joules, 30% higher surface hardness than GK 8, replaces chain 32 of GK 8. Surface CRUD-dsl or pink powder-coated.

4. VIP >MAXI< VCGH-28,
proven Cobra fork head hook of skeletal lightweight design.

5. VIP >MAXI< End component VB-28,
for e.g. shackle connection VC-SCH-6.

6. VIP >MAXI< Connection lock VS-28,
for connecting the 28 mm chain

L = max. Effective length,**
last chain link is laid into the bag of the VV-28

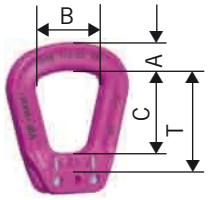
RUD

SLING TECHNOLOGY

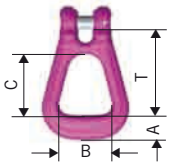
VIP MAXI 28 x 84 The complete MAXI-Program

>MAXI< PATENTED ICE-STEEL

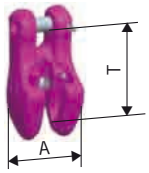
VAK 1/2-28



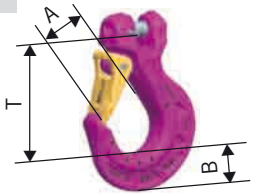
VB-28



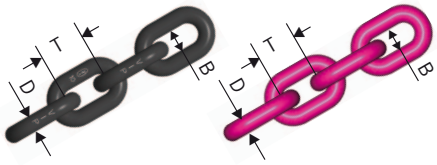
VV-28



VCGH-28

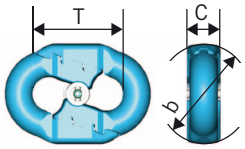


VIP-28 x 84-dsl/pink

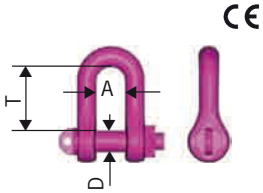


VVS-28

VIP-DOMINATOR 28 (34)

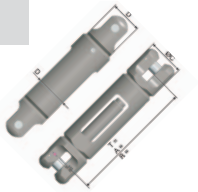


VC-SCH-6



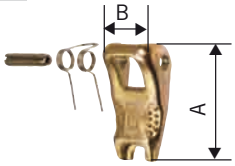
VKZA 1S-28 with or without lettering

VLE-28 VIP- length adjustment



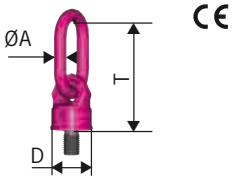
VG-28/Sp-28

Si-Set-VCGH-28

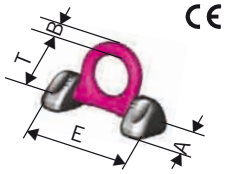


MAXI-Tester

VWBG 31,5 (40) t M72



VRBS-Fix 31,5



Chain	Description	WLL t	A	B	C	D	E	T	Weight kg	Order-No.	Price €
VIP >MAXI< 28 x 84	VAK-1/2-28	31,5/45/63	100	250	280	-	-	360	64,3	VX.VAK1.28	1.378,00
	VB-28	31,5	62	130	150	-	-	209	13,7	VX.VB28.28	407,50
	VV-28	31,5	150	-	-	-	-	170	16,9	VX.VV.28.00	889,50
	VCGH-28	31,5	90	88	-	-	-	275	26,4	VX.VCGH.28	748,00
	VIP-28 x 84-dsl	31,5	-	36,4	-	28	-	84	18,6/m	VX.DSL.28.0	211,00
	VIP-28 x 84-pink	31,5	-	36,4	-	28	-	84	18,6/m	VX.PINK.28	232,50
	VVS-28 Connection lock	31,5	69	228	58	47	-	189	10,6	VX.VVS.28.0	335,00
	VIP-Dominator 28 (34)	31,5	-	119	40	-	-	126	4,1	VX.DOMI.28	on request
	VC-SCH-6	31,5	53	-	-	39	-	120	5,9	VX.SCH6.28	289,00
	VKZA-1S-28	-	-	-	-	-	-	-	0,18	VX.VKZA.28	on request
	VLE-28	31,5	650	172	138	120	-	475	44,0	VX.VVLE.28	2972,00
	VG-28/Sp-28	-	-	-	-	-	-	-	0,65	VX.VGSP.28	64,70
	Si-Set-VCGH-28	-	165	90	-	-	-	-	1,6	VX.SSET.28	47,40
	MAXI-Tester	-	-	-	-	-	-	-	0,37	VX.TEST.28	54,60
	VWBG 31,5 (40) t M72	31,5 (40)	46	-	-	170	-	338	29,9	VX.VWBG.28	2.163,00
	VRBS-Fix 31,5	31,5	160	42	-	-	366	202	18,4	VX.VRBS.28	375,50

Surcharge

Note: VWBG possible up to M150, with UNC thread and custom lengths.

VIP MAXI 28 x 84 Capacities for balanced load

Important information:
- With an unbalanced load, capacities must be reduced by 50 %.

*Slingorcrownchains:
Bollard, bolt or shackle diameter 3 x t > 250 mm. By a smaller diameter (edge load), the carrying capacity must be reduced by 20%. For smaller diameter contact the manufacturer.

Tilt angle β	0°	0°	0-45°	>45-60°	0-7°	>7-45°	0-45°
Load factor	1	2	1,4	1	4	2,8	2,1
WLL t	31,5	63,0	45,0	31,5	126	88	67,0

Tilt angle β	0-7°	>7-45°	>45-60°	0-7°	>7-45°	0-7°	>7-45°	0-7°
Load factor	2	1,4	1	4	2,8	4	2,8	2
WLL t	63*	45,0*	31,5*	126*	88*	126*	88*	63*

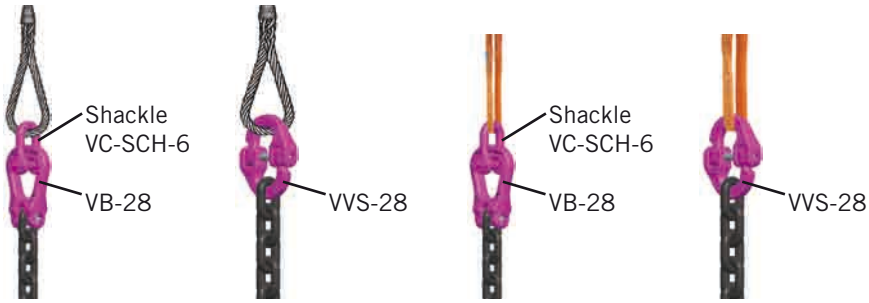
Info

To be guaranteed, when using in the hanging passage, it must be ensured that loads cannot dangerously shift or fall (operating safety, annex 1 in accordance with § 7).

MAXI-Vario-Strand

Quick length adjustment in the heavy load range (31,5 t/strand)

Connecting possibilities



Hanging options

End components

10-VIP sling chain High performance with sling chains

30% more load-carrying capacity than GK8

1-leg, with safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity single direct [kg]	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	1500	V0.1.015.00	78,30	VKM.1.06.000	12,15
8	2500	V0.1.025.00	92,90	VKM.1.08.000	16,05
10	4000	V0.1.040.00	116,00	VKM.1.10.000	20,65
13	6700	V0.1.067.00	172,50	VKM.1.13.000	35,20
16	10000	V0.1.100.00	259,50	VKM.1.16.000	56,80
20	16000	V0.1.160.00	622,00*	VKM.1.20.000	105,00
22	20000	V0.1.200.00	781,50*	VKM.1.22.000	119,00

* Price with 2000 mm minimum usable length

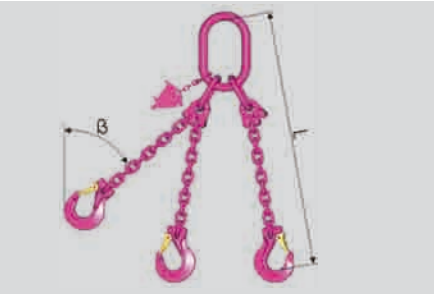
2-leg, with safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	2100	1500	V0.2.021.00	138,00	VKM.1.06.000	12,15
8	3500	2500	V0.2.035.00	168,50	VKM.1.08.000	16,05
10	5600	4000	V0.2.056.00	215,00	VKM.1.10.000	20,65
13	9500	6700	V0.2.095.00	326,50	VKM.1.13.000	35,20
16	14000	10000	V0.2.140.00	539,00	VKM.1.16.000	56,80
20	22400	16000	V0.2.224.00	1.277,00*	VKM.1.20.000	105,00
22	28000	20000	V0.2.280.00	1.558,00*	VKM.1.22.000	119,00

* Price with 2000 mm minimum usable length

3-leg, with safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 3 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	3150	2250	V0.3.031.00	242,50	VKM.1.06.000	12,15
8	5250	3750	V0.3.052.00	290,50	VKM.1.08.000	16,05
10	8400	6000	V0.3.084.00	370,50	VKM.1.10.000	20,65
13	14000	10000	V0.3.140.00	566,00	VKM.1.13.000	35,20
16	21000	15000	V0.3.210.00	870,00	VKM.1.16.000	56,80
20	33600	24000	V0.3.336.00	2.261,00*	VKM.1.20.000	105,00
22	42000	30000	V0.3.420.00	2.657,00*	VKM.1.22.000	119,00



* Price with 2000 mm minimum usable length

4-leg, with safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 4 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	3150	2250	V0.4.031.00	290,50	VKM.1.06.000	12,15
8	5250	3750	V0.4.052.00	348,00	VKM.1.08.000	16,05
10	8400	6000	V0.4.084.00	440,50	VKM.1.10.000	20,65
13	14000	10000	V0.4.140.00	669,50	VKM.1.13.000	35,20
16	21000	15000	V0.4.210.00	1.019,00	VKM.1.16.000	56,80
20	33600	24000	V0.4.336.00	2.687,00*	VKM.1.20.000	105,00
22	42000	30000	V0.4.420.00	3.168,00*	VKM.1.22.000	119,00

Surcharge

* Price with 2000 mm minimum usable length

Ordering example: enter usable length with the order: V0.4.336.04

VIP-sling chain 4-string, usable length 4m, with 20 mm chain thickness, to be shortened

MADE IN GERMANY

SLING TECHNOLOGY

10-VIP sling chain More flexible by a patented multi-shortening claw, undetachably, mountable anywhere

1-leg, with multi-shortening claw and safety hook VIP-Cobra

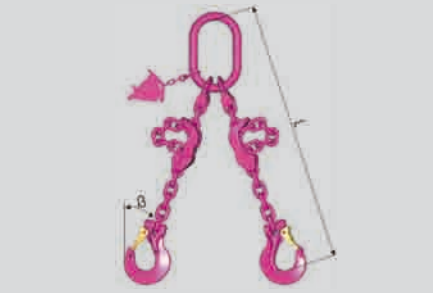
Chain thickness [mm]	Load bearing capacity single direct [kg]	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	1500	VV.1.015.00	137,50	VKM.06.000	12,15
8	2500	VV.1.025.00	160,00	VKM.08.000	16,05
10	4000	VV.1.040.00	205,00	VKM.10.000	20,65
13	6700	VV.1.067.00	310,50	VKM.13.000	35,20
16	10000	VV.1.100.00	483,00	VKM.16.000	56,80
20	16000	VV.1.160.00	1.153,00*	VKM.20.000	105,00
22	20000	VV.1.200.00	1.351,00*	VKM.22.000	119,00

*Price with 2000 mm minimum usable length

2-leg, with multi-shortening claw and safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	2100	1500	VV.2.021.00	257,00	VKM.06.000	12,15
8	3500	2500	VV.2.035.00	302,50	VKM.08.000	16,05
10	5600	4000	VV.2.056.00	392,50	VKM.10.000	20,65
13	9500	6700	VV.2.095.00	602,50	VKM.13.000	35,20
16	14000	10000	VV.2.140.00	957,50	VKM.16.000	56,80
20	22400	16000	VV.2.224.00	2.339,00*	VKM.20.000	105,00
22	28000	20000	VV.2.280.00	2.695,00*	VKM.22.000	119,00

* Price with 2000 mm minimum usable length

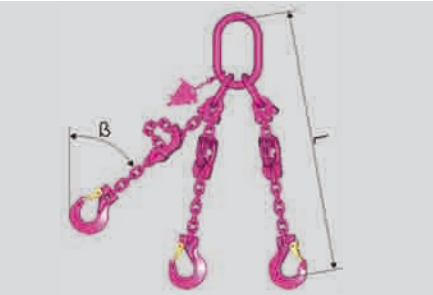


3-leg, with multi-shortening claw and safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	3150	2250	VV.3.031.00	420,50	VKM.06.000	12,15
8	5250	3750	VV.3.052.00	491,50	VKM.08.000	16,05
10	8400	6000	VV.3.084.00	637,00	VKM.10.000	20,65
13	14000	10000	VV.3.140.00	979,50	VKM.13.000	35,20
16	21000	15000	VV.3.210.00	1.540,00	VKM.16.000	56,80
20	33600	24000	VV.3.336.00	3.754,00*	VKM.20.000	105,00
22	42000	30000	VV.3.420.00	4.364,00*	VKM.22.000	119,00

Combined with a seesaw balancing up to 56 t load-carrying capacity

* Price with 2000 mm minimum usable length



4--leg, with multi-shortening claw and safety hook VIP-Cobra

Chain thickness [mm]	Load bearing capacity [kg] tilt angle 2 legs 0-45°	45-60°	Order-no.	Price/ suspension €	Order-no. for chain yard good	Additional charge per m/ leg €
6	3150	2250	VV.4.031.00	528,00	VKM.06.000	12,15
8	5250	3750	VV.4.052.00	616,00	VKM.08.000	16,05
10	8400	6000	VV.4.084.00	795,50	VKM.10.000	20,65
13	14000	10000	VV.4.140.00	1.221,00	VKM.13.000	35,20
16	21000	15000	VV.4.210.00	1.914,00	VKM.16.000	56,80
20	33600	24000	VV.4.336.00	4.810,00*	VKM.20.000	105,00
22	42000	30000	VV.4.420.00	5.443,00*	VKM.22.000	119,00

Combined with a seesaw balancing up to 56 t load-carrying capacity

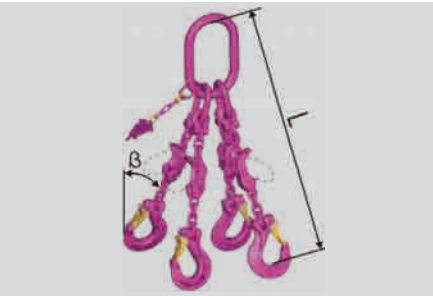
* Price with 2000 mm minimum usable length

Ordering example: enter usable length with the order: VV.4.140.05

VIP sling chain 4-string, usable length 5 m, with 13 mm chain nominal thickness, to be shortened

Ordering example: enter usable length with chain-bulk stock: VKM.06.012

VIP-Chain-bulk stock, 12m chain



Surcharge

NEW 2x 2-strand MAXI up to 126 t WLL

SLING TECHNOLOGY

10-VIP MINI-Construction Kit world-wide exceptional

Higher load-carrying capacity – mini-construction kit for small loads up to 1320 kg!

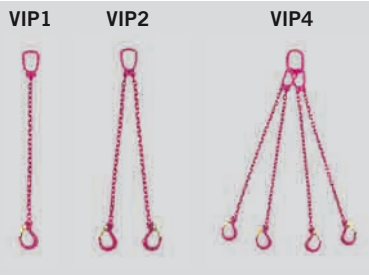
The mini-construction kit perfectly supplements every hoisting device. Due to the combination of the extra light sling chain with 4 mm diameter with optimally applicable components, small loads up to 1320 kg may be lifted with ease and and flexibility.

With type **V** every single string may be **shortened**! In this version the chain is deflected, therefore, with two strings you need two running meters of chain in order to obtain one meter usable length.

Info

With the RUD-last link VA1-10 you may use the mini-construction kit hangers with larger load hooks, too! Talk to your SIP-partner!

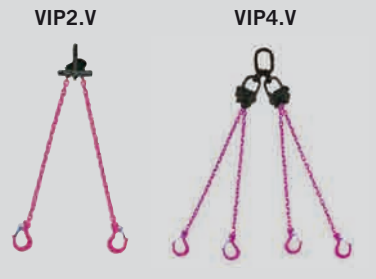
VIP-chain hangers



WLL [kg] 0 - 45°	WLL [kg] 45 - 60°	Order-no.	Price/ 1. m €	Price/leg lin. m €
630	–	MB.VP1.4.01	74,70	11,75
880	630	MB.VP2.4.01	115,50	11,75
1320	950	MB.VP4.4.01	221,00	11,75

Ordering example: enter usable length with the order: MB.VP2.4.02
Mini-construction kit, VIP-chain hangers, length 2 m, 2-string

VIP-chain hangers, shortable



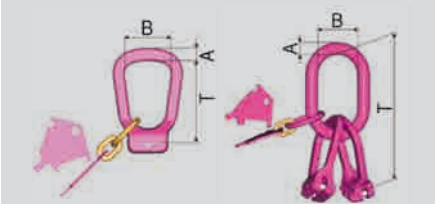
WLL [kg] 0 - 45°	WLL [kg] 45 - 60°	Order-no.	Price/ 1. m €	Price/leg lin. m €
880	630	MB.VP2.V4.1	176,00	11,75
1320	950	MB.VP4.V4.1	357,00	11,75

Ordering example: enter usable length with the order: MB.VP4.V4.2
Mini-construction kit, VIP-chain hangers, length 2 m, 4-string, 4 strings may be shortened

Surcharge

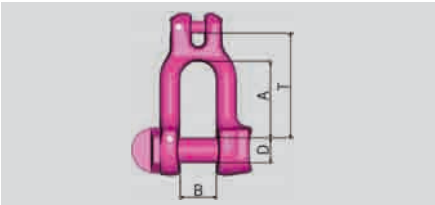
10-VIP MINI-Construction Kit

VIP-Suspension head



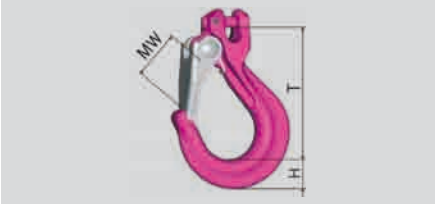
	A	B	T	Weight [kg]	Order-No.	Price/piece €
1-/2-String	9	30	55	0,1	MB.VP.AK.12	34,20
3-/4-String	10	35	106	0,3	MB.VP.AK.34	62,40

VIP-Mini-coupling shackle



A	B	D	T	Weight [kg]	Order-No.	Price/piece €
30	14	10	42	0,12	MB.VP.MKS.0	42,85

VVIP-Mini-hook with safety flap

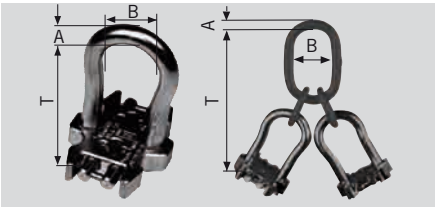


MW	T	H	Weight [kg]	Order-No.	Price/piece €
18	56	13	0,12	MB.VP.MH.18	26,80

VIP-End stop

WLL [kg]	Weight [kg]	Order-No.	Price/piece €
630	0,05	MB.VIP.VEA	10,05

VIP-Mini-Lifter



	A	B	T	Weight [kg]	Order-No.	Price/piece €
1-/2-string	10	30	66	0,26	MB.VP.ML.12	94,90
3-/4-string	10	35	150	0,85	MB.VP.ML.34	198,00

Surcharge

RUD®

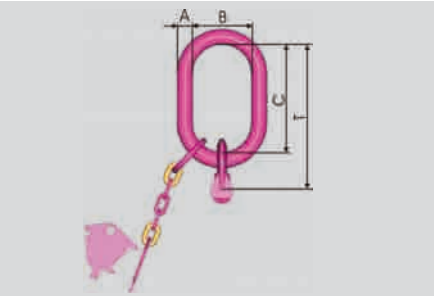
SLING TECHNOLOGY

10-VIP Construction Kit A top-class construction kit

VIP-suspension head, for standard load hooks DIN 15401

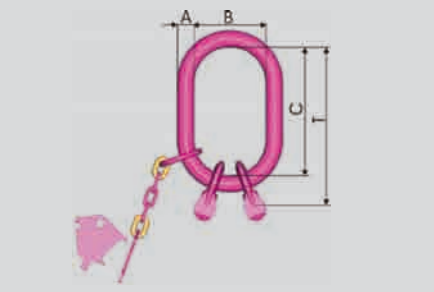
VAK-1, 1-leg

Chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
6	1500	VAK 1-6	13	60	110	138	0,6	VAK.1.V0.06	30,00
8	2500	VAK 1-8	16	60	110	147	0,9	VAK.1.V0.08	34,80
10	4000	VAK 1-10	18	75	135	181	1,4	VAK.1.V0.10	44,95
13	6700	VAK 1-13	22	90	160	218	2,4	VAK.1.V0.13	64,20
16	10000	VAK 1-16	26	100	180	250	4,3	VAK.1.V0.16	102,50
20	16000	VAK 1-20	41	180	340	434	14,7	VAK.1.V0.20	293,50
22	20000	VAK 1-22	45	180	340	434	16,5	VAK.1.V0.22	375,00



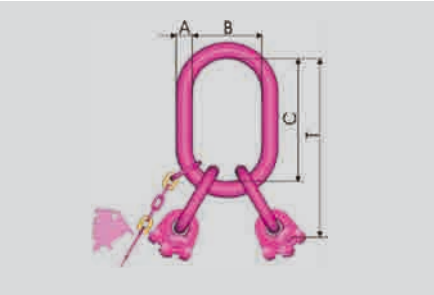
VAK-2, 2-leg

Chain thickness [mm]	WLL [kg] NW 0-45°	NW 45-60°	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	2100	1500	VAK 2-6	13	60	110	138	0,7	VAK.2.V0.06	41,85
8	3500	2500	VAK 2-8	18	75	135	172	1,4	VAK.2.V0.08	52,40
10	5600	4000	VAK 2-10	22	90	160	206	2,3	VAK.2.V0.10	71,90
13	9500	6700	VAK 2-13	26	100	180	238	3,9	VAK.2.V0.13	112,50
16	14000	10000	VAK 2-16	32	110	200	270	6,6	VAK.2.V0.16	226,00
20	22400	16000	VAK 2-20	41	180	340	434	16,0	VAK.2.V0.20	394,00
22	28000	20000	VAK 2-22	45	180	340	434	20,0	VAK.2.V0.22	494,00



VAK-4, 4-leg

Chain thickness [mm]	WLL [kg] NW 0-45°	NW 45-60°	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	3150	2250	VAK 4-6	18	75	135	217	1,7	VAK.4.V0.06	100,00
8	5250	3750	VAK 4-8	22	90	160	268	3,1	VAK.4.V0.08	122,50
10	8400	6000	VAK 4-10	26	100	180	311	5,2	VAK.4.V0.10	162,50
13	14000	10000	VAK 4-13	32	110	200	373	9,7	VAK.4.V0.13	258,00
16	21000	15000	VAK 4-16	36	140	260	470	16,8	VAK.4.V0.16	426,00
20	33600	24000	VAK 4-20	51	190	350	614	40,7	VAK.4.V0.20	995,50
22	42000	30000	VAK 4-22	51	190	350	644	42,1	VAK.4.V0.22	1.136,00



VIP-Components

VIP-identification tag with integrated chain testing gauge

Chain thickness [mm]	Designation	Order-no.	Price/piece €
4	VKZA - 4	VK.ZA.00.04	5,95
6	VKZA - 6	VK.ZA.00.06	6,16
8	VKZA - 8	VK.ZA.00.08	6,47
10	VKZA - 10	VK.ZA.00.10	7,04
13	VKZA - 13	VK.ZA.00.13	8,33
16*	VKZA - 16	VK.ZA.00.16	10,05
20*	VKZA - 20	VK.ZA.00.20	14,45
22*	VKZA - 22	VK.ZA.00.22	20,35

* One testing gauge is added without attachment to every suspension head of this order.

VG-bolt with a protection clamp sleeve

Chain thickness [mm]	Designation	Order-no.	Price/piece €
6	VG - 6/Clamp sleeve 6	VG.B0.00.06	4,66
8	VG - 8/Clamp sleeve 8	VG.B0.00.08	5,07
10	VG - 10/Clamp sleeve 10	VG.B0.00.10	6,78
13	VG - 13/Clamp sleeve 13	VG.B0.00.13	9,06
16	VG - 16/Clamp sleeve 16	VG.B0.00.16	12,15
20	VG - 20/Clamp sleeve 20	VG.B0.00.20	24,55
22	VG - 22/Clamp sleeve 22	VG.B0.00.22	33,05

Surcharge

10-VIP Construction Kit

VIP-suspension head, for smaller load hooks

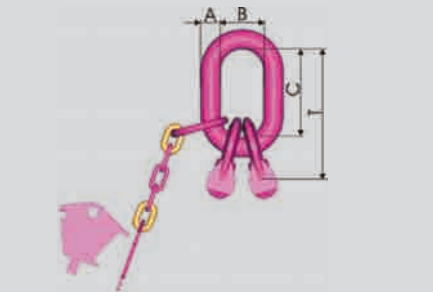
VBK-1, 1-leg

Chain thickness [mm]	WLL [kg]	Desig-nation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order No.	Price/piece €
6	1500	VBK 1-6	13	25	54	82	0,5	VBK.1.V0.06	29,00
8	2500	VBK 1-8	16	34	70	107	0,7	VBK.1.V0.08	34,20
10	4000	VBK 1-10	18	40	85	131	1,1	VBK.1.V0.10	42,75
13	6700	VBK 1-13	22	50	115	174	2,0	VBK.1.V0.13	61,90
16	10000	VBK 1-16	26	65	140	211	3,3	VBK.1.V0.16	97,20
20	16000	VBK 1-20	32	75	170	264	7,6	VBK.1.V0.20	188,00
22	20000	VBK 1-22	36	110	200	294	9,0	VBK.1.V0.22	228,00

Ordering example: VBK.1.V0.20: VIP-suspension head, 1-string, VBK-1 for chain thickness 20 mm

VBK-2, 2-leg

Chain thickness [mm]	WLL [kg] NW 0-45°	NW 45-60°	Desig-nation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	2100	1500	VBK 2-6	13	25	54	82	0,5	VBK.2.V0.06	38,65
8	3500	2500	VBK 2-8	16	34	70	107	0,9	VBK.2.V0.08	44,15
10	5600	4000	VBK 2-10	18	40	85	131	1,4	VBK.2.V0.10	61,40
13	9500	6700	VBK 2-13	22	50	115	174	2,7	VBK.2.V0.13	85,60
16	14000	10000	VBK 2-16	26	65	140	211	4,4	VBK.2.V0.16	163,50
20	22400	16000	VBK 2-20	32	75	170	264	11,0	VBK.2.V0.20	329,00
22	28000	20000	VBK 2-22	36	110	200	294	13,7	VBK.2.V0.22	354,50

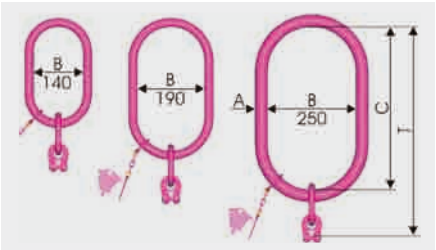


Surcharge

VIP-special-suspension head VSAK

Special-suspension heads with the inner width 140 mm, 190 mm and 250 mm for larger load hooks

Unmistakable chain-link for 1-, 2- and 3-/4-string on request



Info

Ensuring that the VIP-hanger fits: always indicate the size of the load hook when ordering.10% margin on each side required!

SLING TECHNOLOGY

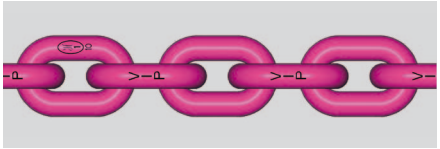
10-VIP Construction Kit

component per component – it's your advantage

VIP-chain bulk stock

Chain thickness [mm]	WLL [kg]	link size [mm]	Order-no.	Price/m €
4	630	4 x 12	VKMW.04.00	11,75
6	1500	6 x 18	VKMW.06.00	12,15
8	2500	8 x 24	VKMW.08.00	16,05
10	4000	10 x 30	VKMW.10.00	20,65
13	6700	13 x 39	VKMW.13.00	35,20
16	10000	16 x 48	VKMW.16.00	56,80
20	16000	20 x 60	VKMW.20.00	105,00
22	20000	22 x 66	VKMW.22.00	119,00

Surcharge



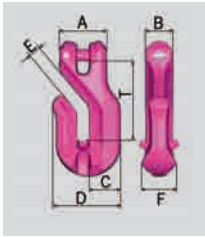
VIP-shortening-hook VVH

according to DIN 5692

Thickened point of the hook, therefore wrong use is ruled out

WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
1500	VVH 6	34	18	20	44	7,5	23	53	0,27	V.VVH.V0.06	29,10
2500	VVH 8	38	22	25	54	9,5	33	64	0,35	V.VVH.V0.08	32,10
4000	VVH 10	47	28	31	68	12	42	80	0,8	V.VVH.V0.10	34,80
6700	VVH 13	60	36	40	87	15	47	103	2,2	V.VVH.V0.13	53,40
10000	VVH 16	75	45	50	108	18,5	57	125	2,9	V.VVH.V0.16	93,90
16000	VVH 20	92	58	63	138	24	76	162	8,4	V.VVH.V0.20	189,50
20000	VVH 22	102	62	69	151	26	83	179	11,0	V.VVH.V0.22	211,20

Surcharge



VVH-assembling by VVS

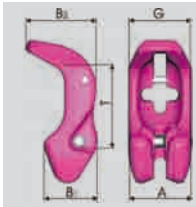
VIP-multi-shortening claw VMK with safety interlock

may be assembled into chain without further components!

According to DIN 5692

Nom. chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B 1 [mm]	B 2 [mm]	G [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VMVK 6	38	34	37	38	66	0,3	VMVK.V0.06	57,60
8	2500	VMVK 8	46	40	51	47	88	0,5	VMVK.V0.08	65,10
10	4000	VMVK 10	58	49	63	60	110	1,0	VMVK.V0.10	86,20
13	6700	VMVK 13	74	64	86	76	143	2,6	VMVK.V0.13	134,00
16	10000	VMVK 16	91	79	105	93	176	4,2	VMVK.V0.16	217,00
20	16000	VV 20	102	62	101	117	209	8,5	VMVK.V0.20	367,00
22	20000	VV 22	102	62	101	117	140	7,8	VMVK.V0.22	370,00

Surcharge



VMVK 6-16

VV 20-22

10-VIP Construction Kit VIP hooks

VIP-COBRA

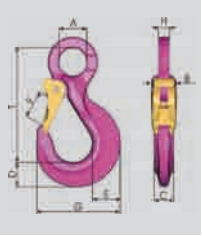
VIP-fork-head-hook with locking device
With marker points forinspection of the jaw opening and root face

Nom. chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	F max. [mm]	G [mm]	T [mm]	Weight [kg]	Order-No.	Price/ piece €
6	1500	VCGH 6	38	22	16	20	24	25	44,5	71	76	0,4	V.COB.V0.06	33,15
8	2500	VCGH 8	50	28	20	28	32	30	52	94	97	0,9	V.COB.V0.08	39,50
10	4000	VCGH 10	60	36	26	36	39	35	64,5	117	108	1,5	V.COB.V0.10	48,55
13	6700	VCGH 13	76	46	30	37	48	40	72,5	133	126	2,7	V.COB.V0.13	74,60
16	10000	VCGH 16	83	56	36	49	58	48	87	157	152	4,3	V.COB.V0.16	107,50
20	16000	VCGH 20	112	68	50	69	78	63	114	218	195	10,0	V.COB.V0.20	262,00
22	20000	VCGH 22	117	74	50	74	83	63	114	222	198	10,5	V.COB.V0.22	322,00

VIP-Cobra eye hooks with VCÖH

For special wire rope, VIP chain hangers, PowerPoint combinations (see Page 113 and Pages 124-125) or universal swivels

Designation	Nom. chain thickness [mm]	WLL [kg]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	T [mm]	Weight [kg]	Order-No.	Price/ piece €
VCÖH-4	4	630	18	18	12	13	14	18	52	8	75	0,14	V.VCOH.004	19,50
VCÖH-6	6	1.500	24	22	16	22	24	25	73	11	98	0,5	V.VCOH.006	27,80
VCÖH-8	8	2.500	32	28	20	28	31	30	95	13	126	0,8	V.VCOH.008	30,60
VCÖH-10	10	4.000	38	36	26	36	39	35	118	17	150	1,6	V.VCOH.010	44,60
VCÖH-13	13	6.700	48	45	30	37	48	40	135	21	170	2,9	V.VCOH.013	81,40
VCÖH-16	16	10.000	63	56	36	49	58	48	161	27	208	4,2	V.VCOH.016	134,70



VIP-safety-set for VCGH and VCOH

Consisting of forged safety fall, three- fold woundnon-corrodingdouble yoke spring and safety pin.
Only the entire set is on sale.Easyassembling/disassembling with a hammer and a drift punch.
Mayalso be used for RUD-GSH of the quality class 8.

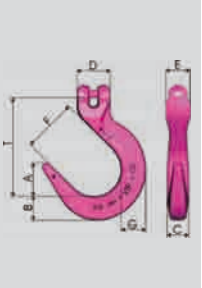
Designation	Nom. chain thickness [mm]	Weight [kg]	Order-no.	Price/piece €
Si-Set VMH-4	4	0,04	SISET.004	6,35
Si-Set VCGH-6	6	0,04	SISET.006	8,39
Si-Set VCGH-8	8	0,07	SISET.008	10,10
Si-Set VCGH-10	10	0,09	SISET.010	13,15
Si-Set VCGH-13	13	0,15	SISET.013	16,15
Si-Set VCGH-16	16	0,24	SISET.016	23,60
Si-Set VCGH-20	20	0,40	SISET.020	42,85
Si-Set VCGH-22	22	0,40	SISET.022	42,85

Use original RUD-spare parts only!

VIP-wide-jaw-opening

With marker point for inspection of the jaw opening and root face

Nom. chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
6	1500	VWH 6	30	22	18	30	22	50	22	87	0,5	V.VWH.V0.06	33,15
8	2500	VWH 8	40	29	26	40	29	64	30	115	0,9	V.VWH.V0.08	44,15
10	4000	VWH 10	46	37	30	50	36	76	37	130	1,7	V.VWH.V0.10	64,40
13	6700	VWH 13	51	45	37	64	46	90	51	168	3,0	V.VWH.V0.13	92,10
16	10000	VWH 16	64	56	40	75	56	100	58	190	5,7	V.VWH.V0.16	143,00
20*	16000	VWH 20	96	80	73	102	80	136	80	277	15,1	V.VWH.V0.20	271,50
22*	20000	VWH 22	96	80	73	102	80	136	80	277	15,1	V.VWH.V0.22	277,00



Surcharge

* Novel weight-optimization by skeletto-technique

SLING TECHNOLOGY

10-VIP Construction Kit VIP hooks

VIP-VAGH-S

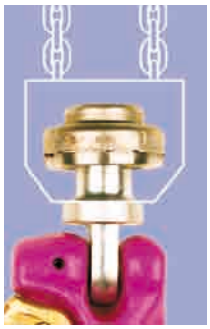
VIP-automatic-fork-head-hook VAGH-S

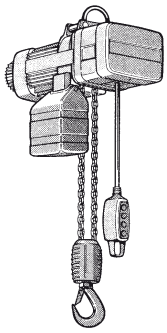
Nom. chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Fmax [mm]	T [mm]	Weight [kg]	Order-No.	Price/ piece €
8*	2.500	VAGH-S 8	40	30	27	28	97	44	60	121	1,0	VAGH.V0.08	58,70
10*	4.000	VAGH-S 10	49	37	30	31	107	48	66	135	1,5	VAGH.V0.10	81,70
13*	6.700	VAGH-S 13	67	48	36	40	133	61	81	168	2,9	VAGH.V0.13	150,50

* Novel weight-optimization by skeletto-technique

Surcharge

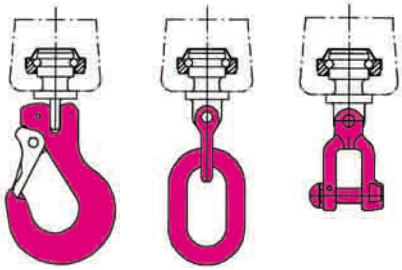
Hoisting device-vortex-adapter HWA for Demag-hoisting devices





- Complete with the original-Demag-ball-bearing
- Matching with all RUD-fork-head-construction kit elements
- Made of high-tensile tempered special steel
- Matching with one-string-hook-block and two-string-lower-block
- Tested according to EN 1677 and BGR 500.2.8

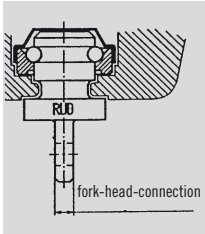
Example of application:



with VCGH with VB-link with VVGSCH

For Demag-DK-hoisting devices

fork-head-connection [mm]	Designation	suitable for	WLL DK/DC [kg]	Weight [kg]	Order-no.	Price/Piece €
6	HWA 6	DK 400/DC 1+2	400/250	0,15	HWK.D6.040	97,20
6	HWA 6	DK 800/DC 5	800/500	0,30	HWK.D6.080	98,40
8	HWA 8	DK 800/DC 5	800/500	0,40	HWK.D8.080	104,00
8	HWA 8	DK 1250/DC 10+20	1250/1000	0,55	HWK.D8.125	130,50
10	HWA 10	DK 2500/DC 20*	2500/2000	0,90	HWK.D0.200	172,50
13	HWA 13	DK 5000	5000	1,20	HWK.D3.500	250,00



* in connection with a Demag DK-lower-block only

For Demag-PK-hoisting devices

fork-head-connection [mm]	Designation	WLL [kg]	Order-no.	Price/Piece €
6	HWA 6 PK (1)	250	HWK.P6.025	92,60
6	HWA 6 PK (2)	500	HWK.P6.050	92,60
8	HWA 8 PK (2)	500	HWK.P8.050	96,20
8	HWA 8 PK (5)	1000	HWK.P8.100	153,00
10	HWA 10 PK (10)	2000	HWK.P0.100	177,50

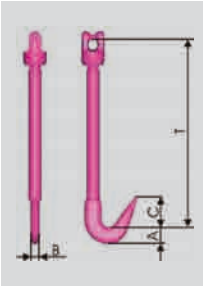
Surcharge

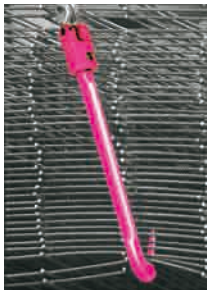
VIP-construction-steel-matt-hook VBMH ball bearinged

Due to flattening on the hook-back horizontal insertion of the hook into the construction-steel-matt- is simplified. Ball bearinged as well as direct chain-connection.

Info

Transport bundled matt-packages only!
Don't hook into the tie-fastening!





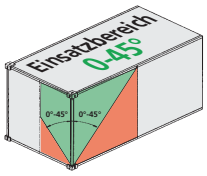
WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price/ piece €
2500	VBMH–8	35	18	61	381	2,5	VBMH.VIP.2	184,50
4000	VBMH–10	35	18	61	381	2,5	VBMH.VIP.4	188,50

Surcharge

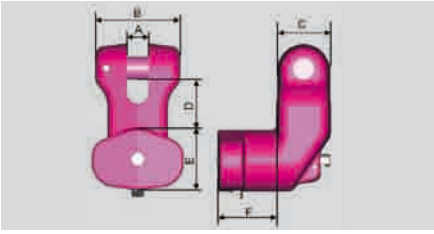
10-VIP Construction Kit VIP-accessories for container

VIP-container-hook VCH-SL – self-bolting

- Adequate for ISO container salient angle
- The container hook is equipped with a patented locking. Slipping out during lifting from the ISO-angle has been ruled out. Most easyhandling.
- RUD VCH-SI-hooks are applicablefor vertical lifting and a collector slope up to max. 45° (see graph).
- Fork-head-connection for 16-VIP-chain



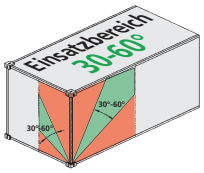
Insertion: without operating the locking by automatic opening and closing.
Extraction: feasible with an operated unlocking bolt only.

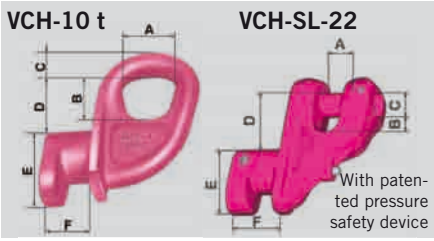


WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Weight [kg]	SU	Order-no.	Price/SU €
10.000	VCH-SL-16	18	71	42	40	50	47	2,5	4	VCH.VIP.10	794,00

VIP-container hook VCH-SL 16

VCH fits ISO-Container salient angle
Stable-connection using VSV or VVGSCH



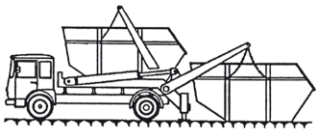


WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Weight [kg]	Order-no.	Price/piece €
10.000	VCH-10 t	56	70	24	83	76	45	3,0	CH.VIP.100	129,50
20.000	VCH-SL-22	24	62	48	45	76	45	4,2	CH.VIP.200	248,00

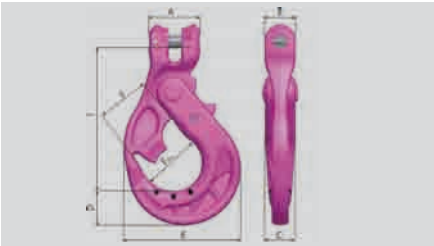
VIP-Trough-Automatic fork head hook VMAGH (S)

NEW

- Suitable for standard trough peg
- Easy use of the bolt or hook safety
- Confusion-free chain connection
- Pre-assembled connecting bolt and safety pin
- Markings for testing of the hook trough width



- Patented wear marks that show the discarding time without remeasuring
- Nonslip operation of the safety lever without risk of injury



Nom. chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Fmax [mm]	T [mm]	Weight [kg]	Order-No.	Price/Piece €
13	6.700	VMAGH (S)-13	61	37	36	40	137	50	81	167	2,9	VMAGH.S.13	149,70

VIP-Rhomben link for trough tipper VMEG

NEW

- Fast, robust and user-friendly
- Quick hanging without extra unlocking
- Simplified hanging and removal of the trough link through ergonomically designed locking flap
- Locking flap with slip-resistant design

- Protection ribs protect the locking flap from damage and shocks
- Suitable for standard trough peg according to DIN/EN 30720

Nom. chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Weight [kg]	Order-No.	Price/Piece €
13	6.700	VMEG-13	37	66	128	20	64	46	149	2,2	VMEG.VP.06	133,70

Surcharge

SLING TECHNOLOGY

10-VIP Construction Kit

Electric current risk recognized? Controlled with VIP-ILG!

VIP-insulating-hanger ILG

With the VIP-IL-hanger the electric flow is interrupted by a fork-shackle, which is embedded in a special synthetic material.

Usable up to 1000 V and an operating temperature of up to 80°C. A vortex-connection is not required, since the hoisting device hook or load hook has to be pivoted.

Info

Nowelding on sling chains and hoisting device chains and or responding components!

Take care during welding on hanging loads – protectyour hoisting devices or your crane from the electric current.

Suspension link VA-1

Two links VIP-chain
VVGSCH
VIP - ILG

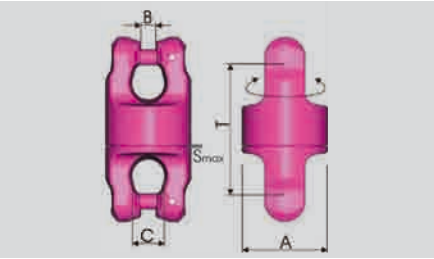
Two links VIP-chain

VCGH

WLL [kg]	L [mm]	B [mm]	Weight [kg]	Order-no.	Price/piece €
1500	357	60	1,5	VIP.ILG.06	233,00
2500	431	60	2,7	VIP.ILG.08	262,50
4000	517	75	4,3	VIP.ILG.10	312,00
6700	632	90	8,0	VIP.ILG.13	388,00
10000	760	100	13,1	VIP.ILG.16	611,50

VIP-all-purpose-vortex PP

- With bearings to allow it to revolve when loaded
- Patented fork-head version
- Universal connector – bearing loads on all sides
- Only mount RUD approved VIP chains and components.



Nominal chain thickn. [mm]	Lload bearing cap. [kg]	Designation	A [mm]	B [mm]	C [mm]	T [mm]	S_{max} [mm]	Weight [kg]	Order-no.	Price/ piece €
4	630	UW PP-4	34	4,8	13	51	1,0	0,24	UWPP.00.04	81,50
6	1500	UW PP-6	38	7,0	16	71	3,5	0,41	UWPP.00.06	108,50
8	2500	UW PP-8	52	9,1	20	86	5,2	1,0	UWPP.00.08	136,00
10	4000	UW PP-10	66	11,0	26	106	4,6	2,0	UWPP.00.10	145,00
13	6700	UW PP-13	80	14,4	30	131	5,2	3,7	UWPP.00.13	173,00
16	10000	UW PP-16	86	17,6	37	141	6,8	4,9	UWPP.00.16	266,50

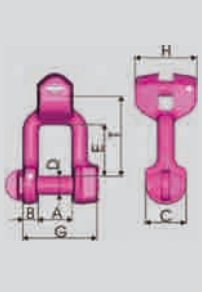
Surcharge

10-VIP Construction Kit VIP-connection made easier

VIP-shackle

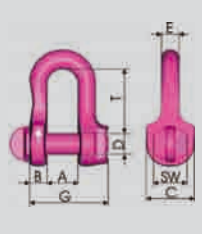
VIP-unmistakable fork-shackle VV-GSCH

Nominal chain thickness [mm]	WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	H [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VV-GSCH 6	17	8	22	10	21	40	28	36	0,15	VV.GS.V4.06	47,15
8	2500	VV-GSCH 8	21	10	26	12	32	48	39	48	0,26	VV.GS.V0.08	54,20
10	4000	VV-GSCH 10	27	13	34	16	35	62	45	61	0,65	VV.GS.V0.10	70,50
13	6700	VV-GSCH 13	33	17	42	20	41	81	59	78	1,35	VV.GS.V0.13	104,50
16	10000	VV-GSCH 16	38	22	49	24	49	95	69	96	2,5	VV.GS.V0.16	147,00
20	16000	VV-GSCH 20	47	27	60	30	57	119	88	108	3,9	VV.GS.V4.20	220,50
22	20000	VV-GSCH 22	53	30	76	36	72	130	95	132	6,7	VV.GS.V4.22	327,50



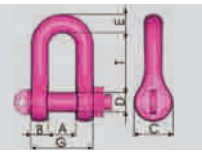
VIP-unmistakable shackle VV-SCH

Nominal chain thickness [mm]	WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	SW [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VV-SCH 6	14	8	22	10	8	36	17	30	0,1	VV.SC.V0.06	28,80
8	2500	VV-SCH 8	17	10	26	12	10	44	19	36	0,2	VV.SC.V0.08	31,90
10	4000	VV-SCH 10	21	13	34	16	13	56	24	49	0,4	VV.SC.V0.10	40,70
13	6700	VV-SCH 13	27	17	42	20	17	75	29	63	0,8	VV.SC.V0.13	59,40
16	10000	VV-SCH 16	33	21	49	24	21	90	36	73	1,5	VV.SC.V0.16	82,50



High-tensile shackle VC-SCH

WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
14000	VC-SCH 4,0	42	27	60	30	29	96	91	2,7	VC.SC.V0.06	198,00
22400	VC-SCH 5,0	47	30	72	36	33	107	111	4,4	VC.SC.V0.08	214,00
31500	VC-SCH 6,0	53	34	78	39	37	121	120	5,9	VC.SC.V0.10	292,00



VIP-connection lock VVS

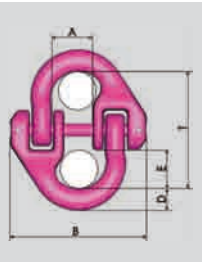
External-connections like suspension points, plate hooks etc. may be assembled Into a shackle with a large opening (A2). The halves of the bail may freelybe combined among oneanother. No movement or damage of the safety pin to be expected.
The matching VIP-chain or overload-link only may be unmistakably (A1) mounted to the shackle-half with a forged-on nose.
Sling chains in quality class 10-VIP

NEW

Nominal chain thickness [mm]	WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VVS 6	18	55	13	11	17	46	0,12	VVS.VP.X06	22,40
8	2500	VVS 8	24	70	17,5	14	23	61	0,29	VVS.VP.X08	25,00
10	4000	VVS 10	28	88	22	17	27	74	0,57	VVS.VP.X10	29,70
13	6700	VVS 13	34	111	28	23	33	93	1,2	VVS.VP.X13	37,60
16	10000	VVS 16	39	130	33	27	37	108	2,0	VVS.VP.X16	65,20
20	16000	VVS 20	42	155	41	34	41	124	3,7	VVS.VP.X20	175,90
22	20000	VVS 22	48	172	44	36	46	139	4,7	VVS.VP.X22	215,90
28	31500	VVS 28	69	228	58	47	67	189	10,6	VVS.VP.X30	334,80

VIP-connection lock VVS-U

Nominal chain thickness [mm]	WLL [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VVS-U 6	14	50	12	8,5	13	40	0,09	VVS.VIP.06	19,45
8	2500	VVS-U 8	19	64	16	10,5	19	53	0,19	VVS.VIP.08	21,75
10	4000	VVS-U 10	23	80	20	13	23	70	0,42	VVS.VIP.10	25,95
13	6700	VVS-U 13	27	97	25	17	27	80	0,78	VVS.VIP.13	32,90
16	10000	VVS-U 16	33	125	31	21	33	104	1,6	VVS.VIP.16	57,20
20	16000	VVS-U 20	42	155	40	27	41	124	3,0	VVS.VIP.20	154,00
22	20000	VVS-U 22	47	172	43	30	46	133	3,9	VVS.VIP.22	189,50

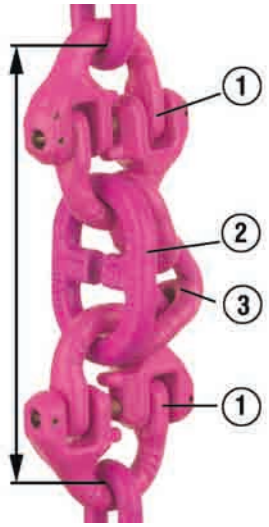


Surcharge

SLING TECHNOLOGY

10-VIP construction kit VIP-overcharge control VCG

The big hit in safety

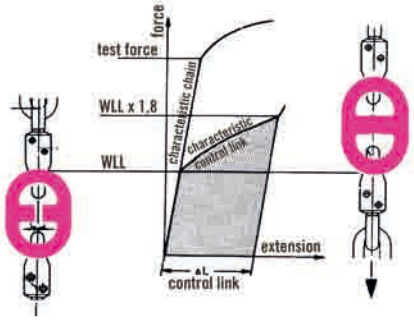


Immediate and lasting optical display on overcharge – immobile by the special calibrated RUD-control link VCG, but easily exchangeable by a connection-feeder-selecting-device VVS-U consisting of:

1) connection-feeder-selecting-device VVS-U easymounting with hammer (unmistakable chain-connection)

2) control link VCG
With a display-stud-link and calibrated slot width (Nominal measure…mm)

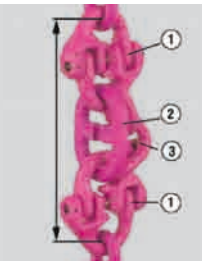
3) chain VIP, Gld
Additional safety-component (chain) in the parallel connection



Immediate lastingoptical display onover-charge – by the special calibrated RUD-control link VCG. No exceeding of the permissible load-carrying capacity! The calibrated slot width corresponds to the stated nominal measure.

VIP-overcharge-link VCG, complete

Nominal chain thickness [mm]	Load bearing capacity [kg]	Designation	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VCG 6 kpl.	115	0,3	VCGK.VP.06	66,60
8	2500	VCG 8 kpl.	151	0,5	VCGK.VP.08	85,80
10	4000	VCG 10 kpl.	198	1,0	VCGK.VP.10	118,00
13	6700	VCG 13 kpl.	232	2,1	VCGK.VP.13	165,00
16	10000	VCG 16 kpl.	291	3,8	VCGK.VP.16	219,50
20	16000	VCG 20 kpl.	345	8,8	VCGK.VP.20	286,50
22	20000	VCG 22 kpl.	382	12,1	VCGK.VP.22	428,00



VIP-overcharge-link VCG, single

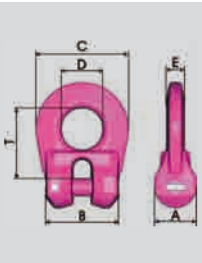
Nominal chain thickness [mm]	Load bearing capacity [kg]	Designation	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VCG 6	36	0,06	VCG.VIP.06	23,45
8	2500	VCG 8	45	0,10	VCG.VIP.08	25,95
10	4000	VCG 10	58	0,20	VCG.VIP.10	45,35
13	6700	VCG 13	70	0,40	VCG.VIP.13	64,10
16	10000	VCG 16	84	0,80	VCG.VIP.16	76,60
20	16000	VCG 20	97	1,10	VCG.VIP.20	94,20
22	20000	VCG 22	116	1,90	VCG.VIP.22	105,00

Surcharge

VIP-ring-fork VRG

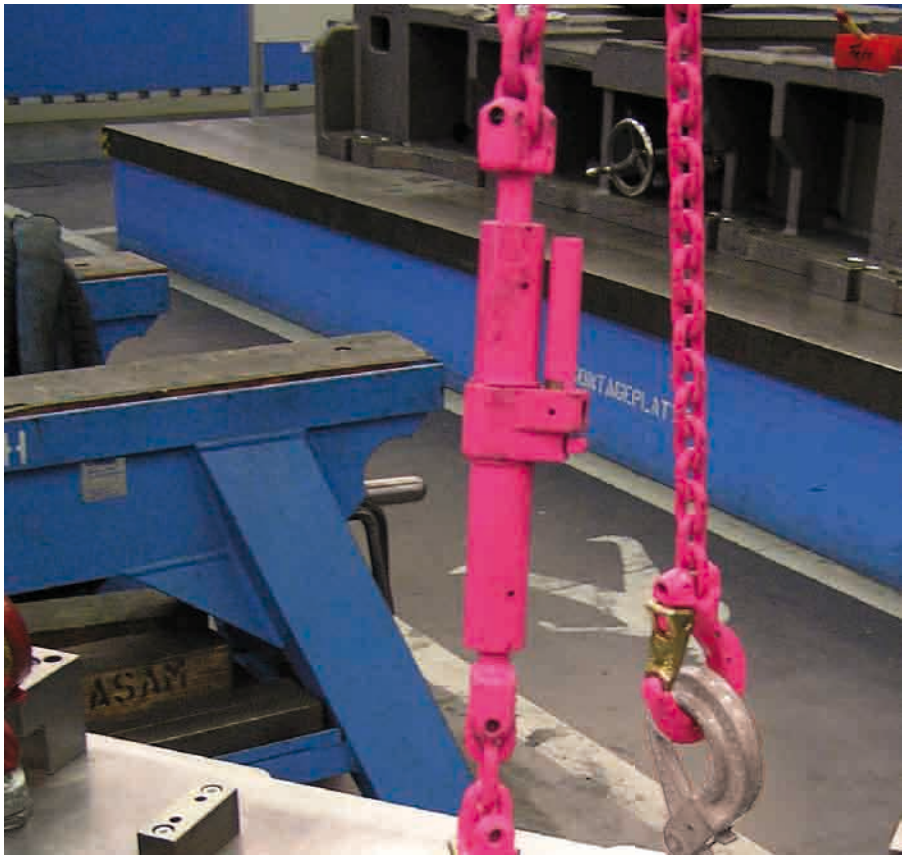
Nominal chain thickness [mm]	load bearing capacity [kg]	Designation	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
6	1500	VRG 6	17	30	37	16	8	28	0,07	VRG.V00.06	16,55
8	2500	VRG 8	23	40	50	22	10	37	0,2	VRG.V00.08	18,85
10	4000	VRG 10	28	50	60	26	13	46	0,3	VRG.V00.10	25,80
13	6700	VRG 13	36	64	75	32	17	58	0,7	VRG.V00.13	34,35
16	10000	VRG 16	45	75	92	40	20	74	1,1	VRG.V00.16	57,10
20	16000	VRG 20	58	92	118	52	28	94	3,1	VRG.V00.20	104,50
22	20000	VRG 22	62	102	124	52	32	94	3,5	VRG.V00.22	138,50

Surcharge



10-VIP Construction Kit with VIP extension, precise positioning

VIP-VIP-spindle spanner ideal for precise length adjustmentof VIP-hangers



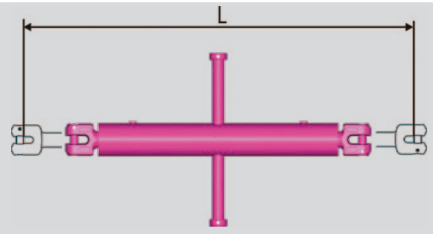
Example of a two roped hanger with two spindle spanners VKSPS for precise positioning of loads!

VIP spindle spanner VKSPS

Ideal for precise positioning of loads to the millimeter! Adjustable in length accurate to the millimeter by right and left hand threads via a through hole handle in the middle. Under load, lowering (lengthening) is limited tosmall loads. Rough shortening with multi claw VMVK. Both sides with fork head connection

Info

Note: The VIP-spanner VKSPS offers a precise length adjustmentfor VIP-chains up to max. 16 mm in diameter. For higher diameters / higher load bearing capacities, the VIP length adjustment VLE is at your disposal, see next page.



Nominal chain thickness [mm]	Load bearing capacity [kg]	Designation	L open [mm]	L closed [mm]	lift [mm]	Weight [kg]	Order-no.	Price/ piece €
6	1500	VKSPS 6	323	204	120	1,0	VSPS.V0.06	132,00
16	10000	VKSPS 16	807	507	300	8,6	VSPS.V0.16	317,50

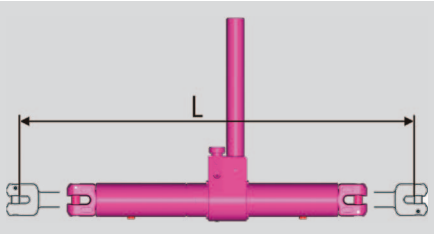
Surcharge

SLING TECHNOLOGY

10-VIP Construction Kit

VIP-compact-spindle-spanner-ratchet VKSPSR

The properties match the VKSPS compact ratchet with right and left running, folding ratchet handle with detent, reduction of safety hazards through swiveling handle, pink powder coated, no safety chain required.

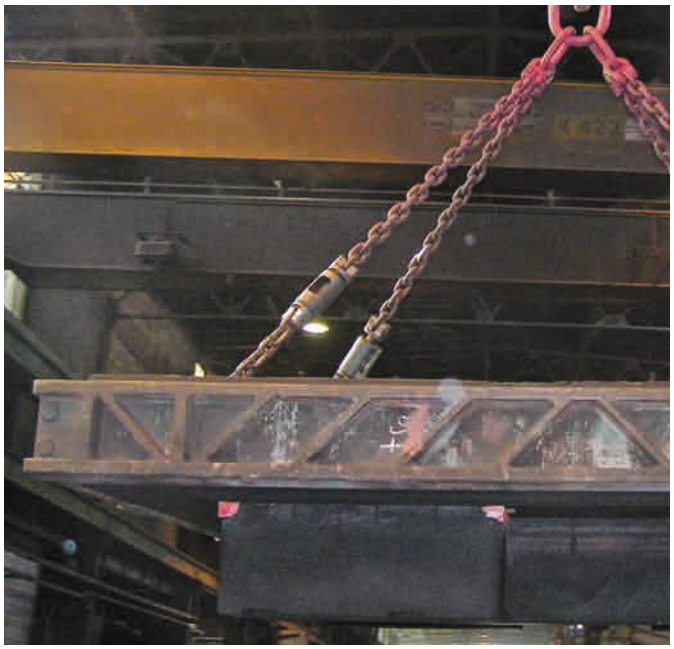


Nominal chain thickness[mm]	WLL [kg]	Lashing force LC [daN]	Designation	L open [mm]	L closed [mm]	Lift [mm]	Reachable preload force STF [daN]	Weight [kg]	Order-no.	Price/ piece €
6	1500	3000	VKSPS-R 6	323	204	120	1500	0,95	VKSPS.R.06	214,00
16	10000	20000	VKSPS-R 16	807	507	300	3600	9,3	VKSPS.R.16	409,00

Surcharge

* discontinued line (delivery as long as on stock)

VLE VIP length adjustment



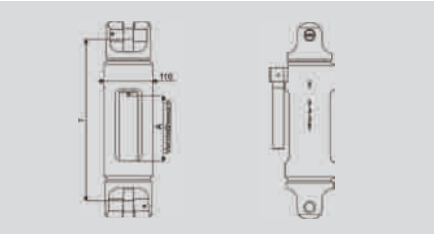
The ideal complement for large nominal chain thicknesses.Optimal for fine adjustment of heavy loads. Four carrying ropes allow precise horizontal alignment. In particular this is important with off center balance point and greatly simplifies assembly. No adjustment under load feasible.

Info

For precise length adjustment in chain hangers. By means ofright and left hand threads viaa centered handle or ratchet adjustable in length accurate to the millimeter. Adjustments may be effected only with low tension or no load.

Nominal chain thickness [mm]	WLL [kg]	Designation	L closed [mm]	Lift [mm]	Weight [kg]	Order-no.	Price/piece €
20	16000	VLE 20	360	140	18,1	VLE.V00.20	2.276,00
22	20000	VLE 22	360	140	18,3	VLE.V00.22	2.467,00
28	31500	VLE 28	475	172	44,0	VLE.V00.28	2.972,00

Surcharge

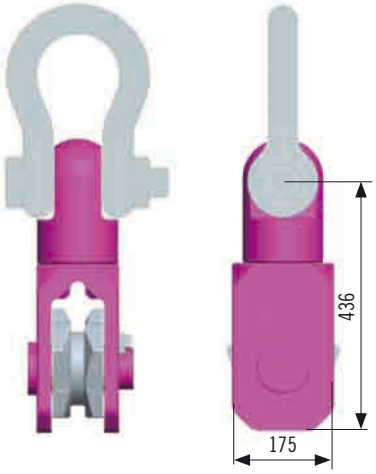


10-VIP Construction Kit

VIP-Chain block 22 / VCB 22 - The better solution

- Balancing power lifting, e.g. for the erection of tower segments for wind turbines
- Capacity 40 t – parallel
- For VIP-chain 22 mm
- 5- edge-role for redirecting the chain
- Ball-bearing intake for shackles
- 60 kg light
- Small size
- Connection with shackle 35 t with 5-times the safety
- Replacement for cable deflection pulley
- Braked 5-edge-roll to avoid falling down of one side of the unloaded chain

VCB 22 with shackle, chain and hook



Width [mm]	Height [mm]	Order-No.	Price/Piece €
175	436	VCB.022.01	on request

VIP-Chain block - ideal in combination with FLARIBO-Stop-points

- FLARIBO- Lifting points for mounting of pipe segments
- Attachment to the existing holes of the pipe flange
- Smooth twisting and turning through slide-mounted ring strap

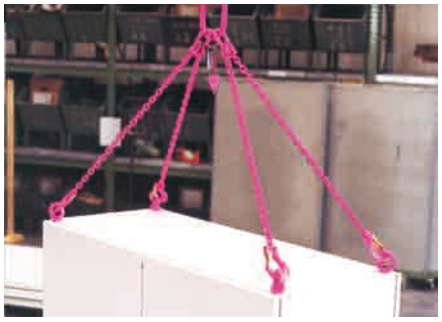
Info

Wrong!

SLING TECHNOLOGY

10-VIP Construction Kit even weight displacement

Optimal load carrying capacity by application of the compensator



Application with compensator

4-rope-hanger, VIP 10mm, consisting of 2x2 rope with 1x compensator = 4 carrying ropes, load bearing capacity 0-45°

= 11.200 kg

Normal application, without compensator

4-rope-hanger, VIP 10 mm, load bearing capacity 0-45°

= 8.400 kg

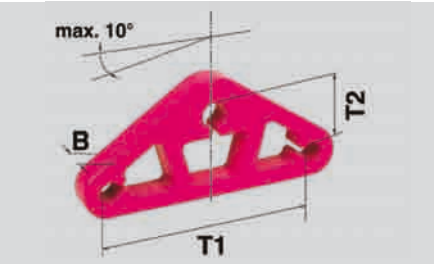
Info

Please note! The balance position or skewed position of the compensator must be 10° max.

VIP-compensator for use of up to 2 rope hangers

Nominal chain thickness [mm]	WLL [kg] 0 – 45°	B [mm]	T1 [mm]	T2 [mm]	Weight [kg]	Order-no.	Price/piece €
6	2100	15	110	42	0,4	VWS.25.006	95,00
8	3500	20	150	56	1,0	VWS.25.008	100,50
10	5600	25	180	70	2,2	VWS.25.010	134,00
13	9400	30	240	97	4,1	VWS.25.013	162,50
16	14000	35	300	120	8,1	VWS.25.016	259,00
20	22400	45	300	123	12,4	VWS.25.020	344,50
22	28000	50	350	138	17,1	VWS.25.022	528,50

Surcharge



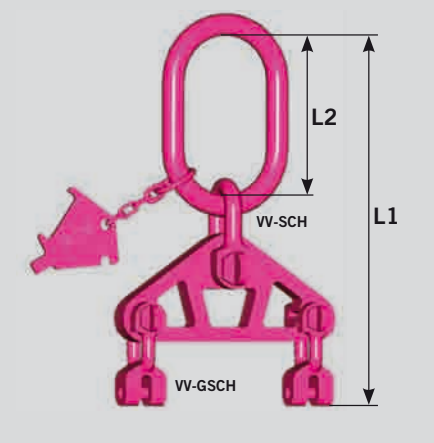
VIP-compensator head, complete with 2 -rope VWK-2S

Increased load bearing capacity:
When using two 2-rope-hangers, with one hanger furnished with a compensator (VWK 2S) – both suspended to the crane hook – 4 carrying chain ropes can be expected if the load is evenly distributed and the angle is no widerthan 45° (BGR 500).

Application:
Increased load bearing capacity,provided that the compensator is skewed no more than 10%. Heavierloads maybe lifted with the same chain, sincefour carrying ropes are available.

Nominal chain thickness [mm]	WLL cap. up to 45° [kg]	L1 [mm]	L2 [mm]	A-Link [mm]	Weight [kg]	Order-no.	Price/piece €
6	4200	224	138	13x60x110	1,5	VWK.25.006	260,00
8	7000	288	172	18x75x135	2,8	VWK.25.008	311,50
10	11200	354	206	22x90x160	6,8	VWK.25.010	500,50
13	18800	428	238	26x100x180	10,7	VWK.25.013	581,50
16	28000	507	270	32x110x200	20,2	VWK.25.016	986,00
20	45000	682	434	40x180x340	35,3	VWK.25.020	1.380,00
22	56000	726	434	45x180x340	50	VWK.25.022	2.014,00

Surcharge



10-VIP Crown Chains in different versions

Single endless, Type VKRE

Nominal chain thickness [mm]	WLL up to 45° [kg]	WLL 45°- 60° [kg]	Order-No.	Price usable length 1 m incl. mounted fittings €	Price lin. m (L1) €
6	1650	1200	V.KK0.06.00	65,70	24,20
8	2750	2000	V.KK0.08.00	82,60	31,90
10	4400	3200	V.KK0.10.00	108,00	41,00
13	7500	5300	V.KK0.13.00	172,50	70,10
16	11000	8000	V.KK0.16.00	313,00	113,50
20	17600	12800	V.KK0.20.00	516,00	210,00
22	22000	16000	V.KK0.22.00	647,50	238,50

Single may be shortened, Type VKREV

Nominal chain thickness [mm]	WLL up to 45° [kg]	WLL 45°- 60° [kg]	Order-No.	Price usable length 1 m incl. mounted fittings €	Price lin. m (L1) €
6	1650	1200	V.KKV.06.00	122,50	24,20
8	2750	2000	V.KKV.08.00	145,00	31,90
10	4400	3200	V.KKV.10.00	192,00	41,00
13	7500	5300	V.KKV.13.00	305,00	70,10
16	11000	8000	V.KKV.16.00	530,50	113,50
20	17600	12800	V.KKV.20.00	803,00	210,00
22	22000	16000	V.KKV.22.00	1.030,00	238,50

Double endless, Type VKRD

Nominal chain thickness [mm]	WLL up to 45° [kg]	WLL 45°- 60° [kg]	Order-No.	Price usable length 1 m incl. mounted fittings €	Price lin. m (L1) €
6	2550	1800	V.KD0.06.00	143,50	48,25
8	4250	3000	V.KD0.08.00	175,50	63,80
10	6800	4800	V.KD0.10.00	226,50	82,50
13	11200	8000	V.KD0.13.00	354,50	140,00
16	17000	12000	V.KD0.16.00	557,00	226,50
20	27200	19200	V.KD0.20.00	1.161,00	420,00
22	34000	24000	V.KD0.22.00	1.317,00	476,50

Double may be shortened, Typ VKRDV

Nominal chain thickness [mm]	WLL up to 45° [kg]	WLL 45°- 60° [kg]	Order-No.	Price usable length 1 m incl. mounted fittings €	Price lin. m (L1) €
6	2550	1800	V.KDV.06.00	256,50	48,25
8	4250	3000	V.KDV.08.00	302,00	63,80
10	6800	4800	V.KDV.10.00	394,50	82,50
13	11200	8000	V.KDV.13.00	620,00	140,00
16	17000	12000	V.KDV.16.00	991,00	226,50
20	27200	19200	V.KDV.20.00	1.736,00	420,00
22	34000	24000	V.KDV.22.00	2.082,00	476,50

Nominal chain thickness	Crown chain single		Crown chain double		Crown chain endless	
mm	0 - 45°	45 - 60°	0 - 45°	45 - 60°	0 - 45°	45 - 60°
6	1650	1200	2550	1800	–	–
8	2750	2000	4250	3000	–	–
10	4400	3200	6800	4800	–	–
13	7500	5300	11200	8000	–	–
16	11000	8000	17000	12000	–	–
20	17600	12800	27200	19200	17600	12800
22	22000	16000	34000	24000	22000	16000

Crown chain, single

Crown chain, double

Surcharge

SLING TECHNOLOGY

Quality class 8 sling chain

Construction kit system with original RUD-chain

With BSEK

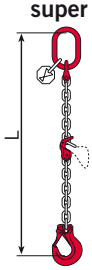
- With pressure-pin safety
- Without additional connective parts
- Without load bearing capacity loss
- Captive with chain rope
- Without interruption of the chain rope
- Mountable anywhere
- According to DIN 5692

Chain bulk stock

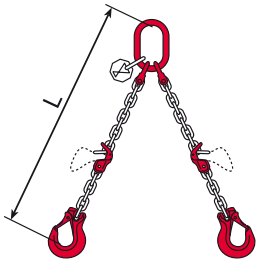
Nominal chain thickness [mm]	Order-no.	Additional price € per m
6	GKM.06.000	8,33
8	GKM.08.000	11,05
10	GKM.10.000	14,95
13	GKM.13.000	25,20
16	GKM.16.000	41,95

Order example: enter usable length of chain bulk stock!
Example: GM.10.004 = 4m usable length, one rope with 10 mm nominal chain thickness.

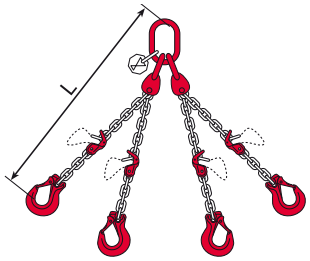
1-rope with BSEK-shortening claw and original GSH granite super hook



2-rope with BSEK-shortening claw and original GSH granite super hook



4-rope with BSEK-shortening claw and original GSH granite super hook



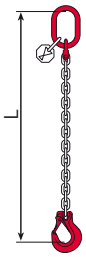
Nom. chain thickn. [mm]	WLL single direct 1-rope [kg]	Order-no.	Price € 1. m incl. mounted fittings	Nom. chain thickn. [mm]	WLL 0-45° 2-strand [kg]	WLL 45-60° 2-strand [kg]	Order-no.	Price € 1. m incl. mounted fittings	Nom. chain thickn. [mm]	WLL 0-45° 3/4-strand [kg]	WLL 45-60° 3/4-strand [kg]	Order-no.	Price € 1. m incl. mounted fittings	Additional price € per m.chain per rope	Unit price BSEK/ piece €
6	1120	GV.1.011.00	133,00	6	1600	1120	GV.2.016.00	244,50	6	2360	1700	GV.4.023.00	495,00	8,33	57,60
8	2000	GV.1.020.00	150,50	8	2800	2000	GV.2.028.00	280,50	8	4250	3000	GV.4.042.00	577,50	11,05	65,10
10	3150	GV.1.032.00	192,00	10	4250	3150	GV.2.043.00	364,50	10	6700	4750	GV.4.067.00	744,00	14,95	86,20
13	5300	GV.1.053.00	289,00	13	7500	5300	GV.2.075.00	551,00	13	11200	8000	GV.4.112.00	1.153,00	25,20	134,00
16	8000	GV.1.080.00	443,50	16	11200	8000	GV.2.112.00	894,00	16	17000	11800	GV.4.170.00	1.790,00	41,95	217,00

Surcharge

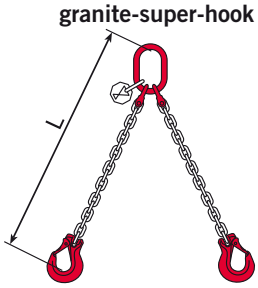
Order example: Enter length! GV.2.112.03
Sling chain, 2 ropes, 11.200kg load bearing capacity with shortening claw, nominal chain diameter 16 mm, length 3 m

Without BSEK

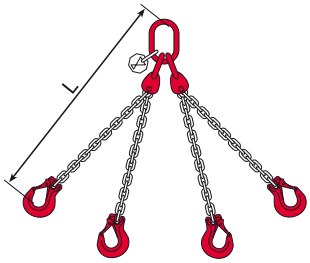
1-rope with original GSH-granite-super-hook



2-ropes with original GSH-granite-super-hook



4-rope with original GSH-granite-super-hook



Nom. chain thickn. [mm]	WLL single direct 1-rope [kg]	Order-no.	Price € 1. m incl. mounted fittings	Nom. chain thickn. [mm]	WLL 0-45° 2-strand [kg]	WLL 45-60° 2-strand [kg]	Order-no.	Price € 1. m incl. mounted fittings	Nom. chain thickn. [mm]	WLL 0-45° 3/4-strand [kg]	WLL 45-60° 3/4-strand [kg]	Order-no.	Price € 1. m incl. mounted fittings	Additional price € per m.chain per rope
6	1120	G0.1.011.00	75,80	6	1600	1120	G0.2.016.00	128,50	6	2360	1700	G0.4.023.00	268,00	8,33
8	2000	G0.1.020.00	86,80	8	2800	2000	G0.2.028.00	153,00	8	4250	3000	G0.4.042.00	326,00	11,05
10	3150	G0.1.032.00	108,00	10	4250	3150	G0.2.043.00	197,00	10	6700	4750	G0.4.067.00	414,00	14,95
13	5300	G0.1.053.00	158,00	13	7500	5300	G0.2.075.00	290,00	13	11200	8000	G0.4.112.00	633,00	25,20
16	8000	G0.1.080.00	231,50	16	11200	8000	G0.2.112.00	470,50	16	17000	11800	G0.4.170.00	952,00	41,95

Surcharge

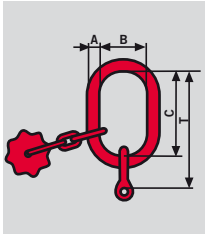
Order example: enter length! G0.4.112.05
sling chain, 4 ropes, 11.200kg load bearing capacity, nominal chain diameter 13 mm, length 5 m

Quality class 8 sling chain

RUD-Original spare parts from the unmistakable construction kit quality class 8

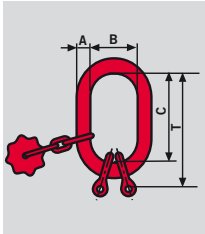
AK 1 Hanging head for 1-rope chains

Nominal chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price / piece €
6	1120	AK 1-6	13	60	110	138	0,60	AK10.AK.06	34,10
8	2000	AK 1-8	16	60	110	147	0,90	AK10.AK.08	37,15
10	3150	AK 1-10	18	75	135	181	1,40	AK10.AK.10	45,75
13	5300	AK 1-13	22	90	160	218	2,40	AK10.AK.13	65,00
16	8000	AK 1-16	26	100	180	250	3,70	AK10.AK.16	96,30



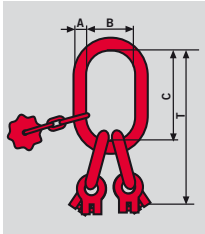
AK 2 Hanging head for 2-rope chains

Nominal chain thickness [mm]	WLL NWO-45°[kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price / piece €
6	1600	AK 2-6	13	60	110	138	0,70	AK20.AK.06	45,45
8	2800	AK 2-8	18	75	135	172	1,40	AK20.AK.08	53,20
10	4250	AK 2-10	22	90	160	206	2,30	AK20.AK.10	72,40
13	7500	AK 2-13	26	100	180	238	3,90	AK20.AK.13	104,00
16	11200	AK 2-16	32	110	200	270	6,60	AK20.AK.16	201,00



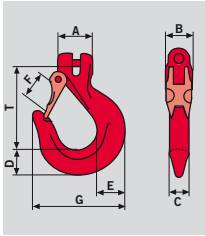
AK 4 Hanging head for 4-rope chains

Nominal chain thickness [mm]	WLL NWO-45°[kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	T [mm]	Weight [kg]	Order-no.	Price / piece €
6	2630	AK 4-6	18	75	135	217	1,60	AK40.AK.06	100,50
8	4250	AK 4-8	22	90	160	268	3,00	AK40.AK.08	127,50
10	6700	AK 4-10	26	100	180	311	4,90	AK40.AK.10	166,50
13	11200	AK 4-13	32	110	200	373	8,90	AK40.AK.13	272,00
16	17000	AK 4-16	36	140	260	470	14,80	AK40.AK.16	435,50



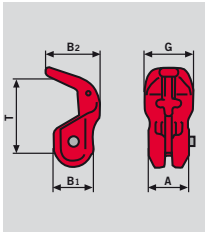
Granite-super hook GSH

Nominal chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	T [mm]	Weight [kg]	Order-no.	Price / piece €
6	1120	GSH 6	27	22	16	20	24	25	74	75	0,33	G8.GSH0.06	30,40
8	2000	GSH 8	38	28	20	28	32	30	98	97	0,80	G8.GSH0.08	36,05
10	3150	GSH 10	46	36	26	35	38	35	122	108	1,39	G8.GSH0.10	45,65
13	5300	GSH 13	58	46	30	37	48	40	139	126	2,46	G8.GSH0.13	67,90
16	8000	GSH 16	66	56	36	49	58	48	164	152	4,05	G8.GSH0.16	98,30



Shortening claw BSEK with pressure pin safety according to DIN 5692

Nominal chain thickness [mm]	WLL [kg]	Designation	Dimensions A [mm]	B 1 [mm]	B 2 [mm]	G [mm]	T [mm]	Weight [kg]	Order-no.	Price / piece €
6	1120	BSEK 6	38	34	37	38	66	0,3	G8.BSEK.06	57,60
8	2000	BSEK 8	46	40	51	47	88	0,5	G8.BSEK.08	65,10
10	3150	BSEK 10	58	49	63	60	100	1,0	G8.BSEK.10	86,20
13	5300	BSEK 13	74	64	86	76	134	2,6	G8.BSEK.13	134,00
16	8000	BSEK 16	91	79	105	93	165	4,2	G8.BSEK.16	217,00



Surcharge

Quality class 8 interline Construction Kit acc. to Euro Norm

Interline system - the reasonable priced alternative

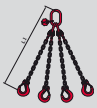
Chain hangers without shortening hook

N chain th. [mm]	WLL single direct [kg]	Order-no. wo.short.-hook	Price/€ 1. m incl. fittings	Additional€ p m chain/rope
6	1120	ET1.00.06.0	61,90	8,28
8	2000	ET1.00.08.0	72,60	10,95
10	3150	ET1.00.10.0	85,20	14,80
13	5300	ET1.00.13.0	128,00	24,95
16	8000	ET1.00.16.0	189,50	41,60

Chain hangers with shortening hooks (according to draft DIN 5692, part 2)

N chain th. [mm]	WLL single direct [kg]	Order-no. w.short.-hook	Price/€ 1. m incl. fittings	Additional€ p m chain/rope
6	1120	ET1.VH.06.0	81,30	8,28
8	2000	ET1.VH.08.0	93,50	10,95
10	3150	ET1.VH.10.0	114,50	14,80
13	5300	ET1.VH.13.0	175,50	24,95
16	8000	ET1.VH.16.0	260,50	41,60

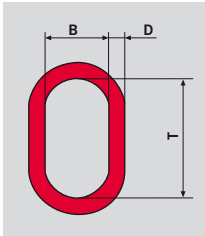
N chain thickn. [mm]	WLL [kg] 2-/4-rope,tilt.-a. 0-45°	45-60°	Order-no. w/o, short-ening hook	Price/€ 1. m incl. mounted fittings	Add.price€ p.m.chain per rope
6	1600	1120	ET2.00.06.0	112,50	8,28
8	2800	2000	ET2.00.08.0	128,50	10,95
10	4250	3150	ET2.00.10.0	151,00	14,80
13	7500	5300	ET2.00.13.0	234,00	24,95
16	11200	8000	ET2.00.16.0	366,00	41,60
6	2360	1700	ET4.00.06.0	217,00	8,28
8	4250	3000	ET4.00.08.0	266,00	10,95
10	6700	4750	ET4.00.10.0	329,50	14,80
13	11200	8000	ET4.00.13.0	485,00	24,95
16	17000	11800	ET4.00.16.0	760,00	41,60



N chain thickn. [mm]	WLL [kg] 2-/4-rope,tilt.-a. 0-45°	45-60°	Order-no. with short-ening hook	Price/€ 1. m incl. mounted fittings	Add.price€ p.m.chain per rope
6	1600	1120	ET2.VH.06.0	152,00	8,28
8	2800	2000	ET2.VH.08.0	171,00	10,95
10	4250	3150	ET2.VH.10.0	212,50	14,80
13	7500	5300	ET2.VH.13.0	329,00	24,95
16	11200	8000	ET2.VH.16.0	506,00	41,60
6	2360	1700	ET4.VH.06.0	307,50	8,28
8	4250	3000	ET4.VH.08.0	338,00	10,95
10	6700	4750	ET4.VH.10.0	450,50	14,80
13	11200	8000	ET4.VH.13.0	796,50	24,95
16	17000	11800	ET4.VH.16.0	1.044,00	41,60

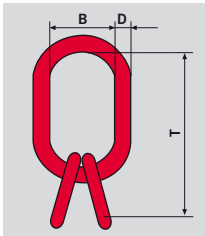
ET-AKO 1/2 hanging head for 1 and 2 rope chain hanger

WLL [kg]	chain connection 1-rope [mm]	2-rope [mm]	Designation	Dimensions D [mm]	B [mm]	T [mm]	Weight [kg]	Order-no.	price/ piece €
1120	6	6	ET-AKO 1-6	13	60	110	0,36	ET.AK1.006	8,93
1500	7	7	ET-AKO 1-7	13	60	110	0,36	ET.AK1.007	8,93
2000	8	-	ET-AKO 1-8	16	60	110	0,55	ET.AK1.008	9,90
3150	10	8	ET-AKO 1-10	18	75	135	0,82	ET.AK1.010	11,20
5300	13	10	ET-AKO 1-13	22	90	160	1,52	ET.AK1.013	17,95
8000	16	13	ET-AKO 1-16	32	110	180	2,32	ET.AK1.016	26,30



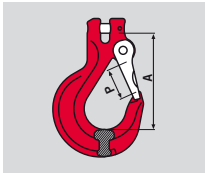
ET-AKO 3/4 hanging head for 3 and 4 rope chain hanger

WLL up to 45° [kg]	45°- 60° [kg]	Chain conn-ection [mm]	Designation	Dimensions D [mm]	B [mm]	T [mm]	Weight [kg]	Order-no.	price/ piece €
2360	1700	6	ET-AKO 3/4-6	18	75	190	1,2	ET.AK3.006	25,20
3150	2250	7	ET-AKO 3/4-7	18	75	190	1,2	ET.AK3.007	25,20
4250	3000	8	ET-AKO 3/4-8	22	90	230	2,26	ET.AK3.008	33,30
6700	4750	10	ET-AKO 3/4-10	26	100	265	3,42	ET.AK3.010	46,65
11200	8000	13	ET-AKO 3/4-13	32	110	315	6,4	ET.AK3.013	73,30
17000	11800	16	ET-AKO 3/4-16	36	140	400	10,02	ET.AK3.016	109,50



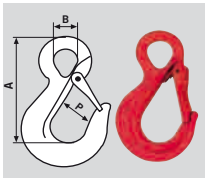
SH-fork head hook forged safety trap with recessed grip

WLL [kg]	chain connection [mm]	Designation	Order-no.	Price/piece €	Order-no.	Price/piece €
1120	6	SH 6	19	73	ET.GKX.006	24,30
2000	8	SH 8	26	86	ET.GKX.008	29,20
3150	10	SH 10	31	105	ET.GKX.010	35,60
5300	13	SH 13	40	128	ET.GKX.013	51,30
8000	16	SH 16	45	155	ET.GKX.016	82,80



Load hook with eye forged safety trap with recessed grip

WLL [kg]	chain connection [mm]	T [mm]	B [mm]	P [mm]	Weight [kg]	Order-no.	Price/piece €
1120	6	24	19	80	0,26	00.CS0.06.8	16,25
2000	7-8	26	26	95	0,54	00.CS0.08.8	18,65
3150	10	35	31	120	0,97	00.CS0.10.8	25,60
5300	13	40	40	183	1,75	00.CS0.13.8	42,20
8000	16	50	45	217	2,8	00.CS0.16.8	60,10



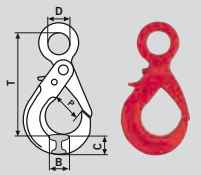
Surcharge

forged safety trap with recessed grip

Quality class 8 InterLine Construction Kit

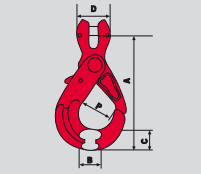
Automatic eye hook

WLL [kg]	Chain connection [mm]	T [mm]	B [mm]	C [mm]	D [mm]	P [mm]	Weight [kg]	Order-no.	Price/piece €
1120	6	114	15	25	24	33	0,53	00.XL05.6.8	44,55
2000	7-8	134	21	29	30	43	0,95	00.XL07.8.8	49,20
3150	10	170	28	34	40	47	1,9	00.XL10.0.8	56,90
5300	13	210	32	43	50	61	3,3	00.XL13.0.8	95,60
8000	16	260	40	57	60	78	7,3	00.XL16.0.8	166,00



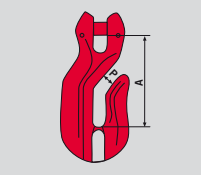
AGH-automatic-fork head hook, according to DIN 5692

WLL [kg]	Chain connection [mm]	Bezeichnung	A [mm]	B [mm]	C [mm]	D [mm]	P [mm]	Order-no.	Price/piece €
1120	6	AGH 6	95	15	25	31	33	ET.AGKX.06	52,60
2000	8	AGH 8	117	21	29	41	43	ET.AGKX.08	56,50
3150	10	AGH 10	142	28	34	53	47	ET.AGKX.10	59,60
5300	13	AGH 13	169	32	43	64	61	ET.AGKX.13	100,50
8000	16	AGH 16	219	40	57	78	78	ET.AGKX.16	174,50



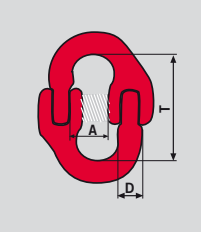
VH-fork head shortening hook, according to DIN 5692

WLL [kg]	Chain connection [mm]	Bezeichnung	T [mm]	P [mm]	Weight [kg]	Order-no.	Price/piece €
1120	6	VH 6	52	7		ET.GVH.006	17,75
2000	8	VH 7/8	59	10	0,35	ET.GVH.008	21,20
3150	10	VH 10	74	12	0,8	ET.GVH.010	30,40
5300	13	VH 13	100	15	1,7	ET.GVH.013	47,80
8000	16	VH 16	137	18	4	ET.GVH.016	63,30



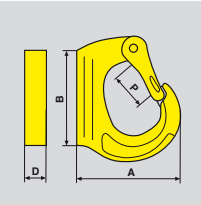
ET-connection lock

WLL [kg]	Chain connection [mm]	Bezeichnung	A [mm]	D [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
1120	6	ET-VS 5/6	14	7	40	0,06	ET.VS.0006	15,75
1500	7	ET-VS 6/7	15	7,5	41	0,08	ET.VS.0007	16,25
2000	8	ET-VS 8	18	8	56	0,18	ET.VS.0008	16,25
3150	10	ET-VS 10	24	11	68	0,3	ET.VS.0010	20,15
5300	13	ET-VS 13	29	14	88	0,6	ET.VS.0013	29,80
8000	16	ET-VS 16	35	17	104	1,3	ET.VS.0016	43,70
12500	18/20	ET-VS 18	43	22	125	1,8	ET.VS.0018	63,00
15000	22	ET-VS 22	49	24	150	3,1	ET.VS.0022	85,00
21200	26	ET-VS 16	58	29	160	4,7	ET.VS.0026	187,00
31500	32	ET-VS 32	70	36	210	8,8	ET.VS.0032	212,50



Welded excavator hook

WLL [kg]	Chain connection [mm]	A [mm]	B [mm]	D mm]	P [mm]	Weight [kg]	Order-no.	Price/piece €
1120	GH 1	76	97	25	25	0,48	GH.ASBH.01	20,00
2000	GH 2	92	114	34	26	0,85	GH.ASBH.02	24,00
3000	GH 3	106	129	36	30	1,12	GH.ASBH.03	25,00
5000	GH 5	136	171	45	34	2,5	GH.ASBH.05	28,00
8000	GH 8	140	177	51	34	3,2	GH.ASBH.08	40,00
10000	GH 10	172	223	53	51	5,2	GH.ASBH.10	98,00



Adapter reducing hanger

In order to prevent tilting while using single ropes in double hooks, loading of just one side of the double hook is prohibited. To balance this, a reducing or adapter hanger is applied. Thus, the load will be evenly distributed on the double crane. It is fastened by a load hook, which is equipped with an eye hook or automatic hook.

WLL [kg]	Chain connection [mm]	Order-no. with eye hook CSO	Price/piece €	Order-no. with autom.eye hook XLO	Price/piece €
1120	13 x 110 x 60	TU.RG.0112	62,00	TU.RG.011.A	82,90
2000	13 x 110 x 60	TU.RG.0200	69,20	TU.RG.020.A	89,80
3150	16 x 110 x 60	TU.RG.0315	84,60	TU.RG.031.A	115,50
5000	18 x 135 x 75	TU.RG.0500	131,40	TU.RG.050.A	179,30
8000	22 x 160 x 90	TU.RG.0800	180,30	TU.RG.080.A	256,20
10000	26 x 180 x 100	TU.RG.1000	365,00	TU.RG.100.A	480,60

Surcharge

SLING TECHNOLOGY

cromox Stop Chains-Construction Kit G5, similar to DIN 5688-1

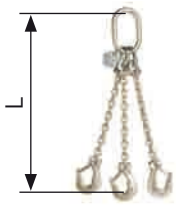
NEW Cromox stop chain G5 with fork hook

1-strand

Chain Ø [mm]	WLL [kg]	Order-No.	Price/ piece €	lin. m. €
6	750	CRX.AK1.06	126,50	13,60
8	1250	CRX.AK1.08	160,50	21,85
10	2000	CRX.AK1.10	220,50	34,60
13	3200	CRX.AK1.13	-	58,70
16	5000	CRX.AK1.16	420,00	91,70

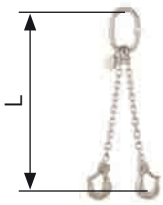
3-strands

Chain Ø [mm]	WLL 45° [kg]	WLL 60° [kg]	Order-No.	Price/ piece €	lin. m. €
6	1600	1120	CRX.AK3.06	367,50	40,80
8	2650	1800	CRX.AK3.08	470,50	65,50
10	4250	3000	CRX.AK3.10	650,00	104,00
13	6700	4750	CRX.AK3.13	-	176,00
16	10000	7500	CRX.AK3.16	1.235,00	275,00



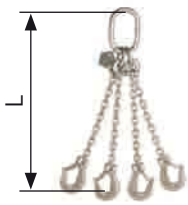
2-strands

Chain Ø [mm]	WLL 45° [kg]	WLL 60° [kg]	Order-No.	Price/ piece €	lin. m. €
6	1000	750	CRX.AK2.06	235,00	27,20
8	1700	1250	CRX.AK2.08	302,00	43,65
10	2800	2000	CRX.AK2.10	421,50	69,20
13	4500	3200	CRX.AK2.13	-	117,50
16	7100	5000	CRX.AK2.16	865,00	183,50



4-strands

Chain Ø [mm]	WLL 45° [kg]	WLL 60° [kg]	Order-No.	Price/ piece €	lin. m. €
6	1600	1120	CRX.AK4.06	475,00	54,40
8	2650	1800	CRX.AK4.08	605,50	87,30
10	4250	3000	CRX.AK4.10	836,50	138,50
13	6700	4750	CRX.AK4.13	-	235,00
16	10000	7500	CRX.AK4.16	1.581,00	366,50



cromox Hanging heads, G5

Type NATF for 3- and 4-strand stop chains

Descrip-tion	WLL[kg] 45°	WLL[kg] 60°	Dimensions [mm] d	t	b	Weight ca. [kg]	Order-No.	Price/ piece €
NATF 0607	2100	1500	A 18	135	75	1,20	NATF.0607	44,30
			B 13	54	25			
NATF 08	2650	1800	A 22	160	90	2,30	NATF.0008	60,80
			B 16	70	34			
NATF 10	4250	3000	A 26	180	100	3,56	NATF.0010	81,40
			B 18	85	40			
NATF 13	6700	4750	A 32	200	110	6,05	NATF.0013	155,50
			B 22	115	50			
NATF 16	10000	7500	A 36	260	140	10,00	NATF.0016	224,50
			B 26	140	65			

cromox Hanging links, G5

for 1- and 2-strand stop chains

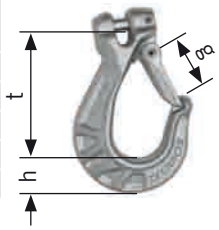
Descrip-tion	WLL [kg] 1-strand	WLL [kg] 2-strand 45°	WLL [kg] 2-strand 60°	Dimensions d	t	b [mm]	Weight ca. [t]	Order-No.	Price/ piece €
NAF 6706	1000	1000	750	13	110	60	0,340	NAF.6706.0	13,40
NAF 0807	1250	1400	1000	16	110	60	0,530	NAF.0807.0	16,50
NAF 1008	2000	1700	1250	18	135	75	0,800	NAF.1008.0	21,65
NAF 1310	3200	2800	2000	22	160	90	1,500	NAF.1310.0	32,95
NAF 1613	5000	4500	3200	26	180	100	2,300	NAF.1613.0	46,35
NAF 1816	7100	7100	5000	32	200	110	3,900	NAF.1816.0	102,00
*NAF 2018	8000	9000	6300	36	260	140	6,350	*NAF.2018.0	143,00
NBF 13	2000	1000	750	13	54	25	0,195	CRX.NBF.13	12,35
NBF 16	3200	1700	1250	16	70	34	0,370	CRX.NBF.16	15,45
NBF 18	4100	2800	2000	18	85	40	0,530	CRX.NBF.18	19,55
NBF 22	6300	4500	3200	22	115	50	1,065	CRX.NBF.22	30,90
NBF 26	7600	7100	5000	26	140	65	1,825	CRX.NBF.26	45,30

* on request

cromox Fork hook, G5

Type NGHF with safety flap

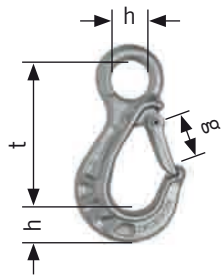
Descrip-tion	WLL [kg]	Dim. [mm] t	g	h	Weight ca. [kg]	Order-No.	Price/ piece €
NGHF 06	750	78	25	22	0,400	CX.NGHF.06	56,70
NGHF 08	1250	97	32	28	0,760	CX.NGHF.08	77,30
NGHF 10	2000	121	41	34	1,440	CX.NGHF.10	114,50
NGHF 13	3200	143	48	47	2,600	CX.NGHF.13	-
NGHF 16	5000	180	69	57	4,900	CX.NGHF.16	230,50



cromox Eyehook, G5

Type NOHF with safety flap

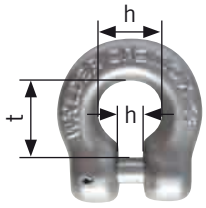
Descrip-tion	WLL [kg]	Dim. [mm] t	g	b	h	Weight ca. [kg]	Order-No.	Price/ piece €
NOHF 04	300	75	20	17	17	0,185	CX.NOHF.04	47,40
NOHF 06	750	100	25	25	22	0,350	CX.NOHF.06	50,50
NOHF 08	1250	126	32	27	28	0,790	CX.NOHF.08	65,90
NOHF 10	2000	160	39	37	34	1,370	CX.NOHF.10	109,00
NOHF 13	3200	190	51	48	45	3,000	CX.NOHF.13	149,50
NOHF 16	5 000	230	66	55	51	4,800	CX.NOHF.16	212,00
NOHF 18	7 000	230	66	55	51	4,800	CX.NOHF.18	226,50



cromox Fork Shackle G5

TYP NGS

Descrip-tion	WLL [kg]	Dim [mm] t	b	a	Weight ca. [kg]	Order-No.	Price/ piece €
NGS 06	750	26	20	7	0,160	CRX.NSG.06	???
NGS 08	1250	30	23	9	0,230	CRX.NSG.08	???
NGS 10	2000	40	28	11	0,460	CRX.NSG.10	???
NGS 13	3200	48	38	14	0,675	CRX.NSG.13	???
NGS 16	5000	50	44	17	1,130	CRX.NSG.16	???



cromox Stop Chains-Construction Kit G5, similar to DIN 5688-1

NEW cromox D-Shackle, G5

Typ NSA tested

Descrip-tion	WLL [kg]	Dimensions a	d	t	b	Weight ca. [kg]	Order-No.	Price/ piece €
		[mm]						
NSA 04	300	7	6	23	12	0,035	CRX.NSA.04	2,68
NSA 05	500	9	8	24	17	0,070	CRX.NSA.05	5,10
NSA 06	750	11	10	35	20	0,135	CRX.NSA.06	9,17
NSA 08	1 250	13	12	42	25	0,220	CRX.NSA.08	12,20
NSA 10	2 000	18	16	64	32	0,510	CRX.NSA.10	26,70
NSA 13	3 200	21	19	76	38	0,910	CRX.NSA.13	43,15
NSA 16	5 000	19	16	64	32	0,550	CRX.NSA.16	84,50
NSA 18	6 300	22	19	76	38	1,000	CRX.NSA.18	143,00
NSA 20	9 000	26	22	88	44	1,900	CRX.NSA.20	223,50
NSA 22	11 000	29	25	102	51	2,900	CRX.NSA.22	307,00
NSA 26	13 000	32	29	114	57	3,100	CRX.NSA.26	478,00
NSA 27	15 000	35	32	128	64	4,350	CRX.NSA.27	657,00
NSA 28	18 000	38	35	140	70	5,300	CRX.NSA.28	871,50

cromox Safety D-Shackle, G5

Type NSS tested

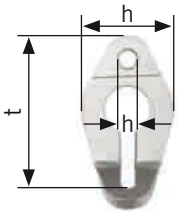
Descrip-tion	WLL [kg]	Dimensions a	d	t	b	Weight ca. [kg]	Order-No.	Price/ piece €
		[mm]						
NSS 04	300	7	6	23	12	0,035	CRX.NSS.04	2,88
NSS 05	500	9	8	24	17	0,070	CRX.NSS.05	5,36
NSS 06	750	11	10	35	20	0,135	CRX.NSS.06	9,48
NSS 08	1250	13	12	42	25	0,225	CRX.NSS.08	12,90
NSS 10	2000	18	16	64	32	0,540	CRX.NSS.10	28,75
NSS 13	3200	21	19	76	38	0,945	CRX.NSS.13	45,20

cromox Bolt and security pin

for NGHF and NGS

Descrip-tion	Weight [kg]	Order-No.	Price/ piece €
NBP 06 8x28	0,010	CRX.NBP.06	8,24
NBP 08 10x32	0,020	CRX.NBP.08	13,40
NBP 10 13x40,5	0,045	CRX.NBP.10	14,40
NBP 13 16x45	0,070	CRX.NBP.13	20,60
NBP 16 20x55	0,140	CRX.NBP.16	25,75

Cromox Shortening NV, G5



Descrip-tion	WLL [kg]	Dimensions [mm] a	b	t	Weight ca. [kg]	Order-No.	Price/ piece €
NV 06	750	47	10	81	0,180	CX.NV.0006	47,40
NV 08	1250	70	12	94	0,380	CX.NV.0008	67,00
NV 10	2000	80	15	120	0,710	CX.NV.0010	85,50
NV 13	3200	91	20	150	1,180	CX.NV.0013	122,50
NV 16	5000	100	21	175	2,300	CX.NV.0016	221,50

cromox Security Set

for NGHF and NOH

Descrip-tion	Weight [kg]	Order-No.	Price/ piece €
NSG 04	0,026	CX.SNSG.04	21,65
NSG 06	0,030	CX.SNSG.06	22,65
NSG 08	0,050	CX.SNSG.08	24,70
NSG 10	0,095	CX.SNSG.10	26,80
NSG 13	0,150	CX.SNSG.13	29,85
NSG 16/18	0,250	CX.SNSG.16	34,00

The safest connection for cargo

Wrong lifting points = frequent safety risk

Do-it-yourself

PROHIBITED

Eye bolt DIN 580

PROHIBITED

RUD-PowerPoint-Star

ALLOWED

Screwable — **Lifting points screwable**

PP-S PP-B Page 112	**VRS** Page 114	**Inox-Star** Page 116
Attachm. point PSA Page 121	**VLBG** Page 117	**VWBG** Page 119
VWBG-V Page 118	**RS RM** Page 116	**VRBG** Page 120

Weldable — **Lifting points weldable**

VLBS Page 123	**WPP** Page 124	**WPPH** Page 125
VRBS-FIX Page 126	**VRBK-FIX** Page 127	**ABA** Page 128

Attachment points = Advantages
Every machine, every construction element must be provided with one or several suitable transport devices. Only in this way can during the single production sequences, with the assembly, with the delivery (train or truck transport), with the customer final assemly, an optimum of handling speed with a maximum of safety for staff and construction be guaranteed.

Lifting points – a mandatory necessity which has been given little attention by many constructors. Mostly eye bolts according to DIN 580 from C 15 are used or sheet constructions are provided which are construed neither for possible titled load or are oversized in such a way that hooks with a smaller mouth width and safety catch cannot be hung up.

Attention!
Eye bolts according to DIN 580 from material C 15 are only to be loaded only vertically or to 45 ° at an angle in ring level. Other loads are not permitted, however they are not avoidable!

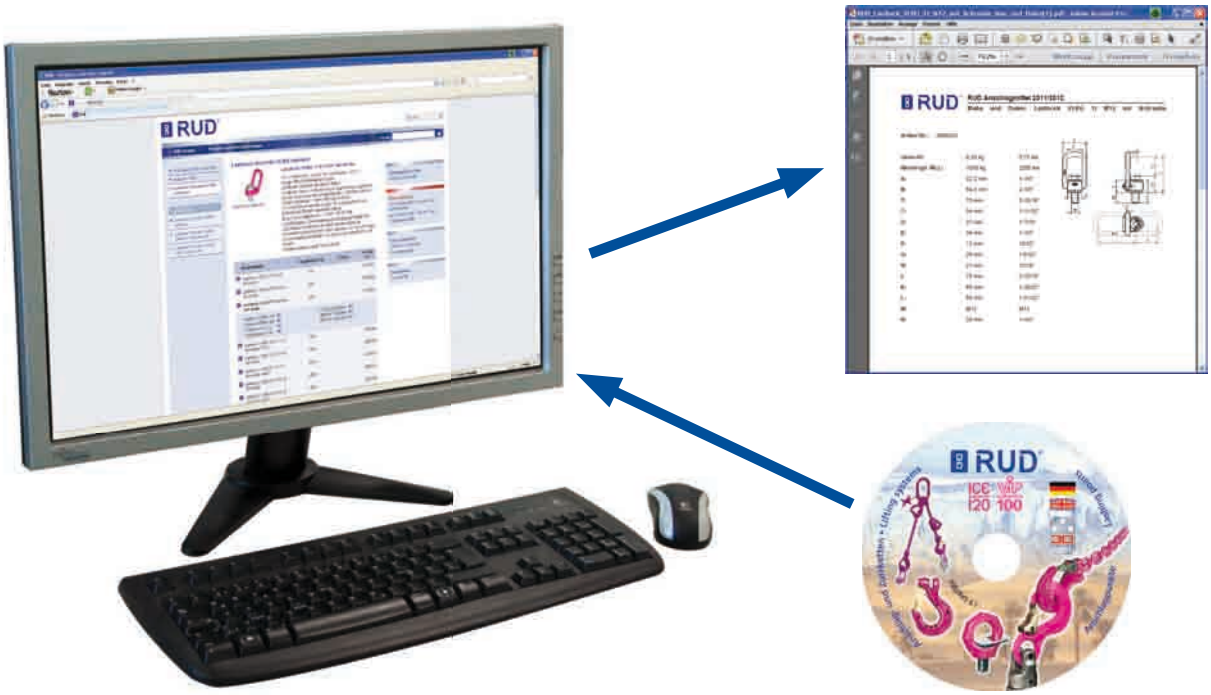
Help with the early planning of lifting points appropriate for safety:
- Reduce dangers of accident!
- Prevent damages and downtimes!
- Reduce transit times!

Info

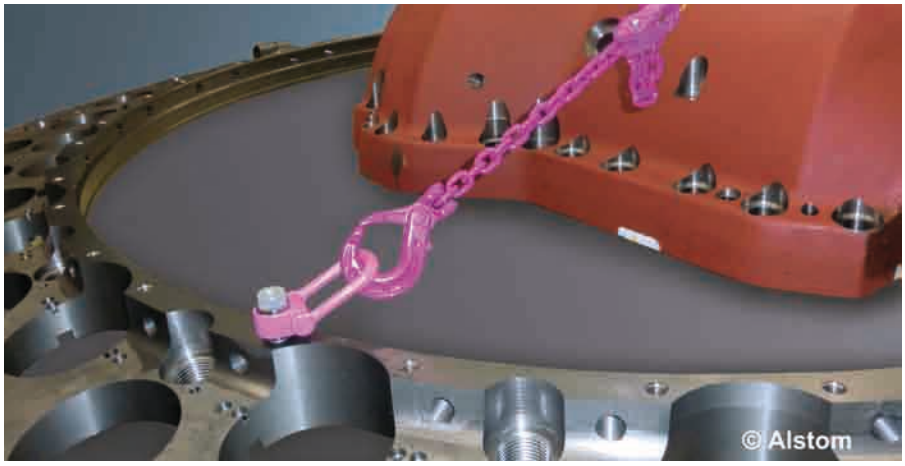
We have the right tools for you. Call us!
The perfect service for the CAD department
We offer to you geometry data for your construction.
CD-ROM for the calculation of the right lifting point. Especially helpful for the constructor is the 3D-representation of the lifting points.

Helpful tips for the user of RUD-lifting points

CD-ROM or www.rud.com



Over 280 different, tested lifting points, from them 200 pieces in screwable and 80 in weldable construction, can according to their operation conditions be selected, requested and ordered. Thereby the weight of the load, the number of the used lifting points as well as the inclinations of the lifting equipment is considered.
With all lifting points the load-carrying capacities can be retrieved via mouse click for 14 different application cases. Through the logical structure – or simpler– through search words, e.g. thread size for lifting points, you make your preselection of the desired products. You can take chosen products over to a shopping cart, update them when required and print them out. Through a calculation module the necessary lashing chains for lashing down, tilted and diagonal lashes be determined and taken over to the shopping cart. More than 240 lifting points and more than 260 VIP and ICE components are exportable as 3D-CAD models in the IGES format and as a 2D-representation in the DXF format and are available to the constructor at the operating level of his CAD system.



Order number	Price €
CD.ROM.001	for free*

* with your next order

VIP-lifting capacity poster

Width 625 mm x height 420 mm.
Grade 12-ICE, 10-VIP and Grade 8.

Order number	Price €
VP.TRPOST	on request

Info

You receive the RUD points with the new RUD-ID system. Through the innovative fastening technology of the transponder use is possible in difficult industrial environments is possible. For more infos please contact us!

Lifting points – screwable

Max. transportation weight „G“ in „t“ for different lifting methods

RUD-lifting points = Plus points

- All carrying parts crack tested or test loaded according to EN 1677
- With screwable RUD-lifting points also the screws are 100 % crack tested
- 4-fold safety in every load direction
- Adjust type VRS and LBG in load direction
- RUD-patented features, such as clamp spring (LBS) for silencing and distance knobs for the perfect root seam welding increase the areas of application.
- Low construction heights, high dynamic and static strengths
- The RUD-lifting points-CD facilitates the correct construction of lifting points

Schraubbar

			Power-Point-Star		Power-Point-B		Power-Point-VIP		VLBG-load ring-thread														WBG-V swivel block-thread-Vario										
			PP 0,63 t	PP 1,5 t	PP 2,5 t	PP 4 t	PP 5 t	PP 8 t	VLBG 0,3 t	VLBG 0,63 t	VLBG 1 t	VLBG 1,5 t	VLBG 2,5 t	VLBG 4 t	VLBG 4 t	VLBG 5 t	VLBG 7 t	VLBG 8 t	VLBG 10 t	VLBG 15 t	VLBG 20 t	LBG M16 RS 1 t	LBG M20 RS 2 t	VWBG-V-0,3 t	VWBG-V-0,45 t	VWBG-V-0,6 t	VWBG-V-1,0 t	VWBG-V-1,3 t	VWBG-V-1,8 t	VWBG-V-2 t	VWBG-V 2 t	VWBG-V-3,5 t	VWBG-V-3,5 t	VWBG-V-5 t
			Page 112		Page 113		Page 113		Page 117				adjust to direction of the force										Page 118				ball bearing mounted						
	Stringno.	Load direction	Thread ty. M 12	M 16	M 20	M 24	M 30	M 36	M 8	M 10	M 12	M 16	M 20	M 24	M 27	M 30	M 36	M 36	M 42	M 42	M 48	M 16	M 20	M 8	M 10	M 12	M 14	M 16	M 18	M 20	M 22	M 24	M 27	M 30
G	1	0°	0,6	1,5	2,5	4	6,7	10	0,3	0,6	1	1,5	2,5	4	4	5	7	8	10	15	20	1	2	0,6	0,9	1,2	2,0	2,6	3,6	4	4	7	7	10
A G	2	0°	1,2	3	5	8	13,4	20	0,6	1,2	2	3	5	8	8	10	14	16	20	30	40	2	4	1,2	1,8	2,4	4,0	5,2	7,2	8	8	14	14	20
G	1	90°	0,6	1,5	2,5	4	5	8	0,3	0,6	1	1,5	2,5	4	4	5	7	8	10	15	20	1	2	0,3 (0,4)	0,4 (0,6)	0,6 (0,7)	1,0 (1,25)	1,3 (1,5)	1,8 (2,0)	2 (2,5)	2 (2,5)	3,5 (4)	3,5 (4)	5 (6)
G	2	90°	1,2	3	5	8	10	16	0,6	1,2	2	3	5	8	8	10	14	16	20	30	40	2	4	0,6 (0,8)	0,9 (1,2)	1,2 (1,5)	2,0 (2,5)	2,6 (3)	3,6 (4,0)	4 (5)	4 (5)	7 (8)	7 (8)	10 (12)
β G	2	0-45°	0,8	2,1	3,5	5,6	7,1	11,2	0,4	0,8	1,4	2,1	3,5	5,6	5,6	7	9,8	11,2	14	21	28	1,4	2,8	0,4	0,6	0,8	1,4	1,8	2,5	2,8	2,8 (3,5)	4,9	4,9 (5,6)	7
	2	45-60°	0,6	1,5	2,5	4	5	8	0,3	0,6	1	1,5	2,5	4	4	5	7	8	10	15	20	1	2	0,3	0,4	0,6	1,0	1,3	1,8	2	2 (2,5)	3,5	3,5 (4)	5
G	2	asymmetric	0,6	1,5	2,5	4	5	8	0,3	0,6	1	1,5	2,5	4	4	5	7	8	10	15	20	1	2	0,3	0,4	0,6	1,0	1,3	1,8	2	2 (2,5)	3,5	3,5 (4)	5
β G	3+4	0-45°	1,3	3,2	5,3	8,4	10,5	16,8	0,6	1,3	2,1	3,1	5,2	8,4	8,4	10,5	14,7	16,8	21	31,5	42	2,1	4,2	0,6	0,9	1,2	2,1	2,7	3,7	4,2	4,2 (5,25)	7,3	7,3 (8,4)	10,5
	3+4	45-60°	0,9	2,2	3,8	6	7,5	12	0,4	0,9	1,5	2,2	3,7	6	6	7,5	10,4	12	15	22,5	30	1,5	3	0,4	0,6	0,9	1,5	1,9	2,7	3	3 (3,75)	5,2	5,2 (6)	7,5
G	3+4	asymmetric	0,6	1,5	2,5	4	5	8	0,3	0,6	1	1,5	2,5	4	4	5	7	8	10	15	20	1	2	0,3	0,4	0,6	1,0	1,3	1,8	2	2 (2,5)	3,5	3,5 (4)	5

Lifting capacities Attachment points

MADE IN GERMANY

SIP

Test criteria for lifting points

- For lifting points apply the regulations of the Betr.-Sich.-V. / BGR 500, 2.8.
- Regard operating, assembly and welding incstructions.
- After the assembly and before every startup lifting points are to be checked on functionality and operational capability.

Info

RUD components and chains are according to DIN EN 818 and 1677 construed for a dynamic load of 20.000 load cycles. The German professional association recommends: „At a high dynamic load with high number of cycles (continuous operation) the factor stress needs to be reduced.“

WBG-Load ring-thread																			VRS Starpoint-Vario-Eye bolt										INOX-Star					RS/RM high-strength eye bolt, lifting eye nut												VRBG/RBG load ring thread					
VWBG 6 (7,5)	VWBG 8 (10)	VWBG 8 (10) Sonder	VWBG 12 (13)	VWBG 12 (13) Sonder	VWBG 12 (15)	VWBG 13 (16)	VWBG 13 (16) Sonder	VWBG 14 (20)	VWBG 16 (22)	VWBG 16 (22) Sonder	VWBG 16 (25)	VWBG 16 (25) Sonder	VWBG 31,5 (40)	VWBG 31,5 (40) Sonder	VWBG 35 (48)	VWBG 35 (48) Sonder	VWBG 40 (50)	VWBG 40 (50) Sonder	VRS/VRM-M6	VRS/VRM-M8	VRS/VRM-M10	VRS/VRM-M12	VRS/VRM-M16	VRS/VRM-M20	VRS/VRM-M24	VRS/VRM-M30	VRS/M36	VRS/M42	VRS/M48	INOX M12	INOX M16	INOX M20	INOX M24	INOX M30	RS-M6	RS-M8	RS-M10	RS-M12	RS-M14	RS-M16	RS-M20	RS-M24	RS-M30	RS-M36	RS-M42	RS-M48	RBG 3 t	VRBG 10 t	VRBG 1 t	VRBG 30 t	VRBG 50 t	VRBG 80 t
Page 119								ball bearing mounted											Page 114 adjust in direction of force										Page 116					S. 116 avoid rotation												P. 120 - 80 t lift capacity					
M 33	M 36		M 42		M 45	M 48		M 52	M 56		M 64		M 72		M 80		M 90		M 6	M 8	M 10	M 12	M 16	M 20	M 24	M 30	M 36	M 42	M 48	M 12	M 16	M 20	M 24	M 30	M 6	M 8	M 10	M 12	M 14	M 16	M 20	M 24	M 30	M 36	M 42	M 48	M 16	M 30	M 30	M 30	M 36	M
15	15	15	17	17	18	18	18	25	28	28	28	28	50	50	50	50	50	50	0,5	1	1	2	4	6	8	12	16	24	32	1,2	2,4	3,6	5,2	-	0,4	0,8	1	1,6	3	4	6	8	12	16	24	32	3	10	16	30	50	80
30	30	30	34	34	36	36	36	50	56	56	56	56	100	100	100	100	100	100	1	2	2	4	8	12	16	24	32	48	64	2,4	4,8	7,2	10,4	-	We recommend for this type of suspension, the use of the „VRS Starpoint“, which is adjustable in the direction of force.												6	20	32	60	100	160
6 (7,5)	8 (10)	8 (10)	12 (13)	12 (13)	12 (15)	13 (16)	13 (16)	14 (20)	16 (22)	16 (22)	16 (25)	16 (25)	31,5 (40)	31,5 (40)	35 (48)	35 (48)	40 (50)	40 (50)	0,1	0,3	0,4	0,7	1,5	2,3	3,2	4,5	7	9	12	0,5	1,0	2,0	2,5	-													3	10	16	30	50	80
12 (15)	16 (20)	16 (20)	24 (26)	24 (26)	24 (30)	26 (32)	26 (32)	28 (40)	32 (44)	32 (44)	32 (50)	32 (50)	63 (80)	63 (80)	70 (96)	70 (96)	80 (100)	80 (100)	0,2	0,6	0,8	1,5	3	4,6	6,4	9	14	18	24	1,0	2,0	4,0	5,0	-													6	20	32	60	100	160
8,4 (10,5)	11,2 (14)	11,2 (14)	16,8 (18,2)	16,8 (18,2)	16,8 (21)	18,2 (22,4)	18,2 (22,4)	19,6 (28)	22,4 (30,8)	22,4 (30,8)	22,4 (35)	22,4 (35)	44,1 (56)	44,1 (56)	49 (67,2)	49 (67,2)	56 (70)	56 (70)	0,14	0,42	0,5	1	2,1	3,2	4,5	6,3	9,8	12,6	16,8	0,7	1,4	2,8	3,5														4,2	14	22,4	42	70	112
6 (7,5)	8 (10)	8 (10)	12 (13)	12 (13)	12 (15)	13 (16)	13 (16)	14 (20)	16 (22)	16 (22)	16 (25)	16 (25)	31,5 (40)	31,5 (40)	35 (48)	35 (48)	40 (50)	40 (50)	0,1	0,3	0,4	0,7	1,5	2,3	3,2	4,5	7	9	12	0,5	1,0	2,0	2,5														3	10	16	30	50	80
6 (7,5)	8 (10)	8 (10)	12 (13)	12 (13)	12 (15)	13 (16)	13 (16)	14 (20)	16 (22)	16 (22)	16 (25)	16 (25)	31,5 (40)	31,5 (40)	35 (48)	35 (48)	40 (50)	40 (50)	0,1	0,3	0,4	0,7	1,5	2,3	3,2	4,5	7	9	12	0,5	1,0	2,0	2,5														3	10	16	30	50	80
12,6 (15,75)	16,8 (21)	16,8 (21)	25,2 (27,3)	25,2 (27,3)	25,23 (31,5)	27,3 (33,6)	27,3 (33,6)	29,4 (42)	33,6 (46,2)	33,6 (46,2)	33,6 (52,5)	33,6 (52,5)	66,15 (84)	66,15 (84)	73,5 (100,8)	73,5 (100,8)	84 (105)	84 (105)	0,21	0,63	0,8	1,6	3,1	4,8	6,7	9,4	14,7	18,9	25,2	1,0	2,1	4,2	5,3														6,3	21	33,6	63	105	168
9 (11,25)	12 (15)	12 (15)	18 (19,5)	18 (19,5)	18 (22,5)	19,5 (24)	19,5 (24)	21 (30)	24 (33)	24 (33)	24 (37,5)	24 (37,5)	47,25 (60)	47,25 (60)	52,5 (72)	52,5 (72)	60 (75)	60 (75)	0,15	0,45	0,6	1,1	2,2	3,4	4,8	6,7	10,5	13,5	18	0,7	1,5	3,0	3,7														4,5	15	24	45	75	120
6 (7,5)	8 (10)	8 (10)	12 (13)	12 (13)	12 (15)	13 (16)	13 (16)	14 (20)	16 (22)	16 (22)	16 (25)	16 (25)	31,5 (40)	31,5 (40)	35 (48)	35 (48)	40 (50)	40 (50)	0,1	0,3	0,4	0,7	1,5	2,3	3,2	4,5	7	9	12	0,5	1,0	2,0	2,5														3	10	16	30	50	80

Info

Please regard the operating instructions on page 130.

PowerPoint-Star screwable lifting points

The universal solution for all requirements

- Fitting for every lifting equipment of the according carrying capability
- Loadable on all sides, cardanlike swivelling, 360° rotating
- Double ball bearing mounted, under load rotating without jolt
- Thickened hook tip against improper application
- Optimized design prevents damages to lifting equipment and the valuable load during turning
- Robust, side insensitive, drop forged, hardened and tempered hook-safety-trap
- No protruding hook tip, no unintentional hooking
- Wear marking on the hook
- Measurable overload test
- Made in Germany
- Construction part protected by patent
- Not suitable for continuous rotations under full load

Please regard the instruction manual by all means!

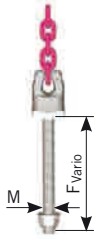
PP-S

WPP-S
weldable

PP-S-Vario

PP-B-Vario

PP-VIP-Vario



For FVario with washers and nut. All types in special lengths on request. Measure FVario see WBGV (Page 118).

Threadadapter For RUD lifting points

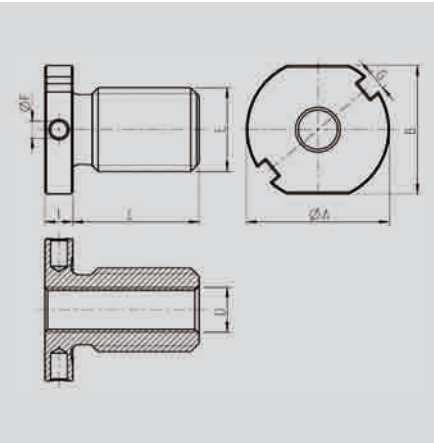
The problem solver for many applications

Often are already on the transport object tapped holes for old DIN-eye bolts. When high strength screwable lifting points are to be used, then these holes are mostly oversized and oversized lifting points have to be used.

Here the RUD-thread adapter offers the optimal solution. The outer thread is attuned to the old thread and the inner thread to the new, screwable lifting point. This saves complex fittings or expensive purchases.
Equipped is the RUD-thread adapter with a flat or the open-wrench assembly, with a nut for the hook spanner assembly as well as a drill for a mounting pin. A permanent marking with the thread size is on the upper side.

Also deliverable with fine and inch thread!

Thread sizes outside/inside	AØ [mm]	B [mm]	C [mm]	FØ [mm]	G [mm]	T [mm]	Order-No.	Price Piece €
M16/M8	35	30	20	5	6	8	RD.GA.1608	40,05
M20/M10	38	32	24	5	6	9	RD.GA.2010	41,60
M24/M12	42	36	28	5	6	9	RD.GA.2412	43,35
M30/M16	51	46	36	6	7	10	RD.GA.3016	63,20
M36/M20	65	55	43	6	8	12	RD.GA.3620	77,50
M42/M24	82	70	50	8	10	16	RD.GA.4224	194,50
M48/M24	82	70	58	8	10	16	RD.GA.4824	203,00
M56/M30	100	90	67	8	10	16	RD.GA.5630	212,50
M64/M36	110	95	77	8	10	16	RD.GA.6436	224,50
M72/M42	110	95	86	8	10	16	RD.GA.7242	on request
M80/M48	110	95	96	8	10	16	RD.GA.8048	on request
M90/M48	120	100	108	8	10	16	RD.GA.9048	on request



PowerPoint-Star PowerPoint-collection

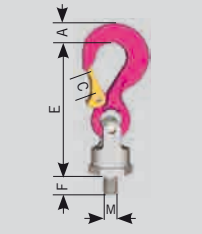
Unattainable variety of applications

Example of use PP-S

- Loadable on all sides, cardanlike swivelling, 360° rotating
- Clear marking of the lifting capacity
- 4-fold tested safety
- Double ball bearing mounted, thereby rotating under full load
- Shapely design
- Cr, Ni, Mo-steel, specially tempered
- All parts100 % crack tested
- Max. lifting capacity with smallest thread-Ø
- Variable screw length - also for through holes
- Fluorescent pink powder coating attachment parts
- Fast amortisation through better handling, no damages through safe transport – also with the load securing
- Only mount original RUD-VIP-chains and components

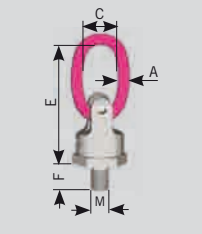
PowerPoint Star

Lifting capacity [kg]	Measurements [mm] M	A	C	E	F	Order-No.	Price € Piece
630	12	13	18	116	18	PP.ST.06.00	71,90
1500	16	20	25	147	25	PP.ST.15.00	90,70
2500	20	28	30	187	30	PP.ST.25.00	114,00
4000	24	36	35	227	36	PP.ST.40.00	160,00
5000 (6700)	30	37	40	267	45	PP.ST.50.00*	233,50
8000 (10000)	36	49	48	310	54	PP.ST.80.00*	369,00



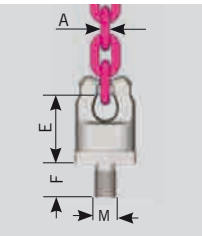
PowerPoint B – eye connection for hook hangers

Lifting capacity [kg]	Measurements [mm] M	A	C	E	F	Order-No.	Price € Piece
630	12	9	35	105	18	PP.B0.06.00	60,20
1500	16	11	35	115	25	PP.B0.15.00	64,70
2500	20	13	40	135	30	PP.B0.25.00	102,50
4000	24	16	45	172	36	PP.B0.40.00	143,00
5000 (6700)	30	21	60	223	45	PP.B0.50.00*	187,50
8000 (10000)	36	24	65	242	54	PP.B0.80.00*	290,50



PowerPoint VIP – Direct VIP-chain connection

Lifting capacity [kg]	Measurements [mm] M	A	E	F	Order-No.	Price € Piece
630	12	4	41	18	PP.VIP.060	51,40
1500	16	6	50	25	PP.VIP.150	54,00
2500	20	8	61	30	PP.VIP.250	81,70
4000	24	10	77	36	PP.VIP.400	114,00
5000 (6700)	30	13	93	45	PP.VIP.500*	150,00
8000 (10000)	36	16	102	54	PP.VIP.800*	233,00



MO 075110

Surcharge | Screwable

*For vertical loading high load capacity

Maximum transport weight „G“ in t for Starpoint-eyebolt for different lifting methods

Lifting method	G	G1	G	G	G		G	G		G
Number	1	1	2	2	2	2	2	3and4 4	3and4	3 and 4
Inclination β	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Factor	1	1	2	2	1,4	1	1	2,1	1,5	1
PP.06	0,63	0,63	1,26	1,26	0,88	0,63	0,63	1,32	0,95	0,63
PP.15	1,5	1,5	3,0	3,0	2,1	1,5	1,5	3,15	2,25	1,5
PP.25	2,5	2,5	5,0	5,0	3,5	2,5	2,5	5,25	3,75	2,5
PP.40	4,0	4,0	8,0	8,0	5,6	4,0	4,0	8,4	6,0	4,0
PP.50	6,7	5,0	13,4	10,0	7,1	5,0	5,0	10,5	7,5	5,0
PP.80	10,0	8,0	20,0	16,0	11,2	8,0	8,0	16,8	12,0	8,0

Attention: For asymmetric load distribution Starpoint needs to carry the max. transport weight! G = F.

Info

The special service for the CAD department. Next to the usual construction templates we offer the geometry data of the liftings points on CD-ROM. The constructor can integrate these data directly into his system und receives a perfect 3-dimensional representation of the lifting points.

VRS Starpoint-eye bolt with integrated key plate

Adjustment to the pull direction made easy

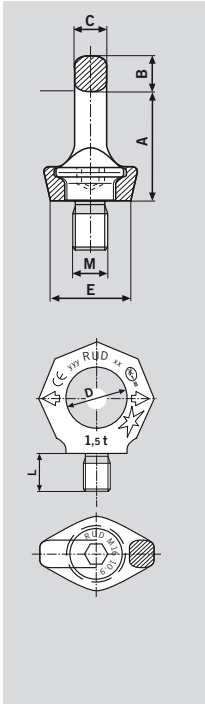
VRS-F fixed

rotating

For the assembly without tools the Starpoint-eye bolt is delivered with a tempered key plate (Typ VR.SF). Very simple: key plate in socket screw - A screw in and out by hand is possible. Finally remove key plate. - VRS is rotating! Through the adjustment in direction of force the unintentional unscrewing or overtightening of the eye bolt is prevented.

- Up to 5,8-fold higher lifting capacity than an eye bolt DIN 580
- Before load adjust in direction of force
- 4-fold safety
- Captive hexagon socket-special screw, 100 % crack tested
- Component protected by patent
- On request also deliverable with longer thread

Lifting capacity [kg]	M	A	B	C	D	E	L	Order-No.	Price € Piece
	Measurements [mm]								
100	6	27	9	7	20	23	9	VR.SF.0010	30,85
300	8	34	11	8,5	25	25	12	VR.SF.X040	25,50
400	10	34	11	8,5	25	25	15	VR.SF.0040	25,50
750	12	42	13	10	30	30	18	VR.SF.0075	31,40
1500	16	49	15	14	35	35	24	VR.SF.0150	36,40
2300	20	57	17	16	40	42	30	VR.SF.0230	48,15
3200	24	69	21	19	48	50	36	VR.SF.0320	64,10
4500	30	86	26	24	60	60	45	VR.SF.0450	100,00
7000	36	103	32	29	72	75	54	VR.SF.0700	135,00
9000	42	120	38	34	82	85	63	VR.SF.0900	189,00
12000	48	137	43	38	94	100	72	VR.SF.1200	232,50
100	6	27	9	7	20	23	9	VR.SM.0010	30,85
300	8	34	11	8,5	25	25	12	VR.SM.X040	22,60
400	10	34	11	8,5	25	25	15	VR.SM.0040	22,60
750	12	42	13	10	30	30	18	VR.SM.0075	27,45
1500	16	49	15	14	35	35	24	VR.SM.0150	33,50
2300	20	57	17	16	40	40	30	VR.SM.0230	45,95
3200	24	69	21	19	48	48	36	VR.SM.0320	61,20
4500	30	86	26	24	60	60	45	VR.SM.0450	93,60
7000	36	103	32	29	72	75	54	VR.SM.0700	130,00
9000	42	120	38	34	82	85	63	VR.SM.0900	183,50
12000	48	137	43	38	94	100	72	VR.SM.1200	219,00



Surcharge | Screwable

Starpoint-eyebolt with(VR.SF.) and without key plate (VR.SM.)

Maximum transport weight „G“ in t for Starpoint-eyebolt for different lifting methods

Lifting method	G	G1	G	G	G	G	G	G	G	G
Number	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Inclination β	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Factor		1		2	1,4	1	1	2,1	1,5	1
VR.SF.0010	0,5	0,1	1	0,2	0,14	0,1	0,1	0,21	0,15	0,1
VR.SF.X040	1	0,3	2	0,6	0,42	0,3	0,3	0,63	0,45	0,3
VR.SF.0040	1 (0,23)	0,4 (X)	2 (0,46)	0,8 (X)	0,56 (0,17)	0,4 (X)	0,4 (X)	0,84 (X)	0,6 (X)	0,4 (X)
VR.SF.0075	2 (0,34)	0,75 (X)	4 (0,68)	1,5 (X)	1 (0,24)	0,75 (X)	0,75 (X)	1,6 (X)	1,12 (X)	0,75 (X)
VR.SF.0150	4 (0,7)	1,5 (X)	8 (1,4)	3 (X)	2,1 (0,5)	1,5 (X)	1,5 (X)	3,15 (X)	2,25 (X)	1,5 (X)
VR.SF.0230	6 (1,2)	2,3 (X)	12 (2,4)	4,6 (X)	3,22 (0,83)	2,3 (X)	2,3 (X)	4,83 (X)	3,45 (X)	2,3 (X)
VR.SF.0320	8 (1,8)	3,2 (X)	16 (3,6)	6,4 (X)	4,48 (1,22)	3,2 (X)	3,2 (X)	6,7 (X)	4,8 (X)	3,2 (X)
VR.SF.0450	12 (3,6)	4,5 (X)	24 (7,2)	9 (X)	6,3 (2,6)	4,5 (X)	4,5 (X)	9,4 (X)	6,7 (X)	4,5 (X)
VR.SF.0700	16 (5,1)	7 (X)	32 (10,2)	14 (X)	9,8 (3,7)	7 (X)	7 (X)	14,7 (X)	10,5 (X)	7 (X)
VR.SF.0900	24 (7)	9 (X)	48 (14)	18 (X)	12,6 (5)	9 (X)	9 (X)	18,9 (X)	13,5 (X)	9 (X)
VR.SF.1200	32 (8,6)	12 (X)	64 (17,2)	24 (X)	16,8 (X)	12 (X)	12 (X)	25,2 (X)	18 (X)	12 (X)

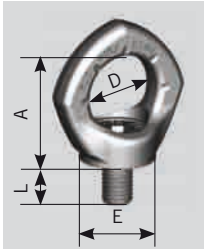
Values in brackets conform to eye bolt DIN 580! (X) marked values for eye bolt DIN 580 are not permitted!

Attention: For asymmetric load distribution Starpoint needs to carry the max. transport weight! G = F.

INOX-Star The stainless eye bolt

Adjustable in direction of movement

- Pentashaped – clear distinction from the DIN 580 eye bolt
- 360°-rotating, adjustable in load direction
- Clear rated lifting capacity indication for the most unfavorable load range. 4-fold safety against breaking
- Ring body drop-forged
- Material of ring body and bolt: 1.4462, Duplex-steel
- 100 % crack tested
- Bolt mounted captive - tighten by hand with socket
- Patented wear markings on ring body



Description	Rated lifting capacity [kg]	Measurements [mm] A	D	E	L	Weight [kg]	Order-No.	Price/Piece €
Inox-Star-M12	500	43	30	30	18	0,20	IX.ST.06.12	54,90
Inox-Star-M16	1000	50	35	35,5	24	0,28	IX.ST.12.16	62,10
Inox-Star-M20	2000	57	40	41,5	30	0,56	IX.ST.18.20	76,50
Inox-Star-M24	2500	70	48	50	35	1,03	IX.ST.26.24	110,50

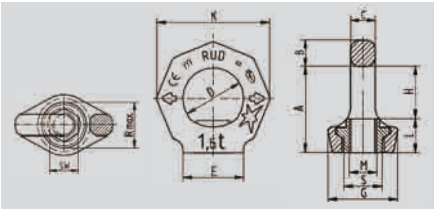
Surcharge | Screwable

VRM Starpoint-ring nut

Complies Machinery Directive 2006/42/EG

- The ring body of the STARPOINT-nut has to be rotating around 360° in the firmly screwed statero. Before hanging up of the lifting device adjust in direction of force.
- Flat screw mounting surface (E) needs to be ensured. The nut thread needs to be filled 100 % with the bolt thread. The mounted threaded pin needs to ensure, that the supporting surface of the ring nut can be mounted on the screwing surface.
- For rotation under load (z.B. turning procedures) use the double ball bearing mounted PowerPoint-Collection
- Lifting capacity values are only valid in connection with the thread bolt grade 10.9 min.

Attention: Follow the inctructions!
4-fold safety – loadable on all sides!



Rated lifting capacity [kg]	Description	Weight [kg]	Measurements [mm] A	B	C	D	E	G	H	K	L	M	Rmax	S	SW	Order-No.	Price/Piece €
100	VRM-M6	0,06	28	9	7	20	23	28	16	37	11	6	16	13	9	VRM.010.06	38,70
300	VRM-M8	0,1	34	11	8,5	25	25	28	20	47	14	8	20	16	12	VRM.040.08	29,50
400	VRM-M10	0,1	34	11	8,5	25	25	28	20	47	14	10	20	16	12	VRM.040.10	34,55
750	VRM-M12	0,2	42	13	10	30	30	34	25	56	17	12	24	20	14	VRM.075.12	37,45
1500	VRM-M16	0,3	51	15	14	35	35,5	40	30	65	21	16	30	22(35,5)	19	VRM.150.16	48,15
2300	VRM-M20	0,5	57	17	16	40	40	50	34	75	23	20	37	29	24	VRM.230.20	54,30
3200	VRM-M24	0,9	69	21	19	48	50	60	40	90	29	24	45	35	30	VRM.320.24	68,20
4500	VRM-M30	1,5	86	26	24	60	60	75	52	112	34	30	56	44	36	VRM.450.30	94,70

Surcharge | Screwable

Measurement „L“ corresponds to the minimum length of the bolt thread.

Offset Socket

For Starpoint VRS, INOX-Star, PSA-Starpoint-VRS and PSA-INOX-Star

Security against loosening of the screw at anchor points is significantly affected by the tightening torque of the screw. Lifting points that remain permanently on the force introduction point must be tightened to the torque corresponding with the associated manual.

The offset socket greatly facilitates the monitored tightening torque using a commercially available torque wrench.

- Follow operating instructions for lifting points and socket
- Socket is nickel plated, therefore usable for INOX-STAR

Starpoint	M6	M8	M10	M12	M16	M20	M24	M30	M36	M42	M48
Torque (Nm)	5	10	15	25	60	115	190	330	590	925	1400
Square drive	1/2“	1/2“	1/2“	1/2“	1/2“	1/2“	1/2“	3/4“	1“	1“	1“
Order-No.	**VRS.STS.06**	**VRS.STS.08**	**VRS.STS.10**	**VRS.STS.12**	**VRS.STS.16**	**VRS.STS.20**	**VRS.STS.24**	**VRS.STS.30**	**VRS.STS.36**	**VRS.STS.42**	**VRS.STS.48**
Price/Piece €	**77,20**	**77,20**	**77,20**	**79,90**	**82,60**	**86,20**	**88,90**	**95,00**	**103,60**	**134,00**	**155,00**

Observe the tightening torques of the appropriate operating instructions! Do not exceed a tightening torque of 12 Nm, VRS.STS.06!

RS/RM Eye bolt and ring nut

High-strength and unmistakable

Eye bolt

Ring nut

- Unmistakable in contrast to conventinal DIN-eye bolts and DIN-ring nuts through: red color and form = octagon, means grade 8.
- Marking: Clear lifting capacity indication for the most unfavorable load range, lateral force (for DIN 580 not permitted).
- Drop-forged, material 1.6541, tempered high-strength, 100% electromagnetic crack test, according to EN 1677-1.

4-fold safety: Screw in-Material St 37 (1.0037). For the use of the RS-eye bolts a clearance of the test commission of the BG-expert committee „Iron and metal“ exists. For the ring nut „RM“ the nut thread has to be filled up a 100 % with the bolt thread. Also deliverable in inch and special thread. During the use check on the strong fixation of the eye bolt and nut! Rotations during transport have to be avoided. Flat screwing surface (E) is to be ensured.

Info

Attention!

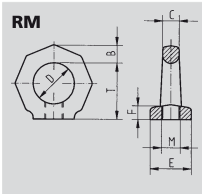
The eye bolt/ring nut – RS/RM is not to be loaded sideways, as these otherwise unscrew. Thereby not suitable for multi-strand suspension.

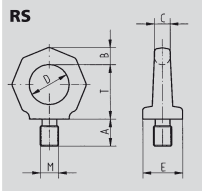
For sideway load use the Starpoint VRSF oder VRM.

See page 114-115.

drehbar

Description	Rated lift. capacity [kg]	A	B	C	D	E	F	M	T	Weight kg	Order-No. Eye bolt	Price/Piece €	Order-No. Ring nut	Price/Piece €
RS – M 6	100	12	11	10	25	25	11	6	35	0,1	**RS.0100.06**	**19,80**	**RM.0100.06**	**28,00**
RS – M 8	200	12	11	10	25	25	11	8	35	0,1	**RS.0200.08**	**20,30**	**RM.0200.08**	**29,40**
RS – M 10	250	15	11	10	25	25	11	10	35	0,1	**RS.0250.10**	**21,10**	**RM.0250.10**	**30,10**
RS – M 12	400	18	13	12	30	30	12	12	41	0,2	**RS.0400.12**	**26,60**	**RM.0400.12**	**34,10**
RS – M 14	750	21	15	14	35	35	13	14	48	0,25	**RS.0750.14**	**31,30**	**RM.0750.14**	**40,70**
RS – M 16	1000	24	15	14	35	35	13	16	48	0,3	**RS.1000.16**	**31,30**	**RM.1000.16**	**43,70**
RS – M 20	1500	30	17	16	40	40	16	20	55	0,45	**RS.1500.20**	**45,10**	**RM.1500.20**	**47,90**
RS – M 24	2000	36	21	20	50	50	20	24	70	0,7	**RS.2000.24**	**56,80**	**RM.2000.24**	**60,20**
RS – M 30	3000	45	26	24	60	60	25	30	85	1,6	**RS.3000.30**	**81,00**	**RM.3000.30**	**86,70**
RS – M 36	4000	54	43	38	90	100	37	36	130	6,0	**RS.4000.36**	**213,60**	**RM.4000.36**	**251,00**
RS – M 42	6000	63	43	38	90	100	37	42	130	6,2	**RS.6000.42**	**215,20**	**RM.6000.42**	**256,00**
RS – M 48	8000	68	43	38	90	100	37	48	130	6,4	**RS.8000.48**	**216,80**	**RM.8000.48**	**270,00**





In RUD ring nuts RM, the thread connector must be of at least grade 8.8 quality.

Surcharge | Screwable

MADE IN GERMANY

SIP

VLBG Lifting point with the twist – in VIP-quality

The RUD-loadbock „Thread“, adjustable in direction of force, 360° rotating!

Auch lieferbar in EDELSTAHL Rostfrei

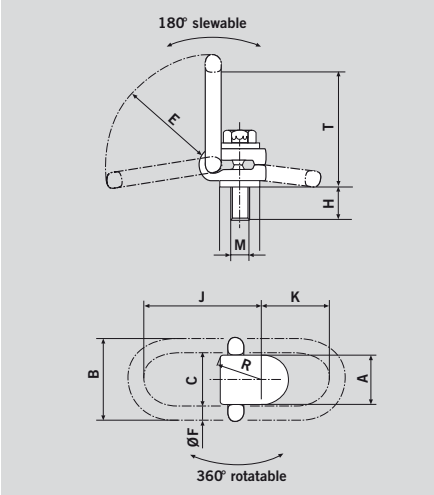
Material-No.: 1.4571

- Highest lifting capacity at smallest thread diameter
- Extremely compact
- Rotates in pull direction
- Only one tapped hole or through-hole necessary
- Variable screw length
- New universal screw captive, 100 % crack tested, surface protection corrud
- Surface pink powder coated
- Round sling easing mounting surface
- With rotations under load use the double ball bearing mounted PowerPoint-Collection
- Also more thread variations in storage, such as special lengths and fine threads

Lift. capacity [kg]	M	H Stand.	H max.	C	T	Order-No.	Price H Stand. €/Piece
300	8	11	76	34	75	VL.BG.08.00	???
630	10	16	96	34	75	VL.BG.10.00	???
1000	12	21	116	34	75	VL.BG.12.01	???
1500	16	25	149	36	85	VL.BG.16.01	55,80
2500	20	32	187	50	110	VL.BG.20.02	63,90
4000	24	37	222	50	125	VL.BG.24.04	68,60
4000	27	39	-	65	147	VL.BG.27.04	117,70
5000	30	49	279	65	147	VL.BG.30.05	124,50
7000	36	52	-	65	146	VL.BG.36.07	139,50
8000	36	63	223	80	197	VL.BG.36.08	245,50
10000	42	73	273	80	162	VL.BG.42.10	270,40
15000	42	63	263	100	222	VL.BG.42.15	318,70
20000	48	73	303	100	222	VL.BG.48.20	343,90
EDELSTAHL Rostfrei 1000	16	25	-	50	88	VL.BG.16.RF	156,50
2000	20	26	-	60	88	VL.BG.20.RF	175,50

Measurements [mm]

Surcharge Screwable



BG-PrüfZert MO 075131

Maximum transportation weight „G“ in t for RUD-load ring thread VLBG for different lifting methods

Lifting method	G Z	G1 90 X (Y)	A G	G	G	G	G	G	G	G
Strand number	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Load direction	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Faktor	2	1	4	2	1,4	1	1	2,1	1,5	1
VL.BG.08.00	0,3	0,3	0,6	0,6	0,42	0,3	0,3	0,63	0,45	0,3
VL.BG.10.00	0,63	0,63	1,26	1,26	0,88	0,63	0,63	1,32	0,95	0,63
VL.BG.12.01	1,0	1,0	2,0	2,0	1,4	1,0	1,0	2,1	1,5	1,0
VL.BG.16.0X	1,5	1,5	3,0	3,0	2,1	1,5	1,5	3,15	2,25	1,5
VL.BG.20.02	2,5	2,5	5,0	5,0	3,5	2,5	2,5	5,25	3,75	2,5
VL.BG.24.04	4,0	4,0	8,0	8,0	5,6	4,0	4,0	8,4	6,0	4,0
VL.BG.27.04	4,0	4,0	8,0	8,0	5,6	4,0	4,0	8,4	6,0	4,0
VL.BG.30.05	5,0	5,0	10,0	10,0	7,0	5,0	5,0	10,5	7,5	5,0
VL.BG.36.06	7,0	7,0	14,0	14,0	9,8	7,0	7,0	14,7	10,4	7,0
VL.BG.36.08	8,0	8,0	16,0	16,0	11,2	8,0	8,0	16,8	12,0	8,0
VL.BG.42.10	10,0	10,0	20,0	20,0	14,0	10,0	10,0	21,0	15,0	10,0
VL.BG.42.15	15,0	15,0	30,0	30,0	21,0	15,0	15,0	31,5	22,5	15,0
VL.BG.48.20	20,0	20,0	40,0	40,0	28,0	20,0	20,0	42,0	30,0	20,0
VL.BG.16.RF	1	1	2	2	1,4	1	1	2,1	1,5	1
VL.BG.20.RF	2	2	4	4	2,8	2	2	4,2	3	2

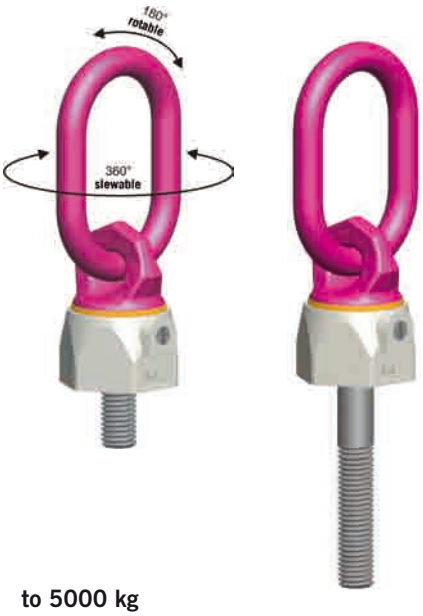
For frequent rotations under load (turning procedures) use ball bearing mounting type WBG, s. page 118!

EDELSTAHL Rostfrei

Sling technology

VWBG-V Swivel ring

The rotating lifting point, ball bearing mounted and loadable on all sides

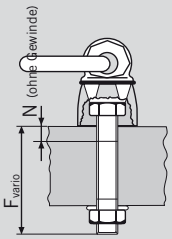


The RUD-swivel ring WBGV is ball bearing mounted and rotates under load in every direction. It is very easy to mount, as only one tapped hole is necessary.

- Under load 360° rotating
- Through ball bearing mount loadable on all sides
- 4-fold security
- Lifting capacity clearly marked
- Simple assembly, only one tapped hole
- Variable thread length (Vario) with washer and 100 % crack tested nut
- Suitable for through-holes
- High-strength, tested suspension eye according to EN 1677-4
- Screws 100 % crack tested
- Regard tightening torque from operating instuctions!

Info

Example for the determination of the necessary thread length F_{vario}:



board thickness 50 mm, through-holes for M20-screw,
Lifting capacity 2000 kg,
Length of the nut 17 mm,
Thickness of the washers 3 mm.

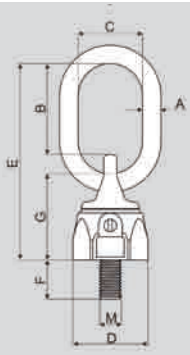
Order length WB.GV.20.00 x 70

to 5000 kg

Lift. capacity [kg]	Measurements [mm] M	C	D	N	T	$F_{Standard}$	F_{max}	Order-No.	Price $F_{Standard}$* €/piece
300**	8	29	30	18	76	13	102*	WB.GV.03.00	53,20
450**	10	29	36	19	78	17	122*	WB.GV.04.00	56,20
600	12	35	42	19	107	21	140*	WB.GV.06.00	60,20
1000	14	38	48		113	21	65	WB.GV.10.00	119,80
1300	16	38	48	28	113	25	180*	WB.GV.13.00	64,70
1800	18	35	64		137	27	83	WB.GV.18.00	129,80
2000	20	35	64	30	137	33	223*	WB.GV.20.00	107,50
2000	22	35	62		137	33	94	WB.GV.20.22	147,80
3500	24	40	81	25	173	40	255*	WB.GV.35.00	144,50
3500	27	40	81		173	40	92	WB.GV.35.27	317,80
5000	30	50	99	32	221	50	330*	WB.GV.50.00	193,00

Surcharge Screwable

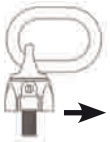
* Price F_{max} on request** without Cylindrical bearing socket



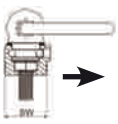
Maximum transportation weight „G“ in t for swivel ring Vario thread for different lifting methods

Lifting method	G Z	G1 X (Y)	G	G	G	G	G	G	G	G
Thread number	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Load direction	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Stress factor	2	1	4	2	1,4	1	1	2,1	1,5	1
WB.GV. 03.00	0,6	0,3 (0,4)	1,2	0,6 (0,8)	0,4 (0,56)	0,3 (0,4)	0,3 (0,4)	0,6 (0,84)	0,4 (0,6)	0,3 (0,4)
WB.GV. 04.00	0,9	0,45 (0,6)	1,8	0,9 (1,2)	0,6 (0,84)	0,45 (0,6)	0,45 (0,6)	0,9 (1,26)	0,6 (0,9)	0,45 (0,6)
WB.GV. 06.00	1,2	0,6 (0,7)	2,4	1,2 (1,5)	0,8 (1,05)	0,6 (0,75)	0,6 (0,75)	1,2 (1,58)	0,9 (1,12)	0,6 (0,75)
WB.GV.10.00	2,0	1,0 (1,25)	4,0	2,0 (2,5)	1,4 (1,75)	1,0 (1,25)	1,0 (1,25)	2,1 (2,62)	1,5 (1,87)	1,0 (1,25)
WB.GV.13.00	2,6	1,3 (1,5)	5,2	2,6 (3)	1,8 (2,1)	1,3 (1,5)	1,3 (1,5)	2,7 (3,15)	1,9 (2,25)	1,3 (1,5)
WB.GV.18.00	3,6	1,8 (2,0)	7,2	3,6 (4)	2,5 (2,8)	1,8 (2)	1,8 (2)	3,7 (4,2)	2,7 (3)	1,8 (2)
WB.GV. 20.00	4	2 (2,5)	8	4 (5)	2,8 (3,5)	2 (2,5)	2 (2,5)	4,2 (5,25)	3 (3,75)	2 (2,5)
WB.GV. 35.00	7	3,5 (4)	14	7 (8)	4,9 (5,6)	3,5 (4)	3,5 (4)	7,3 (8,4)	5,25 (6)	3,5 (4)
WB.GV. 50.00	10	5 (6)	20	10 (12)	7 (8,4)	5 (6)	5 (6)	10,5 (12,6)	7,5 (9)	5 (6)

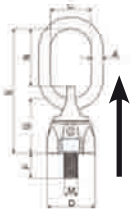
X
Load capacity - only allowed at RUD!



Y
manually adjusted, higher lifting capacity – ()-values



Z
vertical load



Attention: WBGs are not suitable for permenant rotation under load! Not rotating under 90° with full load!
( ) = manual adjustated.

MADE IN GERMANY

SIP

VWBG Rotating swivel block for loads 8 tons and up

Extremely flexible due to variable thread length

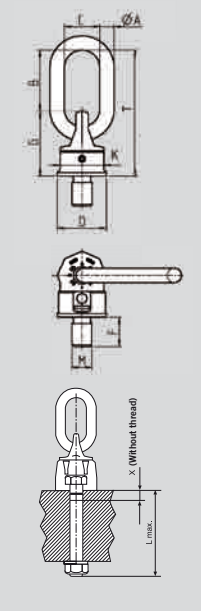
- New forged RUD typical 8-edge-ring peg contour
- Higher capacities in all directions
- Thread up to M150
- Pink painted surface - overheating indicator
- Highly visible angle indicator of the suspended stop means
- Optimal support rest of the screw mounting object through a larger undercut
- Two times wear indicator - check without measuring
- Patented wear lenses for suspension link bearing

Info

Note: VWBGs are not suitable for continuous rotation under load! Not rotatable under 90° with a full load!

Sling technology

Typ	Lift-capac. [kg]	A	B	C	D	T	F	F vario	G	M	K	Torque-[Nm]	Weight [kg]	Order-No.	Price FStandard €/Piece
VWBG 6(7,5) - M 33	6 (7,5)	22	50	90	54	208		33-300	94	33	80	350		WB.G0.06.33	470,00
VWBG 8(10) - M 36	8 (10)	22	86	50	90	208	54	-	94	36	80	410	4,6	WB.G0.08.36	290,50
VWBG 8(10) - Extra thread	8 (10)	22	86	50	90	208	-	36-300	94	36-39	80	410	-	WB.G1.08.36	on request
VWBG 12(13) - M 42	12 (13)	26	111	65	98	235	63	-	96	42	85	550	6,1	WB.G0.12.42	315,00
VWBG 12(13) - Extra thread	12 (13)	26	111	65	98	235	-	42-300	96	42-45	85	550	-	WB.G1.12.42	on request
VWBG 12(15) - M 45	12 (15)	26	111	65	98	235	67	-	96	45	85	550	6,2	WB.G0.12.45	374,00
VWBG 13(16) - M 48	13 (16)	26	111	65	98	235	68	-	96	48	85	550	6,3	WB.G0.13.48	351,50
VWBG 13(16) - Extra thread	13 (16)	26	111	65	98	235	-	48-300	96	48-52	85	550	-	WB.G1.13.48	on request
VWBG 14(20) - M 52	14 (20)	32	119	70	120	274	78	-	120	52	95	750	10,5	WB.G0.14.52	374,00
VWBG 16(22) - M 56	16 (22)	32	119	70	120	274	84	-	120	56	95	800	10,7	WB.G0.16.56	418,00
VWBG 16(22) - Extra thread	16 (22)	32	119	70	120	274	-	56-300	120	56-62	95	800	-	WB.G1.16.56	on request
VWBG 16(25) - M64	16 (25)	32	119	70	120	274	94	-	120	64	95	800	11,4	WB.G0.16.64	501,50
VWBG 16(25) - Extra thread	16 (25)	32	119	70	120	274	-	64-300	120	64-76	95	800	-	WB.G1.16.64	on request
VWBG 31,5(40) - M 72	31,5 (40)	46	130	90	170	338	108	-	159	72	145	1200	29,9	WB.G0.31.72	2.163,00
VWBG 31,5(40)-Extra thread	31,5 (40)	46	130	90	170	338	-	72-300	159	72-76	145	1200	-	WB.G1.31.72	on request
VWBG 35(48) - M 80	35 (48)	46	130	90	170	338	120	-	159	80	145	1500	31,2	WB.G0.35.80	2.179,80
VWBG 35(48) - Extra thread	35 (48)	46	130	90	170	338	-	80-300	159	80-85	145	1500	-	WB.G1.35.80	on request
VWBG 40(50) - M 90	40 (50)	46	130	90	170	338	135	-	159	90	145	2000	33,2	WB.G0.40.90	3.157,00
VWBG 40(50) - Extra thread	40 (50)	46	130	90	170	338	-	90-300	159	90-150	145	2000	-	WB.G1.40.90	on request



Surcharge | Screwable

On request also deliverable with fine and inch thread (UNC and Whitworth).

Maximal transport weight „G“ in t for swivel bock Vario thread by various stop types

	G Z	G A	G1 90 X (Y)	G	G	G	G	G	G
number of strands	1	2	1	2	2	2	2	3 and 4	3 and 4	3 and 4
Load direction	0°	0°	90°	90°	0-45°	45-60°	asymmetrical	0-45°	45-60°	asymmetrical
WB.G0.06.33	15	30	6 (7,5)	12 (15)	8,4 (10,5)	6 (7,5)	6 (7,5)	12,6 (15,75)	9 (11,25)	6 (7,5)
WB.G0.08.36	15	30	8 (10)	16 (20)	11,2 (14)	8 (10)	8 (10)	16,8 (21)	12 (15)	8 (10)
WB.G1.08.36	15	30	8 (10)	16 (20)	11,2 (14)	8 (10)	8 (10)	16,8 (21)	12 (15)	8 (10)
WB.G0.12.42	17	34	12 (13)	24 (26)	16,8 (18,2)	12 (13)	12 (13)	25,2 (27,3)	18 (19,5)	12 (13)
WB.G1.12.42	17	34	12 (13)	24 (26)	16,8 (18,2)	12 (13)	12 (13)	25,2 (27,3)	18 (19,5)	12 (13)
WB.G0.12.45	18	36	12 (15)	24 (30)	16,8 (21)	12 (15)	12 (15)	25,23 (31,5)	18 (22,5)	12 (15)
WB.G0.13.48	18	36	13 (16)	26 (32)	18,2 (22,4)	13 (16)	13 (16)	27,3 (33,6)	19,5 (24)	13 (16)
WB.G1.13.48	18	36	13 (16)	26 (32)	18,2 (22,4)	13 (16)	13 (16)	27,3 (33,6)	19,5 (24)	13 (16)
WB.G0.14.52	25	50	14 (20)	28 (40)	19,6 (28)	14 (20)	14 (20)	29,4 (42)	21 (30)	14 (20)
WB.G0.16.56	28	56	16 (22)	32 (44)	22,4 (30,8)	16 (22)	16 (22)	33,6 (46,2)	24 (33)	16 (22)
WB.G1.16.56	28	56	16 (22)	32 (44)	22,4 (30,8)	16 (22)	16 (22)	33,6 (46,2)	24 (33)	16 (22)
WB.G0.16.64	28	56	16 (25)	32 (50)	22,4 (35)	16 (25)	16 (25)	33,6 (52,5)	24 (37,5)	16 (25)
WB.G1.16.64	28	56	16 (25)	32 (50)	22,4 (35)	16 (25)	16 (25)	33,6 (52,5)	24 (37,5)	16 (25)
WB.G0.31.72	50	100	31,5 (40)	63 (80)	44,1 (56)	31,5 (40)	31,5 (40)	66,15 (84)	47,25 (60)	31,5 (40)
WB.G1.31.72	50	100	31,5 (40)	63 (80)	44,1 (56)	31,5 (40)	31,5 (40)	66,15 (84)	47,25 (60)	31,5 (40)
WB.G0.35.80	50	100	35 (48)	70 (96)	49 (67,2)	35 (48)	35 (48)	73,5 (100,8)	52,5 (72)	35 (48)
WB.G1.35.80	50	100	35 (48)	70 (96)	49 (67,2)	35 (48)	35 (48)	73,5 (100,8)	52,5 (72)	35 (48)
WB.G0.40.90	50	100	40 (50)	80 (100)	56 (70)	40 (50)	40 (50)	84 (105)	60 (75)	40 (50)
WB.G1.40.90	50	100	40 (50)	80 (100)	56 (70)	40 (50)	40 (50)	84 (105)	60 (75)	40 (50)

X
Nominal capacity

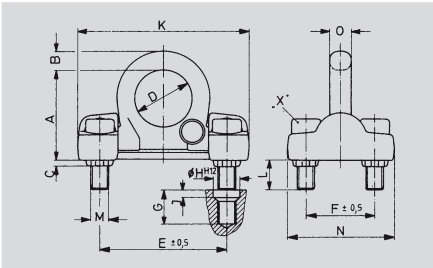
Y
manually aligned, higher capacity – ()-values s.u.

Z
vertical load

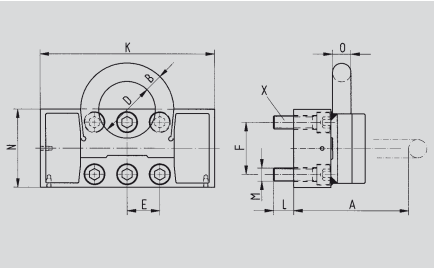
VRBG RUD-VIP-Ringbock thread to 200 t

Safety down-the-line on heavy loads

- Smaller screw diameters, easier to produce, folding, therefore lowest height!
- Favorable force transmission distribution
- With delivered hexagonal sockets are 100 % crack tested
- Patented relief knobs (DBP 3123175) for VRBG 10 and VRBG 16 protects the fixing screws against bending load- and shear load
  This is additional safety!



VRBG 10/16



VRBG 30/50

Lifting capacity [kg]	A	B	C	D	E ±0,5	F ±0,4	G mind.	H H12	J	K	L	M	N	O	X DIN 912	max. tighening torque of the screw	Weight [kg]	Order-No.	Price €/ Piece
	Measurements [mm]																		
10000	102	22	6	65	143	78	50	30	8	194	45	20	120	25	M 20 x 70/12.9	300 Nm	3,8	VRB.G.10.22	142,50
16000	134	30	8	90	198	104	70	46	10	270	57	30	170	32	M 30 x 90/12.9	600 Nm	7,8	VRB.G.16.30	300,00
30000	250	42	–	130	75	120	–	–	–	400	46	30	180	42	M 30 x 100/12.9	900 Nm	67	VRB.G.30.42	1.546,00
50000	410	70	–	230	100	200	–	–	–	650	58	36	270	60	M 36 x 120/12.9	1000 Nm	198	VRB.G.50.70	3.836,00
80000	Differing construction																	VRB.G.80.00	on request
150000	Differing construction																	VRB.G.0150	on request
200000	Differing construction																	VRB.G.0200	on request

Surcharge Screwable

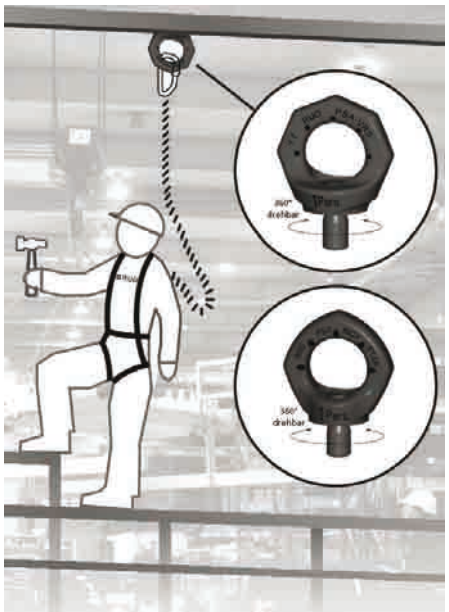
Maximum transportation weight „G“ in „t“ for different lifting methods

Lifting method / Order of the hanging		G	G1	G	G	G	G	G	G	G
Strand number		1	1	2	2	2 symmetric		2	3 u. 4 symmetric		3 and 4
Inclination/load direction		0°	90°	0°	90°	0–45°	45–60°	asymm.	0–45°	45–60°	asymm.
load factor		1	1	2	2	1,4	1	1	2,1	1,5	1
Name	Thread										
VRB.G.03.16	2 x M 16	3	3	6	6	4,2	3	3	6,3	4,5	3
VRB.G.10.22	4 x M 20	10	10	20	20	14	10	10	21	15	10
VRB.G.16.30	4 x M 30	16	16	32	32	22	16	16	33	24	15
VRB.G.30.42	6 x M 30	30	30	60	60	42	30	30	63	45	30
VRB.G.50.70	8 x M 36	50	50	100	100	70	50	50	105	75	50
VRB.G.80.00		80	80	160	160	112	80	80	168	120	80

Fastening Points For PSA

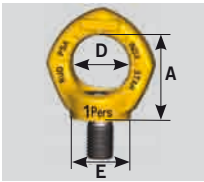
Certificated attachment point for PSA

The PSA-devices PSA-VRS (STARPOINT) and PSA-INOX-STAR are not lifting points in the usual sense. They serve after the assembly as fastening points, to which personal protection (PSA) can be hung up.
These fastening points can also be fixed permanently to a construction device to fasten personal protection. The PSA-VRS (STARPOINT) is not intended for the permanent use outdoors, here the stainless PSA-INOX-STAR is recommended.
The parts correspond to the EG guideline for „Personal protection“ (89/686/EG) and are marked with the CE-marking as well as with the loadable number of persons (1 or 2 pers.).
As test basis the DIN 795, DIN 50308 as well as the OSHA 1926.502 apply.
The test forces with 22,2 kN/person surpass thereby the European Standard.
The RUD-lifting devices PSA-VRS and PSA-INOX-STAR are certificated by the responsible professional associaton (BG Bau).



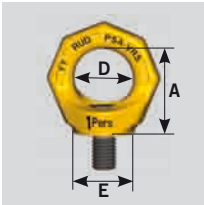
PSA Inox-Star

Description	Type	Lifting capacity [number of person]	Thread length [mm]	Measurements [mm] A	D	E	Order-No.	Price/Piece €
PSA-INOX-STAR	M12	1	18	42	30	30	IS.12.7097	55,60
PSA-INOX-STAR	M12	1	50	42	30	30	IS.12.7820	68,50
PSA-INOX-STAR	M16	2	24	49	35	35	IS.16.6757	65,20
PSA-INOX-STAR	M20	2	30	57	40	43	IS.20.3057	88,40



PSA-STARPOINT-VRS

Description	Type	Lifting capacity [number of person]	Thread length [mm]	Measurements [mm] A	D	E	Order-No.	Price/Piece €
PSA-STARPOINT VRS	M12	1	18	42	30	30	IS.12.7100	32,60
PSA-STARPOINT VRS	M12	1	18 - 150	42	30	30	IS.12.0400	on request
PSA-STARPOINT VRS	1/2“ - 13 UNC	1	3/4“	1 5/8“	1 3/16“	1 3/16“	IS.13.7103	32,60
PSA-STARPOINT VRS	M16	2	24	49	35	35	IS.16.7854	38,30
PSA-STARPOINT-VRS	M20	2	30	57	40	43	IS.20.2222	49,35



Surcharge | Screwable

Info

The special service for the CAD department. In addition to the usual design templates we offer the geometric data of the attachment points on CD-ROM. The designer can integrate this data directly into the CAD system and receives a perfect 3-dimensional image of the attachment points!

RUD

Lifting points – weldable (follow welding instructions)

Max. transportation weight „G“ for different lifting methods

With tested safety – loadable on all sides

- For lifting points the regulations BGR 500 apply, 2.8 conforms to the machine directive 2006/42/EG.
- After the assembly and before every startup the liftingpoints are to be controlled upon functionality and operational capability.

			PowerPoint WPP-series rotating						PowerPoint WPPH-series fixed						VLBS load ring, weldable									VRBS load ring, weldable						VRBSS load ring, weldable + Stellsperre			ABA weldable					
			Page 124						Page 125						Page 123									Page 126						Page 127			Page 128					
	Strand number	load direction	Typ	WPP 0,63 t	WPP 1,5 t	WPP 2,5 t	WPP 4 t	WPP 5 t	WPP 8 t	WPP-H 0,63 t	WPP-H 1,5 t	WPP-H 2,5 t	WPP-H 4 t	WPP-H 5 t	WPP-H 8 t	VLBS-1,5 t	VLBS-2,5 t	VLBS-4 t	VLBS-6,7 t	VLBS-10 t	VLBS-16 t	LBS(1) RS 0,5 t	LBS(3) RS 1 t	LBS(5) RS 2 t	VRBS-FIX 4 t	VRBS-FIX 6,7 t	VRBS-FIX 10 t	VRBS-FIX 16 t	VRBS-FIX 31,5 t	VRBS 50 t	VRBK-FIX-4 t	VRBK-FIX-6,7 t	VRBK-FIX-10 t	ABA-1,6 t	ABA-3,2 t	ABA-5 t	ABA-10 t	ABA-20 t	ABA-31,5 t
G	1	0°		0,6	1,5	2,5	4	6,7	10	0,6	1,5	2,5	4	6,7	10	1,5	2,5	4	6,7	10	16	0,5	1	2	4	6,7	10	16	31,5	50	4	6,7	10	1,6	3,2	5	10	20	31,5
G	2	0°		1,2	3	5	8	13,4	20	1,2	3	5	8	13,4	20	3	5,0	8	13,4	20	32	1	2	4	8	13,4	20	32	63	100	8	13,4	20	3,2	6,4	10	20	40	63
G	1	90°		0,6	1,5	2,5	4	5	8	0,6	1,5	2,5	4	5	8	1,5	2,5	4	6,7	10	16	0,5	1	2	4	6,7	10	16	31,5	50	4	6,7	10	1,6	3,2	5	10	10	31,5
G	2	90°		1,2	3	5	8	10	16	1,2	3	5	8	10	16	3	5,0	8	13,4	20	32	1	2	4	8	13,4	20	32	63	100	8	13,4	20	3,2	6,4	10	20	40	63
G	2	0°-45°		0,8	2,1	3,5	5,6	7,1	11,2	0,8	2,1	3,5	5,6	7,1	11,2	2,1	3,5	5,6	9,38	14	22,4	0,7	1,4	2,8	5,6	9,38	14	22,4	45	70	5,6	9,38	14	2,2	4,5	7,1	14,1	28	45
G	2	45°-60°		0,6	1,5	2,5	4	5	8	0,6	1,5	2,5	4	5	8	1,5	2,5	4	6,7	10	16	0,5	1	2	4	6,7	10	16	31,5	50	4	6,7	10	1,6	3,2	5	10	20	31,5
G	2	asymmetric		0,6	1,5	2,5	4	5	8	0,6	1,5	2,5	4	5	8	1,5	2,5	4	6,7	10	16	0,5	1	2	4	6,7	10	16	31,5	50	4	6,7	10	1,6	3,2	5	10	20	31,5
G	3 + 4	0°-45°		1,3	3,2	5,3	8,4	10,5	16,8	1,3	3,2	5,3	8,4	10,5	16,8	3,15	5,25	8,4	14,1	21	33,6	1,05	2,1	4,2	8,4	14,1	21	33,6	67	105	8,4	14,1	21	3,4	6,8	10,6	21,2	42	67
G	3 + 4	45°-60°		0,9	2,2	3,8	6	7,5	12	0,9	2,2	3,8	6	7,5	12	2,25	3,75	6	10,1	15	24	0,75	1,5	3	6	10,1	15	24	47,5	75	6	10,1	15	2,4	4,8	7,5	15	30	47,5
G	3 + 4	asymmetric		0,6	1,5	2,5	4	5	8	0,6	1,5	2,5	4	5	8	1,5	2,5	4	6,7	10	16	0,5	1	2	4	6,7	10	16	31,5	50	4	6,7	10	1,6	3,2	5	10	20	31,5

MADE IN GERMANY

SIP

VLBS RUD-load ring in VIP-quality

The best connection to the load! – weldable and captive (follow welding instructions)

- Construction in VIP-quality
- Higher lifting capacity than usual constructions
- Shapely design
- Flourescent pink powder coating
- Weld on block marked with lifting capacity
- Internal spring for silencing
- Patented distance knobs
- Optimizied 90°-load support
- 4-fold safety in all directions
- 100 % crack tested

Info

The special service for the CAD-department

Next to the usual construktion vorlagen we offer the geometry data of the lifting points on CD-ROM. The constructor can integrate these data directly into his CAD-system and receives a perfect representation of the lifting points.

Give us a call!

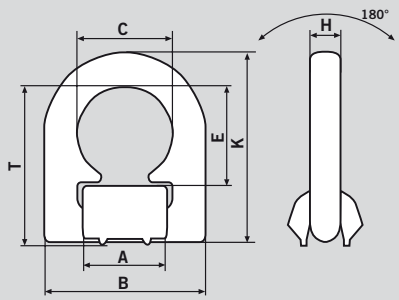
Sling technology

	Type	Lift. capa-city [kg]	Measurements [mm] A	B	C	E	H	K	T	Order-No.	Price/Pi. €
with spring	VLBS 1,5t-F	1.500	40	66	38	40	13,5	79	65	VLBS.0150	19,80
	VLBS 2,5t-F	2.500	46	77	45	48	13,5	91	75	VLBS.0250	20,75
	VLBS 4,0t-F	4.000	60	87	51	52	16,5	101	84	VLBS.0400	22,60
	VLBS 6,7t-F	6.700	60	115	67	73	22,5	141	117	VLBS.0670	47,90
	VLBS 10t-F	10.000	60	129	67	71	26,5	153	126	VLBS.1000	68,20
without spring	VLBS 1,5t	1.500	33	66	38	40	13,5	79	65	VLBS.015X	17,55
	VLBS 2,5t	2.500	40	77	45	48	13,5	91	75	VLBS.025X	18,30
	VLBS 4,0t	4.000	46	87	51	52	16,5	101	84	VLBS.040X	18,85
	VLBS 6,7t	6.700	60	115	67	73	22,5	141	117	VLBS.067X	44,65
	VLBS 10t	10.000	60	129	67	71	26,5	153	126	VLBS.100X	62,00
	VLBS 16t	16.000	90	190	100	105	27	214	174	VLBS.160X	124,50
stainless	LBS(1) 0,5t*	500	33	65	36	39			64	LB.R.005.39*	44,25
	LBS(3) 1t*	1000	46	85	50	50			81	LB.R.010.50*	81,40
	LBS(5) 2t*	2000	60	110	65	72			116	LB.R.020.72*	212,00

Surcharge

Weldable

* Stainless, Material-No. 1.4571



Maximum transportation weight „G“ in t for load ring VLBS and LBS stainless weldable for different lifting methods

Lifting method	G	G1	G	G	G		G	G		G
Strand number	1	1	2	2	2 symmetric		2	3 und 4 symmetric		3 and 4
Load direction	0°	90°	0°	90°	0–45°	45–60°	asymm.	0–45°	45–60°	asymm.
Stress factor	1	1	2	2	1,4	1	1	2,1	1,5	1
VLBS.0150	1,5	1,5	3	3	2,1	1,5	1,5	3,15	2,25	1,5
VLBS.0250	2,5	2,5	5,0	5,0	3,5	2,5	2,5	5,25	3,75	2,5
VLBS.0400	4	4	8	8	5,6	4	4	8,4	6	4
VLBS.0670	6,7	6,7	13,4	13,7	9,38	6,7	6,7	14,1	10,1	6,7
VLBS.1000	10	10	20	20	14	10	10	21	15	10
VLBS.1600	16	16	32	32	22,4	16	16	33,6	24	16
LB.R.005.39	0,5	0,5	1	1	0,7	0,5	0,5	1	0,75	0,5
LB.R.010.50	1	1	2	2	1,4	1	1	2,1	1,5	1
LB.R.020.72	2	2	4	4	2,8	2	2	4,25	3	2

Info

The stainless construction is ideally suited for the food and chemical industry LB.R.005.39, LB.R.010.50 und LB.R.020.72.

WPP Welding PowerPoint

Weldable lifting points – double ball bearing mounted (follow welding instructions)

WPP-S WPP-B WPP-VIP

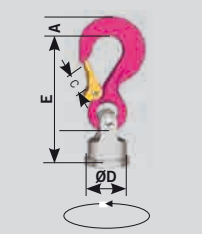
- Loadable on all sides, cardanlike swivelling, 360 Grad rotating
- Clear indication of the rated lifting capacity
- 4-fold tested safety
- Double ball bearing mounted, therefore under load rotating without jolt
- Shapely design
- Cr, Ni, Mo-steel, tempered
- Max. lifting capacity at the smallest welding surface
- All parts 100 % crack tested
- Fluorescent pink powder coating – components
- Fast amortisation through better handling, no damages through safe transport

Info

The special service for the CAD-department:

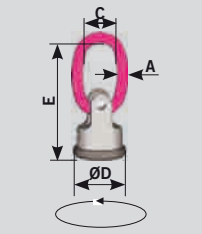
WPP-S – Universal connection

Lifting capacity [kg]	Measurements [mm] A	C	E	D	Order-No.	Price/Piece €
630	13	18	115	40	WPP.ST.060	63,40
1500	20	25	147	46	WPP.ST.150	78,80
2500	28	30	187	61	WPP.ST.250	98,70
4000	36	35	227	78	WPP.ST.400	136,50
5000 (6700)	37	40	267	95	WPP.ST.500*	221,50
8000 (10000)	49	48	310	100	WPP.ST.800*	285,50



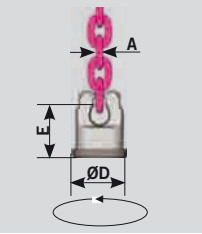
WPP-B – eye connection for hook hangers

Lifting capacity [kg]	Measurements [mm] A	C	E	D	Order-No.	Price/Piece €
630	9	35	105	40	WPP.B.06.00	53,00
1500	11	35	115	46	WPP.B.15.00	62,00
2500	13	40	135	61	WPP.B.25.00	89,30
4000	16	45	172	78	WPP.B.40.00	122,00
5000 (6700)	19	60	223	95	WPP.B.50.00*	178,00
8000 (10000)	24	65	242	100	WPP.B.80.00*	210,00



WPP-VIP – Direct VIP-Chain connection

Lifting capacity [kg]	Measurements [mm] A	E	D	Order-No.	Price/Piece €
630	4	40	40	WPP.V.06.00	44,35
1500	6	50	46	WPP.V.15.00	50,90
2500	8	61	61	WPP.V.25.00	67,30
4000	10	77	78	WPP.V.40.00	90,90
5000 (6700)	13	93	95	WPP.V.50.00*	138,50
8000 (10000)	16	102	100	WPP.V.80.00*	150,00



Surcharge Weldable

*higher load capacity on vertical load according to()

Maximum transportation weight „G“ in t for PowerPoint - lifting point for different lifting methods

Lifting method	G	G1	G	G	G	G	G	G	G	G
Number	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Inclination β	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Stress factor	1	1	2	2	1,4	1	1	2,1	1,5	1
WPP.06	0,63	0,63	1,26	1,26	0,88	0,63	0,63	1,32	0,95	0,63
WPP.15	1,5	1,5	3,0	3,0	2,1	1,5	1,5	3,15	2,25	1,5
WPP.25	2,5	2,5	5,0	5,0	3,5	2,5	2,5	5,25	3,75	2,5
WPP.40	4,0	4,0	8,0	8,0	5,6	4,0	4,0	8,4	6,0	4,0
WPP.50	6,7	5	13	10	7	5	5	10,5	7,5	5
WPP.80	10,0	8,0	20	16,0	11,2	8,0	8,0	16,8	12,0	8,0

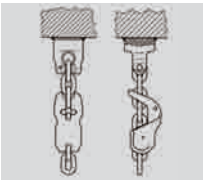
Attention: With asymmetric load distribution every PowerPoint has to lift the max. transportation weight! G = F.

WPPH Welding PowerPoint

Weldable lifting points - the alternative in price (follow welding instructions)

WPPH-S WPPH-B WPPH-VIP

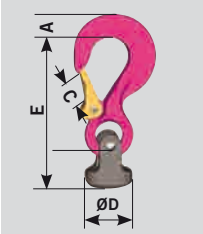
- Loadable on all sides, cardanlike swivelling
- Clear indication of the rated lifting capacity
- 4-fold tested safety
- Shapely design
- Cr, Ni, Mo-steel, tempered
- All parts 100 % crack tested
- Max. lifting capacity at the smallest welding surface
- Fluorescent pink powder coating – components
- Fast amortisation through better handling, no damages through safe transportation



Versatile, weldable, connection variations

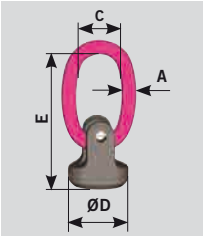
WPP-S – Universal connection

Lifting capacity [kg]	Measurements A	C	E	D	Order-No.	Price/Piece €
630	13	18	109	34	WPPHS.060	40,55
1500	20	25	141	40	WPPHS.150	63,30
2500	28	30	179	53	WPPHS.250	65,80
4000	36	35	217	66	WPPHS.400	92,00
5000 (6700)	37	40	253	79	WPPHS.650*	159,50
8000 (10000)	49	48	296	88	WPPHS.800*	217,50



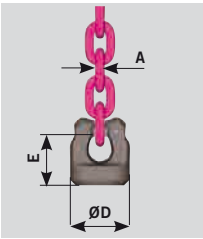
WPPH-B – eye connection for hook hangers

Lifting capacity [kg]	Measurements A	C	E	D	Order-No.	Price/Piece €
630	9	35	99	34	WPPHB.060	30,00
1500	11	35	106	40	WPPHB.150	46,85
2500	13	40	127	53	WPPHB.250	56,50
4000	16	45	163	66	WPPHB.400	77,10
5000 (6700)	19	60	209	79	WPPHB.650*	116,00
8000 (10000)	24	65	228	88	WPPHB.800*	142,00



WPP-VIP – Direct VIP-Chain connection

Lifting capacity [kg]	Measurements A	E	D	Order-No.	Price/Piece €
630	4	34	34	WPPHV.060	20,25
1500	6	44	40	WPPHV.150	26,60
2500	8	53	53	WPPHV.250	33,90
4000	10	66	68	WPPHV.400	45,85
5000 (6700)	13	79	83	WPPHV.650*	76,80
8000 (10000)	16	88	88	WPPHV.800*	81,60



Surcharge Weldable

*higher load capacity on vertical load according to()

VRBS-FIX RUD Ringbock in VIP-Qualität

Safest welded joint up to 100 t! (Please regard the instruction manual)

VRBS-Fix

VRBS

The RUD-Ringbock ist easy and fast weldable.
Patented distance knobs facilitates the root run, folding – therefore no stumbling block. It has a high dynamic and static strength.

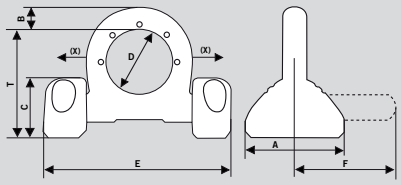
- Optimal force transmission through 2-point-mounting
- Loadable on all sides
- 4-fold safety
- Hanger conforms to EN 1677
- Weld on block 100 % crack tested

VRBS-Fix

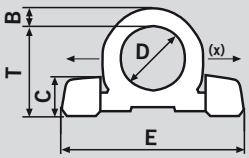
- No complicated alignment of the welding blocks or ring tab
- Welding blocks and ring tab are tightly connected with a special radial clamping spring
- Ring tab remains in position
- Easy painting
- Process safety during welding: E dimension is guaranteed
- Weld without rusting by circulating HY-seam weld
- Smaller than the previous VRBS

Please regard the instruction manual by all means!

Type	Lift.capa-city [kg]	Measurements [mm] A	B	C	D	E	F	T	Weight [kg/p.]	Order-No.	Price/Piece €
VRBS-Fix, weldable											
VRBS-FIX 4 t	4.000	32	14	28	48	140	29	65	1	**VRBSF.040**	**29,00**
VRBS-FIX 6,7 t	6.700	40	20	35	60	180	33	84	2,1	**VRBSF.067**	**50,90**
VRBS-FIX 10 t	10.000	52	22	46	65	212	46	94	4,4	**VRBSF.100**	**86,10**
VRBS-FIX 16 t	16.000	130	30	72	90	265	134	140	8,0	**VRBSF.160**	**155,50**
VRBS-FIX 31,5 t	31.500	160	42	99	130	366	195	202	18,4	**VRBSF.300**	**375,50**
VRBS, weldable											
VRBS 4 t	4.000	62	14	-	48	135	-	65	-	**VRBS.0400**	**24,10**
VRBS 6,7 t	6.700	88	20	-	60	170	-	84	-	**VRBS.0670**	**42,45**
VRBS 10 t	10.000	100	22	-	65	195	-	95	-	**VRBS.1000**	**71,70**
VRBS 16 t	16.000	130	30	-	90	265	-	127	-	**VRBS.1600**	**129,50**
VRBS 30 t	30.000	160	42	-	130	375	-	178	-	**VRBS.3000**	**313,00**
VRBS 50 t	50.000	240	70	-	230	620	-	313	-	**VRBS.5000**	**2.108,00**



VRBS-Fix weldable



VRBS weldable

075104
075106

Maximum transportation weight „G“ in t for load ring weldable for different lifting methods

Lifting method	G	G1	G	G	G	G	G	G	G	G
Strand number	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Load direction	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Stress factor	1	1	2	2	1,4	1	1	2,1	1,5	1
VRBS.0400 (FIX)	4	4	8	8	5,6	4	4	8,4	6	4
VRBS.0670 (FIX)	6,7	6,7	13,4	13,4	9,38	6,7	6,7	14,1	10,1	6,7
VRBS.1000 (FIX)	10	10	20	20	14	10	10	21	15	10
VRBS.1600 (FIX)	16	16	32	32	22,4	16	16	33,6	24	16
VRBS.3000 (FIX)	31,5	31,5	63	63	45	31,5	31,5	67	47	31,5
VRBS.5000	50	50	100	100	70	50	50	105	75	50
VRBS.00X1	100	100	200	200	140	100	100	210	150	100

VRBK-FIX RUD Ringbock in VIP-Qualität

Safest welded joint up to 10 t! (Please regard the instruction manual)

VRBK-FIX

VRBK-FIX ring trestle with high strength quenched and tempered, movable ring tab attached to the edge it saves twice the number of attachment points

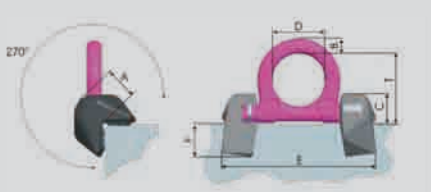
- Forged ring tab corresponds to EN 1677-1, electromagnetically crack tested, pink-coated.
  Individually ordering the ring tab (e.g. VRL 10)
- Fully loadable on all sides
- 4-fold safety against breakage

- Good force induction through two-point support
- Lowest height as it folds (270 °)
- Welding blocks and ring strap connected with special radial clamping spring
- Easy alignment of the ring tab
- Tongue ring remains in position
- Easy painting
- No loose parts
- No knocking
- Process safety when welding: E dimension guaranteed

Type	Lift.capa-city [kg]	Measurements [mm] A	B	C	D	E	F	T	Weight [kg/St.]	Order-No.	Price/Piece €
VRBK-FIX 4 t	4.000	32	14	28	48	140	29	65	1	**VRBK.0400**	**43,70**
VRBK-FIX 6,7 t	6.700	40	20	35	60	180	33	84	2,1	**VRBK.0670**	**61,50**
VRBK-FIX 10 t	10.000	52	22	46	65	212	46	94	4,4	**VRBK.1000**	**67,60**

Tragfähigkeitszuordnung: siehe Tabelle

Teuerungszuschlag **Schweißbar**



VRBK-Fix weldable

075104
075106

Maximum transportation weight „G“ in t for load ring weldable for different lifting methods

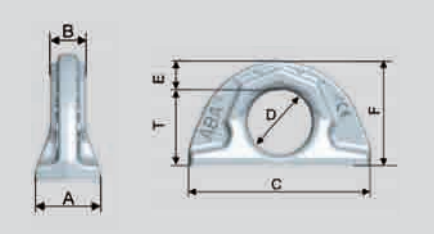
Lifting method	G	G1	G	G	G	G	G	G	G
Strand number	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Load direction	0°	90°	0°	90°	0-45°	45-60°	asymmetric	0-45°	45-60°	asymmetric
Stress factor	1	1	2	2	1,4	1	1	2,1	1,5	1
VRBK.0400 (FIX)	4	4	8	8	5,6	4	4	8,4	6	4
VRBK.0670 (FIX)	6,7	6,7	13,4	13,4	9,38	6,7	6,7	14,1	10,1	6,7
VRBK.1000 (FIX)	10	10	20	20	14	10	10	21	15	10

ABA On all sides loadable stop points

- Loadable on all sides and in all directions
- 4-times the safety against breakage
- Tempered body, thus more wear-resistant
- Patented wear marks, inside and outside
- Circumferential fillet seam
- Surface phosphatized

If the component is used as a lashing point, the load-bearing capacity can be doubled on the component.

Type	Lifting WLL t	Lashing LC daN	A mm	B mm	C mm	D mm	E mm	F mm	T mm	Walding seam thickness	Weight kg/p.	Order-No.	Price/Piece €
ABA 1,6 t	1,6	3.200	30	16	100	35	16	57	41,5	4	0,44	ABA.001.60	16,85
ABA 3,2 t	3,2	6.400	41	23	137	50	21	80	59	6	1,1	ABA.003.20	23,30
ABA 5 t	5	10.000	51	27	172	60	27,5	99	71,5	7	2,3	ABA.005.00	34,45
ABA 10 t	10	20.000	70	38	228	80	35	130	95	8	5,3	ABA.010.00	63,40
ABA 20 t	20		96	52	313	115	49	179	130	10	14	ABA.020.00	on request
ABA 31,5 t	31,5		114	66	370	130	58	212	154	12	24	ABA.031.50	on request



VABH The best sling hook in VIP-Quality

Weldable and screwable (Please consider weld manual)

weldable

screwable

- Robust, also on the sides, drop-forged, annealed hook safety trap
- No overhanging hook tip, no unwanted hook jamming
- Wear out marking on the hook
- Measurable over load checking
- Full usable range up to 120°
- Fully stressable on the side
- Security due to hammer head safety grips
- Good looking design

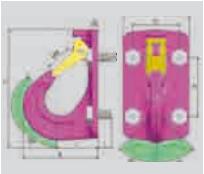
Sling hook VABH-W, weldable

Load bearing cap. [kg]	MW	Measurements [mm] B	C	F	Weld	Weight [kg]	Order-no.	Price/piece €
1500	25	78	117	70	3	0,83	AB.S.015.25	88,20
2500	30	101	148	85	3	1,67	AB.S.025.30	96,40
4000	35	122	171	104	4	2,95	AB0.S.04.35	113,00
6700	40	157	209	120	5	5,18	AB.S.065.40	208,50

Surcharge | Weldable

Sling hook VABH-B, screwable

Load bearing cap. [kg]	MW	Measurements [mm] A	B	C	F	G	H	Screw M	L	Weight [kg]	Order-no.	Price/piece €*
1500	25	7,5	78	117	70	48	60	10	15	0,91	AB.R.015.25	126,50
2500	30	8,5	101	148	85	60	75	12	18	1,75	AB.R.025.30	133,50
4000	35	11	122	171	104	70	90	16	25	3,17	AB.R.040.35	178,50
6700	40	13	156	208	120	85	110	20	30	5,61	AB.R.065.40	287,00



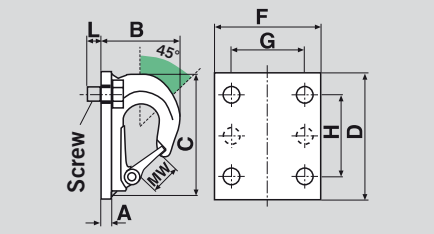
*Prices include crack tested special screws

Surcharge | Screwable

VCGH Sling hooks for heavy loads

Sling hook for heavy load, screwable

The high-strength bolt on hooks in screwable or weldable construction is especially suitable for rope slings, round slings or for lifting devices with eye or oval ring. The stable safety hook prevents an unintentional hanging out of the lifting device.

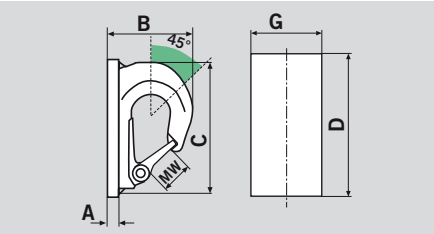


Lifting capacity [kg]	Measurements [mm] MW	A	B	C	D	F	G	H	L	Screw M	Weight [kg]	Order-No.	Price/ Piece €*
10000	48	15	141	200	220	170	120	150	35	4xM24	6,4	AH.R.100.48	367,00
16000	63	20	186	272	288	210	150	228	30	6xM24	10,4	AH.R.160.63	671,50
20000	63	20	195	276	290	240	150	220	30	6xM24	17,5	AH.R.200.63	786,00

*Prices include crack tested special screws - for torque see operating manual

Surcharge | Weldable

Sling hook for heavy load, weldable



Lifting capacity [kg]	Measurements [mm] MW	A	B	C	D	G	Weld	Weight [kg]	Order-No.	Price/Piece €
10000	48	15	141	200	220	100	8	5,0	AH.S.100.48	254,50
16000	63	20	186	272	288	120	8	8,4	AH.S.160.54	563,50
20000	63	20	195	276	290	120	8	15,4	AH.S.200.63	638,00

Surcharge | Screwable

Assembly notes

Lifting equipment – screw on, weldable version

1. For use only by authorized and trained individuals and in accordance with BGR 500.

Schraubbar Schweißbar

2. Inspect regularly before each use the attachment and hoisting points for corrosion, wear, weld cracks, deformation.

3. The location is structurally defined so that the dynamic forces caused by the basic material are not deformed.

4. The position of the load points should be such that unapproved stress, such as twisting or turning over of the load is avoided.

   a.) For single strand hoist the hoisting point should be vertical to the load centre,
   b.) For double strand hoist should both be above the centre of the load and
   c.) for three and four strands evenly set at a level beneath the load centre.

5. Load Symmetry
   The load limits of individual load-points are to be determined based on the symmetrical load according to the following physical, formulated context.

$$WLL = \frac{G}{n \cdot \cos \beta}$$

WLL = required load capacity
Load point/individual strand kg
G = Load weight (kg)
n = Number of load strands
β = Angle of the individual strand

The number of strands is:

	Symmetrical	Asymmetrical
Two legs	2	1
Three/four legs	3	2

6. Effects of temperature
   The weldable hoisting types VLBS, VRBS VRBK can be burnished in a stress-free state with the load (for example, welded constructions).
   Temperature <= 600 ° C

7. Colour contrast markings should make the point of hoisting recognisable.

Info

You will find the test criteria in the manual !

8. When connecting and disconnecting the hoisting device (sling chain) for its functioning and use no crushing, cutting, tuck and butt joints should occur. Damage to slings and hoisting points from sharp impact is to be avoided.

9. During assembly of the hoisting points pay attention to the manual supplied.

   For light metals, non-ferrous metals and cast iron, the thread has to be chosen so that the thread load capacity meets the requirements of the respective base material. When using screws not supplied by RUD e.g. RUD VLBG assumes no responsibility. As a minimum quality of the base material „steel“ 1.0037 / St37) is foreseen.

10. **The continued suitability must be checked after mounting and then periodically by an expert. This is also the case after damage or special incidents.**

When attaching screw please pay attention to the following formula:

Schraubbar

The trade association recommends the minimum screw length:
1 x M in steel (M = size of thread, z. B. M20)
1,25 x M in casting => steel casting
2 x M in aluminium

Reduction in load capacity at RUD hoisting points:
-40 °C bis 200 °C --> 0 %
200 °C bis 300 °C --> -10 %
300 °C bis 400 °C --> -25 %

Info

Please refer to the operating instructions of the respectiveattached points!

Welding notes

Weld correctly so that the welding point holds !

Please note the following points when welding:

- The welding must be carried out by a qualified welder according to EN 287-1
- The welding block material is S355J2G3 (1.0570).
- The connecting surfaces must be free of contaminants, oil, paint etc.
- Do not weld on the tempered lifting ring.
- The entire assembly can be annealed stress-free once without compromising safety <= 600°C.
- The welding point must be appropriate to absorb the induced forces.
- The distance lugs function as a spacers for the air gap required for the root weld(approx. 3 mm).

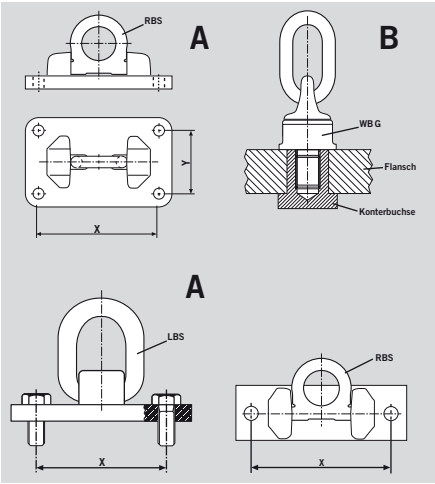
Info

Remember, for all weld-on lifting points: follow the welding instructions!

Important:
The following criteria are to be satisfied by the welded seam arrangement (continuous single bevel or single bevel butt weld):
DIN 18800 for steel constructions prescribes:
For constructions in the open air or where there is particular danger of corrosion, seams should only be welded as continuous, closed fillet welds. A continuously welded seam at the VLBS/ VRBS satisfies this norm. This corresponds to a closed seam.

Info

Please refer to the relevant instruction manual for the lifting points!



Special construction for lifting points:
A) Weld-on lifting points on screw plates
B) Screw-on lifting points for through holes in flanges using counterbushings

Things worth knowing about sling gear made of wire rope!

General information about wire rope

1. Legal basis

For the use of sling chains made of steel wire the following norms essentially apply:

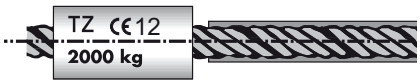
EN 13414-1 bis 4 (DIN 3088)
EN 13411-5 (DIN 1142)
EN 13411-2 (DIN 3089)
EN 13411-3 (DIN 3093)
EN 13411-3 (DIN 3095)
EN 12385-1 bis 4 (DIN 3051)

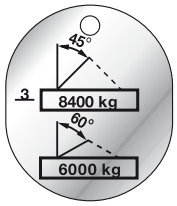
Furthermore, the European machine guideline 2006/42 EG (Appliance safety law) and of course the BGR 500/2.8 load bearing devices in hoist technology apply.

CE

2. Labeling

Only sling ropes, which are standardized and marked according to the respective CE may be used. Examples for properly marked sling ropes:



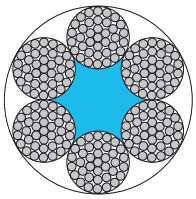


Ropes which are not marked may not be used!

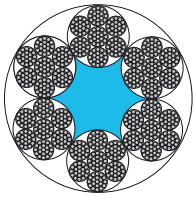
3. Types of rope and end joints

The following types of rope are differentiated:

Stranded rope



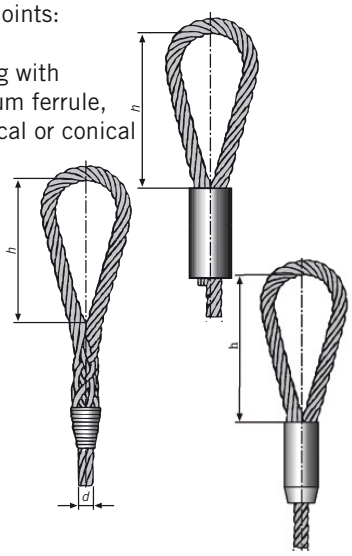
Cable-laid rope, Grummet



Cable-laid ropes have a lower load bearing capacity given the same diameter. However, they are by far more flexible and elastic, which may be an advantage in use.
Only the following types are permitted as end joints:

Grouting with aluminum ferrule, cylindrical or conical

Splice



Flemish eye

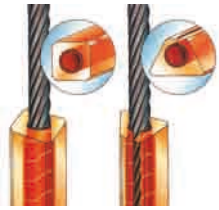
Wire rope clamps as end attachment are allowed for single use only, providing that the EN 13411-5 is observed and a torque wrench is used.

4. Handling and use

Sling ropes made of wire rope may generally be use within a temperature range of -40°C up to +100°C. If the respective restrictions are observed, the following exceptions may be made:
Hint: If combining different sling gears the individual operation temperatures have to be observed!

Rope end joint	Wire rope with	Surface temperature of rope in °C	Load bear. capac.
Alu. ferrule	fibre core	-40 up to +100	100 %
cylindric./conic.	steel core	-40 up to +150	100 %
Splice	fibre core	-40 up to +100	100 %
	steel core	-40 up to +150	100 %
		+151up to+200	90 %
		+200up to+300	75 %
		+300up to+400	65 %
Flemish eye	fibre	not allowed	
with steel clamp	steel core	-40 up to +150	100 %
		+151up to+200	90 %
		+200up to+300	75 %
		+300up to+400	65 %

When fastening with wire ropes, the surfaces and edges of the load also have to be considered, since sharp edges can lead to damages of the sling rope.

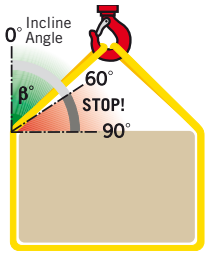


A sharp edge is defined by the edge radius "r" being smaller than the diameter "d" of the wire rope.

If the load is sharp edged or has a rough surface, an adequate abrasion or edge protection has to be applied.

The load bearing capacity of wire ropes can be seen from the load bearing capacity tables.

Important:
An angular range of more than 60° must not be fastened.
The resulting forces above this tilt angle are beyond control!



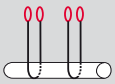
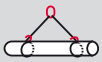
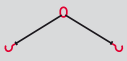
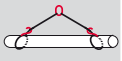
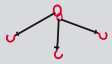
5. Safety related hints

- Damaged sling gear must never be used. (§3.13 BGR 500, chapter 2.8)!
- Never use ropes with knots or kinking!
- Never fasten above 60° tilt angle b!
- Loops have to be adaüted to the crane hook
- Never use wire ropes without edge protection if handling loads with sharp edges!
- Observe service temperature!
- Adhere to BGR 500, Chapter 2.8!
- Never use multi-strand rope hangers, which have more than 2 strands incorporated into the A- or B-link

The mandatory annual inspection of sling gear is regulated in § 3.15 of the BGR 500, chapter 2.8. According to §3.14 of the BGR 500, chapter 2.8, execution of repairs is restricted to experts.

Type of rope	Count of visible wire breakages, unevenly distrib. on a length of		
	3 · d	6 · d	30 · d
Stranded rope	4	6	14
Cable laid rope	10	15	40
Grummet	5 % of the total wire count		

Load bearing capacity table for sling ropes according to DIN EN 13414-1

Tilt angle β	One-stranded sling ropes			Two-stranded sling ropes				Three- and four-stranded sling ropes*	
	-			-0 up to 45°		above 45° up to 60°		0 up to 45°	above 45°up to 60°
	Style of fastening			Style of fastening				Style of fastening	
Nominal rope-Ø	direct	laced	2x shifted	direct	laced	direct	laced	direct	
									
Load fasten. factor	1	0,8	2 x 2	1,4	1,12	1	0,8	2,1	1,5
8	700	560	2800	950	760	700	560	1450	1050
10	1000	800	4000	1400	1100	1000	800	2100	1500
12	1500	1200	6000	2100	1700	1500	1200	3200	2300
14	2000	1600	8000	2800	2250	2000	1600	4200	3000
16	2700	2150	10800	3800	3050	2700	2150	5700	4050
18	3150	2500	12600	4400	3500	3150	2500	6600	4700
20	4000	3200	16000	5600	4500	4000	3200	8400	6000
22	5000	4000	20000	7000	5600	5000	4000	10500	7500
24	6300	5000	25200	8800	7000	6300	5000	13200	9400
26	7000	5600	28000	9800	7800	7000	5600	14700	10500
28	8000	6400	32000	11200	9000	8000	6400	16800	12000
32	11000	8800	44000	15000	12000	11000	8800	23000	16500

* The declaration of the load bearing capacity with 4 stranded sling chains only applies when all strands are stressed symmetrically. In case of asymmetrical stress only two carrying strands must be calculated according to BGR500 chapter 2.8.

The load capacity table corresponds to the FSA table (Association for ropes and mounting equipment), because ropes are market standard according to this publication. The load capacity is not always the highest possible according to DIN EN 13414 Part 1, but adapted to the economically sensible combination rope with hooks and master links according to DIN 1677.

Wire rope 1-strand Sling rope according to EN 13 414-1

Quality checked and inexpensive by EG machine guideline 2006/42 EG

Safe and efficient work guaranteed. The relation of dead weight / load bearing capacity is very favourable with wire ropes. Additionally, the ratio between wire ropes and priced is optimal. SIP offers an extensive product program, which is amplified by a deliberate accessories program. Therefore. wire ropes will be put to economically advantageous use.

Load bearing capacity by norm suggestion „FSA“	Rope-Ø [mm]	load bear. cap. 1-str. single direct [kg]	Order-no..	Price/piece usable length 1 m €	Additional charge per 1m rope length €
Sling rope with two loops Type SS	8	700	D1.08.SS.00	12,85	2,15
	10	1000	D1.10.SS.00	17,55	3,05
	12	1500	D1.12.SS.00	23,00	4,60
	14	2000	D1.14.SS.00	29,35	6,10
	16	2700	D1.16.SS.00	37,00	8,05
	18	3150	D1.18.SS.00	45,95	9,40
	20	4000	D1.20.SS.00	63,50	11,20
	22	5000	D1.22.SS.00	73,40	13,05
	24	6300	D1.24.SS.00	98,10	15,40
	26	7000	D1.26.SS.00	127,80	19,95
	28	8000	D1.28.SS.00	148,10	23,75
	30	9500	D1.30.SS.00	162,05	24,25
	32	11000	D1.32.SS.00	209,70	29,50
Sling rope with O-ring and loops Type OS	8	700	D1.08.OS.00	22,54	2,15
	10	1000	D1.10.OS.00	28,45	3,05
	12	1500	D1.12.OS.00	35,00	4,60
	14	2000	D1.14.OS.00	41,60	6,10
	16	2700	D1.16.OS.00	54,30	8,05
	18	3150	D1.18.OS.00	65,55	9,40
	20	4000	D1.20.OS.00	87,80	11,20
	22	5000	D1.22.OS.00	101,25	13,05
	24	6300	D1.24.OS.00	137,05	15,40
	26	7000	D1.26.OS.00	175,65	19,95
	28	8000	D1.28.OS.00	196,25	23,75
	30	9500	D1.30.OS.00	246,10	24,25
	32	11000	D1.32.OS.00	307,30	29,50
Sling rope with pressed-in thimbles Type KK	8	700	D1.08.KK.00	17,25	2,15
	10	1000	D1.10.KK.00	22,00	3,05
	12	1500	D1.12.KK.00	27,80	4,60
	14	2000	D1.14.KK.00	35,25	6,10
	16	2700	D1.16.KK.00	45,80	8,05
	18	3150	D1.18.KK.00	59,25	9,40
	20	4000	D1.20.KK.00	73,70	11,20
	22	5000	D1.22.KK.00	90,60	13,05
	24	6300	D1.24.KK.00	117,80	15,40
	26	7000	D1.26.KK.00	165,70	19,95
	28	8000	D1.28.KK.00	186,60	23,75
	30	9500	D1.30.KK.00	226,85	24,25
	32	11000	D1.32.KK.00	302,50	29,50

Order example: Enter usable length! D1.16.SS.05
1-strand rope- Ø 16mm with 2 loops 5m NL

Surcharge

Inspection service

Info

Higher load bearing capacity and other versions on request!

Edge protection

Made of high strength hard rubber, with strong permanent magnet for optimal adhesion.

Rope-Ø [mm]	Price/piece	Order-no.	€
max. 25		HG.5082.25	70,00

Made of aluminum die-cast with strong permanent magnets for optimal adhesion, with movable axis.

Rope-Ø [mm]	Nom. chain thickn.[mm]	Order-no.	Price/piece €
max. 25	6	AL.5081.25	76,00
max. 50	13	AL.5081.50	115,00
max. 70	18	AL.5081.70	166,00

Wire rope 1-strand Galvanized sling gear according to EN13 414-1

Corrosion is a foreign word for us

The SIP wire ropes und hangers are galvanized according to DIN EN and offer optimal corrosion protection. End joints according to EN-regulations. Wire ropes and load bearing capacities according to EN 13414-1+2(Din 3088) and BGR 500, Chapter. 2.8 or EG machine guideline 2006/42 EG.

Protect your sensitive loads

SIP offers the protection hose for wire ropes. The soft material protects surface sensitive loads and the wire rope from damages.

Sling technologie

Load bearing capacity by norm suggestion „FSA“	Rope-Ø [mm]	load bear. cap. 1-str. single direct [kg]	Order-no..	Price/piece usable length 1 m €	Additional charge per 1m rope length €
Wire rope with oval ring and wide mouth hook Type WS	8	700	D1.08.WS.00	34,50	2,15
	10	1000	D1.10.WS.00	46,15	3,05
	12	1500	D1.12.WS.00	50,95	4,60
	14	2000	D1.14.WS.00	57,55	6,10
	16	2700	D1.16.WS.00	84,70	8,05
	18	3150	D1.18.WS.00	95,95	9,40
	20	4000	D1.20.WS.00	121,50	11,20
	22	5000	D1.22.WS.00	135,00	13,05
	24	6300	D1.24.WS.00	226,75	15,40
	26	7000	D1.26.WS.00	266,35	19,95
	28	8000	D1.28.WS.00	285,95	23,75
	30	9500	D1.30.WS.00	364,35	24,25
	32	11000	D1.32.WS.00	425,55	29,50
Wire rope with oval ring and safety snap hook Typ SKe	8	700	D1.08.SK.00	35,75	2,15
	10	1000	D1.10.SK.00	43,35	3,05
	12	1500	D1.12.SK.00	56,45	4,60
	14	2000	D1.14.SK.00	65,45	6,10
	16	2700	D1.16.SK.00	86,00	8,05
	18	3150	D1.18.SK.00	102,35	9,40
	20	4000	D1.20.SK.00	146,40	11,20
	22	5000	D1.22.SK.00	171,45	13,05
	24	6300	D1.24.SK.00	231,25	15,40
	26	7000	D1.26.SK.00	295,55	19,95
	28	8000	D1.28.SK.00	318,50	23,75
	30	9500	D1.30.SK.00	433,83	24,25
	32	11000	D1.32.SK.00	502,00	29,50
Wire rope with oval ring, thimble and slide hook Type GS	8	700	D1.08.GS.00	56,55	2,15
	10	1000	D1.10.GS.00	64,45	3,05
	12	1500	D1.12.GS.00	73,05	4,60
	14	2000	D1.14.GS.00	79,65	6,10
	16	2700	D1.16.GS.00	118,30	8,05
	18	3150	D1.18.GS.00	129,55	9,40
	20	4000	D1.20.GS.00	199,90	11,20
	22	5000	D1.22.GS.00	213,35	13,05

Info

Higher load bearing capacities and other versions on request.

Surcharge

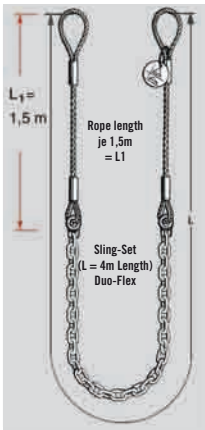
Inspection service

Duo-Flex

Sling-set

4 m length

Rope-Ø [mm]	Nom. chain-thickn. [mm]	WLL single direct [kg]	WLL single shifted [kg]	Order-no.	Price/piece € usable len.4 m	Additional charge € per 1m chain	Add. charge € per 1m rope
10	6	1000	2000	D1.10.DK.00	116,50	8,43	3,05
14	8	2000	4000	D1.14.DK.00	147,50	11,75	6,10
16	10	2700	5400	D1.16.DK.00	188,00	15,25	8,05
18	10	3150	6300	D1.18.DK.00	216,00	15,25	9,40
22	13	5000	10000	D1.22.DK.00	311,00	26,20	13,05



Wire rope 2-strand Wire rope slings

Rational lift made easy

SIP 2-strand hangers are produced according to EN 13414-1 and accident prevention rules. They are uniquely marked and precise quality controls ensures permanently high quality standard.

On request, we will also deliver 1-strand hangers of the respective design.

Load bearing capacity by norm suggestion „FSA“		Rope-Ø [mm]	Load bear. cap. 2-str. single angle 0-45° [kg]	Load bear. cap. 2-str. tilt-angle 45-60° [kg]	Order-no.	Price/pc Usable len. 1 m €	Add. charge per1m rope len. €
Type SO With oval ring and safety snap- hook		8	950	700	D2.08.SO.00	87,60	4,30
		10	1400	1000	D2.10.SO.00	107,50	6,10
		12	2100	1500	D2.12.SO.00	136,00	9,20
		14	2800	2000	D2.14.SO.00	165,00	12,20
		16	3800	2700	D2.16.SO.00	206,00	16,10
		18	4400	3150	D2.18.SO.00	248,50	18,80
		20	5600	4000	D2.20.SO.00	374,00	22,40
		22	7000	5000	D2.22.SO.00	489,50	26,10
		24	8800	6300	D2.24.SO.00	567,50	30,80
Type BO With oval ring and automatic safety hook		8	950	700	D2.08.BO.00	180,50	4,30
		10	1400	1000	D2.10.BO.00	192,00	6,10
		12	2100	1500	D2.12.BO.00	218,50	9,20
		14	2800	2000	D2.14.BO.00	239,00	12,20
		16	3800	2700	D2.16.BO.00	298,00	16,10
		18	4400	3150	D2.18.BO.00	331,50	18,80
		20	5600	4000	D2.20.BO.00	460,00	22,40
		22	7000	5000	D2.22.BO.00	501,50	26,10
		24	8800	6300	D2.24.BO.00	731,00	30,80
Type KO With oval ring and shackle		8	950	700	D2.08.KO.00	63,90	4,30
		10	1400	1000	D2.10.KO.00	75,90	6,10
		12	2100	1500	D2.12.KO.00	87,90	9,20
		14	2800	2000	D2.14.KO.00	112,00	12,20
		16	3800	2700	D2.16.KO.00	143,50	16,10
		18	4400	3150	D2.18.KO.00	176,50	18,80
		20	5600	4000	D2.20.KO.00	221,50	22,40
		22	7000	5000	D2.22.KO.00	272,50	26,10
		24	8800	6300	D2.24.KO.00	443,00	30,80
Type WO With oval ring and wide mouth hook		8	950	700	D2.08.WO.00	84,10	4,30
		10	1400	1000	D2.10.WO.00	95,10	6,10
		12	2100	1500	D2.12.WO.00	117,50	9,20
		14	2800	2000	D2.14.WO.00	137,50	12,20
		16	3800	2700	D2.16.WO.00	192,00	16,10
		18	4400	3150	D2.18.WO.00	224,00	18,80
		20	5600	4000	D2.20.WO.00	292,50	22,40
		22	7000	5000	D2.22.WO.00	331,00	26,10
		24	8800	6300	D2.24.WO.00	531,50	30,80

Ordering example: Enter usable length! D2.16.BO.04 sling rope rope-Ø 16mm auto. S.-hook 4m usable length

Info

Consider:

25% more load bearing capacity due to EG machine guideline

2006/42 EG or

EN 13 414 -1 + 2

(FSA-Norm suggestion)

Higher load bearing capacities and different versions on request!

Surcharge | Inspection service

MADE IN GERMANY

SIP

Wire rope 4-strands Wire rope slings

The professional among hangers - for high Load bearing capacities

The SIP 4-strand hangers are tailored to professional use.

Consequent quality control will ensure extraordinary reliability and durability of the SIP-hangers. The equipment with different accessories allows optimal adaptation to the user's individual requirements.

On request we also deliver 3 strand hangers of the respective version.

Load bearing capacity by norm suggestion „FSA“		Rope ø [mm]	Load bear. cap. 4-str. tilt-angle 0-45° [kg]	Load bear. cap. 2-str. tilt-angle 45-60° [kg]	Order-no.	Price/pc Usable len. 1 m €	Add. charge per1m rope len. €
Type SO with oval ring and safety karabiner hook		8	1450	1050	D4.08.SO.00	176,50	8,60
		10	2100	1500	D4.10.SO.00	221,50	12,20
		12	3200	2300	D4.12.SO.00	321,50	18,40
		14	4200	3000	D4.14.SO.00	342,50	24,40
		16	5700	4050	D4.16.SO.00	445,50	32,20
		18	6600	4700	D4.18.SO.00	525,00	37,60
		20	8400	6000	D4.20.SO.00	804,00	44,80
		22	10500	7500	D4.22.SO.00	1.099,00	52,20
		24	13200	9400	D4.24.SO.00	1.584,00	61,40
Type BO with oval ring and automatic safety hooks		8	1450	1050	D4.08.BO.00	365,00	8,60
		10	2100	1500	D4.10.BO.00	392,00	12,20
		12	3200	2300	D4.12.BO.00	461,00	18,40
		14	4200	3000	D4.14.BO.00	495,50	24,40
		16	5700	4050	D4.16.BO.00	628,50	32,20
		18	6600	4700	D4.18.BO.00	688,00	37,60
		20	8400	6000	D4.20.BO.00	971,50	44,80
		22	10500	7500	D4.22.BO.00	1.118,00	52,20
		24	13200	9400	D4.24.BO.00	1.655,00	61,60
Type KO with oval ring and shackle		8	1450	1050	D4.08.KO.00	125,00	8,60
		10	2100	1500	D4.10.KO.00	158,00	12,20
		12	3200	2300	D4.12.KO.00	203,00	18,40
		14	4200	3000	D4.14.KO.00	243,00	24,40
		16	5700	4050	D4.16.KO.00	321,50	32,20
		18	6600	4700	D4.18.KO.00	380,50	37,60
		20	8400	6000	D4.20.KO.00	500,00	44,80
		22	10500	7500	D4.22.KO.00	666,00	52,20
		24	13200	9400	D4.24.KO.00	1.335,00	61,40
Type WO with oval ring and wide mouth hook		8	1450	1050	D4.08.WO.00	175,00	8,60
		10	2100	1500	D4.10.WO.00	222,50	12,20
		12	3200	2300	D4.12.WO.00	270,00	18,40
		14	4200	3000	D4.14.WO.00	285,00	24,40
		16	5700	4050	D4.16.WO.00	410,50	32,20
		18	6600	4700	D4.18.WO.00	482,50	37,60
		20	8400	6000	D4.20.WO.00	647,50	44,80
		22	10500	7500	D4.22.WO.00	850,50	52,20
		24	13200	9400	D4.24.WO.00	1.463,00	61,40

Order example: enter usable length! D4.16.BO.03 sling rope- Ø16mm auto.s.-hook 3m usable length

Surcharge **Inspection service**

Info

Protect your load and sling rope with the secutex edge protector!

Note:

25% more load bearing capacity due to EG machine guideline 2006/42 EG or EN 13 414 -1 + 2

(FSA-Norm suggestion)

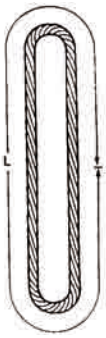
Sling technologie

Grummet Lift with Grummets

Continuously laid according to DIN EN 13414-3

Standard-Grummets

- Grummets should only be used in pairs
- When slinging the load, the rope must not be twisted
- Regular visual inspections are required
- Nominal strength of the wires min. 1770N/m²



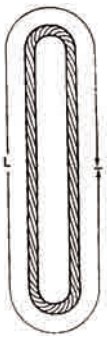
Rope-Ø [mm]	Construction	Single load bearing cap.vertical [t]	laced [t]	min. girth [m]	Order-no.	Price 2 m girth €/Stück	galvanized additional charge €/m
9	7 (6 x 19 M-FC)	1,15	0,90	2	ASG1.09.00	30,55	8,00
12		2,00	1,60	2	ASG1.12.00	43,30	10,65
15		3,20	2,60	2	ASG1.15.00	49,05	12,70
18		4,60	3,70	2	ASG1.18.00	51,30	13,85
21		6,30	5,00	2	ASG1.21.00	64,80	20,25
24		8,25	6,50	2	ASG1.24.00	70,50	23,10
27		10,50	8,50	3	ASG1.27.00	81,10	27,65
30		11,50	9,00	3	ASG1.30.00	89,40	31,75
33	7 (6 x 37 M-FC)	14,00	11,00	4	ASG2.33.00	108,00	43,10
36		16,50	13,00	4	ASG2.36.00	126,00	47,85
39		19,50	15,50	4	ASG2.39.00	139,50	53,00
42		22,50	18,00	4	ASG2.42.00	156,00	60,70
48		30,00	23,50	4	ASG2.48.00	186,00	71,80
54		37,50	30,00	4	ASG2.54.00	213,00	84,70
60		46,00	37,00	4	ASG2.60.00	233,00	100,00
66		60,00	48,00	6	ASG2.66.00	294,50	117,00
72		72,50	58,00	6	ASG2.72.00	342,50	137,00
78		76,00	61,00	6	ASG2.78.00	398,00	160,50
84		98,00	78,50	6	ASG2.84.00	465,00	185,50

Rope construction according to EN 12385-4 * Minus stranding loss of about 10%

Order example: Enter usable length! SG2.72.03 Rope-Ø 72m3m Usable length = 6m girth

Grummets with steel core (WSC)

- Grummets should only be used in pairs
- When slinging the load, the rope must not be twisted
- Regular visual inspections are required
- Nominal strength of the wires min. 1770N/m²



Single load bearing capacity up to 300 t possible on request!

Rope-Ø [mm]	Construction	Single load bearing cap.vertical [t]	laced [t]	min. girth [m]	Order-no.	Price 2 m girth €/piece	galvanized additional charge €/m
27	7 (6 x 19 M - WC)	11,5	9,2	3	ASG4.27.00	95,40	34,80
30		14,0	11,2	3	ASG4.30.00	106,00	40,00
33	7 (6 x 36 + WS - WSC)	17,0	13,6	4	ASG4.33.00	142,00	55,30
36		20,0	16,0	4	ASG4.36.00	154,50	61,30
39		23,5	18,8	4	ASG4.39.00	171,00	68,10
42		27,0	21,6	4	ASG4.42.00	190,00	78,40
48		35,5	28,4	4	ASG4.48.00	227,50	92,40
54		45,0	36,0	4	ASG4.54.00	261,00	109,00
60		55,5	44,4	6	ASG4.60.00	310,50	129,00
66		69,0	55,2	6	ASG4.66.00	363,50	151,50
72		84,0	67,2	6	ASG4.72.00	422,50	177,50
78		102,0	81,6	6	ASG4.78.00	493,00	207,00
84		121,0	96,8	6	ASG4.84.00	574,00	240,00

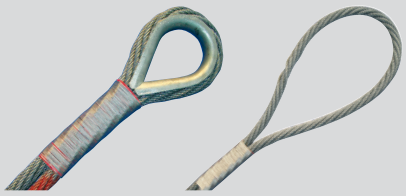
Surcharge

Info

- **Do not stress the red marked lock when bending – only stress in free pull!**
- **Continuous ropes for heavy loads**
- **Continuous ropes without thickening**
- **Important while using shackles:**
- **Sufficiently sized shackle pin**
- **If not feasible – breaking load loss**

Info

Sewing of loops or earing on request on extra charge. Please contact your SIP-partner!



Grummet Load bearing capacity for Grummets

According to EG machine guideline 2006/42/EG or DIN EN 13414-3

- Grummets should only be used in pairs
- Locks marked red may be subjected to free pulling force only
- When slinging the load, the rope must not be twisted
- Regular visual inspections are required
- Nominal strength of the wires min 1770N/mm² /1960 N/mm²
- Rope according to EN 12385-4

EN 12385-4 Construction Rope-Ø [mm]	Tab. 12 7 (6x19FC) load bearing capacity [t]	Tab. 13 7 (6x37FC) load bearing capacity [t]	Tab. 9 7 (6x36FC) load bearing capacity [t]	Tab. 9 7 (6x36WSC) load bearing capacity [t]	Tab. 9 7 (6x36WSC) load bearing capacity [t]	Tab. 10 7 (8x36WSC) load bearing capacity [t]
24,0	8,25	8,25	8,25	9,00	9,50	9,50
27,0	10,50	10,50	10,50	11,50	12,50	12,50
30,0	11,50	11,50	11,50	14,00	15,00	15,00
33,0		14,00	14,00	17,00	18,50	18,50
36,0		16,50	16,50	20,00	21,50	21,50
39,0		19,50	19,50	23,50	25,50	25,50
42,0		22,50	22,50	27,00	29,60	29,60
48,0		30,00	30,00	35,50	39,00	39,00
54,0		37,50	37,50	45,00	49,00	49,00
60,0		46,00	46,00	55,50	60,00	60,00
66,0		60,00	60,00	69,00	75,00	75,00
72,0		72,50	72,50	84,00	92,00	92,00
78,0		76,00	76,00	102,00	112,00	112,00
84,0		98,00	98,00	121,00	132,00	132,00
90,0				144,00	158,00	158,00
96,0				168,00	178,00	178,00
102,0				196,00	216,00	216,00

Info

Grummets are delivered with load bearing capacity tag.

Other special requests as well are manufactured according to the EG and meeting machine guide-line 2006/42/EG.

BG-Prüfzert DIN EN ISO 9001

Edge Protectors For sling gear

The appropriate protection for every sling gear and every edge

secutex single edge protectors for wire ropes SK-DE

- Clip execution, therefore captive and directly applicable
- With casted fabric reinforcement, adapts to any angle
- Easy handling due to low weight
- Inexpensive model for securing sharp edged loads

Wire rope inner thickness [mm]	Inner diameter [mm]	Leg length [mm]	Order-no.	Price €
8	10	50	SKD.E.08.10	8,14
10	12	75	SKD.E.10.12	10,60
12	14	100	SKD.E.12.14	14,05
14	16	125	SKD.E.14.16	17,85

secutex joint edge protector for wire ropes SK-D

- Clip model, therefore captive and directly applicable
- With steel joint, adapts to any angle
- Without magnet fastening only
- Robust due to steel reinforcement
- Easy handling
- Deliverable without magnet fastening only

secutex joint edge protector SK-K

- Model identical with SK-D, for chains, however

Wire rope inner thickness [mm]	Width [mm]	Leg length [mm]	Order-no.	Price €
16	32	80	SKD.016.00	96,20
24	44	95	SKD.024.00	108,00
32	54	110	SKD.032.00	124,50
40	65	140	SKD.040.00	152,00
48	80	160	SKD.048.00	309,00
60	100	200	SKD.060.00	838,00
80	140	280	SKD.080.00	1.078,00
100	170	340	SKD.100.00	1.350,00
120	180	360	SKD.120.00	1.520,00
150	220	400	SKD.150.00	1.933,00
secutex joint edge protector SK-K				
60	180	360	SKK.060.02	1.676,00
80	260	520	SKK.080.02	2.155,00
100	320	640	SKK.100.02	2.701,00
120	340	680	SKK.120.02	3.041,00
150	420	400	SKK.150.02	3.866,00

Massive edge protectors for heavy jobs with wire ropes.

The joint edge protectors, made of steel or aluminum, protect the wire rope and load. The rope is just positioned over the load, the edge protector adapts flexibly to the load and increases the radius on critical edges, thus producing a large-scale distribution of the lifting forces.

a) Joint edge protector for wire ropes SKDS, milled version made of steel

- With steel joint, adapts to any angle
- Without magnet fastening only
- Very robust due to solid material
- Milled version, no cheap casting

Wire rope inner thickness [mm]	Width [mm]	Leg length [mm]	Material	Order-no.	Price €
20	25	50	Aluminium	SKDS.A.020	129,00
25	40	80	Aluminium	SKDS.A.025	160,50
30	50	100	Aluminium	SKDS.A.030	193,00
40	60	120	Aluminium	SKDS.A.040	261,00
50	70	140	Aluminium	SKDS.A.050	339,00
Magnet fastening 2 legs					
20	25	50	Steel	SKDS.S.020	129,00
25	40	80	Steel	SKDS.S.025	160,50
30	50	100	Steel	SKDS.S.030	193,00
40	60	120	Steel	SKDS.S.040	261,00
40	70	140	Steel	SKDS.S.050	339,00
80	100	200	Steel	SKDS.S.080	490,00
Deliverable without magnet fastening only					

b) Joint edge protector just like SKDS

- Execution in full aluminum, magnet fastening in addition

Info

When securing the load, the lashing has to be protected from sharp edges. The high quality load must not be damaged by the lashing chains or ropes.

Fast like lightning, the lashing means is mounted to the secutex single edge protector, due to the mounting slot on the back side. It is therefore captive. Quick abd easy application of the edge protector to the load, due to low dead weight and the flexible fabric reinforcement.

Variants of single edge protectors:

a) secutex single edge protector for lashing straps SK-BE

b) secutex single edge protector for lashing chains SK-KE

Please ask your SIP-partner for prices!

Cable Grips First aid for cable pulling

Pull and hold cables, wires and pipes

Cable grip Type K I with pressed on eye or thimble

For flexible, quick and protective fastening of a cable, rope or pipe to a tow or winch rope while pulling in cable trenches, pipes or similar.

For cable-Ø [mm]	Full length [mm]	Allowed pulling stress [kN]	Thimble-Ø [mm]	Order-no.	Price/ piece €
8-15	1400	5,9	18	ZS.K1.1015	57,00
15-20	1400	9,1	18	ZS.K1.1020	59,00
20-30	1450	13,2	18	ZS.K1.1030	62,00
30-40	1450	17,6	18	ZS.K1.1040	66,00
40-50	1500	17,6	18	ZS.K1.1050	80,00
50-60	1500	31,2	20	ZS.K1.1060	87,00
60-70	1750	39,0	24	ZS.K1.1070	102,00
70-80	1750	39,0	24	ZS.K1.1080	105,00
80-90	1750	46,8	32	ZS.K1.1090	113,00
90-100	1750	54,6	32	ZS.K1.1100	136,00
100-120	1750	62,4	32	ZS.K1.1120	151,00
8-15	1400	5,9	18	ZS.K1.101K	57,00
15-20	1400	9,1	18	ZS.K1.102K	59,00
20-30	1450	13,2	18	ZS.K1.103K	62,00
30-40	1450	17,6	18	ZS.K1.104K	66,00
40-50	1500	17,6	18	ZS.K1.105K	80,00
50-60	1500	31,2	20	ZS.K1.106K	87,00
60-70	1750	39,0	24	ZS.K1.107K	102,00
70-80	1750	39,0	24	ZS.K1.108K	105,00
80-90	1750	46,8	32	ZS.K1.109K	113,00
90-100	1750	54,6	32	ZS.K1.110K	136,00
100-120	1750	62,4	32	ZS.K1.112K	151,00

Cable grip type K II with 2 pressed on eyes or thimbles

Besides pulling of cables, the types K II also allow the tracing due to moving the grip on the pulling material.

For cable-Ø [mm]	Full length [mm]	Allowed pulling stress [kN]	Thimble-Ø [mm]	Order-no.	Price/ piece €
8-15	1400	5,9	16	ZS.K2.1015	58,00
15-20	1400	9,1	16	ZS.K2.1020	62,00
20-30	1450	13,2	18	ZS.K2.1030	64,00
30-40	1450	17,6	18	ZS.K2.1040	77,00
40-50	1500	17,6	18	ZS.K2.1050	84,00
50-60	1500	31,2	20	ZS.K2.1060	95,00
60-70	1750	39,0	20	ZS.K2.1070	123,00
70-80	1750	39,0	24	ZS.K2.1080	125,00
80-90	1750	46,8	28	ZS.K2.1090	132,00
90-100	1750	54,6	30	ZS.K2.1100	153,00
100-120	1750	62,4	30	ZS.K2.1120	178,00
8-15	1400	5,9	16	ZS.K2.101K	58,00
15-20	1400	9,1	16	ZS.K2.102K	62,00
20-30	1450	13,2	18	ZS.K2.103K	64,00
30-40	1450	17,6	18	ZS.K2.104K	77,00
40-50	1500	17,6	18	ZS.K2.105K	84,00
50-60	1500	31,2	20	ZS.K2.106K	95,00
60-70	1750	39,0	20	ZS.K2.107K	123,00
70-80	1750	39,0	24	ZS.K2.108K	125,00
80-90	1750	46,8	28	ZS.K2.109K	132,00
90-100	1750	54,6	30	ZS.K2.110K	153,00
100-120	1750	62,4	30	ZS.K2.112K	178,00

Aerial line grip type KF with pressed on or spliced eye

The types KF are especially well suited for mounting of aerial lines (copper, aluminum and steel lines). The triple stepped braid ensures an even transmission of forces. The specific design with spliced pulling eye is especially well suited for pulling over rolls.

Design eye	For cable-Ø [mm]	For cable-Ø [Zoll]	Full length [mm]	Allowed pulling stress [kN]	Order-no.	Price/ piece €
pressed	6-12	3/8	950	12	ZS.KF.012.P	106,00
pressed	11-19	5/8	1100	18	ZS.KF.020.P	112,00
pressed	17-25	7/8	1300	24	ZS.KF.025.P	143,00
pressed	24-33	11/8	1900	31	ZS.KF.035.P	147,00
pressed	30-40	13/8	2100	42	ZS.KF.040.P	198,00
pressed	35-45	15/8	2100	53	ZS.KF.045.P	227,00
pressed	45-55	2	2300	66	ZS.KF.055.P	350,00
spliced	6-12	3/8	1000	12	ZS.KF.012.S	131,00
spliced	11-19	5/8	1150	18	ZS.KF.020.S	139,00
spliced	17-25	7/8	1250	24	ZS.KF.025.S	177,00
spliced	24-33	11/8	1400	31	ZS.KF.035.S	221,00
spliced	30-40	13/8	1550	42	ZS.KF.040.S	245,50
spliced	35-45	15/8	1700	53	ZS.KF.045.S	280,00
spliced	45-55	2	1900	66	ZS.KF.055.S	432,00

In between cable grip type KO open on both ends

Connection grips serve to connect two cables or ropes. In particular when changing lifting ropes or else, they are indispensible. However, the prerequisite is that there is no excessive torsion on the rope.

For cable-Ø [mm]	Full length [mm]	Allowed pulling stress [kN]	Order-no.	Price/ piece €
6-10	1000	2,8	ZS.KO.1010	38,00
8-15	1500	5,9	ZS.KO.1015	51,00
15-20	1500	9,1	ZS.KO.1020	57,00
20-30	1500	13,2	ZS.KO.1030	61,00
30-40	1500	17,6	ZS.KO.1040	76,00
40-50	1500	17,6	ZS.KO.1050	87,00
50-60	1500	31,2	ZS.KO.1060	99,00
60-70	2000	39,0	ZS.KO.1070	146,00
70-80	2000	39,0	ZS.KO.1080	161,00
80-90	2000	46,8	ZS.KO.1090	171,00
90-100	2000	54,6	ZS.KO.1100	180,00
100-120	2000	62,4	ZS.KO.1120	208,00

Band rope lifting band

Light weight and comfortable for handling

The SIP band rope lifting bands are light weight and comfortable in handling. The lifting forces are broadly spread thanks to the wide supporting surface. Thus, the lifting band as well as the load is protected. This way the band rope lifting band is granted much endurance while delicate loads are not damaged. The SIP-band rope lifting bands are manufactured according to BGR 500.

The SIP-band rope lifting bands are delivered in different versions:
- Galvanized
- Galvanized and vulcanized
- PU-coated

The vulcanizing can be redone any time, which makes it especially eco-friendly.

Info

Increased load bearing capacities on request! Talk to your SIP-partner!

- With rope eye
- Galvanized

Nom.load bearing cap.[kg]	Type	Band-width [mm]	Order-no.	Price per piece € usable length L1 2 m	3 m	4 m	5 m	6 m	Add.charge lin. m €
1000	Galvanized	30	BS.1.10Z.00	88,60	119,50	150,40	181,30	212,20	30,90
1500	Galvanized	45	BS.1.15Z.00	112,50	149,00	185,50	222,00	258,50	36,50
2000	Galvanized	65	BS.1.20Z.00	129,90	173,30	216,70	260,10	303,50	43,40
3000	Galvanized	65	BS.1.30Z.00	183,30	239,20	295,10	351,00	406,90	55,90

- With rope eye
- Vulcanized or with secutex-PU-coating

Nom.load bearing cap.[kg]	Type	Band-width [mm]	Order-no.	Price per piece € usable length L1 2 m	3 m	4 m	5 m	6 m	Add.charge lin. m €
1000	Vulcanized	40	BS.2.10V.00	158,90	224,30	289,70	355,10	420,50	65,40
1500	Vulcanized	50	BS.2.15V.00	193,90	269,80	345,70	421,60	497,50	75,90
2000	Vulcanized	80	BS.2.20V.00	202,10	286,20	370,30	454,40	538,50	84,10
3000	Vulcanized	80	BS.2.30V.00	262,80	352,80	442,80	532,80	622,80	90,00

Info

This way, you'll be in control! Band ropes with secutex-coating are heat resistant up to 100°C, acid resistant, cut resistant and oil resistant. The transparent coating allows unproblematic control of the band rope without having to remove the coating.

Edge protector

- For band loops
- Made of aluminum die casting
- With strong permanent magnet for optimal adhesion
- Mobile version

Type	Bandwidth [mm]	Order-no.	Price/piece €
Alu-die cast	80	AL.5080.08	83,00
Alu-die cast	150	AL.5080.15	243,00

Info

All products are also available in stainless steel on request! Deliverable in different versions up to 100t load bearing capacity at a band width of 350mm!

Band rope lifting band

Light and comfortable handling

- With two crane yokes
- Galvanized and vulcanized

Type	Nom.load bearing cap. [kg]	Band width [mm]	Band thickn. [mm]	Order-no.	Price per piece € vulcanized design 2 m	3 m	4 m	5 m	Additional charge lin. m €
With two crane yokes, vulcanized	750	40	12	BS.3.075.00	430,00	574,00	718,00	862,00	144,00
With two crane yokes, vulcanized	1250	50	12	BS.3.125.00	453,00	609,00	765,00	921,00	156,00
With two crane yokes, vulcanized	2000	70	15	BS.3.200.00	499,00	669,00	839,00	1.009,00	170,00
With two crane yokes, vulcanized	3000	80	15	BS.3.300.00	533,00	720,00	907,00	1.094,00	187,00

- With crane yokes and combination yokes
- Galvanized and vulcanized

Type	Nom.load bearing cap. [kg]	Load bearing capacity laced [kg]	Band width [mm]	Band thickn. [mm]	Order-no.	Price per piece € vulcanized design 2 m	3 m	4 m	5 m	Additional charge lin. m €
With a crane yoke and a combination yoke Vulcanized	750	600	40	12	BS.4.075.00	501,00	645,00	789,00	933,00	144,00
With a crane yoke and a combination yoke Vulcanized	1250	1000	50	12	BS.4.125.00	556,00	712,00	868,00	1.024,00	156,00
With a crane yoke and a combination yoke, vulcanized	2000	1600	70	15	BS.4.200.00	603,00	773,00	943,00	1.113,00	170,00
With a crane yoke and a combination yoke Vulcanized	3000	2400	80	15	BS.4.300.00	650,00	837,00	1.024,00	1.211,00	187,00

- With two roped eyes and loop protection
- Galvanized

Type	Nom.load bearing cap. [kg]	Sizes	Band width [mm]	Band thickn. [mm]	Order-no.	Price per piece € vulcanized design 2 m	3 m	4 m	5 m	Additional charge lin. m €
galvanized	750	A	30	6	BS.5.075.00	200,00	266,00	332,00	398,00	66,00
galvanized	1250	B	40	6	BS.5.125.00	227,00	305,00	383,00	461,00	78,00
galvanized	2000	B	50	8	BS.5.200.00	245,00	328,00	411,00	494,00	83,00
galvanized	3000	C	70	8	BS.5.300.00	258,00	351,00	444,00	537,00	93,00
galvanized	6000	D	90	10	BS.5.600.00	283,00	382,00	481,00	580,00	99,00

- With crane yokes and C-yoke
- Galvanized and vulcanized

Type	Nominal load bearing capacity [kg]	Band width [mm]	Band thickn. [mm]	Order-no.	Price per piece € vulcanized design 2 m	3 m	4 m	5 m	Addit. charge lin. m €
vulcanized	1000	50	10	BS.6.100.00	458,00	658,00	858,00	1.058,00	200,00
vulcanized	1600	70	15	BS.6.160.00	592,00	830,00	1.068,00	1.306,00	238,00
vulcanized	2400	80	15	BS.6.240.00	634,00	883,00	1.132,00	1.381,00	249,00
vulcanized	4800	120	15	BS.6.480.00	689,00	970,00	1.251,00	1.532,00	281,00

Info

Continuous version for turning device on request!

Round steel hooks High-strength sling gear

Info

The S-hooks may only be used as an auxiliary attachment!

The use is determined by a users manual. Round steel hooks also available in rust free steel stainless.

Info

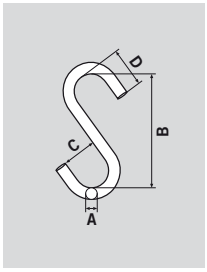
In the application of S-hook is essential to ensure that an unintentional detachment is avoided.

In all cases where this can not be assured with absolute certainty, an S-hook with safety latch mounted plate (price on request) is used.

S-Hook, open

- High resistance
- Standard equipment
- Stamped
- Painted red

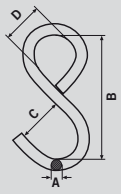
Nom. l. b. cap. [kg]	A [mm]	B [mm]	C [mm]	D [mm]	Order-no.	Price/ piece €
100	8	80	25	28	SH.S0.01.00	12,35
200	10	80	25	28	SH.S0.02.00	12,80
300	14	100	30	35	SH.S0.03.00	15,10
500	16	130	40	45	SH.S0.05.00	15,95
750	18	160	50	56	SH.S0.07.50	20,65
1000	20	180	55	63	SH.S0.10.00	25,20
1250	22	200	60	70	SH.S0.12.00	32,50
1500	26	220	65	77	SH.S0.15.00	37,75
2000	32	260	80	91	SH.S0.20.00	55,20
3000	36	320	95	112	SH.S0.30.00	80,90
4000	40	360	110	126	SH.S0.40.00	138,50
5000	45	400	120	140	SH.S0.50.00	158,50
6000	55	450	135	158	SH.S0.60.00	234,00
8000	60	550	165	192	SH.S0.80.00	379,50
10000	65	600	180	210	SH.S0.00.00	510,50
12500	70	700	180	210	SH.S0.25.00	615,00



S-Hooks, closed

- Closed-loop
- Standard equipment

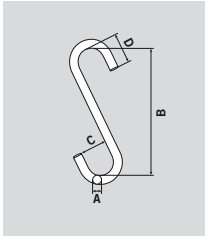
Nom. l. b. cap. [kg]	A [mm]	B [mm]	C [mm]	D [mm]	Order-no.	Price/ piece €
100	8	80	25	28	SH.S0.01.0G	15,50
200	10	80	25	28	SH.S0.02.0G	16,30
300	14	100	30	35	SH.S0.03.0G	19,05
500	16	130	40	45	SH.S0.05.0G	20,15
750	18	160	50	56	SH.S0.07.5G	26,30
1000	20	180	55	63	SH.S0.10.0G	31,90
1250	22	200	60	70	SH.S0.12.0G	41,15
1500	26	220	65	77	SH.S0.15.0G	47,95
2000	32	260	80	91	SH.S0.20.0G	70,20
3000	36	320	95	112	SH.S0.30.0G	102,50
4000	40	360	110	126	SH.S0.40.0G	176,00
5000	45	400	120	140	SH.S0.50.0G	200,50
6000	55	450	135	158	SH.S0.60.0G	296,50
8000	60	550	165	192	SH.S0.80.0G	480,50
10000	65	600	180	210	SH.S0.00.0G	647,50
12500	70	700	180	210	SH.S0.25.0G	780,50



S-Hooks, open

- High resistance
- Great length
- Stamped
- Painted red

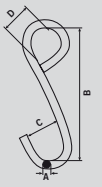
Nom. l. b. cap. [kg]	A [mm]	B [mm]	C [mm]	D [mm]	Order-no.	Price/ piece €
100	8	115	28	28	SH.SF.010.0	13,70
150	10	115	28	28	SH.SF.015.0	14,05
250	12	153	38	38	SH.SF.025.0	18,05
350	14	190	50	50	SH.SF.035.0	19,25
500	16	230	63	63	SH.SF.050.0	21,65
750	20	267	76	76	SH.SF.075.0	26,50
1000	22	305	88	88	SH.SF.100.0	37,75
1300	26	331	100	100	SH.SF.130.0	41,40
1500	28	380	115	115	SH.SF.150.0	52,40
2000	32	407	127	127	SH.SF.200.0	68,50
2400	35	430	140	140	SH.SF.240.0	80,00
2800	38	460	150	150	SH.SF.280.0	86,10
3200	40	500	160	160	SH.SF.320.0	100,50



S-Hooks, closed

- Closed-loop
- Great length

Nom. l. b. cap. [kg]	A [mm]	B [mm]	C [mm]	D [mm]	Order-no.	Price/ piece €
100	8	115	28	28	SH.SF.010.G	16,30
150	10	115	28	28	SH.SF.015.G	17,05
250	12	153	38	38	SH.SF.025.G	21,85
350	14	190	50	50	SH.SF.035.G	22,90
500	16	230	63	63	SH.SF.050.G	25,95
750	20	267	76	76	SH.SF.075.G	31,90
1000	22	305	88	88	SH.SF.100.G	45,20
1300	26	331	100	100	SH.SF.130.G	49,55
1500	28	380	115	115	SH.SF.150.G	62,90
2000	32	407	127	127	SH.SF.200.G	82,10
2400	35	430	140	140	SH.SF.240.G	95,70
2800	38	460	150	150	SH.SF.280.G	103,00
3200	40	500	160	160	SH.SF.320.G	116,00



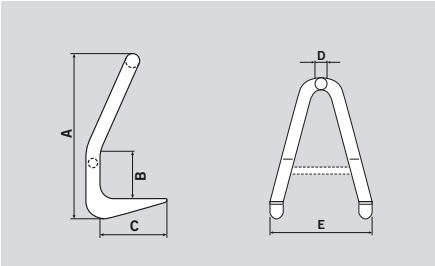
Surcharge

Conveyor hook for sheet transportation.

Easy and flexible to use

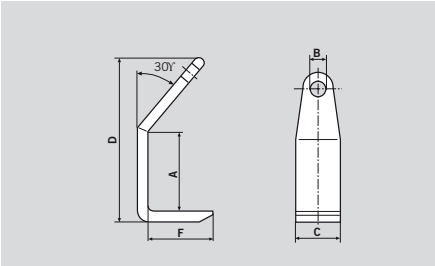
- Spread Execution
- High Resistance

Load bear. capacity [kg]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Weight [kg]	Order-no.	Price/piece €
500	180	50	80	18	150	1,3	SH.BH.005.0	89,30
1120	210	60	95	20	170	1,8	SH.BH.010.0	130,00
1500	240	70	105	22	200	2,2	SH.BH.015.0	150,00
2000	280	80	115	26	220	3,3	SH.BH.020.0	162,00
2500	340	100	120	32	270	6,5	SH.BH.025.0	253,50
3200	400	120	140	32	320	8,3	SH.BH.030.0	271,00
4000	530	160	180	36	420	13,5	SH.BH.040.0	340,50
5300	660	200	210	40	520	19,0	SH.BH.050.0	400,00
6000	800	250	250	50	640	33,0	SH.BH.060.0	541,50
7500	980	300	300	60	760	60,0	SH.BH.075.0	817,00
10000	1000	400	350	70	800	75,0	SH.BH.100.0	1.364,00



- Simple form
- High resistance
- Stamped
- Painted red
- With or without handle

Load bear. capacity [kg]	A [mm]	B [mm]	C [mm]	D [mm]	F [mm]	Weight [kg]	Order-no.	Price/piece €
500	80	16	50	170	70	0,8	SH.BH2.05.0	123,00
1000	90	20	60	210	90	1,4	SH.BH2.10.0	144,50
1500	110	23	70	240	105	2,5	SH.BH2.15.0	155,00
2000	125	25	80	275	110	3,5	SH.BH2.20.0	219,00
2500	145	30	90	300	120	5,7	SH.BH2.25.0	289,50
3000	185	35	100	380	135	7,4	SH.BH2.30.0	372,50
4000	220	35	115	450	145	10,2	SH.BH2.40.0	483,00
5000	260	40	130	520	160	15,0	SH.BH2.50.0	570,00
7500	300	45	150	600	180	20,0	SH.BH2.75.0	871,00

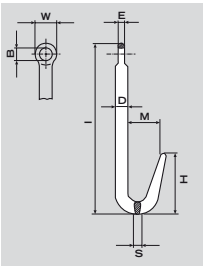


Matt steel hook

- Stamped
- Painted red

Load b. capacity [kg]	B [mm]	D [mm]	E [mm]	H [mm]	L [mm]	M [mm]	S [mm]	W [mm]	Weight [kg]	Order-no.	Price/ piece €
1600	20	20	10	100	280	40	15	35	1,2	SH.BSMH.01	80,80
1600	20	30	20	110	370	50	20	50	2,5	SH.BSMH.02	96,60
3200	21	28	13	95	430	50	23	45	2,3	SH.BSMH.03	127,50

Surcharge



Info

We offer a variety of special hooks to suit your specific needs.

We will be happy send you further information

e.g.: Double hook

Flat steel hook

Round steel hook

Square Steel hooks

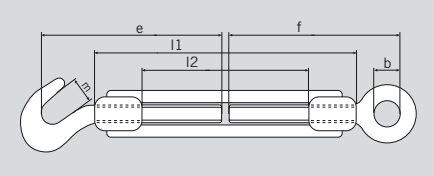
Turnbuckle Sling ropes accessoires

with hook and loop

- Similar to DIN 1480
- With hook and loop
- Material St37
- Galvanized

SIP turnbuckles are also available with two loops or two hooks!

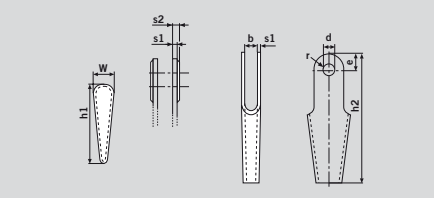
Nom. size thread-Ø	L1 [mm]	L2 [mm]	b [mm]	e [mm]	f [mm]	m [mm]	Weight [kg]	Order-no.	Price/ piece €
M 6	110	86	9	85	80	12	0,095	00.0M06.SS	2,26
M 8	110	80	10	85	84	15	0,155	00.0M08.SS	2,83
M 10	125	89	14	112	105	18	0,290	00.0M10.SS	4,27
M 12	125	83	16	117	115	21	0,430	00.0M12.SS	5,22
M 14	140	92	18	122	122	24	0,620	00.0M14.SS	7,48
M 16	170	116	22	138	165	27	0,920	00.0M16.SS	9,00
M 20	200	132	24	170	167	34	1,630	00.0M20.SS	15,07
M 22	220	146	27	185	167	37	2,200	00.0M22.SS	28,12
M 24	255	177	27	205	205	39	3,000	00.0M24.SS	29,11
M 30	255	165	31	225	255	45	4,600	00.0M30.SS	41,06
M 36	295	185	43	255	276	55	7,680	00.0M36.SS	95,17



Cable lock

- According to EN 13411-7 (former DIN 15315)
- Sizes 25-40 non-standard
- Material: rope socket housing material St37 to EN 10025
- Malleable Iron DIN 1692 - GTS-35-10
- Design: Rope wedge according to EN 10025 under S235JR according to DIN 1691 GG-20

Rope ø [mm]	b [mm]	e [mm]	s1 [mm]	s2 [mm]	h2 [mm]	d [mm]	r [mm]	h1 [mm]	w [mm]	Weight [kg]	Order-no.	Price/ piece €
4-5	12	14	3	-	110	10	12	68	19	0,17	SC.5800.05	10,06
5-6,5	10	16	4,5	-	100	10	14	58	19	0,21	SC.5800.06	11,16
6-8	14	20	4	-	150	12	18	92	25	0,50	SC.5800.08	13,30
9-11	17	26	6	-	190	16	23	117	32	1,04	SC.5800.11	20,60
12-14	22	32	8	-	230	18	28	141	38	2,07	SC.5800.14	34,19
15-17	25	36	10	-	260	22	32	162	46	3,66	SC.5800.17	54,79
18-20	27	40	12	-	300	25	35	186	52	5,35	SC.5800.20	80,15
22-25	33	40	12	-	284	42	44	180	60	6,22	SC.5800.25	284,35
26-30	40	55	14	22	335	52	55	182	62	10,10	SC.5800.30	430,19
31-35	44	60	27	35	390	55	60	207	68	23,64	SC.5800.35	964,55
36-40	50	70	29	37	460	60	65	231	70	33,22	SC.5800.40	1.381,80

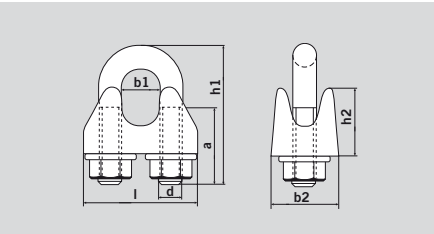


Wire rope clamp

- According to DIN 1142, DIN 1982-01 and EN 13411-5

Rope-ø [mm]	a [mm]	B1 [mm]	B2 [mm]	d [mm]	h1 [mm]	h2 [mm]	l [mm]	Weight/ piece [kg]	Order-no.	Price/ piece €
5	13	7	13	M 5	25	13	25	0,021	00.05.05.KL	0,45
6,5	17	8	16	M 6	32	14	30	0,040	00.06.06.KL	0,58
8	20	10	20	M 8	41	18	39	0,082	00.08.08.KL	0,96
10	24	12	20	M 8	46	21	40	0,092	00.10.08.KL	0,95
13	30	15	28	M 12	64	29	55	0,275	00.13.12.KL	1,87
16	35	18	32	M 14	76	35	64	0,430	00.16.14.KL	3,45
19	36	22	32	M 14	83	40	68	0,490	00.19.14.KL	3,96
22	40	24	34	M 16	96	44	74	0,680	00.22.16.KL	4,78
26	50	26	38	M 20	111	51	84	1,170	00.26.20.KL	10,26

Surcharge

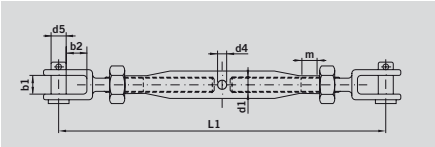


Stay Adjusters Sling ropes accessoires

With Forks

- Stay Adjusters similar to DIN 1478
- With forks, nuts, machine screws and lock nuts

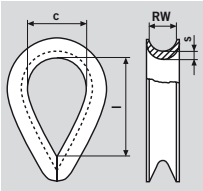
Nom. load [kg]	d1 [mm]	d4 [mm]	d5 [mm]	b1 [mm]	b2 [mm]	L1 from to [mm]	Adjustm. range [mm]	m [mm]	Weight [kg]	Order-no.	Price/ piece €
120	M 8	8	M 8	10	15	205-290	85	10	0,26	SC.5700.08	22,00
200	M 10	8	M 10	10	21	250-340	90	12	0,45	SC.5700.10	29,00
270	M 12	10	M 12	14	19	300-390	90	15	0,66	SC.5700.12	38,00
2200	M 16	10	M 16	18	24	340-465	125	20	1,51	SC.5700.16	55,00
4300	M 20	12	M 20	27	47	455-605	150	24	2,93	SC.5700.20	88,00
8000	M 24	12	M 24	33	53	550-730	180	29	5,00	SC.5700.24	183,00
11500	M 30	16	M 30	43	74	665-845	180	36	9,97	SC.5700.30	on request



Rope-Ø [mm]	RW [mm]	c [mm]	l [mm]	s [mm]	Weight [kg]	Order-no.	Price/piece €
4	5	10	20	2,1	0,01	KS.3090.04	0,95
6	7	15	30	2,6	0,03	KS.3090.06	1,19
8	9	20	40	4,0	0,07	KS.3090.08	2,07
10	11	25	50	5,0	0,15	KS.3090.10	3,58
12	13	30	60	6,0	0,23	KS.3090.12	4,65
14	16	35	70	7,0	0,33	KS.3090.14	5,35
16	18	40	80	8,0	0,48	KS.3090.16	7,36
18	20	45	90	9,0	0,65	KS.3090.18	11,45
20	22	50	100	10,0	0,95	KS.3090.20	18,13
22	24	55	110	10,0	1,08	KS.3090.22	25,35
24	26	60	120	11,0	1,32	KS.3090.24	29,22
26	29	65	130	12,0	2,18	KS.3090.26	32,86
28	31	70	140	12,0	2,60	KS.3090.28	40,71
32	35	80	160	14,0	3,99	KS.3090.32	57,29
36	40	90	180	16,0	4,47	KS.3090.36	73,46
40	44	100	200	18,0	7,30	KS.3090.40	113,07
44	48	110	220	20,0	8,68	KS.3090.44	140,33
48	53	120	240	22,0	10,74	KS.3090.48	223,49

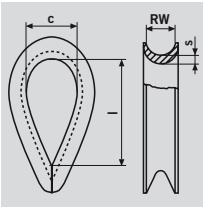
Thimbles

- Similar to DIN EN 13411-1 (formerly DIN 3090)
- Galvanized
- Nominal size taken



2,5	3	12	19	1,2	0,005	KS.000B.03	0,22
3,5	4	13	21	1,2	0,008	KS.000B.04	0,27
4,0	5	14	23	1,7	0,010	KS.000B.05	0,30
5,0	6	16	25	2,2	0,016	KS.000B.06	0,36
6,0	7	18	28	2,2	0,019	KS.000B.07	0,44
7,0	8	20	32	2,7	0,030	KS.000B.08	0,52
9,0	10	24	38	2,9	0,047	KS.000B.10	0,66
11,0	12	28	45	3,2	0,068	KS.000B.12	0,91
13,0	14	32	51	3,5	0,100	KS.000B.14	1,19
15,0	16	36	58	3,8	0,145	KS.000B.16	1,63
16,0	18	40	64	4,2	0,190	KS.000B.18	2,83
18,0	20	45	72	5,2	0,290	KS.000B.20	3,52
20,0	22	50	80	5,2	0,320	KS.000B.22	3,71
22,0	24	56	90	6,2	0,500	KS.000B.24	4,15
24,0	26	62	99	6,5	0,590	KS.000B.26	7,17
26,0	28	70	112	7,3	0,820	KS.000B.28	8,74
28,0	30	75	120	8,0	1,000	KS.000B.30	12,30
30,0	32	80	128	8,0	1,230	KS.000B.32	14,61
32,0	34	95	152	8,0	1,560	KS.000B.34	on request
34,0	36	100	160	8,0	1,760	KS.000B.36	on request
36,0	38	110	176	8,5	1,920	KS.000B.38	on request
38,0	40	115	184	10,5	2,920	KS.000B.40	on request
40,0	42	120	194	10,5	3,200	KS.000B.42	on request

- According to DIN 6899 Type BF (formerly DIN 6899 B)
- Galvanized



Info

The complete grade steel can be found on pages 413-415.

Surcharge

Shackles With Shackle Bolts

The reliale union

The SIP shackles are made of high strength steel and tested.The load and nominal size is permanently attached.

The SIP shackles are similar to EN 13889, they are galvanized, the bolt is painted.
Need shackles of grade 8 or in the special grade 8S, higher capacity and smaller dimensions, talk to us, we will be happy to advise you.

Info

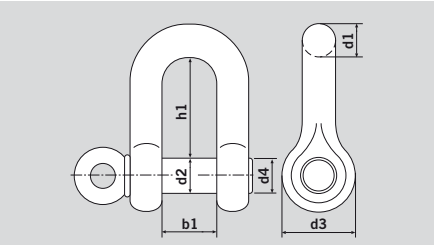
Extending round slings can be done by connecting it to a shackle.

Forged shackle according to DIN 82101 available upon request. Talk to us about it!

Shackle Type SA

- Straight shape
- With galvanized bolts
- Bolts painted
- Rated load capacity and size stamped in

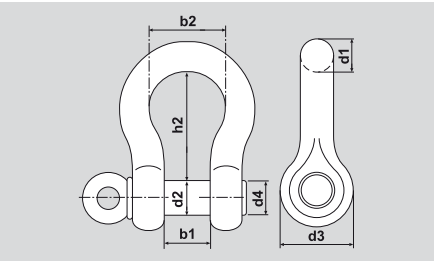
Nom. size [Zoll]	Load bear. cap. with 5x safety [kg]	D1 [mm]	D2 [mm]	D2 [Zoll]	D3 [mm]	B1 [mm]	B2 [mm]	H2 [mm]	ca. weight [kg]	Order-no.	Price/piece €
1/4	500	6,5	8	5/16	17	12	20	28	0,05	00.0005.SA	2,72
5/16	750	8	10	3/8	21	13	21	31	0,08	00.0007.SA	2,93
3/8	1000	10	11	7/16	25	16	26	36	0,14	00.0010.SA	3,24
7/16	1500	11	13	1/2	27	18	29	42	0,22	00.0015.SA	4,12
1/2	2000	13	16	5/8	30	21	33	48	0,33	00.0020.SA	4,86
5/8	3250	16	19	3/4	40	27	43	60	0,65	00.0032.SA	8,15
3/4	4750	19	22	7/8	48	32	51	71	0,97	00.0047.SA	11,10
7/8	6500	22	25	1	54	36	58	84	1,52	00.0065.SA	14,85
1	8500	25	29	1 1/8	60	43	68	95	2,39	00.0085.SA	20,85
1 1/8	9500	29	32	1 1/4	67	46	74	108	3,15	00.0095.SA	29,00
1 1/4	12000	32	35	1 3/8	76	52	82	119	4,32	00.0120.SA	46,25
1 3/8	13500	35	38	1 1/2	84	57	92	133	5,67	00.0135.SA	61,60
1 1/2	17000	38	41	1 5/8	92	60	98	146	7,79	00.0170.SA	75,80
1 3/4	25000	44	51	2	110	73	127	178	12,51	00.0250.SA	125,00
2	35000	51	57	2 1/4	127	83	146	197	18,50	00.0350.SA	188,00
2 1/2	55000	63	70	2 3/4	152	105	184	267	37,58	00.0550.SA	404,50



Shackle Type SB

- Curved shape
- With galvanized bolts
- Bolts painted
- Rated load capacity and size stamped in

Nom. size [Zoll]	Load bear. cap. with 5x safety [kg]	D1 [mm]	D2 [mm]	D2 [Zoll]	D3 [mm]	B1 [mm]	B2 [mm]	H2 [mm]	ca. weight [kg]	Order-no.	Price/piece €
1/4	500	6,5	8	5/16	17	12	20	28	0,05	00.0005.SB	2,72
5/16	750	8	10	3/8	21	13	21	31	0,08	00.0007.SB	2,93
3/8	1000	10	11	7/16	25	16	26	36	0,14	00.0010.SB	3,24
7/16	1500	11	13	1/2	27	18	29	42	0,22	00.0015.SB	4,26
1/2	2000	13	16	5/8	30	21	33	48	0,33	00.0020.SB	5,41
5/8	3250	16	19	3/4	40	27	43	60	0,65	00.0032.SB	8,34
3/4	4750	19	22	7/8	48	32	51	71	0,97	00.0047.SB	11,40
7/8	6500	22	25	1	54	36	58	84	1,52	00.0065.SB	15,45
1	8500	25	29	1 1/8	60	43	68	95	2,39	00.0085.SB	22,00
1 1/8	9500	29	32	1 1/4	67	46	74	108	3,15	00.0095.SB	29,35
1 1/4	12000	32	35	1 3/8	76	52	82	119	4,32	00.0120.SB	49,25
1 3/8	13500	35	38	1 1/2	84	57	92	133	5,67	00.0135.SB	62,90
1 1/2	17000	38	41	1 5/8	92	60	98	146	7,79	00.0170.SB	78,90
1 3/4	25000	44	51	2	110	73	127	178	12,51	00.0250.SB	129,50
2	35000	51	57	2 1/4	127	83	146	197	18,50	00.0350.SB	196,00
2 1/2	55000	63	70	2 3/4	152	105	184	267	37,58	00.0550.SB	415,00



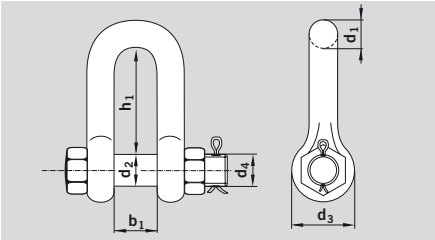
Shackles High strength with nut and split pin

The safe connection for demanding loads

The SIP shackle type SA-M/SB-M are on account of the nut and split pin and suitable for safe use according to BGR suitable 500. They are made of high strength steel and are tested. The load capacity and nominal size is permanently attached. The SIP shackles are similar to EN 13889, they are galvanized, the bolt is painted.

Correct application and use
Use is not approved with normal, high strength shackles:

According to EN 13889 a β-angle of inclination greater than 7 ° is not permitted!



High strength shackle Type SA-M

- Straight shape
- With nut and split pin

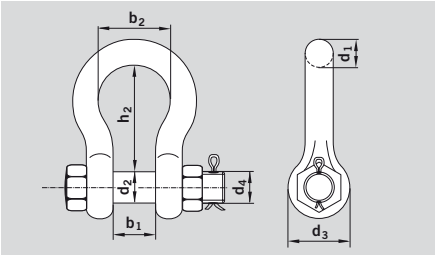
Load bear. c. with 5x s[kg]	Nom. size [Zoll]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [Zoll]	B1 [mm]	H1 [mm]	ca. weight [kg]	Order-no.	Price/piece €
1000	3/8	10	12	26	7/16	16	31	0,15	00.G000.SA	6,75
1500	7/16	11	14	28	1/2	18	36	0,22	00.G001.SA	7,45
2000	1/2	13	16	30	5/8	21	41	0,35	00.G002.SA	8,09
3250	5/8	16	19	40	3/4	27	51	0,7	00.G003.SA	11,60
4750	3/4	19	22	48	7/8	32	60	1,22	00.G004.SA	16,65
6500	7/8	22	25	54	1	36	70	1,7	00.G006.SA	22,15
8500	1	25	29	60	1 1/8	43	80	2,45	00.G008.SA	28,65
9500	1 1/8	29	32	67	1 1/4	46	90	3,4	00.G009.SA	41,60
12000	1 1/4	32	35	76	1 3/8	52	100	4,8	00.G012.SA	62,90
13500	1 3/8	35	38	84	1 1/2	57	113	6,4	00.G013.SA	81,70
17000	1 1/2	38	41	92	1 5/8	60	124	8,5	00.G017.SA	99,20
25000	1 3/4	44	51	110	2	73	146	13,2	00.G025.SA	166,50
35000	2	51	57	127	2 1/4	83	171	20,0	00.G035.SA	207,00
55000	2 1/2	63	70	152	2 3/4	105	203	38,0	00.G055.SA	516,50
85000	3	76	82	165	3 1/4	127	216	55,4	00.G085.SA	856,50
120000	3 1/2	89	95	203	3 3/4	146	267	98,1	00.G120.SA	1.405,00

Order example: Enter only the first 8 characters! 00.G008.SA Shackle Type SA-M load 8500 kg

High-strength shackle type SB-M

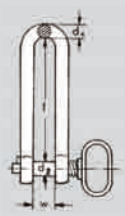
- Curved shape
- With nut and split pin

Load bear. c. with 5x s[kg]	Nom. size [Zoll]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [Zoll]	B1 [mm]	B2 [mm]	H2 [mm]	ca. weight [kg]	Order-no.	Price/piece €
1000	3/8	10	12	26	7/16	16	26	31	0,18	00.S000.SB	6,95
1500	7/16	11	14	28	1/2	18	29	36	0,25	00.S001.SB	7,75
2000	1/2	13	16	30	5/8	21	33	48	0,35	00.S002.SB	8,35
3250	5/8	16	19	40	3/4	27	43	60	0,7	00.S003.SB	13,50
4750	3/4	19	22	48	7/8	32	51	71	1,22	00.S004.SB	17,80
6500	7/8	22	25	54	1	36	58	84	1,7	00.S006.SB	24,25
8500	1	25	29	60	1 1/8	43	68	95	2,45	00.S008.SB	29,25
9500	1 1/8	29	32	67	1 1/4	46	74	108	3,4	00.S009.SB	44,95
12000	1 1/4	32	35	76	1 3/8	52	82	119	4,8	00.S012.SB	64,60
13500	1 3/8	35	38	84	1 1/2	57	92	133	6,4	00.S013.SB	83,90
17000	1 1/2	38	41	92	1 5/8	60	98	146	8,5	00.S017.SB	104,50
25000	1 3/4	44	51	110	2	73	127	178	13,2	00.S025.SB	172,50
35000	2	51	57	127	2 1/4	83	146	197	20,0	00.S035.SB	210,00
55000	2 1/2	63	70	152	2 3/4	105	184	267	42,3	00.S055.SB	525,00
85000	3	76	82	165	3 1/4	127	200	330	65,5	00.S085.SB	866,50
120000	3 1/2	89	95	203	3 3/4	146	230	381	112,5	00.S120.SB	1.486,00



Info

Sheet piling shackle with patented fast lock, high-strength bolts, stamped and painted. Load capacity up to 10,000 kg.
Please contact us to!



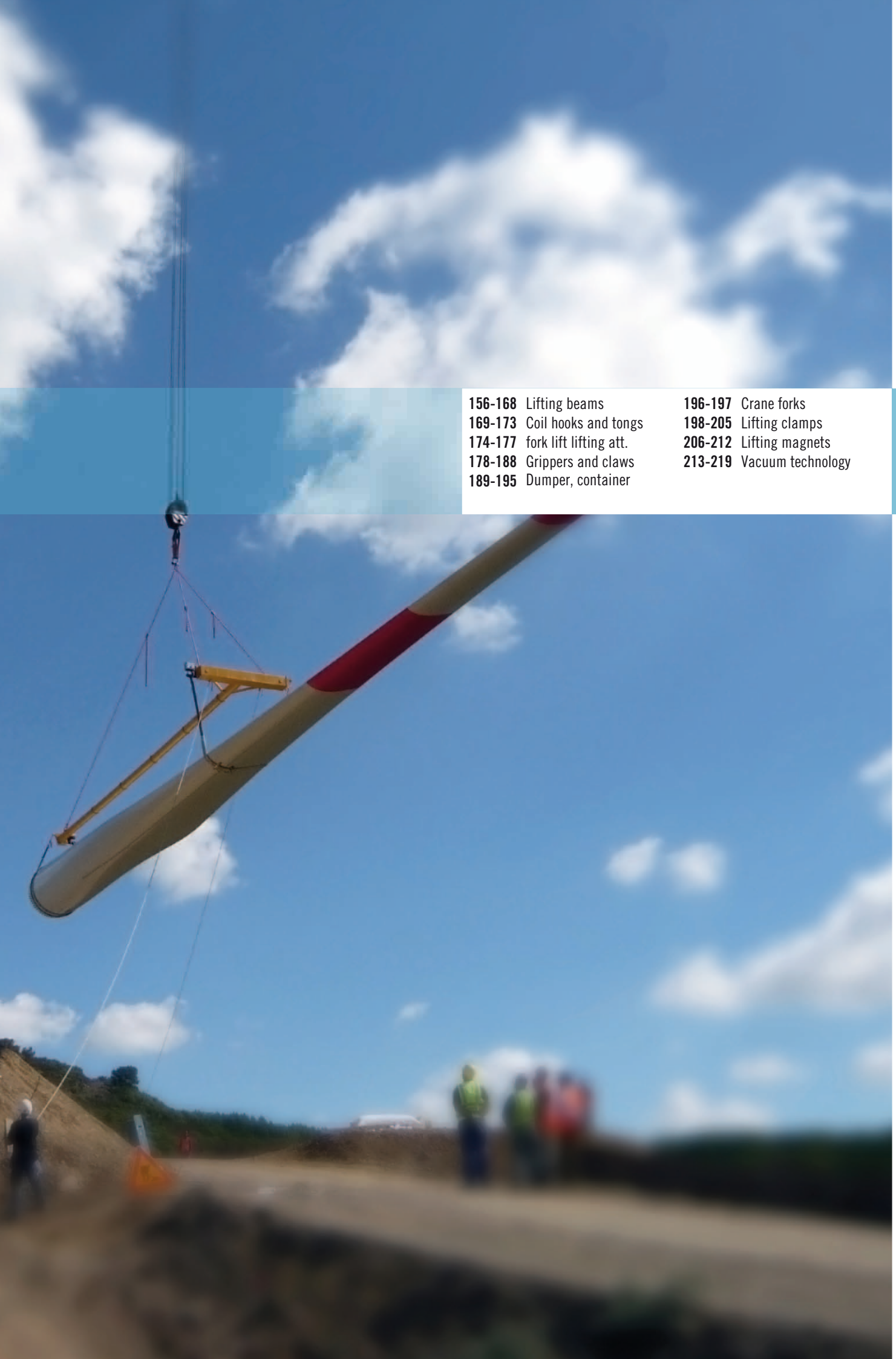
Info

Shackles in stainless steel can be found on catalog pages 413-415.

Info

Are you looking for other versions of shackles? Talk to your SIP partners. We are happy to help!

HOISTING DEVICES



156-168 Lifting beams
169-173 Coil hooks and tongs
174-177 fork lift lifting att.
178-188 Grippers and claws
189-195 Dumper, container
196-197 Crane forks
198-205 Lifting clamps
206-212 Lifting magnets
213-219 Vacuum technology

Facts about lifting equipment!

1. Legal foundation

- BRG 500, chapter 2.8
- Operation of load-support equipment in lifting equipment mode
- Machinery Directive 2006/42 EC
- EN 13155

High quality ensures perfect operation.

The manufacturing department has the major welding suitability certificate according to DIN 18800, Part 7, and DIN 15018 for dynamic and static support frames.
The lifting equipment is produced by certified welders according to EN 287 -1 under constant control of a welding engineer. Only material with a test certificate according to EN 10204 is used.
Testing methods and constructive basis of assessment according to EN 13155 (cranes > loose lifting equipment) and DIN 15018.

All of the lifting equipment will be constructed standardized and so calculated that a static overload test with double nominal load without visible damages and permanent deformation can be realized (overload is never permissible in normal operation).

2. Lifting gear from the hands of experts

Precise planning guarantees perfect function
Already during planning phase an optimal concept will be developed by intensive contact by the user. The construction with the latest CAD-systems and computer-based calculation programs enable subsequent processing and modification any time.

Competent consultation on site
The trained team of experienced consultants gets full potential from some problem solutions into the counseling meeting. Thereby, the application engineer gladly comes to the customer to gain an impression on site of the respective operating conditions and requirements.

Certificates, of course
Each piece of lifting equipment has a name plate with the manufacturer, lifting capacity, dead weight, serial number and date of manufacture. Each piece of lifting equipment has a detailed user manual, the factory test certificate and the declaration of conformity.

For an additional charge, we deliver auditable and statistic documents; special audits (Lloyd Register, Norske Veritas and TÜV etc.) and overload test are easily possible.
The CE declaration and user manual refers to delivered load suspension device, in case of internal specialties a more detailed risk analysis may be necessary.

Info

EPIS is the electronic product management and identification system with the latest RFID technology. The system consists of system (database), mobile writing utensil/ reading device and different data chips that allow equipping lifting equipment.

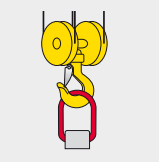
The advantages of EPIS
- **Ideal for planning, organization and documentation of prescribed tests**
- **Product identification**
- **Preparation of inventory lists**
- **Documentation of lifetime**
- **Outsourcing and storage**

3. Design and mode of operation

Lifting beams

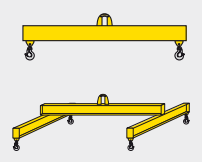
Following standard adjustments and standard variants are possible, everything optional combinable.

Crane side:



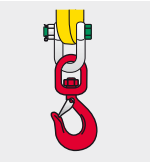
- Two, three or four leg chain suspension, also with chain shorteners
- Load centre ascertainable by shortening of one or more chains
- Suspension is ordered rigid, symmetrical and asymmetrical
- The suspension unit can be adjusted incrementally.
- The suspension unit can be adjusted with the traveling gear manually via the winch chain (also under full load).
- The suspension unit can be adjusted with the traveling gear manually via an electric motor (also under full load)

Construction:



- Plane variations: e.g. lifting beam, spreader beam
- Three-dimensional variations: e.g. H beams, spreader frames

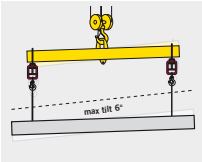
Load side:



- Load attachment points are rigid
- Load attachment points can be incrementally adjusted
- Load attachment points on running gear can be manually adjusted using the winch chain
- Load attachment points on traveling gear can be adjusted via an electric motor

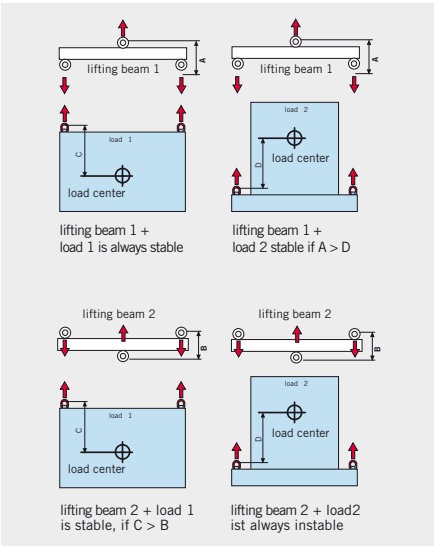
Caution! When lifting a load, the crane hook must always be over the load centre of gravity. When crane hook is not over load centre, the total system will tilt when lifting until load centre is below crane hook. The higher the lifting beam is built, the less the system has to tilt to take the position of load centre under crane hook. Because lifting beam with

load never hang completely horizontal, a permissible tilt was defined. According to EN 13155, 6° are maximum permissible.



When striking, the height centre of gravity of load must always be noticed and to undergo a critical evaluation.
It is quite safe when load centre is lower than the attachment points of the load. If the load centre is higher than attachment points of the load special attention is required! If you strike there wrongly, a complete changing of the system is possible!

Each lifting equipment has a „fixed height". The fixed height is the dimension of the contact point crane hook until next underlying hinge point, i.e. the altitude range of lifting beam below the crane hook, which geometrically cannot change during swinging of the load. For example a shackle pin or flexible contact area of frame cover forms a hinge point. The fixed height of lifting beam must

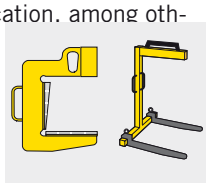


always be considerably greater than the dimension of attachment point until height centre of load! In this connection the spatial X-axis and spatial Z-axis must undergo an assessment.

Low „fixed heights"have lifting beam with a suspension eye. Higher „fixed heights"have lifting beams with a four-strand suspension.

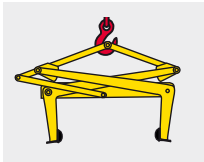
Coil hooks, crane forks

Loads must be loaded and take off so that an unintentional falling, falling to pieces, sliding or unwinding of the load will be avoided. Suitable options are, depending on the application, among others a protective cage, a slip-resistant zinc coating. For small loads, e.g. slit strips, a mechanical fuse is required. A transport of loads with a centre of gravity in front of the suspension (in direction of tine point) leads to a tilt towards of the tine and is prohibited in any case.



Grippers

Mechanical grippers with positive lock grip the load, so that they grip under the load or in an available recess. Please note that the positive lock face has to be perpendicular to the gripper axis.



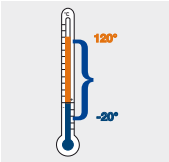
Please note without fail!
A constructed gripper for an positive lock operation may never be used as a frictional gripper.
The load will inevitable slip out of the gripper! Mechanical, frictional grippers must have security level 2 against slipping out of the load. Whether the grippers operates in a sufficiently certain way depends on the jaw pressure of the determined friction coefficient.

It must always be determined that the load to be lifted in combination with the surface of the gripping jaws has the necessary friction coefficient. It is important to note that the relative safety against slipping out has nothing to do with the load weight but only depends on the friction coefficient and the geometric position of the gripper.

The gripper draws the necessary jaw pressure from the constructive geometry and from the load weight. During transport of loads with grippers it should be noted that load collisions with the surrounding area can lead to an opening of the gripper. Therefore, collisions during lifting with grippers must be avoided absolutely. If collisions cannot be eliminated, the gripper must be equipped with an additional safety device

4. Handling and usage

With the use of lifting equipments, the user manual should be noted. The permissible temperature range is from -20 °C to + 120°C.



Lifting gear may be used only by people independently that are familiar with these tasks. For this purpose we kindly offer you training and instructions. Lifting gear may not be loaded above load capacity. The load must be secured against falling off. Damages which can lead to a disturbance of load capacity of the lifting equipment must be avoided.

Testing of lifting Gear

Rules and regulations – BGR 500

Regular tests of delivered lifting equipment enable safe working and an extended usage.
Nature, scope and deadlines are fully regulated in BGR 500 in chapter "Load-support equipment in lifting equipment mode"

Tests
The employer has to determine nature, scope and deadlines of required testing of working appliances according to Article 3 para. 3 of Ordinance of Industrial Safety and Health. These tests should systematically identify and remove safety-related deficiencies. Furthermore the employer determines the conditions which a person appointed by him has to fulfill (qualified person). According to current estimates it is assumed that the tasks of qualified person for the following tests are carried out by the persons mentioned. Nature, scope and deadlines of the tests are previous approved practice and comply with the rules of engineering.
Testing before initial operation. The employer has to ensure that lifting equipments are only put into operation, if they were inspected by an approved specialist and determined deficiencies have been corrected. An approved specialist is who has, on the basis of his professional training and experience, a sufficient knowledge in the field of load handling devices. Furthermore he should be familiar with the relevant health and safety regulations, accident prevention regulations and generally accepted rules of engineering (such as BG-rules, DIN standards, VDE regulations, technical rules of other member states of European Union or other contracting member states from the agreement on the European Economic Area so) so that he can estimate the working safety of load handling devices.

The testing before initial operation was certainly carried out by Axzion GKS.

Regular tests
The employer has to ensure that the load handling devices will be inspected at intervals of one year at the latest by an approved specialist.
Tests can be necessary at shorter intervals than one year according to operating conditions of the load handling devices. This applies e.g. to an especially frequent usage, increased wear, during corrosion, under the effect of heat or increased vulnerability to failures can be expected.

Extent of tests
The testing before initial operation and regular testing are essentially visual testing and functional tests. They should range from testing of the condition of components and facilities, intended assembly and completeness and effectiveness of safety device.

Other load handling devices
- Breakings, deformations or cracks
- Damages, heavy wear
- Corrosion damages
- Dysfunction of safety devices

Prior to the visual testing and functional test a previous cleaning of load handling devices can be possibly necessary.
The amount of extraordinary testing depends on nature and amount of the damage, incident or repair.

Testing certificate
In individual cases the Employers' Liability Insurance Association can call for the testing certificate.
With bearing loads, the certificate should be expediently summarized with the testing certificate of the hoist. On request the testing certificates must be handed out to the supervisor. Therefore it is necessary to keep them available any time.

For supplied or joined accessories such as lifting accessories (lifting strap, round sling, wire rope, chains etc.) and joining means (shackle, hook etc.) apply the corresponding regulations of testing (see also BGR 500).

Repairs
The employer has to ensure that the repairs on load handling devices are only carried out by persons with the necessary knowledge and skills.

600-t-testing bench for lifting equipment

A new era in the implementation of load tests

„460,470,480 t …The eyes of the testing engineer look concentrated on the display. The load is constant for a short period, and then it's done. The lifting equipment will be tested for permanent deformations. Finally the desired certification stamp will be marked on the test log."

The requirements, especially in the offshore sector are enormously. All lifting accessories and lifting equipment with overload were always tested.
The intensive permanent load by waves, wind difficult operating conditions stains the lifting device especially strong.
Proven safety is highest priority.

Turbines, gas compressors and wind power stations are loads with great value. Under no circumstances damages during transport may happen. Economic losses would be dramatically due to the extremely long repair and replacement time. International customers set high standards on lifting devices. All components have to prove their stability in an overload test. The certificates of large audit companies certify the quality required.

Overload tests of large lifting constructions were extremely difficult and complex. For example two large cranes must be rented for testing of a large 350 t lifting beam which was specially made for the revision of a steam turbine. Over a period of several days ten people in all were occupied with striking the test weights and carrying out the test. The total costs of this load test were incredibly 40.000 Euro.

More and more lifting equipments are required. Unit weights increase strongly. Many aggregates were already pre-assembled before they were shipped. Therefore long ago, large producers call for an appropriate testing bench for lifting equipment because costs and complexity for improvised load test were no longer acceptable.

Axzion GKS is an expert for large lifting equipment in the international SpanSet group. With the expansion of the production location in Langenfeld including a production area of more than 5.000 m², at the end of 2008, the space for urgently needed testing bench was available.

The new testing plant has a length of 20 m, a height of 5 m and a dead weight of more than 100 t. The pulling force at the maximum of 600 t is produced by two huge hydraulic cylinders. The tank capacity of hydraulic power unit is as large as the fuel tank in the cellar of a detached house. The regulation of the load tests is realized by manual operation or computer-controlled with an analysis.

The Material Testing Office NRW confirmed the correctness of the system and all indicated values are calibrated and certified. The investment volume for testing bench is approximately 500.000 Euro. The system is modular designed and is possible to expand.

The new testing bench can be used by all. Now, other lifting equipments can also be tested here at short notice. Large testing agencies such as Lloyds Register, Germanischer Lloyd or Dekra have already accompanied load test of the new testing bench and are very impressed by this easy handling.

Comprehensive series of test such as the testing of new tower attachment point for Nordex could be realized under absolutely realistic operating conditions. Also the testing of already existing lifting equipments according to DIN EN 13155 will become more important in the future. By the use of a load test with a double overload, the suitability of the lifting solution according to the standard can be verified. The accompanying welding engineer confirms the test result.

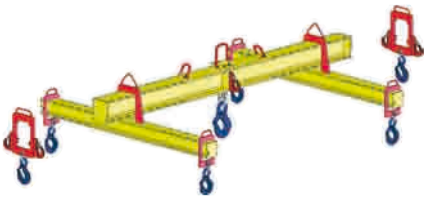
By request Axzion-GKS also organizes the monitoring tests by neutral testing agencies like TÜV, Dekra, Lloyds Register, Germanischer Lloyd, Nordke Veritas and others.

Conventional load test – these days are over

Axzion-Loading Beam Loading beam in a construction kit

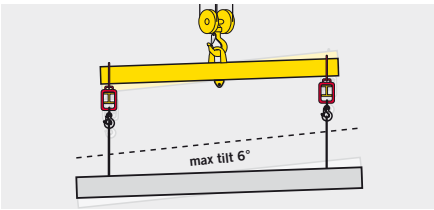
The flexible construction kit

Variable instead of fixated
A traverse is usually in use for many years and for many different purposes. The hanging, which is suitable today might be to big for a new crane facility. The Axzion traverse is completely equipped and allows changes at any time. Insecure and time consuming ad-lib alterations are no longer necessary.



Replaceable high tense chain-steel eye-hangings
Super compact design due to high tense chain steel (loads up 6 tons). The hooks at modern crane facilities are significantly smaller than common construction steel hangings, and do not fit anymore. The hangings are exchangeable an can be altered later, i.e. In case of application of a traverse in a different hall or after mounting to a new crane facility.

Protected against swinging due to innovative design.
A grating has been integrated into the robust Steel profile. Due to this grating the hook-sheet can not swing, the traverse hangs substantially more stable. This new design of the axzion traverse significantly improves the stability, the load hast to be re-positioned by far less often and the transport procedure is faster and safer.



Axzion-beam traverse adjustable, incl. frame sheet adjustable range = ½ usable length

Load bear. capacity WLL [kg]	Length max. [mm]	Length min. [mm]	Eye height [mm]	Eye width [mm]	Mouth width [mm]	Welding hook [mm]	Constr. height [mm]	Weight ca. [kg]	Order-no.	Price w/o middle hook €
1000	1000	500	100	50	18	30	390	23	AXBT.01.01	876,00
1000	2000	1000	100	50	18	30	410	40	AXBT.01.02	1.040,00
1000	3000	1500	100	50	18	30	410	84	AXBT.01.03	1.372,00
1000	4000	2000	100	50	18	30	410	122	AXBT.01.04	1.663,00
1000	5000	3000	100	50	18	30	410	142	AXBT.01.05	1.806,00
1000	6000	3000	100	50	18	30	440	237	AXBT.01.06	2.515,00
2000	1000	500	130	65	25	30	500	31	AXBT.02.01	944,00
2000	2000	1000	130	65	25	30	510	75	AXBT.02.02	1.268,00
2000	3000	1500	130	65	25	30	530	124	AXBT.02.03	1.631,00
2000	4000	2000	130	65	25	30	530	157	AXBT.02.04	1.897,00
2000	6000	3000	130	65	25	30	580	349	AXBT.02.06	3.219,00
3000	1000	500	150	70	32	30	580	38	AXBT.03.01	1.001,00
3000	2000	1000	150	70	32	30	570	79	AXBT.03.02	1.300,00
3000	3000	1500	150	70	32	30	610	153	AXBT.03.03	1.817,00
3000	4000	2000	150	70	32	30	610	193	AXBT.03.04	2.128,00
3000	6000	3000	150	70	32	30	660	410	AXBT.03.06	3.595,00
4000	3000	1500	170	80	36	30	680	164	AXBT.04.03	1.934,00
5000	1000	500	190	85	40	30	710	71	AXBT.05.01	1.256,00
5000	2000	1000	190	85	40	30	750	138	AXBT.05.02	1.697,00
5000	3000	1500	190	85	40	30	780	213	AXBT.05.03	2.206,00
5000	4000	2000	190	85	40	30	800	304	AXBT.05.04	2.810,00
5000	6000	3000	190	85	40	30	850	582	AXBT.05.06	4.614,00
8000	2000	1000	230	105	50	30	880	179	AXBT.08.02	1.957,00
8000	3000	1500	230	105	50	30	930	303	AXBT.08.03	2.727,00
8000	4000	2000	230	105	50	30	950	421	AXBT.08.04	3.498,00
8000	6000	3000	230	105	50	30	1000	749	AXBT.08.06	5.598,00
10000	3000	1500	270	120	56	30	1040	337	AXBT.10.03	2.919,00
10000	4000	2000	270	120	56	30	1090	519	AXBT.10.04	4.020,00
10000	6000	3000	270	120	56	30	1130	868	AXBT.10.06	6.220,00

Middle hook for surcharge. Please inquire! The design is subject to technical changes

Axzion-H-Loading Beam

Variable, flexible, suitable for combination

Two additional load supports for hanging of a 2 thread suspension gear
With the 2-strap suspension gear the traverse is hanging more stable, customized hangings, i.e. For application on an auto crane, can be realized fast.

Forged double hooks with extra large mouth width and forged safety catch
Each end loop will be hanged in a an own hook, therefore rational sling attachment, no potential errors and less wear off to round slings and lifting straps.

Additional hooks
for chain hangings, optimum adjusting to force direction.

Longitudinal beam H-traverse Middle hook for surcharge

Cross beam H-traverse adjustable incl. Frame sheet, please consider sample calculation, stated below

Order-no.	Price w/o middle hook €	Load b.-capacity WLL [kg]	Width max. [mm]	Width min. [mm]	Mouth width [mm]	Height [mm]	Weight ca. [kg]	Order-no.	Price piece €
AXHT.01.01	862,00	500	1500	1000	18	420	30	AHQT.05.01	741,00
AXHT.01.02	1.069,00	500	2000	1000	18	420	39	AHQT.05.02	856,50
AXHT.01.03	1.442,00	500	3000	1500	18	460	60	AHQT.05.03	1.031,00
AXHT.01.04	1.777,00	500	4000	2000	18	500	85	AHQT.05.04	1.238,00
AXHT.01.05	1.566,30	500	5000	3000	18	500	95	AHQT.05.05	1.301,00
AXHT.01.06	2.272,00	500	6000	3000	18	470	202	AHQT.05.06	2.067,00
AXHT.02.01	759,00	1000	1000	500	18	420	27	AHQT.10.01	722,00
AXHT.02.02	1.068,00	1000	2000	1000	18	460	45	AHQT.10.02	885,50
AXHT.02.03	1.414,00	1000	3000	1500	18	460	89	AHQT.10.03	1.178,00
AXHT.02.04	1.667,00	1000	4000	2000	18	470	127	AHQT.10.04	1.436,00
AXHT.02.06	2.927,00	1000	6000	3000	18	510	243	AHQT.10.06	2.272,00
AXHT.03.01	803,00	1500	1000	500	18	510	38	AHQT.15.01	771,50
AXHT.03.02	1.087,00	1500	2000	1000	18	510	75	AHQT.15.02	1.025,00
AXHT.03.03	1.581,00	1500	3000	1500	18	510	110	AHQT.15.03	1.267,00
AXHT.03.04	1.877,00	1500	4000	2000	18	560	166	AHQT.15.04	1.619,00
AXHT.03.06	3.275,00	1500	6000	3000	18	600	301	AHQT.15.06	1.760,00
AXHT.04.03	1.605,70	2000	3000	1500	25	590	134	AHQT.20.03	1.386,00
AXHT.05.01	963,50	3000	1000	500	32	620	46	AHQT.30.01	816,50
AXHT.05.02	1.384,00	3000	2000	1000	32	580	87	AHQT.30.02	1.081,00
AXHT.05.03	1.869,00	3000	3000	1500	32	670	164	AHQT.30.03	1.527,00
AXHT.05.04	2.445,00	3000	4000	2000	32	670	204	AHQT.30.04	1.801,00
AXHT.05.06	4.165,00	3000	6000	3000	32	750	423	AHQT.30.06	3.121,00
AXHT.08.02	1.607,00	4000	2000	1000	36	680	117	AHQT.40.02	1.274,00
AXHT.08.03	2.341,00	4000	3000	1500	36	720	179	AHQT.40.03	1.642,00
AXHT.08.04	3.076,00	4000	4000	2000	36	770	263	AHQT.40.04	2.119,00
AXHT.08.06	5.078,00	4000	6000	3000	36	850	511	AHQT.40.06	3.567,00
AXHT.10.03	2.411,80	5000	3000	1500	40	840	236	AHQT.50.03	1.882,00
AXHT.10.04	3.442,20	5000	4000	2000	40	880	330	AHQT.50.04	2.394,00
AXHT.10.06	5.500,60	5000	6000	3000	40	970	611	AHQT.50.06	3.990,00

Middle hook for surcharge

Info

Other sizes available! Please request our extensive measure table.

BGR 500, Chapter 2.8 „3.12.1 Attachment and load bearing tackles must be positioned or laid, in a way to ensure that they can not turn over, fall down or slide away.“

Provide accidents and order the rack fitting to your traverse.

Consider the combination of longitudinal ans cross-beams:

Sample calculation

Load bearing capacities for longitudal	cross beams
2000 kg	2 X 1000 kg
5000 kg	2 X 2500 kg

Standard Loading Beam Fixed or adjustable

Adjustability is its strength

Load traverses with hangings for single hooks DIN 15401; with two adjustable single hooks.

- Extensive user manual, large certificate and declaration of conformity
- Adapted crane hanging
- Supply within short schedule
- Consultation on site is possible
- Standard designs up to 20 t. suppliable

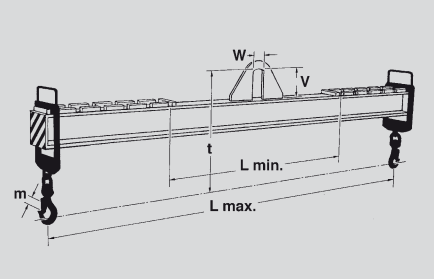
Supplementary equipment:
Traverse hanging for double hooks DIN 15402; Swivel hooks (not turnable under load); Double hooks.
Traverse measures according to individual requirements.

HOISTING DEVICES

Traverse beam, with adjustable hooks

WLL	Dimensions [mm]						Weight	Order-No.	Price/piece
[kg]	L max.	L mind.	V	w	m	T	[kg]		€
1000	1000	500	100	50	18	390	23	ST.05.01.01	674,00
1000	2000	1000	100	50	18	410	40	ST.05.01.02	800,00
1000	3000	1500	100	50	18	410	84	ST.05.01.03	1.056,00
1000	4000	2000	100	50	18	410	122	ST.05.01.04	1.279,00
1000	5000	3000	100	50	18	410	142	ST.05.01.05	1.389,00
2000	1000	500	130	65	25	500	31	ST.05.02.01	726,00
2000	2000	1000	130	65	25	510	75	ST.05.02.02	975,50
2000	3000	1500	130	65	25	530	124	ST.05.02.03	1.255,00
2000	4000	2000	130	65	25	530	157	ST.05.02.04	1.459,00
2000	5000	3000	130	65	25	550	223	ST.05.02.05	1.788,00
3000	2000	1000	150	70	32	570	79	ST.05.03.02	999,50
3000	3000	1500	150	70	32	610	153	ST.05.03.03	1.398,00
3000	4000	2000	150	70	32	610	193	ST.05.03.04	1.637,00
3000	5000	3000	150	70	32	640	277	ST.05.03.05	2.049,00
3000	6000	3000	150	70	32	660	410	ST.05.03.06	2.765,00

SUPER PRICE Surcharge

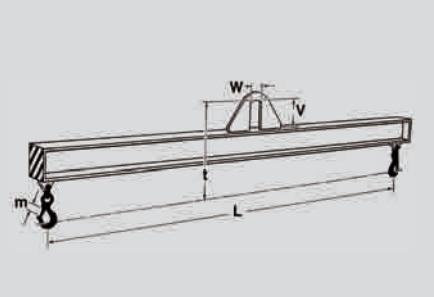


Traverse beam fixed, not adjustable

WLL	Dimensions [mm]					Weight	Order-No.	Price/piece
[kg]	L	V	W	m	t	[kg]		€
1000	1000	100	50	18	310	9	BTS.01.01.1	528,50
1000	2000	100	50	18	330	19	BTS.01.01.2	591,00
1000	3000	100	50	18	330	54	BTS.01.01.3	781,00
1000	4000	100	50	18	330	85	BTS.01.01.4	942,00
1000	5000	100	50	18	330	106	BTS.01.01.5	1.052,00
2000	1000	130	65	25	410	14	BTS.01.02.1	578,00
2000	2000	130	65	25	410	47	BTS.01.02.2	759,00
2000	3000	130	65	25	430	87	BTS.01.02.3	973,00
2000	4000	130	65	25	430	114	BTS.01.02.4	1.115,00
2000	5000	130	65	25	450	177	BTS.01.02.5	1.441,00
3000	2000	150	70	32	470	50	BTS.01.03.2	781,00
3000	3000	150	70	32	510	111	BTS.01.03.3	1.110,00
3000	4000	150	70	32	510	145	BTS.01.03.4	1.286,00
3000	5000	150	70	32	530	225	BTS.01.03.5	1.695,00
3000	6000	150	70	32	550	320	BTS.01.03.6	2.174,00

SUPER PRICE Surcharge

The design is subject to technical changes



Info

Other sizes available! Please request our extensive measure table.

Standard-H-Loading Beams Fixed or adjustable

Load traverses with hanging for single hooks DIN 15401 with two or four adjustable single hooks.

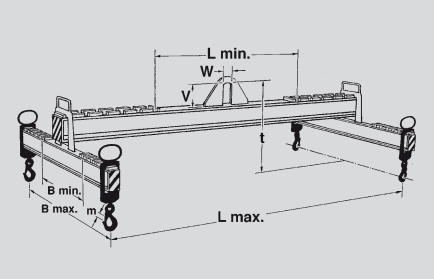
- Extensive user manual, large certificate and declaration of conformity
- Adapted crane hanging
- Supply within short schedule
- Consultation on site is possible
- Standard designs up to 20 t. suppliable

Supplementary equipment:
Traverse hanging for double hooks DIN 15402; Swivel hooks (not turnable under load); Double hooks.
Traverse measures according to individual requirements.

HOISTING DEVICES

WLL	Dimensions [mm]								Weight	Order-No.	Price/piece
[kg]	L max.	L mind.	B max.	B max.	V	w	m	T	[kg]		€
2000	1000	500	1000	500	130	65	18	570	78	ST.15.02.01	2.141,00
2000	2000	1000	2000	1000	130	65	18	610	154	ST.15.02.02	2.745,00
2000	3000	1500	2000	1000	130	65	18	610	201	ST.15.02.03	3.005,00
2000	4000	2000	3000	1500	130	65	18	610	321	ST.15.02.04	3.879,00
2000	5000	2500	3000	1500	130	65	18	610	384	ST.15.02.05	4.205,00
3000	2000	1000	2000	1000	150	70	25	680	215	ST.15.03.02	3.035,00
3000	3000	1500	2000	1000	150	70	25	680	284	ST.15.03.03	3.460,00
3000	4000	2000	3000	1500	150	70	25	680	393	ST.15.03.04	4.217,00
3000	5000	2500	3000	1500	150	70	25	680	473	ST.15.03.05	4.624,00
3000	6000	3000	4000	2000	150	70	25	730	715	ST.15.03.06	6.217,00
5000	2000	1000	2000	1000	190	85	32	790	270	ST.15.05.02	3.340,00
5000	3000	1500	2000	1000	190	85	32	790	338	ST.15.05.03	3.757,00
5000	4000	2000	3000	1500	190	85	32	880	577	ST.15.05.04	5.142,00
5000	5000	2500	3000	1500	190	85	32	880	681	ST.15.05.05	5.659,00
5000	6000	3000	4000	2000	190	85	32	880	919	ST.15.05.06	7.235,00

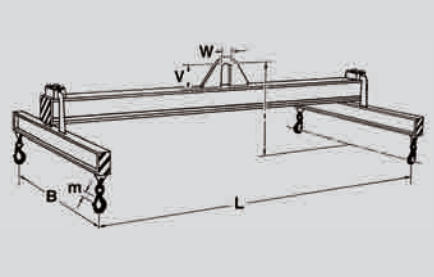
SUPER PRICE Surcharge



WLL	Dimensions [mm]						Weight	Order-No.	Price/piece
[kg]	L	B	V	W	m	t	[kg]		€
2000	1000	1000	130	65	18	470	36	HTS.11.02.1	1.730,00
2000	2000	2000	130	65	18	510	92	HTS.11.02.2	1.806,00
2000	3000	2000	130	65	18	510	132	HTS.11.02.3	2.021,00
2000	4000	3000	130	65	18	510	227	HTS.11.02.4	2.563,00
2000	5000	3000	130	65	18	510	290	HTS.11.02.5	2.889,00
3000	2000	2000	150	70	18	550	137	HTS.11.03.2	2.086,00
3000	3000	2000	150	70	18	550	199	HTS.11.03.3	2.415,00
3000	4000	3000	150	70	18	560	289	HTS.11.03.4	2.903,00
3000	5000	3000	150	70	18	560	369	HTS.11.03.5	3.312,00
3000	6000	4000	150	70	18	600	559	HTS.11.03.6	4.321,00
5000	2000	2000	190	85	32	670	188	HTS.11.05.2	2.393,00
5000	3000	2000	190	85	32	670	250	HTS.11.05.3	2.715,00
5000	4000	3000	190	85	32	750	452	HTS.11.05.4	3.821,00
5000	5000	3000	190	85	32	750	556	HTS.11.05.5	4.340,00
5000	6000	4000	190	85	32	830	1096	HTS.11.05.6	6.851,00

SUPER PRICE Surcharge

The design is subject to technical changes



Info

Other sizes available! Please request our extensive measure table.

Container Traverse for 20 and 40 foot containers

Transport containers more cost efficient

- Supplied completely with chains GK 8 or alternative wit RUD-VIP chains
- Optional with chain shortener incl. Additional length of chain; the crane hook can be positioned over the balance point.
- Suppliable for 10, 20 and 40 foot containers.

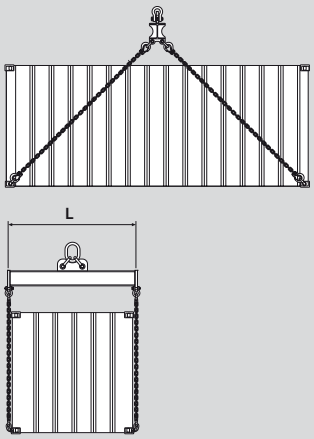
Please request or technical data sheet for additional information!

Info

Optionally with multiple shortening claw, see at page 71.

Standard design with Chain GK 8

Container size	WLL [kg]	Weight ca. [kg]	Order-No.	Price/piece €
for 20-feet-Container	16.000	404	ST.23.20.16	3.876,00
for 40-feet-Container	16.000	478	ST.23.40.16	4.235,00
for 20-feet-Container	25.000	544	ST.23.20.25	5.537,00
for 40-feet-Container	25.000	652	ST.23.40.25	6.080,00



Container Traverse, design with VIP-chain

Container size	WLL [kg]	Weight ca. [kg]	Order-No.	Preis/Stück €	Order-No. 2 Shortener	Add. price/2 piece €
for 20-feet-Container	20.000	482	ST.30.20.20	5.616,00	VK.30.20.20	768,00
for 40-feet-Container	20.000	559	ST.30.40.20	6.473,00	VK.30.20.20	768,00
for 20-feet-Container	40.000	773	ST.30.20.40	10.212,00	VK.30.20.40	1.415,00
for 40-feet-Container	40.000	921	ST.30.40.40	11.900,00	VK.30.20.40	1.415,00

Surcharge

Container Traverses With mechaical central locking system

This traverse is a cost efficient compromise for all users, who do not own a container terminal and who want to lift containers with existing crane facilities. This traverse operates absolutely secure and fulfills all standards and stipulations. Further sizes on request!Eye hanger fitting all crane hooks DIN 15401, optional with remote control and/or with battery operation.

- Turn pin locking on the upper corner hard ware
- Balance point adjustment with adjustable eye hanging via the crane or by electro-motoric prodedure of hanging
- Electric locking with energy saving electric-cylinders
- Operation via hand held or remote control
- External energy supply via crane or net-independent GEL accumulator
- Signals for locking and load operation

For 10“-Containers

WLL [kg]	Order-No. 10“ Container	Price €
10.000	ST.10.10.ZV	38.270,00
15.000	ST.15.10.ZV	41.830,00
20.000	ST.20.10.ZV	45.390,00
25.000	ST.25.10.ZV	44.141,00
30.000	ST.30.10.ZV	47.700,00

For 20“-Containers

WLL [kg]	Order-No. 20“ Container	Price €
10.000	ST.10.20.ZV	39.517,00
15.000	ST.15.20.ZV	42.721,00
20.000	ST.20.20.ZV	40.936,00
25.000	ST.25.20.ZV	46.097,00
30.000	ST.30.20.ZV	49.658,00

Balance point adjustment due to simple movement of eye

Surcharge

The design is subject to technical changes

Info

Container-loading hooks (only for two-crane-operation) The loading and unloading of long items in closed containers is commonly handled with fork lifters. Whereas the load has to be pushed or pulled with great effort.

The loading of containers is possible with a crane, due to the very robust container loading hook. Satisfied users report significantly reduced handling times and clearly less material damages.

Axzion-Turnmaster Turning Beam

Efficient and secure turning

During the manufacturing and dispatch machines and casted parts are often turned. Components are getting bigger, the requirements to the quality are increasing more and more.

Expensive crane facilities are blocked for hours, large production facilities have to be blocked for longer times.
Axzion-GKS has developed the Turnmaster-Traverses for the economical and secure turning of heavy loads. They are easy to operate and amortize after a short time.

Turnmaster Vario - The flexible solution even for heavy loads

At the Turnmaster Vario the lifting straps are pushed to the suitable positions, the turning reels are self-positioning, after the lifting the crane side hanging is simply moved over the loads balance point, the turning process can begin.

Due to the interlocked turning reels in combination with the Secuwave-coating the torque is reliably transmitted to the load. The coatings teeth provide a secure grip at the load, a slipping through is not possible.

The exact balance point of machines or large constructions is often not known to the crane loader, in many cases various components built on make a reliably evaluation almost impossible.

During the turning process the balance point of the load may shift. In case of standard traverses the adjustment to the balance point is done by re-allocation of the traverse. This is often difficult and always time consuming.

- With the elector motor adjustable vario-hanging for the adjustment of the system inclination
- With two infinitely adjustable turning reels, mounted to the running gear with self setting rope adjustment
- Turning reels individually powered and separately controllable
- Completely with turning belt with Secuwave-coating and C-Clamp closure
- Electric operation with a 6 m cable with hand held control
- Suitable only for rigid loads

Optional:
- Equipment for outdoor use
- Remote control
- With chain or grid wire belts

Turnmaster Compact - the economic solution for symmetric loads

Turnmaster Compact is the economic alternative for reliably turning of loads. Due to the new design this traverse can be operated considerably easier and manageable. The Turnmaster Compact is suitable for symmetric components with a not to large length, the adjustment of the balance point is carried out by repositioning the traverse.

Due to the interlocked turning reels in combination with the Secuwave-coating the torque is reliably transmitted to the load. The coatings teeth provide a secure grip at the load, a slipping through is not possible.

- On crane side with vario-hanging not adjustable
- With two turning reels, not adjustable
- Turning reels commonly powered and not separately controllable
- Completely with turning belt with Secuwave-coating and C-Clamp quick closure
- Electric operation with a 6 m cable whit hand held control
- Suitable only for rigid loads

Turnmaster Hoist - Working as if 2 cranes would be at hand

The new turning traverse with middle tackles closes the gap between the more expensive model with electric motor and the simple model with hand operation.

The bearing lifting straps are positioned endless around the load, the reels are running free and not powered, the centric lifting sling is hooked to the load in the "simply laced" fastening method , so that the loop is placed beside or under the load. Due to the pulling of the centric tackles the loop moves upwards and the load is turning. With this procedure asymmetric parts can be turned simple and very cost efficient.
Users commend the easy handling of the turning traverse with middle tackles, we however recommend a special training as the control of the turning procedure is only be carried out with the centric tackles, in case of a wrong positioning of the loop the load may turn un-controlled.

- 4-thread chain hanging
- Complete with turning belts with Powerflex-coating and C-clamp quick closure
- Complete with centric tackles (1 ton hand chain tackle, 3 tons and 5 tons electric chain tackles
- Complete with C-Clamp belt, centric
- Suitable only for rigid loads

Manual turning traverse

The manual turning traverse is only suitable for turn-symmetric loads. The adjustment to the balance point is carried out by re-hanging of the turning reels.

- Eye hangings
- With easy running synthetic rolls, not powered
- Turning belts not included
- Suitable only for rigid loads

Optional:
- Turning belts with powerflex-coating and C-Clamp quick closure

Satisfied clients are important for us. Assure you're self: with the available presentation traverses you can become acquainted with the advantages under your specific conditions.

Type	WLL [kg]	Length max. [mm]	Length min. [mm]	Eye height [V] [mm]	Eye width [W] [mm]	Lifting band width [mm]		Dead weight ca. [kg]	Order-no.	Price €
Turnmaster Vario	5000	4000		180	105	60	10	890	TMV.05.040	23.374,00
Turnmaster Vario	8000	4000		240	140	90	10	980	TMV.08.040	26.423,00
Turnmaster Vario	10000	4000		240	140	90	10	1010	TMV.10.040	29.367,00
Turnmaster Vario	15000	4000		350	200	150	12	1560	TMV.15.040	36.274,00
Turnmaster Vario	20000	4000		350	200	240	12	1680	TMV.20.040	42.723,00
Turnmaster Compact	3000	1500		180	105	60	10	320	TMC.03.015	10.250,00
Turnmaster Compact	5000	1500		180	105	60	10	340	TMC.05.015	11.154,00
Turnmaster Compact	8000	1500		240	140	90	10	410	TMC.08.015	12.955,00
Turnmaster Compact	10000	1500		240	140	90	10	430	TMC.10.015	13.884,00
Turnmaster Compact	15000	2000		350	200	150	12	730	TMC.15.020	19.134,00
Turnmaster Compact	20000	2000		350	200	240	12	750	TMC.20.020	23.805,00
Turnmaster Hoist	1000	1000		135	75	60	10	220	TMH.01.010	4.374,00
Turnmaster Hoist	3000	1000		160	90	60	10	210	TMH.03.010	6.594,00
Turnmaster Hoist	5000	1000		180	100	90	10	230	TMH.05.010	9.542,00
manual turning traverse	500	1000	500		80	40		18	SW.28.05.01	1.255,00
manual turning traverse	500	2000	1000		80	40		43	SW.28.05.02	1.315,00
manual turning traverse	500	3000	1500		80	40		65	SW.28.05.03	1.401,00
manual turning traverse	1000	1000	500		100	50		20	SW.28.10.01	1.351,00
manual turning traverse	1000	2000	1000		100	50		45	SW.28.10.02	1.395,00
manual turning traverse	1000	3000	1500		100	50		67	SW.28.10.03	1.674,00
manual turning traverse	2000	1000	500		130	65		35	SW.28.20.01	1.461,00
manual turning traverse	2000	2000	1000		130	65		55	SW.28.20.02	1.835,00
manual turning traverse	2000	3000	1500		130	65		80	SW.28.20.03	1.932,00

Surcharge

Spreading beam Fixed or Adjustable

Flexible and easy application in practice

Operating range adjustable through telescoping. The cross beam exclusively experiences compression forces and no bending through the articulated assembly of limit plates. Thus the beam has low dead weight with maximum efficiency. In the operating area, the beam is adjusted individually according to the customer requirement.

Capacities: 1,000 to 1,75,000 kg,
Working lengths: 500 to 20,000 mm
Combination of three beams with the two sub-beams attached to an upper beam is possible.

Spreader beam, rigid, with G8 chain slings, with single hook

Load b. capacity WLL [kg]	Length stiff [mm]	Weight [kg]	Order-no.	Price €
1400	2000	22	STGO.01.02	936,50
1400	3000	31	STGO.01.03	1.048,00
1400	4000	44	STGO.01.04	1.182,00
2800	2000	35	STGO.02.02	1.131,00
2800	3000	48	STGO.02.03	1.260,00
2800	4000	78	STGO.02.04	1.554,00
4200	2000	51	STGO.04.02	1.343,00
4200	3000	77	STGO.04.03	1.600,00
4200	4000	101	STGO.04.04	1.832,00
7000	2000	80	STGO.07.02	1.718,00
7000	3000	104	STGO.07.03	1.959,00
7000	4000	132	STGO.07.04	2.236,00
11200	2000	128	STGO.11.02	2.479,00
11200	3000	163	STGO.11.03	2.855,00
11200	4000	219	STGO.11.04	3.395,00
17500	2000	210	STGO.17.02	3.676,00
17500	3000	263	STGO.17.03	4.313,00
17500	4000	307	STGO.17.04	4.856,00
21000	2000	321	STGO.21.02	5.340,00
21000	3000	369	STGO.21.03	5.934,00
21000	4000	432	STGO.21.04	5.934,00

Other designs on request.

Spreader beam, adjustable with GK 8 chain slings, with single hook

Load b. capacity WLL [kg]	Length stiff [mm]	W. [kg]	Order-no.	Price €	Preis €
1000	2000	1250	19	STGV.01.02	1.732,00
1000	3000	2000	25	STGV.01.03	2.130,00
1000	4000	2500	35	STGV.01.04	2.599,00
2000	2000	1500	30	STGV.02.02	1.954,00
2000	3000	2000	44	STGV.02.03	2.403,00
2000	4000	2500	73	STGV.02.04	3.070,00
3000	2000	1500	46	STGV.03.02	2.211,00
3000	3000	2000	71	STGV.03.03	2.825,00
3000	4000	2500	87	STGV.03.04	3.496,00
5000	2000	1500	70	STGV.05.02	2.650,00
5000	3000	2000	86	STGV.05.03	3.298,00
5000	4000	2500	118	STGV.05.04	3.913,00
8000	2000	1500	114	STGV.08.02	3.508,00
8000	3000	2000	151	STGV.08.03	4.341,00
8000	4000	2500	177	STGV.08.04	5.275,00
12500	2000	1500	178	STGV.12.02	4.841,00
12500	3000	2250	227	STGV.12.03	6.288,00
12500	4000	2750	263	STGV.12.04	7.349,00
15000	2000	1750	321	STGV.15.02	6.798,00
15000	3000	2250	378	STGV.15.03	7.909,00
15000	4000	2750	428	STGV.15.04	9.767,00

Other designs on request.

Spreading beam, rigid, with round slings, with single hook

Load b. capacity WLL [kg]	Length stiff [mm]	Weight [kg]	Order-no.	Price €
21000	2000	51	STRO.21.02	4.132,00
21000	3000	94	STRO.21.03	4.739,00
21000	4000	148	STRO.21.04	5.260,00
28000	2000	83	STRO.28.02	5.831,00
28000	3000	129	STRO.28.03	6.505,00
28000	4000	164	STRO.28.04	7.395,00
35000	2000	114	STRO.35.02	7.565,00
35000	3000	149	STRO.35.03	8.229,00
35000	4000	215	STRO.35.04	8.900,00
42000	3000	239	STRO.42.03	9.422,00
42000	4000	293	STRO.42.04	10.507,00
42000	5000	378	STRO.42.05	11.320,00
56000	3000	319	STRO.56.03	12.221,00
56000	4000	380	STRO.56.04	13.274,00
56000	5000	557	STRO.56.05	14.283,00
70000	3000	573	STRO.70.03	16.101,00
70000	4000	681	STRO.70.04	17.346,00
70000	5000	858	STRO.70.05	18.567,00

Other designs on request.

Surcharge

Info

The large spreader beam is available on request with weight-reducing head end. Advantage: Design related inclination angle of 60 ° is not possible.

Spreading beam, rigid with VIP chain slings, with single hook

Load b. capacity WLL [kg]	Length stiff [mm]	Weight [kg]	Order-no.	Price €
880	2000	140	STV0.01.02	1.049,00
880	3000	201	STV0.01.03	1.140,00
880	4000	250	STV0.01.04	1.270,00
2100	2000	205	STV0.02.02	1.232,00
2100	3000	271	STV0.02.03	1.384,00
2100	4000	338	STV0.02.04	1.687,00
3500	2000	232	STV0.03.02	1.466,00
3500	3000	301	STV0.03.03	1.723,00
3500	4000	395	STV0.03.04	1.905,00
5600	2000	272	STV0.05.02	1.661,00
5600	3000	361	STV0.05.03	1.851,00
5600	4000	510	STV0.05.04	2.175,00
9380	2000	367	STV0.09.02	2.382,00
9380	3000	476	STV0.09.03	2.759,00
9380	4000	638	STV0.09.04	3.049,00
14000	2000	525	STV0.14.02	3.611,00
14000	3000	650	STV0.14.03	4.143,00
14000	4000	958	STV0.14.04	4.557,00
22400	2000	321	STV0.22.02	6.413,00
22400	3000	378	STV0.22.03	7.097,00
22400	4000	428	STV0.22.04	7.723,00

Other designs on request

Spreader beam, adjustable with VIP chain slings, with single hook

Load b. capacity WLL [kg]	Leng. max. [mm]	Leng. min. [mm]	Weight [kg]	Order-no.	Price €
630	2000	1500	85	STVV.00.02	1.788,00
630	3000	2000	133	STVV.00.03	2.101,00
630	4000	2500	189	STVV.00.04	2.635,00
1500	2000	1500	118	STVV.01.02	1.980,00
1500	3000	2000	171	STVV.01.03	2.546,00
1500	4000	2500	220	STVV.01.04	3.233,00
2500	2000	1500	175	STVV.02.02	2.367,00
2500	3000	2000	244	STVV.02.03	2.976,00
2500	4000	2750	324	STVV.02.04	3.406,00
4000	2000	1750	267	STVV.04.02	2.496,00
4000	3000	2250	401	STVV.04.03	2.978,00
4000	4000	2750	487	STVV.04.04	3.742,00
6700	2000	1750	416	STVV.06.02	3.290,00
6700	3000	2250	507	STVV.06.03	4.118,00
6700	4000	2750	679	STVV.06.04	4.767,00
10000	2000	1750	529	STVV.10.02	4.613,00
10000	3000	2250	685	STVV.10.03	5.467,00
10000	4000	2750	814	STVV.10.04	6.239,00
16000	2000	1750	704	STVV.16.02	7.788,00
16000	3000	2500	869	STVV.16.03	9.426,00
16000	4000	3000	1061	STVV.16.04	10.639,00
20000	2000	2000	694	STVV.20.02	9.200,00
20000	3000	2500	1070	STVV.20.03	10.877,00
20000	4000	3000	1221	STVV.20.04	12.305,00

Other designs on request

HOISTING DEVICES

Pipe Hooks Simple pipe hook or heavy lifting pipe hook

Simple pipe hook
For chain sling. Suspension for shackle

Heavy lifting pipe hook
Bearing surface with an adjusted radius, locating surface optional with interchangeable secutex-impact protection for the protection of high-quality pipe.

Info

We manufacture special sizes according to your specifications. If you have needs but you do not know exactly how your load suspension device should be, then speak with us.
We are happy to help you!

Load bearing capacity/ Pair [kg]	Weight [kg]	Order-no. simple execution	Price/piece €
1000	14	416.M01.01	248,50
2000	17	416.M01.03	322,50
3000	22	416.M01.04	331,00
5000	25	416.M01.05	534,50

Load bearing capacity/ Pair [kg]	Weight [kg]	Order-no. heavy duty execution	Price/piece €
6000	-	416.M02.03	445,50
8500	-	416.M02.04	477,00
12000	-	416.M02.05	572,50
16000	-	416.M02.06	572,50

Load bearing capacity/ Pair [kg]	Weight [kg]	Order-no. h.d. exec. w. secutex bounce prot.	Price/pc €
6000	-	416.MP2.03	536,00
8500	-	416.MP2.04	567,50
12000	-	416.MP2.05	663,00
16000	-	416.MP2.06	663,00

Surcharge

Frame Beam With VIP-Chain Hanger

- Complete with 4-strand VIP chain suspension, tilt angle max. 45 ° with uniform load distribution
- With four shackles, optionally with four single hooks

Optional:
Chain slings with the chain shortener for balance of center of gravity or for different load sizes; beam dimensions according to individual needs; swivel hook

Load bearing capacity [kg]	Length [mm]	Width [mm]	Eye height [mm]	Eye width [mm]	Mouth width [mm]	Weight ca. [kg]	Order-no.	Price €
3.150	1000	1000	135	75	25	34	SRT.03.01.1	1.472,00
3.150	2000	2000	135	75	25	59	SRT.03.02.2	1.723,00
3.150	3000	3000	135	75	25	111	SRT.03.03.3	2.213,00
5.250	1000	1000	160	90	25	43	SRT.05.01.1	1.554,00
5.250	2000	2000	160	90	25	8	SRT.05.02.2	1.984,00
5.250	3000	3000	160	90	25	184	SRT.05.03.3	2.865,00
8.400	1000	1000	180	100	30	75	SRT.08.01.1	1.766,00
8.400	2000	2000	180	100	30	153	SRT.08.02.2	2.449,00
8.400	3000	3000	180	100	30	213	SRT.08.03.3	3.002,00
14.000	1000	1000	180	100	35	105	SRT.14.01.1	2.048,00
14.000	2000	2000	180	100	35	179	SRT.14.02.2	2.703,00
14.000	3000	3000	180	100	35	311	SRT.14.03.3	3.895,00
21.000	1000	1000	260	140	35	198	SRT.21.01.1	2.918,00
21.000	2000	2000	260	140	35	297	SRT.21.02.2	3.868,00
21.000	3000	3000	260	140	35	477	SRT.21.03.3	5.526,00
33.600	1000	1000	350	190	48	390	SRT.33.01.1	6.364,00
33.600	2000	2000	350	190	48	547	SRT.33.02.2	7.907,00
33.600	3000	3000	350	190	48	750	SRT.33.03.3	9.848,00
42.000	1000	1000	350	190	63	533	SRT.42.01.1	9.284,00
42.000	2000	2000	350	190	63	713	SRT.42.02.2	11.016,00
42.000	3000	3000	350	190	63	966	SRT.42.03.3	13.388,00

Surcharge

Lifting beams in special designs

110-t- frame beam for containers

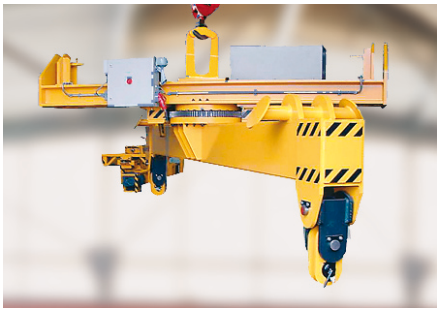
Frame beam

155-t-pivot bar for heavy load round slings

Lifting beams in special designs

58.5-t-beam back-up roll

63-t-H-beam for machine transportation


Electric motor driven rotating beam

200-t-test beam

Module traverse with cross beams

Complete beam module

Beam module with main girders

Beam mountain, telescopable

Hydraulic swing beam for bridge components

Balancing Beam With chain and adjustable suspension

Always at the right level

Flexible balance beam complete with:

- Spindle adjustable lifting lug for single crane hook according to DIN 15401
- Zinc-plated chain and chain shortener
- Revolving chain guide rollers
- Available on request with both sides delivered hatching

Info

Receive the balance beam in a modular assembly system. Prices available on request. Talk to your SIP partners!

Info

We need the following information for your order/request:

Load bearing cap. _____ **kg**

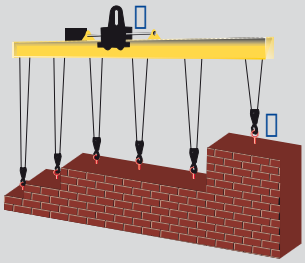
Operating width _____ **mm**

Design of the suspension (1):

- ☐ **rigid**
- ☐ **adjustable spindle**
- ☐ **double suspension**

Number of attachment points (2):

- ☐ **Pieces**



Lattice box beam According to DIN 15155

Lattice box beam with suspension for single hook according to DIN 15401.

Additional features:
Beam suspension for double hooks DIN 15402; four long hooks for transport of stacked lattice boxes.

- For detailed instructions, large factory certification and conformity declaration
- Custom crane hook suspension without charge
- Available at short notice
- Advice on site

Load bearing capacity [kg]	Dimensions l [mm]	B [mm]	V [mm]	W [mm]	t [mm]	Weight [kg]	Order-no.	Price/Piece €
1.000	1250	600	100	50	405	35	ST.24.01.12	1.025,00
2.000	1250	600	130	65	435	44	ST.24.02.12	1.063,00

2 crane beam Combined we are stronger

Two cranes can be coupled with the 2 crane beam, so as to add the carrying capacities.
Load side used a crane hook suspension DIN 15411 with crane hook DIN 15401-P.

- With 2 infinitely variable reversing rolls, mounted on trolleys with automatic cable equalization
- Reversing roles individually driven and controlled separately

WLL [kg]	Length [mm]	Eye height [V]	Eye width [W]	Mouth width [m]	Height [t]	Entrance weight ca. [kg]	Order-no.	Price €
5000	2000	150	70	35	790	90	DHS.05.02.0	1.569,00
5000	3000	150	70	35	810	150	DHS.05.03.0	1.890,00
5000	4000	150	70	35	830	230	DHS.05.04.0	2.286,00
8000	2000	170	80	40	900	120	DHS.08.02.0	1.870,00
8000	3000	170	80	40	940	220	DHS.08.03.0	2.383,00
8000	4000	170	80	40	960	320	DHS.08.04.0	2.905,00
10000	2000	190	85	46	1010	150	DHS.10.02.0	2.179,00
10000	3000	190	85	46	1030	230	DHS.10.03.0	2.600,00
10000	4000	190	85	46	1070	380	DHS.10.04.0	3.360,00
20000	2000	270	120	70	1360	280	DHS.20.02.0	3.770,00
20000	3000	270	120	70	1400	420	DHS.20.03.0	4.499,00
20000	4000	270	120	70	1440	620	DHS.20.04.0	5.482,00
30000	2000	360	160	80	1550	370	DHS.30.02.0	5.080,00
30000	3000	360	160	80	1590	540	DHS.30.03.0	5.951,00
30000	4000	360	160	80	1670	790	DHS.30.04.0	7.127,00
40000	2000	360	160	97	1780	480	DHS.40.02.0	6.960,00
40000	3000	360	160	97	1840	670	DHS.40.03.0	7.907,00
40000	4000	360	160	97	1930	930	DHS.40.04.0	9.176,00

Surcharge

Coil hooks with counter weight

Optional with secutex impact protection and locking device

Sturdy construction made of high quality steel, of course with material test certificate. Under load the supporting prongs shows about 3 ° to the top, with no load, the coil hooks remains level by the counterbalance. The high quality coil, with excellent cut resistance, can be protected with the use of secutex-impact protection, a polyurethane composite material. Secutex impact protection can be optionally mounted on the zinc top side and at the back inside.
Design with fuse available on request.

Info

Storage rack for coil hook

BGR 500, Section 2.8, „3.12.1 Lifting and loading accessories must be stored or discarded so that they do not collapse, drop or slide.“ Take care and order the storage rack to fit coil hook.

HOISTING DEVICES

Load b. capacity [kg]	Inner height l [mm]	Prong length Zl [mm]	Prong height Zh[mm]	Prong width Zb [mm]	Eye height [mm]	Eye width [mm]	Height t [mm]	Weight ca. [kg]	Coil hook standard Order-no.	Price piece €	Back with bump protect. Order-no.	Surcharge €	Prongs with bump prot. Order-no.	Surcharge €
2500	500	600	100	25	130	65	750	65	CH.MG.02.06	1.142,00	SP.CR.02.06	113,00	SP.CZ.02.06	124,50
2500	500	750	110	25	130	65	760	79	CH.MG.02.07	1.307,00	SP.CR.02.07	113,00	SP.CZ.02.07	142,00
2500	500	1000	120	30	130	65	770	112	CH.MG.02.10	1.728,00	SP.CR.02.10	113,00	SP.CZ.02.10	171,50
2500	500	1250	140	30	130	65	790	144	CH.MG.02.12	2.072,00	SP.CR.02.12	113,00	SP.CZ.02.12	201,00
5000	600	600	130	30	190	85	940	126	CH.MG.05.06	1.658,00	SP.CR.05.06	124,50	SP.CZ.05.06	124,50
5000	600	750	145	30	190	85	960	148	CH.MG.05.07	1.897,00	SP.CR.05.07	124,50	SP.CZ.05.07	142,00
5000	600	1000	145	40	190	85	960	212	CH.MG.05.10	2.657,00	SP.CR.05.10	124,50	SP.CZ.05.10	171,50
5000	600	1250	170	40	190	85	980	266	CH.MG.05.12	3.201,00	SP.CR.05.12	124,50	SP.CZ.05.12	201,00
5000	600	1500	185	40	190	85	1000	327	CH.MG.05.15	3.776,00	SP.CR.05.15	124,50	SP.CZ.05.15	230,50
5000	600	1750	185	50	190	85	1000	430	CH.MG.05.17	4.968,00	SP.CR.05.17	195,00	SP.CZ.05.17	466,50
5000	600	2000	200	50	190	85	1010	509	CH.MG.05.20	5.696,00	SP.CR.05.20	195,00	SP.CZ.05.20	525,50
10000	700	1250	210	50	270	120	1210	489	CH.MG.10.12	4.968,00	SP.CR.10.12	218,50	SP.CZ.10.12	348,50
10000	700	1500	235	50	270	120	1230	591	CH.MG.10.15	5.854,00	SP.CR.10.15	218,50	SP.CZ.10.15	407,50
10000	800	1750	235	60	270	120	1330	783	CH.MG.10.17	8.108,00	SP.CR.10.17	242,00	SP.CZ.10.17	466,50
10000	800	2000	260	60	270	120	1360	914	CH.MG.10.20	9.268,00	SP.CR.10.20	242,00	SP.CZ.10.20	525,50
16000	700	1000	235	50	360	160	1330	571	CH.MG.16.10	5.215,00	SP.CR.16.10	218,50	SP.CZ.16.10	289,50
16000	700	1250	245	60	360	160	1340	732	CH.MG.16.12	6.754,00	SP.CR.16.12	218,50	SP.CZ.16.12	348,50
16000	700	1350	255	60	360	160	1350	789	CH.MG.16.13	7.213,00	SP.CR.16.13	218,50	SP.CZ.16.13	372,00
16000	800	1500	270	60	360	160	1460	918	CH.MG.16.15	8.495,00	SP.CR.16.15	242,00	SP.CZ.16.15	407,50
16000	800	1750	275	70	360	160	1470	1138	CH.MG.16.17	10.671,00	SP.CR.16.17	242,00	SP.CZ.16.17	466,50
16000	800	2000	300	70	360	160	1490	1324	CH.MG.16.20	12.174,00	SP.CR.16.20	242,00	SP.CZ.16.20	525,50
20000	800	1000	240	60	360	160	1440	763	CH.MG.20.10	6.755,00	SP.CR.20.10	242,00	SP.CZ.20.10	289,50
20000	800	1250	275	60	360	160	1480	911	CH.MG.20.12	7.999,00	SP.CR.20.12	242,00	SP.CZ.20.12	348,50
20000	800	1350	285	60	360	160	1490	977	CH.MG.20.13	8.527,00	SP.CR.20.13	242,00	SP.CZ.20.13	372,00
20000	900	1500	280	70	360	160	1580	1186	CH.MG.20.15	10.798,00	SP.CR.20.15	266,00	SP.CZ.20.15	407,50
20000	900	1750	310	70	360	160	1610	1384	CH.MG.20.17	12.435,00	SP.CR.20.17	266,00	SP.CZ.20.17	466,50
20000	900	2000	335	70	360	160	1640	1599	CH.MG.20.20	14.155,00	SP.CR.20.20	266,00	SP.CZ.20.20	525,50

Surcharge The design is subject to technical changes

Please request for information and alternative sheet for coils.

Other designs are available on request

Protection against slipping

Equipment with impact protection

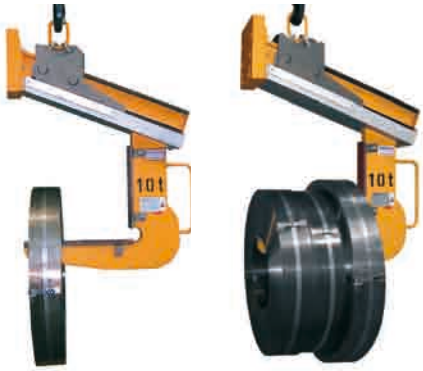
Expansion shell for metal coils

Heavy lift coil hook

Gripper system for coils

Coil hook with secutex pipe module

Vario-Coil hooks Smooth, automatic, variable



The position of the suspension can be easily adjusted to the load center.

In the steel processing industry, C-hooks are used for the cost effective handling of coils. These load suspension devices are exactly suitable for a coil width; different hooks are used for different sizes.If the load center is not directly under the crane hook, the hook is at an angle under load, such that the coil can slip off. Axzion-GKS, the specialist for load suspension devices in the global SpanSet Group, has newly developed the Vario-coil hook for changing coil widths.

Vario-suspension
Interchangeable eyes suspension of high-strength special steel chain. The hooks on the modern crane systems are much smaller, the usual roasted mild steel hangers are no longer fit. The suspension is interchangeable and can be subsequently adjusted, for example when using the beam in another hall, or after installing a new crane.

Without counter weight
Two strong gas springs hold the crane hook suspension without load at the load center; a heavy and bulky counterweight is no longer required.

A hook for all coil sizes
A handle and the load center is readjusted, the suspension eye glides on rollers in the lifting position. Decision-makers note positively that only one hook must be procured. The downtime of the crane, caused by constant hanging of the hooks, is cancelled.

Commercially available coil hooks are exactly suitable for a coil width; different hooks are used for different sizes. If the load center is not directly under the crane hook, the hook is at an angle under load, such that the coil can slip off.

Optional secutex impact protection of high-quality coils is available by equipping with secutex impact protection for all coil sizes.

Load bearing capacity [kg]	Inner height [mm]	Tine length [mm]	Tine height [mm]	Tine width [mm]	Eye height [mm]	Eye width [mm]	Coil width min. [mm]	Height [mm]	Weight [kg]	Order-no.	Price €
5.000	600	1000	145	40	160	95	250	1240	200	CH.VA.05.10	5.106,00
5.000	600	1250	170	40	160	95	320	1330	250	CH.VA.05.12	5.795,00
5.000	600	1500	185	40	160	95	380	1410	300	CH.VA.05.15	6.517,00
8.000	700	1000	185	40	190	110	250	1420	275	CH.VA.08.10	6.151,00
8.000	700	1250	190	50	190	110	320	1500	375	CH.VA.08.12	7.581,00
8.000	700	1500	210	50	190	110	380	1580	450	CH.VA.08.15	8.633,00
10.000	800	1000	185	50	190	110	250	1560	350	CH.VA.10.10	7.466,00
10.000	800	1250	210	50	190	110	320	1660	450	CH.VA.10.12	8.628,00
10.000	800	1500	235	50	190	110	380	1740	525	CH.VA.10.15	9.850,00
16.000	900	1000	235	50	240	140	250	1810	525	CH.VA.16.10	9.602,00
16.000	900	1250	245	60	240	140	320	1890	675	CH.VA.16.12	11.838,00
16.000	900	1500	270	60	240	140	380	1970	800	CH.VA.16.15	13.572,00
16.000	900	1750	275	70	240	140	440	2050	1000	CH.VA.16.17	15.634,00
20.000	1000	1000	240	60	250	150	250	1920	675	CH.VA.20.10	11.783,00
20.000	1000	1250	275	60	250	150	320	2030	825	CH.VA.20.12	13.668,00
20.000	1000	1500	280	70	250	150	380	2090	1025	CH.VA.20.15	16.656,00
20.000	1000	1750	310	70	250	150	440	2190	1200	CH.VA.20.17	18.036,00
20.000	1000	2000	335	70	250	150	500	2290	1400	CH.VA.20.20	21.278,00
25.000	1000	1000	265	60	250	150	250	1990	800	CH.VA.25.10	12.498,00
25.000	1000	1250	280	70	250	150	320	2070	1000	CH.VA.25.12	15.327,00
25.000	1000	1500	315	70	250	150	380	2170	1200	CH.VA.25.15	17.620,00
25.000	1000	1750	345	70	250	150	440	2270	1400	CH.VA.25.17	20.035,00
25.000	1000	2000	350	80	250	150	500	2340	1375	CH.VA.25.20	23.827,00

Surcharge

Coil hooks Without counterweight

Standard

Optional

Robust construction from high-quality steel, of course with material test certificate. Under load display the supporting prongs at around approx. 3 ° upwards. Working with the coil hooks without counter weight is possible only with small coils as the coil hooks are manually inserted into the coil.

Optional version:
coil hooks with magnet for securing steel slit strips

Info

Are you not able to find out a suitable coil hooks for your application? Then talk to us. We manufacture coil hooks in many special designs or according to your requirements. Call us!

Load b. capacity [kg]	Inner height [mm]	Tine length [mm]	Tine height [mm]	Tine width [mm]	Eye height [mm]	Eye width [mm]	Height [mm]	Weight ca. [kg]	Order-no.	Price Piece €
250	300	100	70	10	80	40	410	1	CH.OG.02.31	303,50
500	400	100	25	10	80	40	520	2	CH.OG.05.41	311,50
1000	500	100	65	10	100	50	650	4	CH.OG.10.51	335,50
500	300	150	60	10	80	40	430	2	CH.OG.05.31	319,50
1000	400	150	40	15	100	50	550	5	CH.OG.10.41	362,50
1500	500	150	95	15	130	65	700	8	CH.OG.15.51	392,50
500	300	200	60	10	80	40	430	3	CH.OG.05.32	335,50
1500	400	200	80	15	130	65	600	9	CH.OG.15.32	405,50
2000	500	200	100	15	130	65	710	11	CH.OG.20.52	435,00
1000	300	300	75	15	100	50	470	8	CH.OG.10.33	413,00
1500	400	300	85	15	130	65	620	12	CH.OG.15.43	457,00
2000	500	300	100	20	130	65	720	17	CH.OG.20.53	535,50
3000	600	350	100	20	150	70	860	27	CH.OG.30.63	645,00

Additional equipment with secutex impact protection

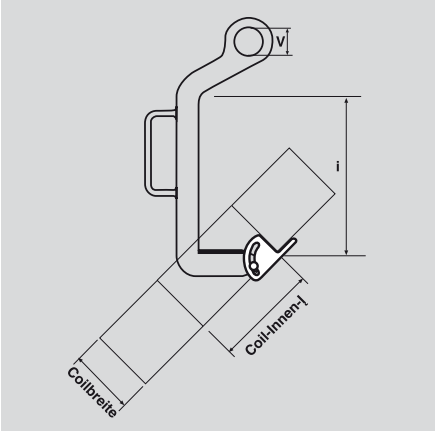
Order-no.	Surcharge back €	Order-no.	Surcharge tine €
SP.CZ.02.31	62,70	SP.CR.02.31	85,10
SP.CZ.05.41	62,70	SP.CR.05.41	96,30
SP.CZ.10.51	62,70	SP.CR.10.51	107,50
SP.CZ.05.31	68,30	SP.CR.05.31	85,10
SP.CZ.10.41	68,30	SP.CR.10.41	96,30
SP.CZ.15.51	68,30	SP.CR.15.51	107,50
SP.CZ.05.32	73,90	SP.CR.05.32	85,10
SP.CZ.15.32	73,90	SP.CR.15.32	96,30
SP.CZ.20.52	73,90	SP.CR.20.52	107,50
SP.CZ.10.33	85,10	SP.CR.10.33	85,10
SP.CZ.15.43	85,10	SP.CR.15.43	96,30
SP.CZ.20.53	85,10	SP.CR.20.53	107,50
SP.CZ.30.63	90,70	SP.CR.30.63	118,50

Coil upender Position changes made easy

Through the tilting edition with high nib, suitable for raising of Coils. These must lie on squared timbers, single gap tape rings must be bundled up well. Working with the coil upender is possible only with small coils and requires careful handling. The thin slit strips can be tilted in one direction! The minimum width specified in the table must not be exceeded.

Info

Necessary request for technical information on coil upender.



Load b. capacity [kg]	Inner height i [mm]	Coil Inner-Ø min. [mm]	Coil width [mm]	Tine lenth Zl [mm]	Tilt nose width Zb [mm]	Eye-Ø V [mm]	Weight ca. [kg]	Order-no.	Price/ Piece €
500	400	300	100-200	200	60	75	11	ST.54.05.02	644,00
1000	450	300	100-200	200	60	75	14	ST.54.10.02	705,00
1000	500	400	200-300	300	60	75	18	ST.54.10.03	866,50
2500	500	300	100-200	200	80	90	23	ST.54.25.02	819,50
2500	500	400	200-300	300	80	90	32	ST.54.25.03	1.003,00
3000	550	400	200-300	300	80	90	32	ST.54.30.03	1.237,00

Surcharge

Other executions available on request

Coil-tongs

With robust mega spindle

Coil tongs are the safe and quick solution for the lifting of stationary coils. The drive occurs electromechanically about a robust impulse with self-locking mega spindle and gear motor.

- Driven by self-locking mega spindle (significantly improved life span)
- Robust construction method
- Suspension suitable for a crane hook according to DIN 15401 or double hook
- With electronic disconnection (no failure prone sensor) to switch off the tongs arm impulse with entire engaging of the load
- With the switch sensors at both tongs arms, for the load protection against unintentional opening of the tongs arms under load
- With closing message display of signal lights on the tongs housing

Optional:

- Driven by hydraulic cylinder
- secutex protection of the gripping arms and gripping claws
- With slewing gear
- With electromechanical breaking in the gripper arms
- Crane sided with pulleys
- Extra hooks

Parallelogram-coil-gripper

Very sturdy welded construction with a parallelogram shaped arms. The particular advantage of the gripper is the low side space, which allows an optimal storage space utilization.

- Driven by hydraulic cylinder
- Robust construction with generously sized pipe guide
- Low-maintenance sliding bearing
- Suspension suitable for a crane hook according to DIN 15401 or double hook
- With electronic disconnection (no failure prone sensor) to switch off the tongs arm impulse with entire engaging of the load
- With the switch sensors at both tongs arms, for the load protection against unintentional opening of the tongs arms under load
- With closing message display of signal lights on the tongs housing.

Optional:

- secutex protection of the gripping arms and gripping claws
- With slewing gear
- Extra hooks
- Equipment for hot operation

Laminated core gripper, electromechanical

Laminations tongs are the safe and quick solution for the lifting of laminated cores. The drive occurs electromechanically about a robust impulse with self-locking mega spindle and gearmotor.

- Driven by self-locking mega spindle (significantly improved life span)
- Robust construction method
- Suspension suitable for a crane hook according to DIN 15401 or double hook
- With electronic disconnection (no failure prone sensor) to switch off the tongs arm impulse with entire engaging of the load
- With the switch sensors at both tongs arms, for the load protection against unintentional opening of the tongs arms under load
- With closing message display of signal lights on the tongs housing

Optional:
- Driven by hydraulic cylinder
- secutex protection of the gripping arms and gripping claws
- With slewing gear
- With electromechanical breaking in the gripper arms
- Crane sided with pulleys
- Extra hooks

Mechanische vertical- coil tong

Everywhere in the steel processing industry, mechanical vertical coil tongs are used for cost effective handling of horizontal coils. The Coils can be stacked without an intermediate timber, for instance, for the annealing process. The massive, generous tappered centering pin and the narrow design allows the user to record the coils, the pause function works reliably and safely.

- Suspension suitable for a crane hook according to DIN 15401 or double hook
- Suitable for many coil sizes
- Compact design with FEM-construction
- Very robust construction

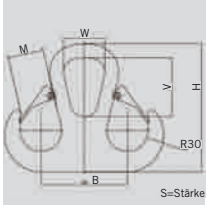
Repair service

Fast repair service , interchangeable parts, spare parts service worldwide
By the rough application in the steel-processing industry, damages cannot be completely excluded. The production increase, and naturally, no one has a further coil tong stock. By the machine-production can Axzion-GKS produce and deliver the necessary new spare parts at very short notice, a complex adjustment during installation is not required. All moving parts can be dismantled, controlled and maintained easily, the rapid repair service offering is fast and reliable.

Double hook Simply rigging up to double hook

MADE IN GERMANY

Lifting tackle, i.e. round-slings or lifting straps must not stack on top of each other as the lower lifting tackles may be squeezed and therefore the risk of damaging exists. Due to using the double hook lifting tackles can be allocated to both hooks, to avoid damage or a reduction of bearing capacity.



Weight [kg]	WLL [kg]	Dimensions [mm] W	V	M	B	H	S	Order-no	Price/ Piece €
2,5	800	60	85	38	125	185	15	TU.DH.0080	185,50
3	1.000	60	90	39	147	204	15	TU.DH.0100	208,00
6	1.250	50	80	39	154	204	15	TU.DH.0125	212,00
9	2.000	70	90	40	200	250	20	TU.DH.0200	231,50
12	4.000	90	140	50	214	350	25	TU.DH.0400	244,50
17	6.000	110	180	54	250	425	30	TU.DH.0600	346,50
19	8.000	105	230	60	360	402	30	TU.DH.0800	484,00
58	10.000	165	261	94	356	609	50	TU.DH.1000	805,00
71	15.000	113	200	94	356	558	50	TU.DH.1500	1.009,00
87	20.000	113	200	94	356	558	60	TU.DH.2000	1.376,00
188	35.000	180	340	122	600	696	70	TU.DH.3500	2.181,00
225	40.000	180	340	122	600	600	80	TU.DH.4000	3.353,00
228	65.000	230	350	69	477	735	100	TU.DH.6500	4.922,00

Surcharge

Individual customized measures are possible

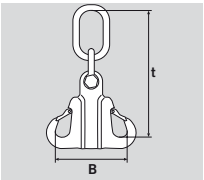
With high-strength hanging ring

Axzion

MADE IN EUROPE

How to make a double hook out of your single hook.
Also supplied as quadruple hook
Higher bearing capacities on request.

- Coated forged load hook
- Broad bearing surface
- High-strength gimbal fitting to many crane hooks
- Gimbal is exchangeable



Info

Special sizes also available as well as a broader base for the round slings.

Seak to your SIP partner!

Load b. cap. [kg]	Hanging ring [mm]	Mouth w. [mm]	Meas. B[mm]	Meas.t v[mm]	Weight [kg]	Order-no.	Price/ Piece €
4000	140 x 80 x 17	30	180	385	8	SE.DH.0040	337,50
6500	165 x 90 x 22	30	180	400	10	SE.DH.0065	388,00
10000	240 x 140 x 34	45	300	470	24	SE.DH.0100	849,00
12500	240 x 140 x 34	50	340	500	32	SE.DH.0125	1.023,00
15000	240 x 140 x 34	56	370	530	42	SE.DH.0150	1.325,00
20000	250 x 150 x 40	63	440	580	47	SE.DH.0200	1.578,00
25000	300 x 180 x 45	71	460	640	72	SE.DH.0250	1.830,00
30000	300 x 180 x 45	80	520	690	88	SE.DH.0300	2.361,00
40000	300 x 200 x 50	90	600	730	129	SE.DH.0400	3.312,00
50000	300 x 200 x 55	100	640	750	167	SE.DH.0500	4.350,00
63000	350 x 200 x 60	112	730	890	228	SE.DH.0630	5.687,00
80000	400 x 250 x 70	125	780	960	310	SE.DH.0800	7.434,00

Load balancer In case of offset balance point

Axzion MADE IN EUROPE

The axzion-load balancer is a simple and cost effective tool for lifting of loads with non-centred balance point.

Lateral shifted balance points can be adjusted with the axzion-load balancer. He works according to the so called spill-principle: if both steel cable ends are equally loaded, he reliably holds the load. If on e steel cable end is not loaded the load balancer can be laterally proceeded until the crane hook is positioned exactly over the load balance point.

Both cable ends are equally tightened in this position. There is no slippage within the load balancer, the load can be lifted.

Load b. capacity 0°-45° [kg]	45°-60° [kg]	Hanging ring [mm]	Rope-Ø [mm]	Rope length [m]	Dead weight without wire rope [kg]	Order-no.	Price/Piece €	Surcharge wire rope/m €
2800	2000	140x80x17	14	4	13	SE.LB.028.0	717,00	6,93
4400	3150	160x95x22	18	4	22	SE.LB.044.0	946,00	9,68
8800	6300	200x110x34	24	4	40	SE.LB.088.0	1.591,00	15,60
11200	8000	240x140x34	28	4	85	SE.LB.112.0	2.265,00	21,00

Surcharge

Fork lift cross beam

With one hook

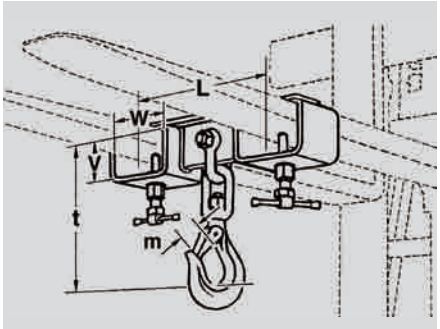
SIP-hoister pockets for two fork lifter prongs; securing due to two clamping screws; arranged in a centred position a turnable and pivotable eyehook.
With securing (not turnable while load bearing). Zink coated version.

- Extensive operating manual, Manufacturing certificate and declaration of conformity
- Available on short term
- Consultation on site

Optionally: Eye hooks with axial bearing, turnable under load.
Measures of traverse according to individual requirements.

Info

Swivel hooks with ball bearing, turnable under load are available on request.

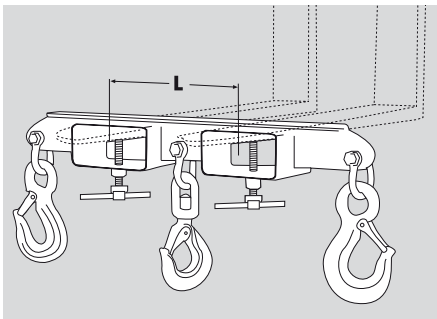


Load bearing capacity [kg]	Dimensions L [mm]	V [mm]	W [mm]	m [mm]	t [mm]	Weight [kg]	Order-no.	Price/ Piece €
1.000	320	60	120	23	220	12	ST.23.01.38	434,50
2.000	320	60	160	27	280	14	ST.23.02.40	463,50
3.000	320	80	180	35	315	18	ST.23.03.41	612,50
5.000	320	100	200	45	425	25	ST.23.05.42	705,50
8.000	320	120	200	49	-	64	ST.23.08.43	1.409,00
10.000	320	120	200	69	-	85	ST.23.10.44	1.801,00

With three hooks

Traverse for fork lifter, securing due to two clamp screws arranged centric, one turnable and pivotable eye hook with securing. Outward two load hooks with securing. Zink coated version.

Optionally: Eye hooks with axial bearing, turnable under load.

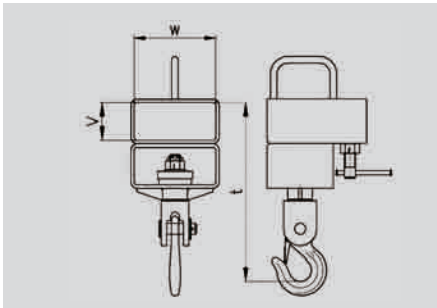


Load bearing cap.[kg]	L [mm]	Weight [kg]	Order-no.	Price/Piece €
1.000	320	13	ST.23.01.00	602,00
2.000	320	28	ST.23.02.00	645,50
3.000	320	30	ST.23.03.00	811,50
5.000	320	42	ST.23.05.00	1.142,00
8.000	320	55	ST.23.08.00	1.302,00
10.000	320	66	ST.23.10.00	1.645,00

For single prongs

Hoister pocket for one fork prong. Please consider: Avoid overloading the fork prong under any circumstance.

- Securing with clamp screw
- Hooks turnable and pivotable



Load bearing capacity [kg]	W [mm]	V [mm]	t [mm]	Weight [kg]	Order-no.	Price/Piece €
1.000	140	65	315	10	ST.23.01.01	368,50
2.000	140	65	330	12	ST.23.02.01	405,00
3.000	140	65	355	14	ST.23.03.01	574,50
5.000	200	120	-	24	ST.23.05.01	942,00
8.000	300	120	-	35	ST.23.08.01	1.370,00

Surcharge

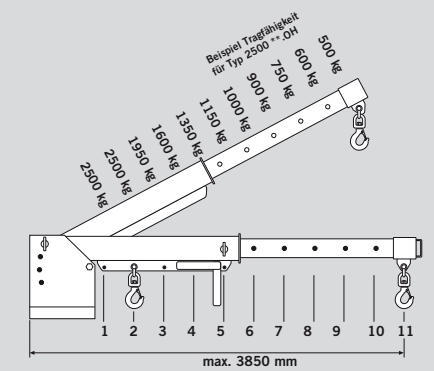
Crane boom For fork lifts

Make a crane out of your fork lifter

Hoister pockets for two fork prongs; securing with securing chain. With re-pluggable swivel hook (not turnable under load). Telescopic, with plug bolts simply adjustable usable length (Please consider the bearing capacity diagram).

Optionally:
Load hook with axial bearing, turnable under load.

Advice:
Please consider in any case the balance point and the bearing capacity of your fork lifter!



Load bearing capacity diagram

Load bearing capacity [kg]	Dimensions L max. [mm]	L mind. [mm]	V [mm]	w [mm]	Weight [kg]	Order-no.	Price/ Piece €
2.500	3850	910	70	180	210	ST.23.25.00	2.211,00
5.000	3850	910	100	200	393	ST.23.50.00	2.667,00
2.500	3850	910	70	180	260	ST.23.25.0H	2.779,00
5.000	3850	910	100	200	470	ST.23.50.0H	3.519,00

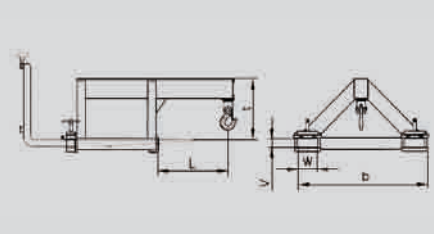
The crane boom type * *.OH is designed pivotable!

Short crane boom for fork lifts

Image with optional lateral retraction pockets

This is how a fork lifter becomes a universal lifting tool. Securing by 2 clamp screws. (Please consider the bearing capacity diagram.)

- Swivel hooks
- Ruggedly designed version, suitable for driving operation
- Optionally with lateral retraction pockets



Type	Load bear. cap. [kg]	L [mm]	V [mm]	W [mm]	b [mm]	t [mm]	Weight [kg]	Order-no.	Price €
ZV2P 1000/750/0,5	1000	500	70	160	750	325	280	ST.23.01.02	2.026,00
ZV2P 2000/750/0,5	2000	500	70	160	750	300	305	ST.23.02.02	2.181,00
ZV2P 3000/750/0,5	3000	500	80	160	750	200	320	ST.23.03.02	2.451,00

Hook traverse Diagonally or longitudinal applicable

Hook traverse for fork lifts.
Cross or longitudinal mountable. The secutex-hook-traverse allows versatile applications due to the different mountability options at the fork lifter. Overall length from hook to hook: 2 Metres.

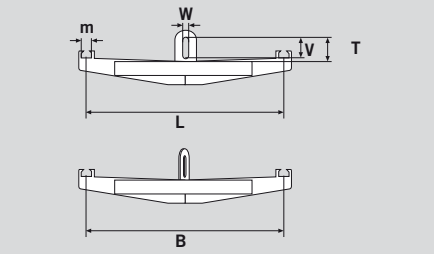
Load bearing capacity [kg]	Weight [kg]	Order-no.	Price / Piece €
2.500	165	ST.23.25.20	1.756,00

Surcharge

Info
Swivel hooks with ball bearing, turnable under load are available on request.

BigBag-traverse For hooks

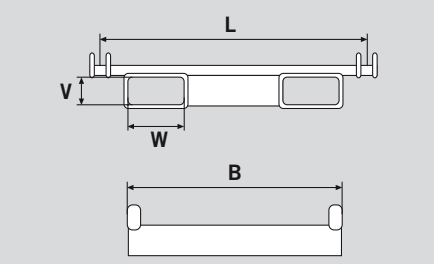
With mounting bracket for single hooks DIN 15401; with four rigid eye hooks for the big-bag-straps.



Load bear. capacity [kg]	L [mm]	B [mm]	V [mm]	W [mm]	m [mm]	T [mm]	Weight [kg]	Order-no.	Price/piece €
1000	900	900	100	50	60	110	18	ST.30.10.90	773,00
2000	900	900	130	65	60	140	30	ST.30.20.90	805,00

For fork lifts

Traverse especially developed for the gentle transport of big-bags with the fork lifter. The bearing eyes have large radiuses for long-term preservation of the big-bag-straps.

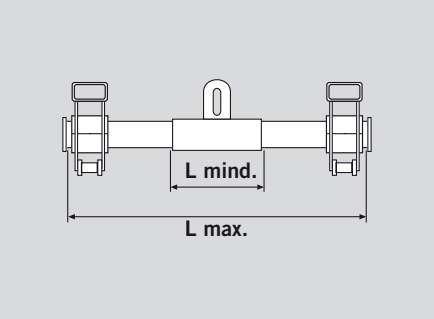


Load bearing capacity [kg]	W [mm]	V [mm]	Tine space [mm]	L [mm]	B [mm]	Weight [kg]	Order-no.	Price/piece €
1.500	160	60	600	900	900	72	ST.30.15.90	1.148,00

SIP-rotation traverse For easy lifting or rotating

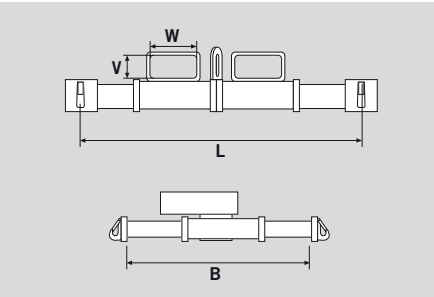
The SIP-rotation traverse can be applied very flexible. The fork lifter pockets can be adjusted in a great range. An additional mounting head for the application at a crane hood is present.

Load bearing capacity [kg]	Dimensions L min. [mm]	L max. [mm]	Order-no.	Price/ Piece €
500	500	1000	ST.28.05.01	1.195,00
500	1000	2000	ST.28.05.02	1.253,00
500	1500	3000	ST.28.05.03	1.393,00
1.000	500	1000	ST.28.10.01	1.292,00
1.000	1000	2000	ST.28.10.02	1.329,00
1.000	1500	3000	ST.28.10.03	1.596,00
2.000	500	1000	ST.28.20.01	1.393,00
2.000	1000	2000	ST.28.20.02	1.750,00
2.000	1500	3000	ST.28.20.03	1.839,00



Battery traverses Safe lifting of batteries

Flexible and telescopic traverse for the transport of batteries and rectangular loads. Four load hooks with safety latch.



Load bearing capacity [kg]	Dead weight [kg]	W [mm]	V [mm]	Tine space [mm]	L [mm]	B [mm]	Order-no.	Price/Piece €
2.000	90	60	160	500	800-1.200	600-800	4020.012B	1.379,00

Surcharge

HOISTING DEVICES

MADE IN EUROPE

Akzion

Gas bottle lifters for 40 l gas bottles

For the secure transport of gas bottles with cranes or fork lifts

Robust loading gear.

- With hanging for crane hooks DIN 15401
- With 2 “LashingSet” Lashing straps for securing the gas bottles
- Variant I: Only for crane operation
- Variant II: Alternative for crane and fork lifter operation

Optionally:

- Adjustable to deviation gas bottle sizes

Load bearing capacity [kg]	Eye height [mm]	Eye width [mm]	Height [mm]	Dead weight ca. [kg]	Order-no.	Price €
Gas bottle lifter for 1 gas bottle with eye-hanging						
100	80	40	2025	60 kg	GFH.01.1.4.0	718,50
200	80	40	2025	70 kg	GFH.02.2.4.0	946,00
400	80	40	2025	80 kg	GFH.04.4.4.0	1.313,00
Gas bottle lifter for 1 gas bottle with eye-hanging and bag for fork lift forks						
100	80	40	2145	75 kg	GFH.01.1.4.1	943,00
200	80	40	2145	85 kg	GFH.02.2.4.1	1.171,00
400	80	40	2145	95 kg	GFH.04.4.4.1	1.537,00

Carton Gripper

Secure lifting of packed loads

Large cartons are hard to grip due to their slippery surface, usual grippers damage the carton. This new carton gripper has large gripping jaws, the necessary gripping pressure is carefully applied to the carton.

- With hanging for crane hooks DIN 15401
- Parallel gripping jaws equipped with secutex-Impact-protection
- Keep open lever, self-locking

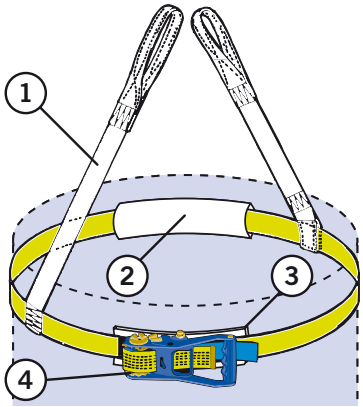
Info

KLT-gripper for lifting of KLT-boxes can be found on page 255.

Load bearing capacity [kg]	Gripping range max. [mm]	Gripping range min. [mm]	Jaw size [mm]	Gripping height [mm]	Eye height [mm]	Dead weight ca. [kg]	Order-no.	Price €
200	300	100	250 x 100	125	60	21	KG.0020.03	1.035,00
200	400	200	250 x 100	125	60	22	KG.0020.04	1.064,00
200	500	300	250 x 100	125	60	23	KG.0020.05	1.092,00
200	600	400	250 x 100	125	60	25	KG.0020.06	1.120,00
200	800	600	250 x 100	125	60	27	KG.0020.08	1.149,00

Barrel lifting tackles Systematic barrel lifting

MADE IN GERMANY



1. 2 x A 40, 900 mm long, loops 300 mm long
2. Tube with Power-flex-Coating, 500 mm long
3. Pawl support pad SPL 10 x 100 x 200 mm
4. Pawl belt 20020/4-1, 2,5 m long, threaded and beaded

- Low empty weight, but 500 kg load bearing capacity
- Suitable for barrel diameters up to a max. of 0,7 m
- Test certificate of the German Lloyd
- More efficient work due to fast and flexible handling
- Easy to store – always at hand
- Expressively cost efficient

Load bearing capacity [kg]	Ø max. [mm]	Order-no.	Price/piece €
500	700	SS.FASS.HG	127,00

Surcharge

HOISTING DEVICES

Barrel forceps + barrel turning forceps

MADE IN EUROPE

Top

For the vertical lifting of corrugated drums and quick lever-closure drums. Also suitable for application in case of barrels standing close together.

Load bearing capacity [kg]	Eye height [mm]	Gripping range [mm]	Weight [kg]	Order-no.	Price/piece €
300	95	600	5	FASS.XTOP	216,50

Side

For horizontal lifting and transporting of corrugated drums and quick lever closure drums.

Load bearing capacity [kg]	Eye height [mm]	Gripping range [mm]	Weight [kg]	Order-no.	Price/piece €
300	95	900	6	FASS.SIDE	216,50

Top-Side

For lifting corrugated drums or quick lever closure drums. Even open barrels can be transported, as they can always be held in vertical position. With automatic locking.

Load bearing capacity [kg]	Eye height [mm]	Gripping range [mm]	Weight [kg]	Order-no.	Price/piece €
300	55x65	600	10	FASS.STOP	216,50

Barrel turning forceps

Gripping jaws with entry rollers

For secure lifting of solid corrugated drums of quick lever closure drums. Due to the entry rollers the barrels can be receipted and discharged securely in vertical or horizontal position. The difficult manual positioning is no longer necessary.

- Hanging for single hooks DIN 15401
- Keep open lever, self locking, with extra large handle
- Pinch guard for the fingers
- Galvanized/powder coated

Load bearing capacity [kg]	Eye height [mm]	Gripping range [mm]	Weight [kg]	Order-no.	Price/piece €
300	95	600	58	FASS.WEZ1	1.404,00

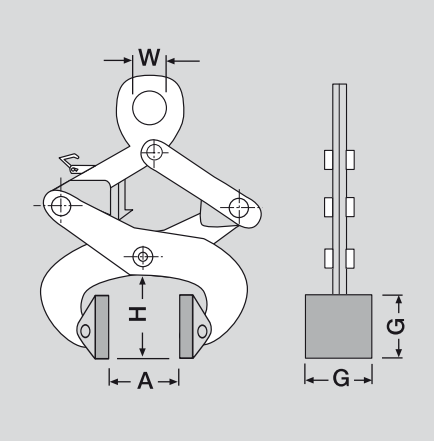
Block gripper Lift ashlar shaped loads and blocks securly

Block gripper for the careful transport of cuboid loads with vertical and parallel sides. A load depending clamping force is being generated, due to the robust lever construction, the load has to be pressure resistant. The Secutex-Block-Gripper is designed for a coefficient of friction of at least 0,4 µ, the transport load has to be dry and free of lubricants. With a hanging for single hooks DIN 15401.

- Parallel gripping jaws with very robust secutex impact protection and structured surface
- Keep open lever, self-locking, with extra large handle
- Additional strengthening of swivel joint for longer duration
- Clamping protection for fingers
- Galvanized / powder coated

Optionally:
- Automatic step-drive-mechanism
- Gripping jaws with gearing (consider the coefficient of friction
- Gripping range according to individual requirements
- Special gripper with increased pressure for oiled parts are available.

Load bearing capacity [kg]	Gripping area A [mm]	Gripping jaws G [mm]	Gripping height H [mm]	Eye-Ø [mm]	Weight [kg]	Oder-no.	Price/ piece €
250	50 - 125	100 x 100	132	80	12	ST.70.02.01	671,00
250	150 - 260	100 x 100	132	80	16	ST.70.02.02	706,50
250	250 - 500	100 x 100	132	80	17	ST.70.02.05	774,50
500	50 - 125	100 x 100	132	80	18	ST.70.05.01	683,00
500	150 - 260	100 x 100	132	80	21	ST.70.05.02	718,50
500	250 - 500	100 x 100	132	80	28	ST.70.05.05	797,00
1.000	150 - 260	120 x 120	162	85	33	ST.70.10.02	842,00
1.000	250 - 500	120 x 120	192	85	43	ST.70.10.05	1.104,00
1.000	480 - 750	120 x 120	192	85	60	ST.70.10.07	1.374,00
2.500	150 - 260	160 x 160	217	95	78	ST.70.25.02	1.295,00
2.500	250 - 500	160 x 160	217	95	93	ST.70.25.05	1.518,00
2.500	480 - 750	160 x 160	217	95	107	ST.70.25.07	2.059,00



Many other grippers are available on request:

Gripper for concrete profiles

Turning grippers for stone plates

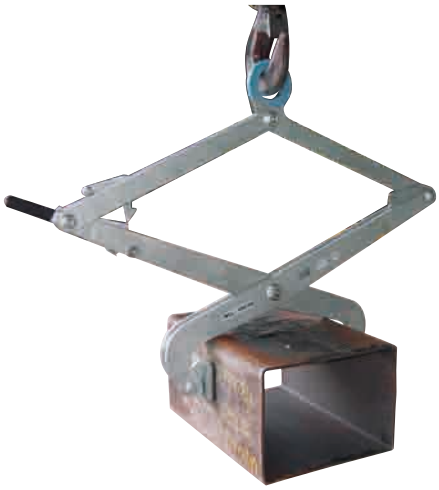
Gripper for rail wheels

Special grippers

Stone grippers

Special grippers, adjustable spindles

Block gripper with increased pressure and secutex-Gripping-Jaws



In case of some loads (steel ropes, Granite, etc.) the friction coefficient is low, this requires a gripper with a higher pressure. The Secutex-Block-Gripper is designed for a coefficient of friction of at least 0,2 µ, the transport load has to be dry and free of lubricants. Block grippers are designed for the transport of cuboid loads with vertical and parallel sides. A load depending clamping force is generated due to the robust construction with prolonged arms, the load has to be pressure resistant

- With a hanging for single hooks DIN 15401.
- Parallel gripping jaws with very robust secutex impact protection and structured surface
- Keep open lever, self-locking, with extra large handle
- Additional strengthening of swivel joint for longer duration

Optionally:
Gripping jaws with gears (consider the coefficient of friction)

Load bearing capacity [kg]	Gripping range max. [mm]	Gripping range min. [mm]	Jaw size	Gripping height [mm]	Eye height [mm]	Dead weight ca. [kg]	Oder-no.	Price €
250	125	50	100x100	130	80	20	BLG.025.12	1.241,00
250	260	150	100x100	130	80	25	BLG.025.26	1.307,00
250	500	250	100x100	130	80	30	BLG.025.50	1.433,00
500	125	50	100x100	130	80	30	BLG.050.12	1.263,00
500	260	150	100x100	130	80	35	BLG.050.26	1.329,00
500	500	250	100x100	130	80	45	BLG.050.50	1.474,00
1000	260	150	120x120	160	85	50	BLG.100.26	1.558,00
1000	500	250	120x120	160	85	65	BLG.100.50	2.042,00
2500	260	150	160x160	190	95	120	BLG.250.26	2.396,00
2500	500	250	160x160	190	95	140	BLG.250.50	2.809,00

Cable drum gripper

Optimum lifting of cable drums

Gripper suitable for lifting of cable drums. The side arms are simply repositioned by hand and can be locked with clamp levers. The drum has to be suitable for such strain, the round thorns of the drum have to be completely inserted.

- With a hanging for single hooks DIN 15401
- Round thorn length 150 mm, fitting to the drum cores

Load bear. cap. [kg]	Gripping range max. [mm]	Gripping range min. [mm]	Fork length [mm]	Fork diameter [mm]	Eye height [mm]	Eye width [mm]	Inner height[mm]	Dead weight ca. [kg]	Order-no.	Price €
500	1500	500	150	30	80	40	800	55	KTG.05.015	1.359,00
1000	1500	500	150	40	100	50	800	60	KTG.10.015	1.393,00
2000	1500	500	150	50	130	65	1000	80	KTG.20.015	1.455,00

Round material gripper

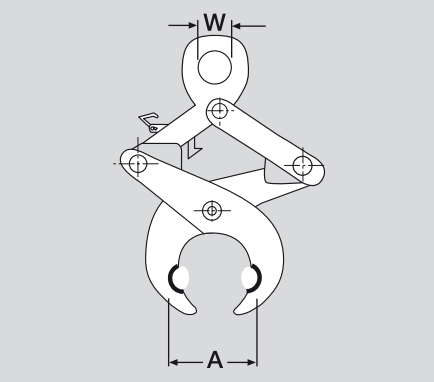
Careful lifting of round materials

Round material grippers for the horizontal transport of round materials and pipes. A load depending clamp force is being generated due to the robust lever combination, the load has to be pressure resistant.

- With a hanging for single hooks DIN 15401
- Robust gripper trays for the careful transport of the load
- Secure grip due to guaranteed 3-point-contact of gripping arms
- Keep open lever, self-locking, with extra large handle
- Additional strengthening of swivel joint for longer duration
- Clamping protection for fingers
- Galvanized/powder coated

Optionally:
- Automatic step-drive-mechanism
- Gripping range according to individual requirements

Load bearing capacity [kg]	Gripping range A [mm]	Eye-Ø W [mm]	Weight [kg]	Order-no.	Price/ piece €
250	60 - 250	65	16	ST.74.02.02	457,00
500	40 - 200	75	14	ST.74.05.02	521,00
500	100 - 350	75	30	ST.74.05.03	665,50
500	200 - 500	75	53	ST.74.05.05	867,50
1.000	60 - 250	80	33	ST.74.10.02	648,50
1.000	100 - 350	80	36	ST.74.10.03	746,50
1.000	200 - 500	80	68	ST.74.10.05	949,50
1.000	300 - 800	80	123	ST.74.10.08	1.472,00
1.000	800 - 1200	80	165	ST.74.10.12	1.824,00
2.500	60 - 250	95	58	ST.74.25.02	1.104,00
2.500	100 - 350	95	53	ST.74.25.03	1.328,00
2.500	200 - 500	95	91	ST.74.25.05	1.602,00
2.500	300 - 800	95	189	ST.74.25.08	2.518,00
2.500	800 - 1200	95	-	ST.74.25.12	on request

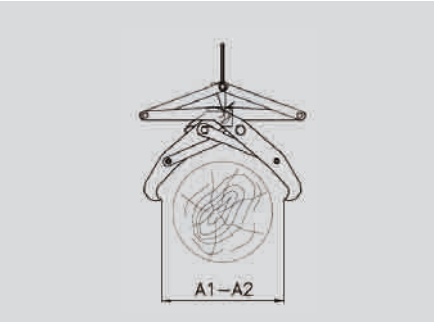


Tree trunk gripper

Adjustable forceps for the transport of tree trunks. A load depending clamp force is being generated due to the robust lever combination, the load has to be pressure resistant.

- With a hanging for single hooks DIN 15401
- Single-tooth jaws
- Hold-open automatic

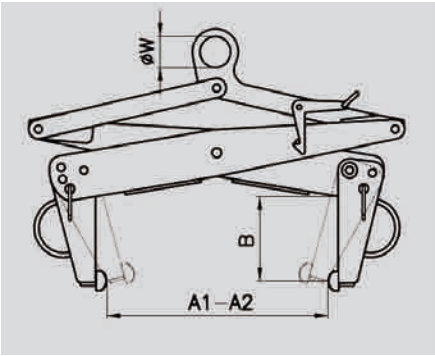
Load bearing capacity [kg]	A1 [mm]	A2 [mm]	Eye height [mm]	Eye width [mm]	Weight [kg]	Order-no.	Price/piece €
2500	1000	400	70	140	160	ST.79.250.0	2.590,00



Block forceps For stones or concrete blocks, adjustable

Adjustable forceps for the transport of concrete or stone blocks. A load depending clamp force is being generated due to the robust lever combination, the load has to be pressure resistant.

- With a hanging for single hooks DIN 15401
- Adjustment via locking pins
- Single tooth jaws
- Keep open lever, self-locking, with extra large handle
- Clamping protection for fingers
- Galvanized/powder coated

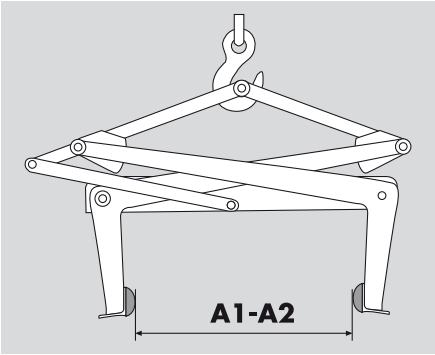


Load bearing cap. [kg]	Clamping range A1-A2 [mm]	B [mm]	W [mm]	Weight [kg]	Order-no.	Price/piece €
600	300-540	175	80	25	ST.73.06.54	1.185,00
1000	300-580	215	100	48	ST.73.10.58	1.428,00
1200	140-450	175	100	30	ST.73.12.45	1.344,00

For finished concrete parts

Adjustable forceps for the transport of stone or concrete blocks. A load depending clamp force is being generated due to the robust lever design, the load balance point has to be centered.

- With a hanging for single hooks DIN 15401
- With secutex-Gripping-Jaws
- Keep open lever, self-locking, with extra large handle
- Clamping protection for fingers
- Galvanized/powder coated



Load bearing capacity [kg]	Clamping range A1-A2 [mm]	Weight [kg]	Order-no.	Price / piece €
400	100-200	31	SKBB.401.2	997,50
400	200-400	53	SKBB.401.4	1.091,00
400	400-600	87	SKBB.401.6	1.198,00

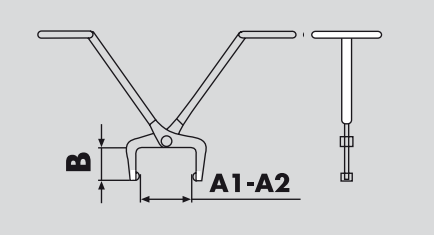
Stone positioning forceps For curb stones and round profiles

Adjustable/not adjustable stone positioning forceps for the manual handling of curb stones or similar elements and for parts with round cross sections. A load depending clamp force is being generated due to the robust lever design, the load has to be pressure resistant, in case of longer parts 2 grippers have to be used in pair.

- Extra large handles
- Adjustable due to locking pins (adjustable variant only)
- Single tooth jaws (minimum coefficient of friction 0,4 µ)
- Galvanized/powder coated

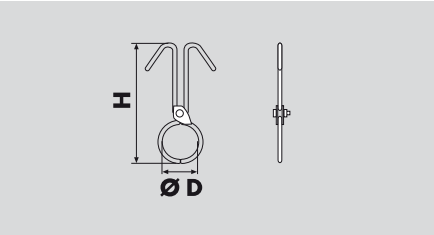
Info

Customized design and other variations on request. Just call us!



Stone positioning forceps for curb stones

Design	Load b. cap. [kg]	Gripping range A1-A2 [mm]	B [mm]	Weight [kg]	Order-no.	Price/piece €
fixed	120	125 - 250	133	7,6	ST.75.01.25	259,00
adjustable	120	40 - 275	149	8	ST.75.01.27	319,00



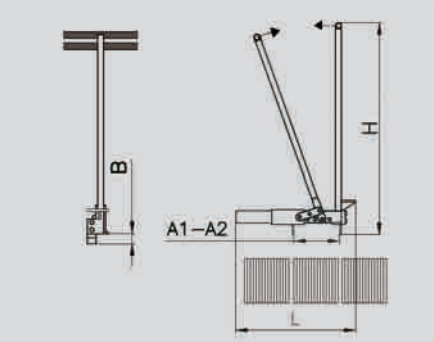
Stone positioning forceps for round profiles

Load bearing cap. [kg]	Ø D [mm]	H [mm]	Weight [kg]	Order-no.	Price/piece €
50	130	450	2	ST.76.05.13	189,50
250	160	650	5	ST.76.25.16	358,50

Manual positioning forceps For plates and interlocking pavement stones

Manual position forceps for the manual handling of plates and interlocking pavement stones. The load balance point has to be centric, in case of longer parts 2 grippers have to be used in pair.

- Extra large handles
- Extra slim gripping jaws (usually fitting into the gap of the interlocking pavement stones)
- Galvanized/powder coated



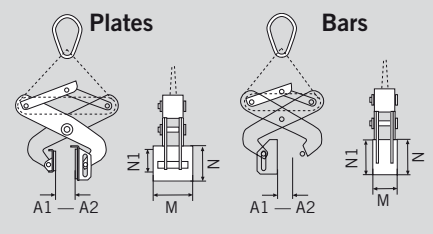
Load bearing capacity [kg]	Gripping range A1-A2 [mm]		B [mm]	L [mm]	H [mm]	Weight [kg]	Order-no.	Price/piece €
10	90	270	35	410	715	4,4	ST.78.01.27	282,50

Universal-turning gripper Universal gripping and turning

Via a steel rope which is several times deflected a load depending clamp force is generated, the load has to be pressure resistant. With the turning gripper the stone plate or beam can be gripped horizontally, turned to a vertical position and transported vertically. The gripper is designed for a minimum coefficient of friction of 0,4 µ, the transport item therefore has to be dry and free of lubricants.

- Coated gripping jaws
- With a hanging for single hooks DIN 15401
- Keep open lever
- Galvanized/powder coated
- Variant KKULG with additional securing against unintentional opening of the gripper

Load b. cap. [kg]	Design for	Clamping range A1-A2 [mm]	M [mm]	N [mm]	N1 [mm]	Weight [kg]	Order-no.	Price/piece €
500	stone plates	25-100	160	140	90	12	ST.71.05.10	747,50
1200	stone plates	25-100	160	140	90	16	ST.71.12.10	873,50
500	stone plates	60-200	140	120		24	ST.71.05.20	793,50
1200	stone plates	25-130	200	165		27	ST.71.12.13	993,00
1600	stone plates	25-130	200	165		29	ST.71.16.13	1.113,00
500	bars	40-140	115	140	90	18	ST.71.05.14	1.079,00



Concrete pipe hanging For concrete pipes or shaft rings

Hangings for vertical transport of concrete pipes and shaft rings. A load depending clamp force is being generated due to the robust lever design.

- With a hanging for single hooks DIN 15401
- Galvanized chain hanging
- Galvanized clamps

Load bearing cap. 0 - 45° [kg]	Gripping range [mm]	D [mm]	Weight [kg]	Oder-no.	Price/piece €
1500	40 - 120	500-2000	35	BRG.15.120	922,90
2500	50 - 180	500-2000	81	BRG.30.180	940,50
2500	100 - 220	500-2000	84	BRG.30.220	976,50

MADE IN GERMANY

HOISTING DEVICES

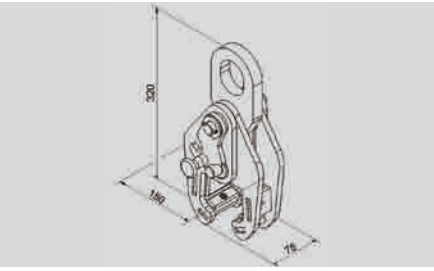
Rail Gripper AZ-Multirail

Safely Grip Rails

- Very small dimensions, to grip between rails that are side by side, touching
- Lightweight, robust gripper with protective cover and eyelet
- No steel on the rail thanks to a plastic lining
- Interchangeable Jaws
- Easy to operate opening and locking device
- Duplex corrosion protection
- Ideal for positioning and stacking of rails

Info

AZ-Multirail Rail grip with plastic lining on the recommendation of DB-AG.

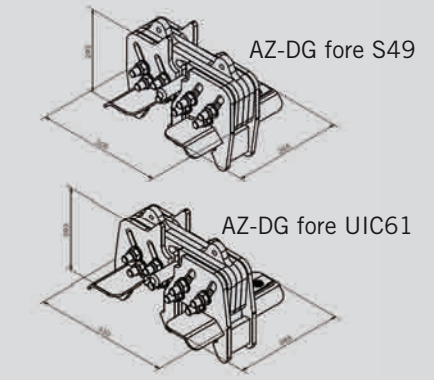


Type	WLL [kg]	Gripping range rail type	Dimensions [mm]	Weight [kg]	Order-No.	Price/piece €
AZ-M	2000	S49, R50, S54, UIC60	130 x 321 x 75	5	MULTI.RAI	421,50

Iso in 4000kg load capacity and other versions available

Multi rail gripper AZ-DG-Automatic 2 t

- Double rail girpper
- Opening/closing achieved electrically
- Only appliable in pairs
- Ideal for positioning and stacking of long rails
- For use with beams up to max 100 m in length

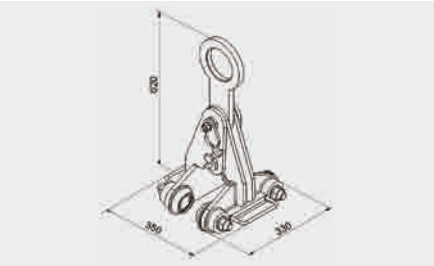


Roller Clamps

Type	WLL [kg]	Gripping range rail type	Dimensions [mm]	Weight [kg]	Order-No.	Price/piece €
AZ-DG-Manuell 2 t	2000	S49, R50, S54	306 x 203 x 265	27	AZ.DG.M.01.0	901,50
AZ-DG-Manuell 2 t	2000	UIC61, R65	330 x 203 x 265	27	AZ.DG.M.02.0	901,50

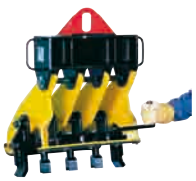
Roller Clamps AZ-R

- Compact design
- With security lock (mechanical)
- Four Ball-bearing rollers
- Compact design
- High security
- Ling life



Type	WLL [kg]	Gripping range rail type	Dimensions [mm]	Weight [kg]	Order-No.	Price/piece €
AZ-R 2006	4000	S49, R50, S54, UIC60	350 x 620 x 330	31	SG.504.172	1.088,00

Other grippers upon request. Here are some examples:

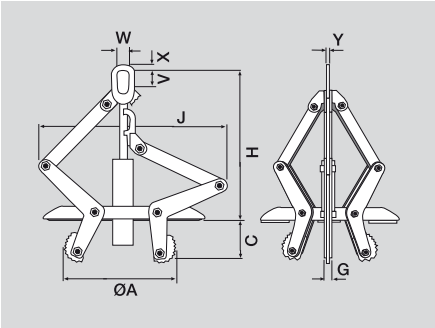


Coil Inner Gripper

Secure grip coils from the inside

Coil Inner Gripper for safe and smooth transport to the steel industry.
The robust construction with central tube and extremely wear resistant gripping claws guarantee safe operation in continuous use.

- Torsion execution through positively guided central tube
- Interchangeable Jaws made from high resistance fine grain steel
- Atomatic sequencer
- Large suspension eyes
- Lower and robust construction
- Easy maintenance



Load bearing capacity [kg]	Grip. range A [mm]	Eye measures H x B [mm]	Usable h. [mm]	C [mm]	G [mm]	H [mm]	J [mm]	V [mm]	W [mm]	X [mm]	Y [mm]	Weight [kg]	Order-no.	Price/piece €
3.000	550-800	150 x 70	960	290	150	860	1.460	170	100	40	20	210	ST.62.3.080	2.623,00

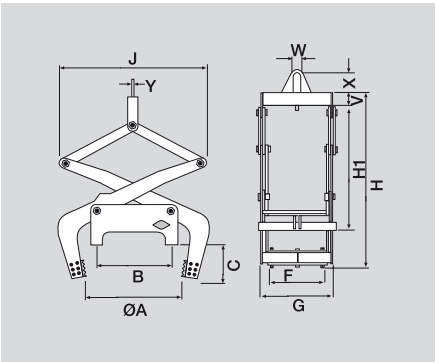
Binding technical changes

Outer coil gripper

Securely grip wire coils from the outside

Wire Coils outer gripper for steel handling with large turnover of goods in continous operation.
The sophiscticated construction offers a secure and gentle grip of the wire coils.

- Robust, tortionaly rigid construction
- Interchangeable Jaws made from high resistance fine grain steel
- Atomatic sequencer
- Large suspension eyes
- Easy maintenance



Load bearing capacity [kg]	Grip. range A [mm]	Eye-m. H x B [mm]	Usable h. [mm]	B [mm]	C [mm]	H1 [mm]	H [mm]	J [mm]	V [mm]	W [mm]	X [mm]	Y [mm]	Weight [kg]	Order-no.	Price/piece €
3.000	850-1250	150 x 75	1.380	710	350	800	1.280	1.580	120	70	150	15	440	ST.71.3.125	4.340,00

Technische Änderungen freibleibend

Many ther grippers available upon request:

Gripper system for winding

Cabel drum gripper

Paper roll gripper

Paper roll hoister

Rotating grip for films

Gripper system for wheels

Coil turning tables

Gently turn coils

80-t Turning unit for submarine section

Axzion-Turning tables
Coil turning tables are the safe and quick solution for turning coils and strips.
The coil is placed with a crane or a fork-lift truck, and operated at the press of a button.
The approved standard drive is achieved through a rugged electro-mechanical gear motor.

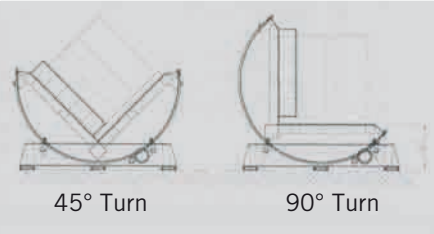
- Aproved standard construction
- Robust
- Easily controlled
- Suitable for heavy loads

Optionally:
Turn tables without its own mechanism, operate with help of the existing crate.

- Value for money
- Only suitable for small weights

Turntables with hydraulic mechanism
- Very robust
- Suitable for the heaviest loads
- Suitable for continuous operation

Special designs
- Turn tables with coiling mandrel (samll coils)
- Turning Tables for molds and machine parts, an alternative for other loads



WLL [kg]	Coil diameter max. [mm]	Coil width max. [mm]	Dead weight ca. [kg]	Order-no.	Price €
5000	1800	1200	2750	39.615,00	39.615,00
15000	2000	1500	3600	CW.1500.20	45.120,00
25000	2400	2000	5500	CW.2500.24	on request
35000	2400	2000	5800	CW.3500.24	on request

Scrap Container with floor discharge

The extra rugged design, that can also handle core waste

- With suspension for 4 strand chain
- Self closing
- Very robust design, suitable for core waste
- Other sizes available
- Attractive quantity discounts, please ask for large quantity prices

With the large, conventional containers, valuable housing space is used, as apart form the from the container footprint, a lorry wide corridor must be kept clear. They are simply tipped out by one of the turning points that lie beneath the center of gravity.
Caution. The tilting action causes a jolt, as the rushing weight shifts.
The unique feature of the newly developed scrap container is the pivoting floor.

The scrap container can easily be opened manually or by a rope, the two floor flap open due to the weight of the contents and the scrap fall out.
After emptying, two strong springs pull the flaps up, the flaps are closed and the security hooks automatically lock the mechanism.
The new scrap container is made of extra thick steel plates and is ideal for containing core waste.

Custumers report an excellent durability, damages or dents are not to be seen, even in with very demanding usage.
The standard waste containers are not suitable for inclusion of heavy core waste Sheet leftovers and cuttings from steel profiles dent the thin sheet in a short time.

WLL [kg]	Length [mm]	Width [mm]	Height [mm]	Dead weight ca. [kg]	Order-no.	Price €
3500	2000	2200	1200	1650	SC.0350.20	10.422,00
5000	1000	1000	1000	630	SC.0500.10	4.971,00
5000	1500	1000	1000	780	SC.0500.15	5.772,00
5000	2000	1000	1000	940	SC.0500.20	6.627,00
10000	1500	1500	1500	1530	SC.1000.15	9.781,00
10000	2000	1500	1500	1860	SC.1000.20	11.544,00
10000	2500	1500	1500	2180	SC.1000.25	13.255,00
10000	3000	1500	1500	2500	SC.1000.30	14.965,00

Mechanical chippings gripper

- With interchangeable prongs made of reinforced steel 42CrMo4V
- No power supply needs, also ideal for chippings bunker
- Suitable for a II chippings, that create a chippings ball
- Mit AUTOMATIC STEP
- High gripping safety

The gripper can be modified for different job dimensions and load capacity.

Info

We would be happy to send you an offer quote for any product on this website.
Talk to your SIP partner!

HOISTING DEVICES

Tilting container with roll off system

Flexible transport and tilt

Accessories: lid

Accessories: rolls

- Affordable load center
- Emptied at any height by cable from the driver's seat
- 3 mm sheet pans round edge profile
- Stable base frame with forklift pockets
- Transportable with fork lift trucks
- Protection against unintentional slipping and tipping
- Roles can be re-equipped

Info

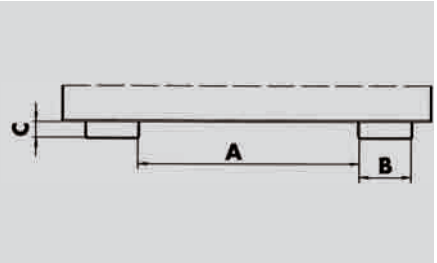
Additional versions:

- **2 swivel and 2 fixed caster rolls made of polyamide Ø 180 mm, one of then a steering roll with lock, height 220 mm**
- **Capacity 350 kg per roll**
- **Oil-and water-tight design**
- **Two-piece lid surface**
- **Painted, orange RAL 2000,**
- **More colors at no extra cost:**
  red RAL 3000,
  blue RAL 5012,
  green RAL 6011,
  grey RAL 7005
- **Please specify a color when ordering**
- **Hot dip galvanized to EN ISO 1461**

Many more colors request

Design	Load b. capacity [kg]	Con-tents [m³]	Dimensions [mm]	Forklift pocket size A [mm]	B [mm]	C [mm]	Weight [kg]	Order-no.	Price/ piece €
orange painted	1000	0,50	1420x1008x1070	600	200	90	166	SAK.05.L.R0	654,80
orange painted	1000	0,75	1420x1190x1070	600	200	90	190	SAK.07.L.R0	732,30
orange painted	1000	1,00	1420x1560x1070	600	200	90	209	SAK.10.L.R0	792,60
hot-dip galvanis.	1000	0,50	1420x1008x1070	600	200	90	199	SAK.05.F.R0	780,80
hot-dip galvanis.	1000	0,75	1420x1190x1070	600	200	90	225	SAK.07.F.R0	857,20
hot-dip galvanis.	1000	1,00	1420x1560x1070	600	200	90	248	SAK.10.F.R0	926,20

Forklift pocket inner size



Accessories:

Additional equipment with wheels	SAK.ROLLE	108,80
Cover for SIP-Tilting 0,50 m³	SAK.05.DEK	112,00
Cover for SIP-Tilting 0,75 m³	SAK.75.DEK	155,10
Cover for SIP-Tilting 1,00 m³	SAK.10.DEK	176,60

Surcharge

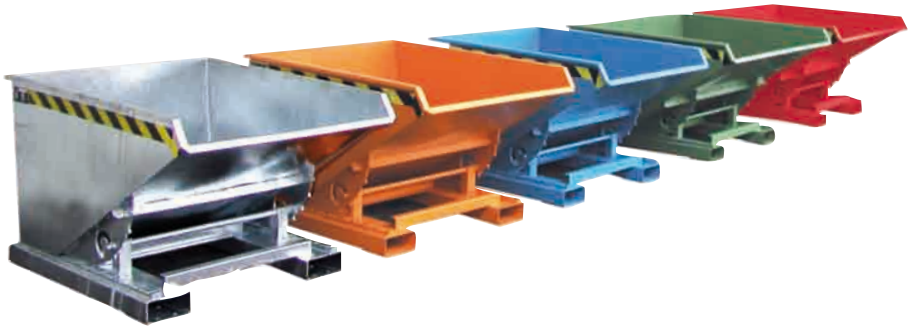
Tilting container Expo

The compact with roll off system

- Low center of gravity
- Emptied at any height by cable
- Standard 3 mm pan sheet with surrounding edge profile
- Stable base frame with forklift pockets
- Protection against unintentional slipping and tipping
- Roles can be re-equipped

Surface hot-dip galvanized according to EN ISO 1461 or painted: Orange RAL 2000 Red RAL 3000 Blue RAL 5012 Green RAL 6011, Grey RAL 7005

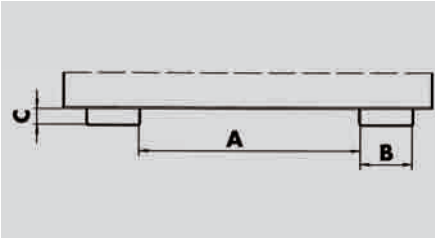
Accessories
2 Swivel and 2 fixed castors made of polyamide Ø 180 mm, one of them a swivel roll with brake - Height 220 mm, capacity 450 kg per roll.
Oil-and water-tight



Galvanised tilting container

Dimensions [mm]	Load bear. cap. [kg]	Forklift pocket size A [mm]	B [mm]	C [mm]	Contents ca. [m³]	Weight [kg]	Order-no.	Price/piece €
1260x770x835	750	300	200	80	0,30	132	EXPO.RV.03	666,60
1260x1070x835	1000	600	200	80	0,60	154	EXPO.RV.06	744,20
1260x1570x835	1000	600	200	80	0,90	190	EXPO.RV.09	816,30
1720x1070x1103	1500	600	200	80	1,20	226	EXPO.RV.12	880,90
1720x1570x1103	1500	600	200	80	1,70	275	EXPO.RV.17	1.200,80
1720x1870x1103	1500	600	200	80	2,10	305	EXPO.RV.21	1.344,00

Forklift pockets inner size



Tilting container, painted

Load bear. cap. [kg]	Forklift pocket size A [mm]	B [mm]	C [mm]	Content ca. [m³]	Weight [kg]	Color orange Order-no.	Color red Order-no.	Color blue Order-no.	Color green Order-no.	Color grey Order-no.	Price/piece €
750	300	200	80	0,30	120	EXPO.OL.03	EXPO.RL.03	EXPO.BL.03	EXPO.YL.03	EXPO.ZL.03	520,20
1000	600	200	80	0,60	140	EXPO.OL.06	EXPO.RL.06	EXPO.BL.06	EXPO.YL.06	EXPO.ZL.06	620,30
1000	600	200	80	0,90	173	EXPO.OL.09	EXPO.RL.09	EXPO.BL.09	EXPO.YL.09	EXPO.ZL.09	691,40
1500	600	200	80	1,20	205	EXPO.OL.12	EXPO.RL.12	EXPO.BL.12	EXPO.YL.12	EXPO.ZL.12	750,60
1500	600	200	80	1,70	250	EXPO.OL.17	EXPO.RL.17	EXPO.BL.17	EXPO.YL.17	EXPO.ZL.17	1.005,90
1500	600	200	80	2,10	280	EXPO.OL.21	EXPO.RL.21	EXPO.BL.21	EXPO.YL.21	EXPO.ZL.21	1.109,20

Accessories:
Additional equipment with wheels

EXP.ROLLE	108,80

Surcharge

Special versions on request

Tilting Container KW Ground Level Bulk emptying

Zubehör

- Rugged steel construction with reinforced edges
- Base frame made of profiled steel
- Oil-and water-tight
- Secured with prong loaded tilting
- 2 wheels and a steering role (from 0.60 m³ content with 2 steering wheels) solid rubber Ø 250 mm x 60 mm, one of them with a steering wheel with lock
- Sliding handle
- 300 kg capacity
- Forklift pockets with security against unintentional slipping and tipping, choose between galvanised and painted

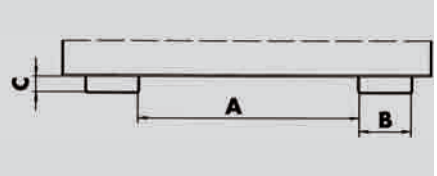
Surface hot-dip galvanised according to EN ISO 1461 or painted: Orange RAL 2000 Red RAL 3000 Blue RAL 5012 Green RAL 6011, Grey 7005

Accessories
Sheet metal inserts for chip collection Hole diameter 3 mm, pitch 6 mm and drain valve 1", galvanised tilting container

Galvanised tilting container

Dimensions L x B x H [mm]	Forklift pocket size A [mm]	B [mm]	C [mm]	Content ca. [m³]	Weight [kg]	Order-no.	Price/piece €
1120 x 820 x 990	465	170	55	0,25	87	KW.VZ.KW.02	683,00
1330 x 900 x 1090	465	170	55	0,40	104	KW.VZ.KW.04	757,00
1400 x 1070 x 1220	465	170	55	0,60	152	KW.VZ.KW.06	886,00
1430 x 1340 x 1285	465	170	55	1,00	183	KW.VZ.KW.10	1.209,00

Forklift pockets inner size



Tilting container, painted

Dimensions L x B x H [mm]	Forklift pocket size A [mm]	B [mm]	C [mm]	Content ca. [m³]	Weight [kg]	Color orange Order-no.	Color red Order-no.	Color blue Order-no.	Color green Order-no.	Color grey Order-no.	Price/piece €
1120 x 820 x 990	465	170	55	0,25	80	KW.OL.KW.02	KW.RL.KW.02	KW.BL.KW.02	KW.YL.KW.02	KW.ZL.KW.02	445,00
1330 x 900 x 1090	465	170	55	0,40	96	KW.OL.KW.04	KW.RL.KW.04	KW.BL.KW.04	KW.YL.KW.04	KW.ZL.KW.04	491,00
1400 x 1070 x 1220	465	170	55	0,60	140	KW.OL.KW.06	KW.RL.KW.06	KW.BL.KW.06	KW.YL.KW.06	KW.ZL.KW.06	612,00
1430 x 1340 x 1285	465	170	55	1,00	168	KW.OL.KW.10	KW.RL.KW.10	KW.BL.KW.10	KW.YL.KW.10	KW.ZL.KW.10	756,00

Accessories:
Additional equipment with perforated sheet.

KW.LBLECH	84,00

Surcharge

Special versions on request

Stack truck The stack truck for strong stress

- Bottom, side and rear walls of 2 mm profile sheet, bulk wall 3 mm
- Triple stackable
- Tilting with crossmember by cable from the driver's seat

Design/painted color blue	Load bearing capacity [kg]	Cont. [m3]	Dimensions [mm]	Weight [kg]	Order-no. color Orange	Price/piece €
SSK.05.L.RB	500	0,30	800x600x600	50	SSK.05.L.RO	160,30
SSK.10.L.RB	1000	0,55	1000x800x900	80	SSK.10.L.RO	227,20
SSK.15.L.RB	1500	0,70	1200x800x900	90	SSK.15.L.RO	243,50
SSK.20.L.RB	2000	0,90	1200x1000x900	100	SSK.20.L.RO	253,60
hot-dip galvanised	500	0,30	800x600x600	55	SSK.05.F.RO	213,00
hot-dip galvanised	1000	0,55	1000x800x900	88	SSK.10.F.RO	310,40
hot-dip galvanised	1500	0,70	1200x800x900	99	SSK.15.F.RO	336,80
hot-dip galvanised	2000	0,90	1200x1000x900	110	SSK.20.F.RO	359,10

Surcharge

Info

Additional versions:
- **2-piece lids (not stackable)**
- **Roles (not stackable)**
- **Oil-and water-tight design**
- **Removable hole sheets, shelf and drain valve 1"**
- **Eyebolts**
- **Crossbar stands**
- **Truck Traverse type BST**

Available surfaces:
- **Painted orange RAL 2000, blue RAL 5012 (without additional charge)**
- **Hot dip galvanised to EN ISO 1461**
- **Stainless steel**

Forklift Traverse For forklift trucks

The ideal complement to the SIP stack truck: The truck SIP traverse.
They also provide easy transportation.
With the stacking traverse, you can control the stack dumper from the drivers seat.
Colour, Orange RAL 2000.

Design	Order-no.	Price/piece €
fore Type SSK.05...	SST.05.L.RO	225,20
fore Type SSK.10...	SST.10.L.RO	259,70
fore Type SSK.15...	SST.15.L.RO	259,70
fore Type SSK.20...	SST.20.L.RO	273,90

Surcharge

HOISTING DEVICES

Chipping container SGU

For collecting and separating liquids from solids

Galvanized according to EN ISO 1461 or lacquered: Orange RAL 2000 Red RAL 3000, blue RAL 5012. Stainless steel version on request.

- Perforated intermediate floor, hole Ø 3 mm, pitch 6 mm
- 1 inch drain valve to drain the fluids
- Emptied at any height by cable from the stacking seat
- Standard 3 mm pan sheet with surrounding edge profile
- Stable base frame with forklift pockets
- Protection against unintentional slipping and tipping
- Oil-and water-tight design

Accessories:
2 Swivel and 2 fixed castors made of polyamide, Ø 180 mm, swivel castor with brake - 220 mm height and push handle, capacity 450 kg per roll

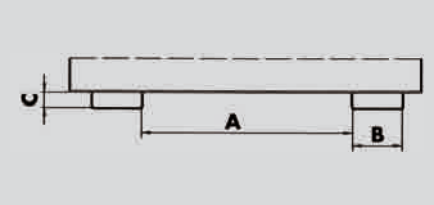
Info

For more accessories please contact your SIP partners.

Chip container, galvanized

Load bearing capacity [kg]	Forklift pocket size A [mm]	B [mm]	C [mm]	Content ca. [m³]	Order-no.	Price/piece €
750	12	200	60	0,30	SGU.VZ.030	978,50
1000	150	200	60	0,50	SGU.VZ.050	1.233,50
1000	495	200	60	0,75	SGU.VZ.075	1.423,90
1500	495	200	60	1,00	SGU.VZ.100	1.860,00
1500	495	200	60	1,50	SGU.VZ.150	1.966,20

Forklift pockets inner size



Chip container, painted

Load bearing capacity [kg]	Dimensions L x B x H [mm]	Content ca. [m³]	orange Order-no.	red Order-no.	blue Order-no.	Price/piece €
750	1440 x 680 x 580	0,30	SGU.OL.030	SGU.RL.030	SGU.BL.030	822,70
1000	1440 x 780 x 680	0,50	SGU.OL.050	SGU.RL.050	SGU.BL.050	1.018,90
1000	1440 x 1280 x 680	0,75	SGU.OL.075	SGU.RL.075	SGU.BL.075	1.150,40
1500	1640 x 1280 x 780	1,00	SGU.OL.100	SGU.RL.100	SGU.BL.100	1.377,70
1500	1640 x 1280 x 1090	1,50	SGU.OL.150	SGU.RL.150	SGU.BL.150	1.547,30

Accessories:

Additional version with rolls	SGU.ROLLE	155,10

Surcharge

Opening bottom container

Cost effective tipping

- Conical design
- Interstackable
- Opening of the base flaps by wire pullye
- Base flap closes automatically upon touchdown, 90 ° opening
- Solid construction with continuous edge profile 3 mm walls, floor flap 4 mm
- Support for forklift and crane
- Clearance height 100 mm - transportable with fork lift trucks
- Protection against unintentional slipping and tipping

Info

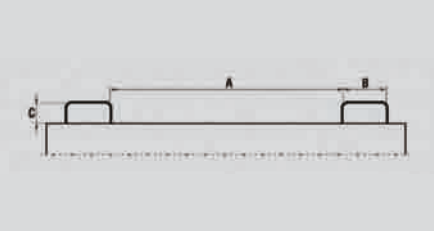
Additional equipement:

- **2 swivel and 2 fixed Polyamid castors**

Available surfaces:

- **Painted Orange RAL 2000 Red RAL 3000 Blue RAL 5012 Green RAL 6011, Grey RAL 7005, colors at no extra cost**
- **Hot dip galvanised to EN ISO**

Forklift pockets inner size



Design	Load bearing capacity [kg]	Cont. [m³]	Dimensions [mm]	Forklift pocket size A [mm]	B [mm]	C [mm]	Weight [kg]	Order-no. color orange	Price/ piece €
painted	1000	0,50	1200x1040x721	600	180	65	163	SBK.05.L.R0	623,50
painted	1500	0,70	1200x1040x971	600	180	65	183	SBK.07.L.R0	666,60
painted	2000	1,00	1200x1040x1271	600	180	65	206	SBK.10.L.R0	706,50
hot-dip galva.	1000	0,50	1200x1040x721	600	180	65	179	SBK.05.F.R0	740,90
hot-dip galva.	1500	0,70	1200x1040x971	600	180	65	201	SBK.07.F.R0	785,10
hot-dip galva.	2000	1,00	1200x1040x1271	600	180	65	227	SBK.10.F.R0	841,10

Accessories:

Additional version with rolls	SBK.ROLLE	155,10

Surcharge

Platforms The flexible workplace

- Tested for fork-lifts forklift and crane
- Safe repair and maintenance works
- Approved for 2 people
- 300 kg payload
- Standard tool tray (Type SAB.MB.D. .. and SAB.MB.A...)
- Anti sliding forklift sleeves

Info

Additional versions:

2 Swivel and 2 fixed castors made of polyamide, Ø 180 mm, swivel castor with brakes, height 220 mm, capacity 450 kg per roll

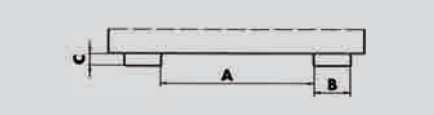
Surface

Painted

Orange RAL 2000

Blue RAL 5012

Forklift pockets inner size



Stand space [mm]	Dimensions [mm]	Forklift pocket size A [mm]	B [mm]	C [mm]	Weight [kg]	Order-no.	Price/piece €
800x1200	1115x1200x1890	600	200	80	120	SAB.MB.D00	779,80
800x1200	1115x1200x2090	600	200	80	132	SAB.MB.A00*	982,20

Accessories:

Additional version with rolls	SAB.ROLLE	155,10

For crane op.

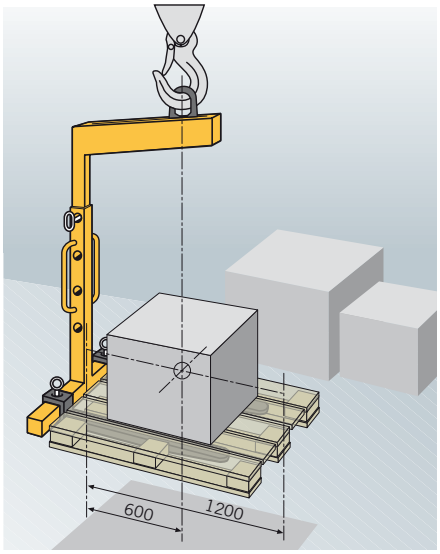
800x1200	800x1200x2300	170	SAB.MB.K40	1.732,50

* The work platform SAB.MB.A00 is approved only for Austria. Stainless steel versions available on request.

Surcharge

Loading forks Pallet handling, made easy with the crane

Fork lifter with manual and automatic balancing



Loading forks are ideal for ground-level transport of pallets, box pallets and other loads combined with the crane.
By height adjustment, and adjustable side prongs, the Axion Loading forks can be adjusted to various loads.
Also designed for the longitudinal transport.
Lifting specialists know that the standard pallets and box palets have a length of 1200 mm, the load center center here lies at 600 mm.
The light loading forks with a design load center of 500 mm are not suitable for these operations, the loading forks hang under weight with the forks facing downwards, the load can be lost.

Info

Fork lift with manual balancing
- **Different sizes or unevenly loaded pallets**
- **Pallets with less weight than 20-25% of capacity**
- **Input or output storage**

Info

Loading fork with automatic balancing
- **Uniformly loaded pallets**
- **Pallets with more weight than 20-25% of capacity**
- **High intensity of use**

Loading fork with automatic balancing

The Axzion loading forks automaticaly positions itself above carriage and gas loaded springs on the loads center of balance.
The load must be above the prong center.
The loading fork can only be lifted when the MOVING EYE has reached its load position.

When empty, the loading head, through the sliding gas compression spring against is pressed against the rear back stop and automatically sits horizontally.
Under load, the eye goes to the front stop, the loading fork is straight.
For the reliable operation of the automatic balance mechanism, at least 20-25% of the load capacity must be on the prongs.

- Solid construction from robust hollow profiles
- Load center 600 mm
- With suspension eye suitable for crane hooks
- With wear-free gas pressure spring
- Compact forks, adjustable for side loads
- Alternative I: Fixed loading height
- Model II: Flexible loading height by height adjustment

Optional
- Forged loading forks for smaller cross sections
- Safety cage
- 2x2 piece LBS 3 t in the rear suitable for hanging of 2 lashings
- secutex prong coating

WLL [kg]	Inner height min. [mm]	Inner height max. [mm]	Fork length [mm]	Fork width [mm]	Fork height [mm]	Fork adjustment area h [mm]	Height [mm]	Load center of gravity [mm]	Dead weight ca. [kg]	Order-no.	Price €
Fork lift with automatic balancing, not height adjustable											
1000	1300		1000	80	35	400-900	1450	600	110	LG.1000.LS	1.298,00
1500	1300		1000	90	40	400-900	1500	600	140	LG.1500.LS	1.322,00
2000	1300		1000	100	40	400-900	1570	600	165	LG.2000.LS	1.546,00
3000	1300		1000	130	50	400-900	1650	600	220	LG.3000.LS	1.781,00
Fork lift with automatic balancing, height adjustable											
1000	1300	2000	1000	80	35	400-900	1800	600	120	LG.1000.SH	1.422,00
1500	1300	2000	1000	90	40	400-900	1850	600	150	LG.1500.SH	1.537,00
2000	1300	2000	1000	100	40	400-900	1900	600	180	LG.2000.SH	1.735,00
3000	1300	2000	1000	130	50	400-900	1950	600	240	LG.3000.SH	2.008,00

Loading forks

With manual balancing

With unevenly loaded pallets, the exact center of gravity is not always centered. With the easy to move hanging ring, the loading fork can be adapted to various load centers.

- Solid construction from robust hollow profiles
- Load center 600 mm
- With extra large hanging ring, 260x140 mm (Hxb)
- Compact forks, adjustable for side loads
- Alternative I: Fixed loading height
- Model II: Flexible loading height by height adjustment

Optionally

- Forged loading forks for smaller cross sections
- Safety cage
- 2x2 piece LBS 3 t in the rear suitable for hanging of 2 lashings
- secutex prong coating

WLL [kg]	Inner height fixed/min. [mm]	Inner height max. [mm]	Fork length [mm]	Fork width [mm]	Fork height [mm]	Fork adjustable area h [mm]	Height [mm]	Load center of gravity [mm]	Dead weight ca. [kg]	Order-no.	Price €
Fork lifter with manual weight counterbalance, not height adjustable											
1000	1300		1000	80	35	400-900	1450	600	110	LG.1000.LM	992,50
1500	1300		1000	90	40	400-900	1500	600	140	LG.1500.LM	1.004,00
2000	1300		1000	100	40	400-900	1570	600	165	LG.2000.LM	1.266,00
3000	1300		1000	130	50	400-900	1650	600	220	LG.3000.LM	1.406,00
Fork lifter with manual weight counterbalance, height adjustable											
1000	1300	2000	1000	80	35	400-900	1800	600	120	LG.1000.MH	1.126,00
1500	1300	2000	1000	90	40	400-900	1850	600	150	LG.1500.MH	1.150,00
2000	1300	2000	1000	100	40	400-900	1900	600	180	LG.2000.MH	1.547,00
3000	1300	2000	1000	130	50	400-900	1950	600	240	LG.3000.MH	1.727,00

With manual balancing on fixed version

This ultra-economical load forks are ideal for palletized goods.
The weight balance is carried out by attaching the crane hook eyelet by hand.
The prongs are not laterally displaceable.

- Simple Design
- Load center only 500 mm !!!
- fork prongs not lateraly adjustable
- Fixed loading height

Info

Loading forks special designs

WLL [kg]	Inner height max. [mm]	Fork length [mm]	Fork width [mm]	Fork height [mm]	Load center of gravity [mm]	Dead weight ca. [kg]	Order-no.	Price €
1000	1300	900	100	30	500	95	LG.1000.MF	838,50
1500	1300	900	80	40	600	120	LG.1500.MF	854,00
2000	1300	900	100	40	500	145	LG.2000.MF	999,50

Useful information for handling hoisting clamps

1. Legal Basis

The technical requirements and handling descriptions for Germany, are described in the BGR 500 and europe wide through the 2006/42/EG guidelines

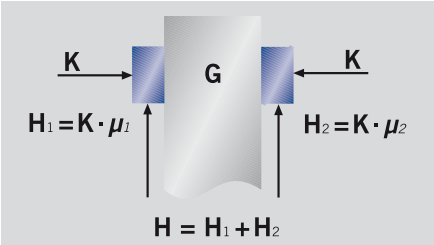
For Lifting Clamps that were put into operation for the first time after the 31 December 1992, the manufacturer/supplier guarantees to fulfil the Guidelines 2006/42/EG in compliance with E.C guidelines

On the hoisting clamp, the following information must be permanently displayed and visible:

1. Manufacturer or supplier
2. Sustainability
3. Net weight, providing that it exceeds 5% of the sustainability or 50 kg
4. Type
5. Factory number
6. Year
7. Allocated clamping range

2. Operating and Handling Procedures for load baring clamps

With clamps, grips and pipe grasps the load is held between the clamp segments due to the friction generated. The Faust Formula applies, the higher the horizontal clamp strength K, and friction co efficient U1 U2 are, the bigger the load baring point H is, and thus, the securer the load will be held through the lifting clamps. The load baring strength must be at least 2G over the entire clamping range.
The load baring device is not allowed, by modification of the clamp, nor by elastic deformation of the load to sink under these values.



One chooses Load Clamps for the vertical and horizontal transportation of sheets, automatic or manual locking hoisting clamps, clamps for hoisting, flipping and turning of sheets.

Vertical transport, universal

Automatick clamping/lock

Clamp for turning

Horizontal transport

3. Handling and operation

Security hoisting clamps are essentially for hoisting, turning and transporting steel and aluminium sheets as well as wood and plastics.

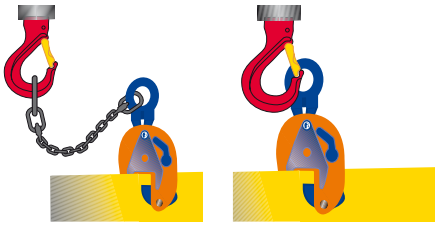
To achieve the ideal contact from the clamp to the load. The load baring contact points should be free of grease, paint, dirt and be uncoated.

The maximum load amount may not be surppased, and by vertical transport only one sheet at a time per device may be used, for example, for transport.

IP clamps can be operated in temperatures ranging from –40 to +100°C and are designed for sheets with a surface hardness of up to 37Rc.

Info

For use of lifting clamps outside the temperature range, you may ask your SIP partner.

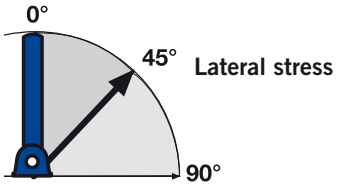


allowed **not allowed**

The size of the crane hook and load ring must coincide, so that the clamp has freedom of movement. Ideally a latched chain will be used as fore-walker.

4. Tests and repairs

IP Hoisting clamps with a rigid bearing ring can be side loaded up to 15° and with a pivoting bearing ring can be side loaded up to 90°.
With a lateral load over 45°, the load sustainability is reduced by 50%.



Lifting clamps can be operated singularly, deployed in pairs or in groups. IP-Lifting clamps are sustainable from 0.5 to 55 t and available with a clamping range from 0 to 155 mm, come ready equipped with, for safe operation, important instructions.

Avoid unnecessary wear and tear on the teeth segments/circles and always store your IP lifting clamps in an open and aired location.

Clamps should be put through a visual and functionality test before every use, and once a year it should be disassembled and approved by an authorised expert.

Clean Profiles and Clamp surfaces are a necessity for the safe operation of clamps. To clean the hoisiting clamps diesel oil or petroleum should be applied.
Subsequently, turning points and slide surfaces greased for the achievement of a safe functinality and longer life span.

Lifting clamps that have been overloaded, left standing or work poorly, are to be removed from the workplace and be inspected by a qualified and authorised expert. After successful reparations and before renewed implementation in the workplace, the lifting clamp must pass a revision test.

Spare parts kit-easy repair by modular construction

The modular construction of the IP lifting clamps allows for quick and exacting revisions of each section, as well as cost efficient spare parts. Therefore there are different repair kits available for servicing and conditioning, that you may acquire by you SIP Partener!

10 year guarantee on all IP quality security hoisting clamps:

Through the 10 year guarantee you receive maximum quality and security. With this purchase, you are choosing a quality IP product with the unique guarantee of ensured functionality. The guarantee is bound to recurring inspections through IP certified specialists.

Every clamp will be delivered with the Terms and Conditions, Operation Procedures, Maintenance Manual and Warranty Certificate.

For more information please refer to you your SIP Partner.

Info

You may acquire a poster for safe lifting with clamps by your IP Partner.

Info

Special clamps

We deliver, what you want!

Our Partner the manufacturer Inter Product, develops and produces in team work with ourselves THE lifting clamp for YOUR SPECIAL hoisting needs conforming to ISO 9001.

HOISTING DEVICES

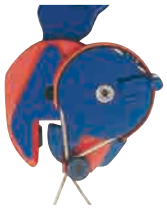
More versions for more flexibility

The new Grip Series with wider mouth opening and improved ergonomics

1

2

3

4

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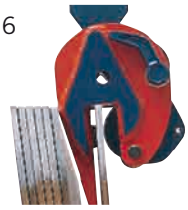


Depending on your particular load baring needs, you have option to choose between various models of the prototypes IP10 and IPU10.

	With fixed bearing ring	With universal pivoting bearing ring	
1	P10/A	IPU10/A (A=autolocking)	Automatic Locking
2	IP10/H	IPU10/H (H=hard, Hardox)	For hard materials up to 450 Brinell (47 Rc)
3	IP10/J..	IPU10/J.. (J=jaw)	With flexible clamping parameters
4	IP10/R	IPU10/R (R=remote release)	Remote controlled by cable to open and close
5	IP10/S	IPU10/S (S=stainless steel)	With grip surf. made of VA-Steel for VA-Steel material
6	IP10/W	IPU10/W (W=wedge)	Directed with a spearhead
7	IPNM/P	Gentle lifting with soft gripper	
8	Other Hoisting capacities (WLL) upon request.		

7

HOISTING DEVICES

IPU 10 Universally lifting in every direction

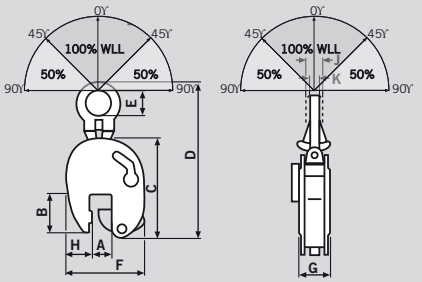
Comprehensive Tension by lifting, turning and transport.

The IPU10 has a universal, swivelling bearing ring. So that the weight may be displaced in the direction of your choice. Apart from that, the IPU10 is very useful for application where larger sheets are to be lifted with two clamps in combination on a two stranded suspension.

Info

More and higher load bearing capabilities upon request.

Model	WLL	Dimensions [mm]										Weight	Order-no.	Price/ piece
		Mouth												
	[kg]	A	B	C	D	E	F	G	H	J	K	[kg]		€
0,5-IPU10	500	0-16	44	128	228	40	115	41	28	-	11	1,9	IP.U1.005.0	259,50
1-IPU10	1000	0-20	45	139	222	40	126	41	38	-	11	2,4	IP.U1.010.0	371,50
2-IPU10	2000	0-35	78	201	372	70	190	61	55	-	16	8,5	IP.U1.020.0	428,00
3-IPU10	3000	0-40	100	253	445	75	225	78	60	-	20	14,8	IP.U1.030.0	543,00
4,5-IPU10	4500	0-40	100	253	445	75	232	82	65	-	20	16,0	IP.U1.045.0	612,00
6-IPU10	6000	0-50	126	302	525	80	292	84	95	44	20	24,0	IP.U1.060.0	815,50
6-IPU10J	6000	50-100	126	302	525	80	342	84	95	44	20	25,0	IP.U1.060.J	916,50
9-IPU10	9000	0-50	126	325	557	80	310	92	105	44	20	29,5	IP.U1.090.0	1.072,00
9-IPU10J	9000	50-100	126	325	562	80	360	92	105	44	20	30,5	IP.U1.090.J	1.179,00
12-IPU10	12000	0-54	160	391	623	80	331	117	137	41	25	57,0	IP.U1.1200	2.003,00
12-IPU10J	12000	54-108	178	439	673	80	415	117	137	41	25	59,0	IP.U1.120J	2.204,00



10 years warranty

IP10 Leading hoisting technick

For Vertical Lifting, turning and transporting

The IP10 clams are suited to Lifting, turning 180° and vertical transport of sheet steel and construction elements.

Info

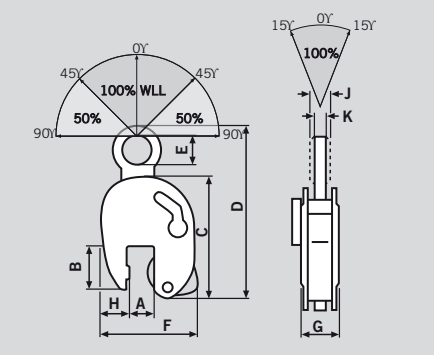
Custom creations are not a problem for us, i.e.

- **Hoisting clamps in stainless steel**
- **For especially hard sheet surfaces**

Contact us!

Other and higher load bearing capacities upon request, speak to you SIP Partner!

Model	WLL	Dimensions [mm]										Weight	Order-no.	Price/
		Mouth												piece
	[kg]	A	B	C	D	E	F	G	H	J	K	[kg]		€
0,5-IP10	500	0-16	44	128	207	30	115	41	28	-	10	1,8	IP.10.005.0	194,00
1-IP10	1000	0-20	45	139	215	30	126	41	38	-	10	2,2	IP.10.010.0	252,50
2-IP10	2000	0-35	78	201	336	70	190	61	55	-	16	7,6	IP.10.020.0	271,50
3-IP10	3000	0-40	100	253	436	75	225	78	60	-	20	13,8	IP.10.030.0	360,50
4,5-IP10	4500	0-40	100	253	436	75	232	82	65	-	20	15,0	IP.10.045.0	407,50
6-IP10	6000	0-50	126	302	515	80	292	84	95	40	20	23,5	IP.10.060.0	587,50
6-IP10J	6000	50-100	126	302	515	80	342	84	95	40	20	24,0	IP.10.060.J	672,50
9-IP10	9000	0-50	126	325	550	80	310	92	105	44	25	27,5	IP.10.090.0	737,00
9-IP10J	9000	50-100	126	325	555	80	360	92	105	44	25	28,5	IP.10.090.J	812,50
12-IP10	12000	0-54	160	391	580	80	331	117	137	41	25	49,0	IP.10.120.0	1.574,00
12-IP10J	12000	54-108	178	439	630	80	415	117	137	41	25	58,0	IP.10.120.J	1.731,00



10 years warranty

Order example: IP.10.090.J IP10 hoistng clamp. Load capacity 9000 kg, mouth opening 50-100 mm

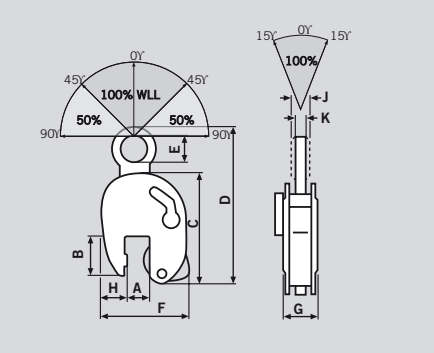
IPU10/A Hoisting clamp, locks automaticaly

For Vertical Transport

The IPU10/A Automaticaly engages and locks so that the material is secured as soon as the clamp is attached. As the security latch remains in the same position once the clamp has been attached, no further dangerous situations can occur. Attaching the clamp in hard to reach areas is not a problem with the IPU10/A! This clamp is designed to lift, turn (180°) and to vertically transport Steel Sheets and Constructions.

Info

Higher load bearing capacities and varying clamp parameters upon request.



Model	WLL	Dimensions [mm]									Weight	Order-no.	Price/
		Mouth											piece
	[kg]	A	B	C	D	E	F	G	H	K	[kg]		€
1-IPU10A	1000	0-20	45	138	238	30	128	41	37	10	2,3	IP.U10A.10	441,00
2-IPU10A	2000	0-35	78	201	378	70	200	61	72	16	8,9	IP.U10A.20	571,50

10 years warranty

Order example IP.U10A.20 IPU-10/A Hoisting clamp, load capability 2000 kg

IPNM10 The soft gripper

Ideal for loads with delicate surfaces

IPNM10JC

Some of the numerous applications:

- Transporting aluminium, VA steel, Hard Materials or profiles
- Poduction of drums and pressure vessels
- Production and/ assembly of composite materials
- Handling Steel
- Defence industry, Airplane and tank assembly
- Aluminium and steel production
- Yacht and ship construction
- High, Deep and street work
- Mining industry
- Automobile Industry (bus truck and lorries)
- Machine construction for Goods-, Biotech- Chemical and Cosmetic industries

The IPNM10-Hoisting Clamp can be incorporated into near enough every Industry Sector, where the load must be pretected from damage during lifting and transportion. The grips of the clamp are composed of a synthetic material with a very hi friction co-efficient, so that delicate sheets can be transported securely and free of damage. This also goes for materials with a very flat surface, composites or sheets with a very hard surface. These new clamps are extremely user friendly, as they are very compact, easy to handly and lightweight.
Of course, we grant the IPNM10 Clamps a 10 year guarantee.

- Vertical hoisting, turning and transporting damage free
- User Friendly due to compact structure
- Synthetic grips for very delicate loads
- Easy and safe to use
- Extremely lightweight
- Cost savings, because post-processing is not necessary
- No more damaged materials

The main client from IPNM10 Clamps at the moment is the Airline Industry. But IPNM10 Clamps can also, quickly and cost-effectively be incorprated into many other industry sectors.

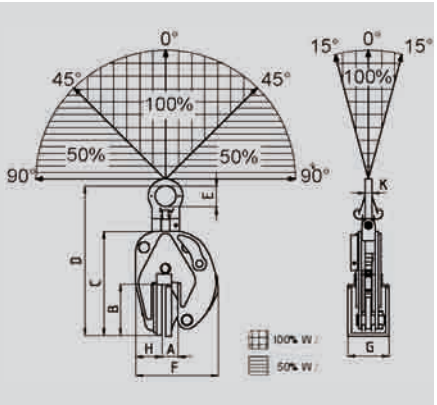
The IPNM10 security clamps are specialy designed for:

- Aluminium
- VA steel
- Composite materials
- Hard materials
- Plastics, amomngst others, Plexiglas and Trespa
- Polished metals
- Layered and lackered materials
- Copper and alloys
- Wood, amongst others, Triplex and Multiplex

… and many other applications!

Model **IPNM10JC** also for conical surfaces.

All IPNM10-Clamps are equipped with RFID-Tag.



IPNM10

Label	Load bear. Capacity WLL [kg]	Mouth A	Dimensions [mm] B	C	D	E	F	G	H	K	W. [kg]	Order-no.	Price/ piece €
0,5 IPNM10N	500	0-10	74	149	205	40	128	60	38	11	2,5	IP.NM.05.00	627,50
1 IPNM10N	1000	0-20	110	209	270	30	184	80	56	10	4,4	IP.NM.10.00	847,50
1 IPNM10J	1000	20-37	86	196	265	30	177	80	51	10	5,5	IP.NM.10.0J	979,00
1 IPNM10J1	1000	0-25	86	225	314	30	194	80	59	10	5,5	IP.NM.10.J1	1.427,00
2 IPNM10	2000	0-40	153	258	396	70	196	100	161	16	14,5	IP.NM.20.00	2.245,00

IPNM10P – Equipped with a protection cap

Load bear. Capacity WLL [kg]	Mouth A	Dimensions [mm] B	C	D	E	F	G	H	K	W. [kg]	Order-no.	Price/ piece €	Price/ piece €
0,5 IPNM10P	500	0-10	82	157	213	30	145	68	48	10	2,8	IP.NM.05.0P	754,00
1 IPNM10P	1000	0-20	97	195	268	30	205	82	66	10	4,5	IP.NM.10.0P	973,50

10 years warranty

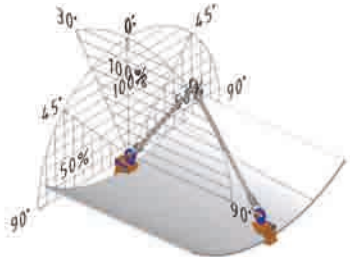
The protective cap serves as a protection for delicate materials in the area of the lifting operations.

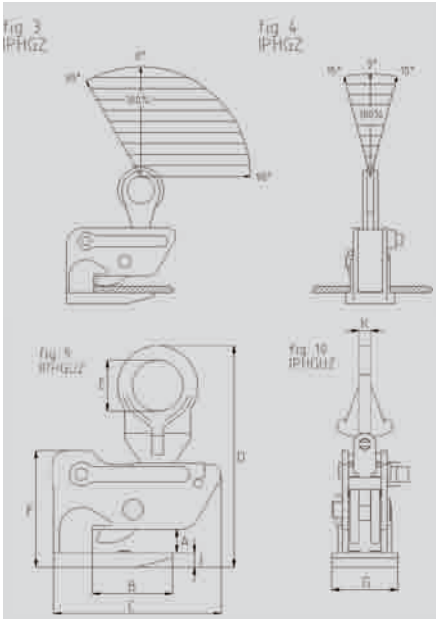
IPHGUZ Horizontal transport of metallic sheets

For horizontal transport – with locking mechanism

The horizontal lifting clamps IPHGUZ - IPHGZ are suitable for hoisting and transporting metallic sheets (also for malleable sheets).
The IPHGZ lifting clamp can be locked in both open and closed position.
This ensures safe handling and is why it is also use for the transport of folding benches, panel scissors, metal round bending machines, etc.

Available in two versions:
1. IPHGUZ: fitted with universal bearer ring.
2. IPHGZ: fitted with fixed bearer ring.





Model	WLL [kg]	Weight [kg]	Dimension [mm] A	C	D	E	H	J	K	Order-No.	Price/piece €
0,75 IPHGZ	750	4,0	0-25	82	148	206	50	99	98	IP.HGZ.075	386,00
1,5 IPHGZ	1500	7,3	0-25	110	200	250	50	118	90	IP.HGZ.150	437,00
3 IPHGZ	3000	12,3	0-40	120	227	305	70	148	120	IP.HGZ.300	702,00
4,5 IPHGZ	4500	25,0	0-40	120	284	381	70	181	155	IP.HGZ.450	on request
1,5 IPHGUZ	1500	9,0	0-25	110	232	287	70	139	90	IP.HUZ.150	912,00
3 IPHGUZ	3000	19,9	0-40	119	253	348	75	175	120	IP.HUZ.300	on request
4,5 IPHGUZ	4500	30,0	0-40	119	301	370	80	175	155	IP.HUZ.450	on request

10 years warranty

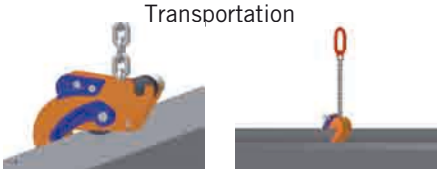
IPSTARTEC11 Special clamp for hoisting H and I profiles

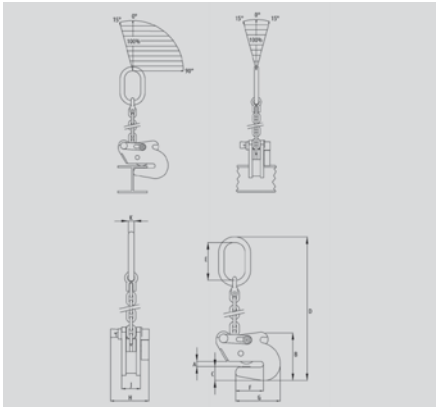
The specialist for tipping operations

The IP-Startec is a special clamp for hoisting, tipping and stacking H and I steel profiles. On account of the special construction of the hoisting clamp, goods cannot only be hoisted but through proper positioning can also be tipped without problems. Depending on the size and the weight of the support there are two versions of the IP-Startec-clamp with differing jaw sizes.

Controlled turning

Transportation





Model	WLL [kg]	Maul A	B	C	D	E	F	G	H	J	K	Weight	Order-No.	Price/piece €
1,5 IPSTARTEC11	1500	6-12	140	39	575	110	81	129	54	126	16	6,6	IP.STAR.15	484,50
2,5 IPSTARTEC11	2500	6-20	210	55	725	135	115	182	74	140	18	14,5	IP.STAR.25	656,00

10 years warranty

IPH10 The horizontal secure lifting clamp

With pre-tensioning, magnets and handle

We are introducing the new IPH10 series as the successor of the proven IPHTONZ/ IPHSZ series.
The IPH10-clamps come with many extras which will guarantee an exceptionally easy and safe handling.

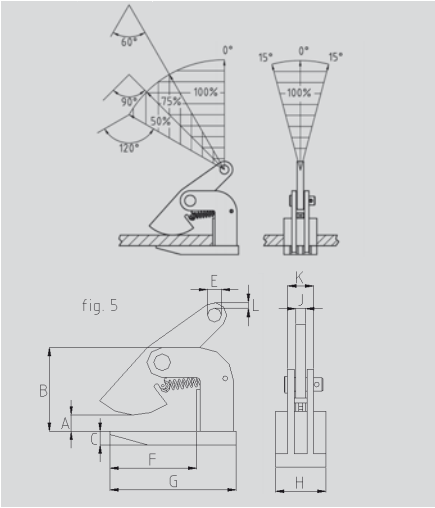
- For the horizontal lifting and transport of non-bendable steel sheets
- Equipped with pre-tensioning, magnets and handle
- Magnets for an improved clamp fit to the metal sheet
- Easy handling through handle and leg spring
- Lifting can be engaged with one person
- The IPH10 is always used in pairs
- For sheets with surface hardness of 345HB, 37 Rc (1170 N/mm²)

We are offering a 10-year guarantee for IPH10-clamps.

There are 3 IPH10-clamps versions available:
IPH10 (0,5 – 1,0 t) with spring, without handle
IPH10 (2,0 – 12 t) with leg spring, magnets and handle
IPH10 (2,0 – 12 t) with handle

With spring, without handle

Spring



Model	WLL/ pair [kg]	A [mm]	B [mm]	C [mm]	E [mm]	F [mm]	G [mm]	H [mm]	J [mm]	K [mm]	L [mm]	Weight/ pair [kg]	Order-no.	Price/ pair €
0,5 IPH10	500	0-20	86	12	16	103	150	60	12	27	4	3,6	IP.10.3297	307,50
1 IPH10	1000	0-35	100	16	16	103	150	60	12	31	7	5	IP.10.3298	353,50

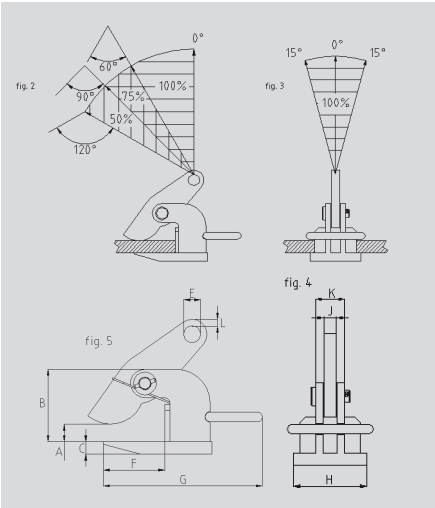
10 years warranty

With leg spring, magnets and handle

leg spring

handle

magnets

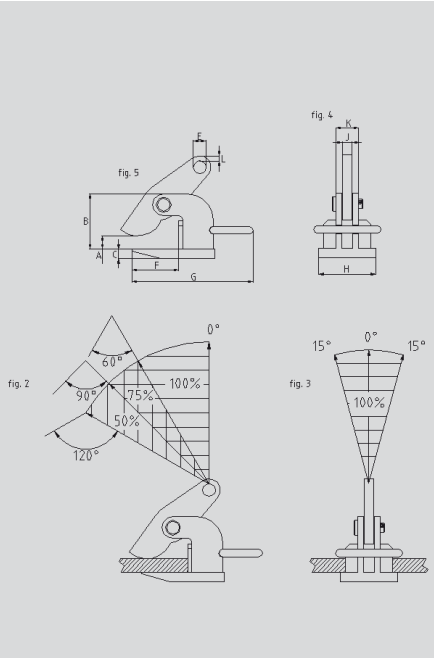


Model	WLL/ pair [kg]	A [mm]	B [mm]	C [mm]	E [mm]	F [mm]	G [mm]	H [mm]	J [mm]	K [mm]	L [mm]	Weight/ pair [kg]	Order-no.	Price/ pair €
2 IPH10	2000	0-60	117	16	22	109	256	110	20	40	9	11	IP.10.3522	726,50
3 IPH10	3000	0-60	117	20	26	109	266	120	20	48	11	15	IP.10.3523	871,00
4,5 IPH10	4500	0-60	132	25	30	104	280	130	20	48	12	21	IP.10.3524	968,00
6 IPH10	6000	0-60	143	25	36	123	320	130	20	48	14	26	IP.10.3525	1.113,00
9 IPH10	9000	0-60	157	30	43	133	330	140	25	62	16	37	IP.10.3526	1.695,00
12 IPH10	12000	0-60	172	30	47	141	353	150	25	62	17	43	IP.10.3527	2.397,00
3 IPH10J	3000	60-120	177	20	26	109	266	120	20	48	11	18	IP.10.3533	1.016,00
4,5 IPH10J	4500	60-120	192	25	30	104	280	130	20	48	12	24	IP.10.3534	1.137,00
6 IPH10J	6000	60-120	203	25	36	123	320	130	20	48	14	30	IP.10.3535	1.332,00
9 IPH10J	9000	60-120	217	30	43	133	330	140	25	62	16	41	IP.10.3536	2.034,00
12 IPH10J	12000	60-120	232	30	47	141	353	150	25	62	17	48	IP.10.3537	2.759,00

10 years warranty

Version with handle, without spring

handle



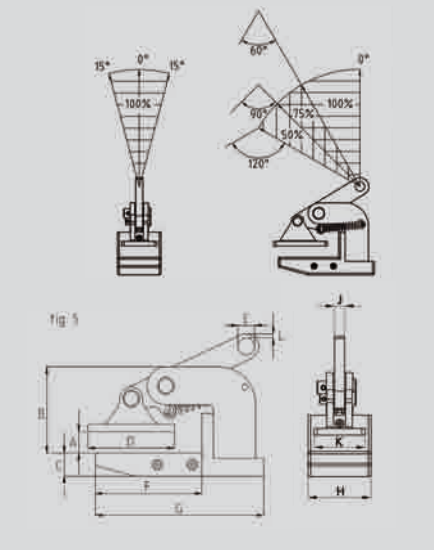
Model	WLL/ pair [kg]	Dimensions [mm] A	B	C	E	F	G	H	J	K	L	Weight/ pair [kg]	Order-No.	Price/ pair €
2 IPH10E	2000	0-60	117	16	22	109	256	110	20	40	9	11	IP.10.3542	456,00
3 IPH10E	3000	0-60	117	20	26	109	266	120	20	48	11	15	IP.10.3543	557,50
4,5 IPH10E	4500	0-60	132	25	30	104	280	130	20	48	12	21	IP.10.3544	642,00
6 IPH10E	6000	0-60	143	25	36	123	320	130	20	48	14	26	IP.10.3545	679,00
9 IPH10E	9000	0-60	157	30	43	133	330	140	25	62	16	37	IP.10.3546	968,00
12 IPH10E	12000	0-60	172	30	47	141	353	150	25	62	17	43	IP.10.3547	1.695,00
3 IPH10JE	3000	60-120	177	20	26	109	266	120	20	48	11	18	IP.10.3553	679,00
4,5 IPH10JE	4500	60-120	192	25	30	104	280	130	20	48	12	24	IP.10.3554	774,50
6 IPH10JE	6000	60-120	203	25	36	123	320	130	20	48	14	30	IP.10.3555	895,00
9 IPH10JE	9000	60-120	217	30	43	133	330	140	25	62	16	41	IP.10.3556	1.211,00
12 IPH10JE	12000	60-120	232	30	47	141	353	150	25	62	17	48	IP.10.3557	1.936,00

10 years warranty

IPHNM10 Soft-clamp with high lifting capability

The IPHNM10-clamps are especially useful for the transport of metal sheet and steel constructions in horizontal positions. They are providing an easy and safe handling.

- For the horizontal lifting and transport of non-bendable steel sheets
- Light and compact design
- Lifting can be engaged with one person
- The horizontal lifting clamps are always used in pairs
- Can also be used vertically beneath traverses
- Higher lifting capabilities and custom clamp areas on request
- All IPHNM10-Clamps are equipped with RFID-Tag



Model	WLL/ pair [kg]	Mouth A	B	C	D	E	F	G	H	J	K	L	Weigth/ pair [kg]	Order-No.	Price/ pair €
0,5 IPHNM10	500	0-20	81	22	82	16	101	160	74	12	60	4	4,0	IP.HNM.050	1.002,00
1 IPHNM10	1000	0-35	93	30	92	16	103	164	74	12	60	7	7,0	IP.HNM.100	1.068,00
2 IPHNM10	2,0	0-40	139	30	131	22	166	245	100	20	74	9	15,0	IP.HNM.200	1.322,00
2 IPHNM10J	2,0	30-60	169	30	131	22	166	245	100	20	74	9	16,0	IP.HNM.20J	1.513,00

Magnet claw For manual use

The mobile grip for sharp-edged, oily, hot or bulky parts!

- Non-fatigue way of working
  Solid handle, plastic covered and ergonomically shaped.
- Easily maintained
  The magnets are covered by non-ferrous metals to provide protection for damage and dirt.
- Direct frictional connection
  The magnet blocks are embedded in shock resistant aluminium casings and directly connected via the handle or the crane-eye.

Lifting force [kg]	Towing force [kg]	Sheet thickness [mm]	Base area [mm]	Weight [kg]	Order-no.	price/ piece €
120*	70	1-2	140 x 84	1,4	MK.H.012.00	172,00
170*	100	1-4...5	140 x 116	1,8	MK.H.017.00	198,00
300*	180	ab 2	160 x 180	3,5	MK.H.030.00	295,00

* with double safety for manual handling
measured on dressed to size material St37 k, cleaned surfaces and 25 mm thickness

Magnet claw for crane usage

For metal sheet size 1.000 x 2.000 mm there is only 1 lifting magnet necessary, for 1.500 x 3.000 mm 2 of them plus a small traverse.

Info

Please note: The full adhesive power potential is only realised with smooth and clean surfaces and magnetisable parts and sufficient thickness. Adhesive power is lost on scaled surfaces: for magnet claws up to 2/3, for load-carrying magnets up to 50%.

Lifting force [kg]	Towing force [kg]	Sheet thickness [mm]	Base area [mm]	Weight [kg]	Order-no.	Price/ piece €
250***	100**	ab 4	290 x 125	7,2	MK.K.025.00	445,00
300***	125**	ab 4	290 x 180	10,5	MK.K.030.00	520,00

** with double safety for crane usage
*** with triple safety for crane usage
measured on dressed to size material St37 k, cleaned surfaces and 25 mm thickness

Manual lifting magnet

The practical little helper

- With 2-part leather strap
- For the de-stacking, grabbing and insertion of thin metal sheets and metal parts from 0,3 - 2 mm
- Lifting power: 25 kg
- Dead weight: 0,15 kg

Replacement strap made of plastic upon request.

Label	Order-no.	Price/piece €
Lifting Magnet	HHM.015.00	37,00
Replacement strap	HHM.EHR.00	4,00
Replacement thumb strap	HHM.EDR.00	1,40

Usage: Place the magnet flat on the metal sheet, lift it slightly and grab it. Effortless release through folding.

NEO Permanent lifting magnet

Easier lifting without disturbing cables, safes time and money and ensures safety.

The SIP-permanent-load-carrying magnets are completely new developments and are setting the technological norm. These relatively small high-energy magnets made of neodymium ensure an enormous lifting power even with air gaps.

- Enormous lifting power through novel magnets
- Very compact design
- Very light dead weight
- Outstanding manageability
- ON/OFF switch made as sturdy steel lever
- EG certified

Suggested max. lifting force for flat materials[kg]	Suggested max lifting force for round mat. [kg]	Certified tear-off force [kg]	For round materials Ø [mm]	L x w [mm]	Height to crane h. [mm]	Weight [kg]	Order-no.	Price/ piece €
125	50	400*	50-100	95x60	110	3	NEO.0125.N	398,00
250	125	800*	60-200	151x100	168	10	NEO.0250.N	545,00
500	250	1600*	65-270	246x120	168	19	NEO.0500.N	825,00
1000	500	3200*	100-300	306x146	216	39	NEO.1000.N	1.395,00
1500	750	4500*	150-350	375x165	253	66	NEO.1500.N	1.790,00
2000	1000	6000*	150-350	480x165	253	85	NEO.2000.N	2.395,00

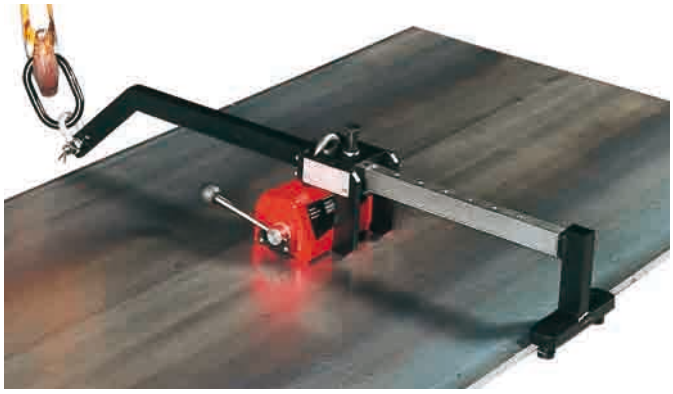
* measured on dressed to size material St37 k and 50 mm thickness

Info

The SIP-load lifting magnets have a safety lock and come with a manual, testing certificate and EG-declaration of conformity.

Rotary arm for permanent load lifting magnets

Convenient rotation of parts



Magnet with lifting arm to rotate parts by 90°

The SIP-rotary arm with a mechanical fixed stop is suitable for "vertical- and horizontal engagement" and ideal for the upgrade of type NEO 250 and NEO 500 magnets which are already present. This makes the turning and swinging of parts very easy. The magnet can be quickly adjusted to fit the part's width or diameter. Ideal for the loading and unloading of horizontal machining centers, lathes etc.

SIP-permanent-load-carrying magnets for horizontal and vertical use

Suggested max. lifting force for flat materials [kg]	Certified tear-off force [kg]	For part width or Ø [mm]	Length x width [mm]	Height [mm]	Weight [kg]	Order-no.	Price/ piece €
250	800*	300-800	958x210	252	27	NEO.250.HV	1.310,00
500	1600*	300-1000	1158x275	255	38	NEO.500.HV	1.600,00

SIP-rotary arms for permanent load-carrying magnets

Label	Use	Order-no..	Price/piece €
Accessories for NEO 250	Rotary arm for perm. load-carrying magnets	NEO.250.SA	765,00
Accessories for NEO 500	Rotary arm for perm. load-carrying magnets	NEO.500.SA	775,00

Load lifting magnet

The affordable load lifting magnet

The new load lifting magnet is especially compact and strong in performance. It can carry up to 20-50 times of its own dead weight. Due to its innovative design it provides a high level of reliability and sturdiness.

- Maximum safety
- Easy handling
- Supreme reliability
- Solid design
- Cost-saving

- Ideal for flat and round parts
- Safety level 3
- Three years guarantee if check-up is performed at least once per year by your SIP-partner

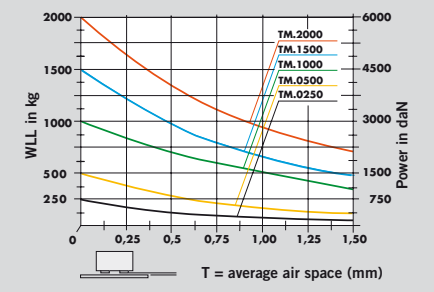
Info

SIP-rotary arm for TM-load lifting magnets up to 1.000 kg carrying capacity available on request.

Sugg. max. lifting force f. flat materials [kg]	Sugg. max. lifting force for round materials [kg]	Wall strength* flat [mm]	Wall strength* round [mm]	Length x width [mm]	Compl. height [mm]	Weight [kg]	Order-no.	Price/ piece €
125	50	20	10	121 x 79	105	3,6	TM.0125.00	450,00
250	100	20	10	189 x 79	142	6	TM.0250.00	580,00
500	200	25	15	250 x 106	189	15	TM.0500.00	870,00
1000	400	40	25	342 x 133	219	34	TM.1000.00	1.510,00
1500	600	45	30	383 x 166	293	65	TM.1500.00	1.970,00
2000	800	55	35	457 x 166	293	78	TM.2000.00	2.650,00

SUPER PRICE Surcharge

* Wall thickness needed to reach full adhesive power



Manual lifting magnet for thin-walled loads

Strong, sturdy and compact

The special pole piece surface design combined with the balanced magnetic masses which are present in the stator and rotor enable an optimal concentration and distribution of magnetic power throughout the load's complete surface. This leads to a smooth flip of the lever. The well known characteristics of safety and reliability of the MaxX load lifting units are retained.

- Solid steel sheet construction
- High performance through the power of permanent magnets
- Special pre-treatment present on all surfaces against rust and wear

Load b. cap. flat load [kg]	Load b. cap. round load [kg]	min. wall str. [mm]	max. Ø [mm]	L [mm]	Width [mm]	Height [mm]	Weight [kg]	Order-no.	Price/piece €
150	60	8	240	189	79	142	6	TM.MAX.150	670,00
300	120	10	290	250	106	190	16	TM.MAX.300	1.000,00

Surcharge

Can be used with traverse - Ask your SIP-partner

Ultralift lifting magnet Plus

One of the most secure lifting appliances worldwide

1. Safety lock
The safety lock secures the handle in the "ON" position and provides a sturdy and positive lock for the switch mechanism.

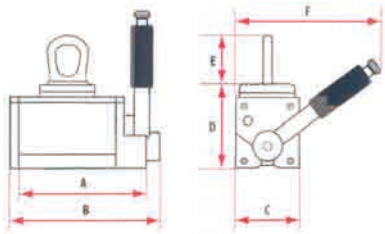
2. Lifting eye
Additional safety lock. If the lifting eye is under tension of the load the mechanism locks the handle to make sure that the magnet cannot be released by accident. (Patent No. GB2399456)

3. Handbrake solution
The magnet is easily released with one hand.

4. Safety disc
The Eclipse Magnetics Ultralift Plus is the only permanent magnetic lifting magnet which comes completely with a "safety disc" (international patented). This enables a preliminary test of the load to be lifted no matter how heavy, how thick or how the surface might be composed. If the load passes the test it guarantees a safety factor of 3:1.

Quickest and most secure solution for the lifting of pre-tested or known loads.
- Lower the magnet onto the metal sheet
- Turn the handle
- Safely lift the load

Dead weight	Dimensions [mm]						Length	Flat profile		Round profile			Order-no.	Price
							max.	secure work	material thickn.	secure work	max. diameter	min. thickness		
[kg]	A	B	C	D	E	F	[mm]	load [kg]	[mm]	load [kg]	[mm]	[mm]		€
4	101	155	69	74	64	152	1500	125	20	50	40-200	20	UL.0125.00	405,00
11	155	214	92	96	94	218	1500	250	25	100	60-300	25	UL.0250.00	610,00
27	224	300	122	128	123	266	1500	500	30	200	50-400	30	UL.0500.00	950,00
63	260	359	176	174	149	391	1500	1000	45	400	75-450	45	UL.1000.00	1.650,00
157	368	477	233	227	195	493	2000	2000	70	800	100-600	55	UL.2000.00	2.800,00



Lifting magnet LM

No performance cost
There is no need of electricity - no additional cost.

High performance
Magnet material is made from rare earth neodymium which provides for a light-weight and powerful performance.

Protection of the load
The load's surface won't be marked.

Easy to install
The unit is ready for use by simply attaching it to your crane or your lifting equipment.

Easy to use
One person can effortlessly attach the load within seconds.

Secure lifting
Safety lock mechanism prevents the unintended release of the load.

Space Saving
Access to the load is needed only from the top side which enables a more efficient use of your storage and handling areas.

Dead weight	Dimensions [mm]						Flat profile			Rundprofil			Order-no.	Price €	Preis €
							secure work	material thickn.	max. Length	secure work	max. diameter	max. Len.			
[kg]	A	B	C	D	E	F	load[kg]	[mm]	[mm]	load[kg]	[mm]	[mm]			
4,5	110	150	76	62	54	150	125	20	1500	50	50-250	1500	20	LM.0125.00	315,00
8,5	165	210	90	72	76	200	250	25	1500	100	60-300	1500	25	LM.0250.00	490,00
17,5	225	281	106	88	103	243	500	30	2000	200	80-400	2000	30	LM.0500.00	730,00
36,5	325	391	136	103	113	365	1000	45	3000	400	80-450	3000	45	LM.1000.00	1.350,00
79,0	400	483	186	132	170	526	2000	70	3000	800	120-600	3000	55	LM.2000.00	2.600,00

Info

Secure workload indicates a safety factor of 3:1.

The load capacity of the Ultralift hoist magnet is determined through general steel (St37 - St52). In steel alloys or other types of steel please contact us.

What you need to know when handling electric powered permanent magnet systems

1. Legal basis

The production of electric powered magnet systems is governed by the up to date EG-norms (UNI EN 13155:2004). Production quality, functional safety and constant performance attributes are guaranteed and certified.

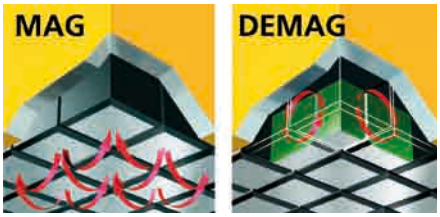
2. Optimal handling

The most intelligent method of handling iron parts
There is a continuous investment in the research and development of advanced technological solutions for electric powered permanent magnet systems. Through this a safe handling, energy conservation and environmental friendliness are guaranteed.

- Easy lifting and transport of loads
- Optimised space usage and a high level of automation
- Loads are not deformed or compressed
- Superior compared to other mechanical and electromagnetic solutions
- Optimal for the whole steel industry especially for companies working with steel, for large structure processing, for shipyards and modern companies

3. Functionality of lifting magnets

Quadratpol-Technology
The electric powered Quadratpol-system combines the power of the electric powered magnet with the autonomy of permanent magnetism. Due to the fact that only a few seconds are needed for the "MAG-phase" for magnetisation and "DEMAG-phase" for demagnetisation are needed the double and changeable polarity permanent magnet circle's functional principle provides a 95% energy conservation compared to standard electric powered magnet load lifting systems. The magnetic poles on the load-carrying surface are structured in a chessboard fashion to create a concentration of power wherever it is needed.



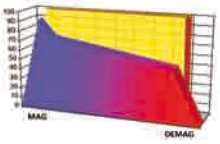
Permanent safety
This system is not influenced by blackouts. Thanks to the permanent magnets the load can be lifted with unlimited and constant power. Only when the load is placed down it can be released. A support battery is not necessary.

Useful and user friendly

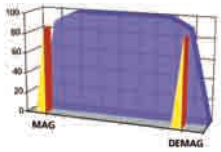
A single user controlling the remote is able to lift loads, transport and release them from a safe distance. There is no need for further personnel for securing or attaching.

4. Advantages compared to traditional electrical magnets

Stable holding power



Minimal needs for energy



Tecno-Lift
Traditional electric powered magnet
Phase for warming up

The electric powered permanent technology is one step ahead of the traditional electric powered magnet.

- No decrease in holding power due to the progressive warming up of magnetic modules
- 95% energy conservation compared to classic electric powered magnet load lifting systems
- No excessive maintenance needed - no cost for support batteries and their maintenance either
- No magnetic residue in the transported load

5. Test and maintenance service

Electric powered permanent load-carrying equipment is to be checked via visual and functional test before use. If flaws are detected usage has to be discontinued.
The BGR 500 Kap. 2.8 is also valid for electric powered permanent magnet systems which means a mandatory check-up by an expert has to be performed at least once a year. Depending on the operational conditions short interval check-ups might become necessary.
Your SIP-partner is well equipped for such testing. Of course all maintenance tasks can also be fulfilled.
You can find more details about the service for maintenance and repair in the catalogue on pages 8-9.

Bat-Grip Electro-permanent Lifting Magnet with Remote Control and Battery

Concentrated Force
The neutral crown enables complete magnetic isolation and at the same time is providing a perfect isolation of the module against nearby iron-containing loads.

Maximum Security
The load is held only by the permanent magnetic force, remaining constant for an unlimited time without electric power supply.

Advantageous in any Case
The electro-permanent circuit is not exposed to thermal stress, therefore the module will not suffer heating, guaranteeing extended use without special maintenance. The Bat-Grip lifting magnet combines the security of electro-permanent magnetic systems with a practical and simple battery supply and the electronic control.

Dautanac-System
A magnetic switch, enabling magnetisation or demagnetisation only if there is no load attached to the chain. These operations may only be executed if the load hook is not retreated, that is, if the load is still or again down on the ground.

Quick Cycles
The MAG-/DEMAG cycles take about 1 second and so may be triggered either by remote control or by the keyboard at the lifting magnet.

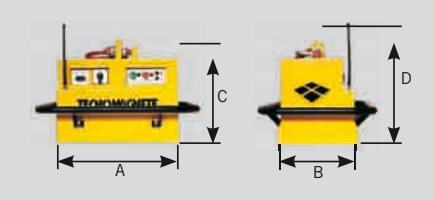
Operation Assistance
A tubular protection device, surrounding the lifting magnet at all sides, simplifying operation and preventing accidents.

Easy Handling
The monoblock structure and the use of high-performance permanent magnets allow for easiest removal of heavy loads with considerable dimensions.
Absolutely Flexible Application
The Bat-Grip may used in manufacture and outdoors without constraints to location and duration, for no mains contact is required.

Easy Charging
The Bat-Grip is by standard equipped with a battery charging device and a corresponding mains cable. Charging is possible by applying a voltage of 220-240 V AC for about 8 hours, ideally over the weekend. If the battery charge is low, the MAG/DEMAG cycles are not executable. This is indicated by a flashing warning light.

HOISTING DEVICES

Load b. capacity [kg]	min. wall thickn. flat [mm]	min. wall thickn. round [mm]	Dimensions [mm] A	B	C	D	Weight [kg]	Order-no.	Price €
3000	25	150	690	328	490	660	160	EP.MT.0160	6.300,00



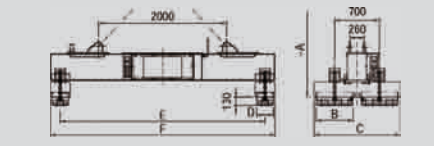
BF2 Rigid Lifting Beam

- Permanent magnet with electrically reversible polarity
- For sheets up to 6 m in length
- 2 cross-beams with 2 magnetic modules each
- Load-bearing tubing frame construction of carbon steel
- Magnetic modules in monoblock variety with elastic suspension for automatic adaption to the structure and flexions of the load
- Load size: Length of 3.2 – 6.0 m, width of 0.5 – 3.5 m

Optionally:
- Cable drum AVC/1
- SRM Manual system for turning by 90°

Load bear. capacity[kg]	Model	Dimensions [mm] A	B	C	D	E	F	Weight [kg]	Str. of load [mm]	Order-no.	Price/ piece €
3700	BF 2/37 N	2450	500	1246	230	2900	3130	1100	5	BF2.04000	18.300,00
6000	BF 2/60 N	2450	500	1246	230	2900	3130	1100	5	BF2.06000	21.100,00
9000	BF 2/90 N	2450	500	1246	230	2900	3130	1350	8	BF2.10000	22.900,00

Surcharge No backup batteries



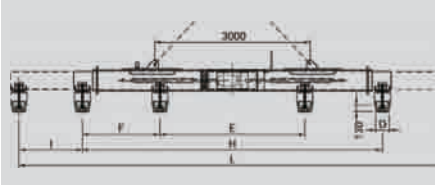
TM4 Permanent Magnet Telescopic Beams

Telescopic Beams for Sheets up to 12 m in Length

No backup batteries

- Permanent magnet with electrically reversible polarity
- Individual lift feature for sheets of up to 12 m
- 4 cross-beams with 2 magnetic modules each
- Load-bearing tubing frame construction of carbon steel
- Integrated hydraulic system for positioning of the telescopic arms
- Monoblock magnetic modules with spring suspension for autom. adaption to the structure and flexions of the load
- Adhesive power control APC
- Selection of cross-beams

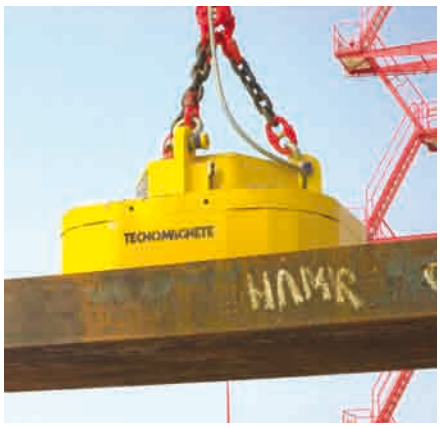
Optionally:
- Cable drum AVC/1
- SRM Manual system for turning by 90°



Load bear. capacity[kg]	Model	Dimensions [mm] A	B	C	D	E	F	H	I	L	Weight [kg]	Length of load [mm]	Width of load [mm]	Strength of l. min. [mm]	Order-no.	Price/piece €
7500	TM 4/75 N	2450	500	1246	230	2800	1500	5800	1500	8800	2800	3000-12000	500-3500	5	TM4.0750N	40.900,00
10000	TM 4/100 N	2450	500	1246	230	2800	1500	5800	1500	8800	2800	3000-12000	500-3500	5	TM4.1000N	43.300,00
12000	TM 4/120 N	2450	500	1246	230	2800	1500	5800	1500	8800	2800	3000-12000	500-3500	5	TM4.1200N	44.500,00
14000	TM 4/140 N	2450	500	1246	230	2800	1500	5800	1500	8800	2800	3000-12000	500-3500	8	TM4.1400N	45.700,00
18000	TM 4/180 N	2450	500	1246	230	2800	1500	5800	1500	8800	2800	3000-12000	500-3500	8	TM4.1800N	46.900,00

Type TM6 is available on request for sheets of up to 16 m, with 6 cross-beams

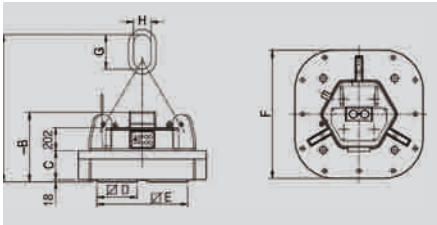
SMH Permanent Magnet Module



No backup batteries

For handling of slabs and burnt-out blocks. Designed for transporting loads with vast air gap.
- Permanent magnet with electrically reversible polarity
- Square pole technology for increased power concentration
- More magnetic power
- Adhesive power control APC
- Reduced size and weight
- Load site: length of 1,000 – 6,000 mm, width of 1,000 – 2,500 mm

Optionally:
- Cable drum AVC/1



Load bearing capacity [kg]	Model	Dimensions [mm] A	B	C	D	E	F	G	H	Weight [kg]	Strength of l. min. [mm]	Order-no.	Price/piece €
5000	SMH 50	1285	505	155	198	462	800	180	100	610	30	SMH.05000	21.000,00
10000	SMH 100	1545	531	181	242	560	880	266	133	950	30	SMH.10000	30.000,00
15000	SMH 150	1575	563	213	280	626	860	266	133	1300	40	SMH.15000	40.000,00
20000	SMH 200	1760	577	227	320	706	980	304	152	1750	40	SMH.20000	50.000,00
25000	SMH 250	1790	637	280	350	770	1100	355	177	2150	80	SMH.25000	60.000,00
30000	SMH 300	1790	625	272	374	814	1147	355	177	2700	80	SMH.30000	72.500,00

Surcharge

Important information on handling vacuum systems

Vacuum transport systems

Vacuum transport systems are required for very different movement of loads. Their versatility and flexibility facilitate cost-effective and secure transportation. There are two versions available.

1. Electrical vacuum hoist
For the horizontal and vertical transportation of almost any material and shape
- Standard and custom-built solutions
- Durable, high-quality systems and components
- Flexible device configurations for diffe ring loads and sensitive surfaces
- Load capacities from 1 kg up to over 50.000 kg

Other advantages
- Simple controls using hoisting valves, remote control operations with cable, radio and automatic switching
- To a large extent low maintenance needs and service-friendly
- Voltages (230 V - 500 V and 24 V battery operation)
- Increased security through optic-acoustic warning systems according to DIN EN 13155
- Safe with power failure
- For indoors and out
- Made in Germany

2. Self-priming vacuum hoist
For horizontal transport of smooth goods which are airtight
- Independent of energy
- Automatic switching when hoisting and setting down
- Plug & Play, immediately available
- Standard and custom-built solutions for various loads and sensitive surfaces
- Load capacities up to 4.000 kg

Other advantages
- Simple controls for example, through crane controls
- Largely maintenance-free even when working at full capacity
- Increased security through optic-acoustic warning systems according to DIN EN 13155
- For indoors and out
- Tried and tested devices with over 40 years experience
- Made in Germany

Vacuum transportation systems are suitable for many materials:

For example

Sandstone slabs

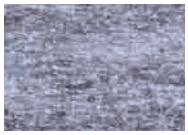
Aluminium plates

Sandwich panels

Plastics

Marble slabs

Cardboard boxes



Granite slabs

Glass sheets

GFK slabs

Profiled sheeting

Steel sheets

Cement parts

...and many more!

Self-priming Vacuum Lifter Flexible and Independent

Lift Loads up to 2,300 kg without Power Supply

Info

The vacuum lifters are by standard equipped with exchangeable floor seals. Oil- and heat-resistant seal-rings are available on request.

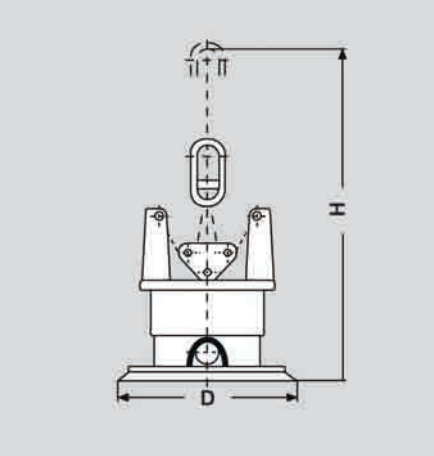
Talk to your SIP partner!

The decisive factor for maximum size of the load is that the load should not suffer any bending when lifting.

After suspending at the hook, the SIP vacuum lifter is immediately ready for operation without mains supply.
Other than the crane control, no further devices are needed.
The vacuum lifter does not need much maintenance even under high stress in dirty workplaces or outdoors.
Each device is by standard equipped with an optical and acoustical warning facility.

Typical fields of application
Horizontal transport of airtight loads with rather clean and level surfaces, p.e. sheets (flash rust does not affect the application), polished marble or granite blocks, coated chipboards, plastic plates, etc.

H max. working height =
Extent between bottom of the suction cup and upper inside part of the suspension eyelet.
This extent is achieved only if the weight of the load is close or equal to or higher than the nominal load capacity limit.



Use	Load bear. capacity [kg]	Number of suct. plates	Suction bowl-Ø [mm]	Traverse length [mm]	Warning facility*	Weight [kg]	Order-no.	Price/ piece** €
Single unit for substantially rigid loads	270	1	350	-	Typ VO-A	25	VL.U0002.E	1.751,00
Single unit for substantially rigid loads	640	1	480	-	Typ VO-A	78	VL.U0075.E	2.870,00
Single unit for substantially rigid loads	1100	1	625	-	Typ VO-A	135	VL.U0125.E	4.263,00
Multi-shell device for larger, instable loads	300	2	350	1500	Typ VO-A	67	VL.U0002.2	2.490,00
Multi-shell device for larger, instable loads	300	4	250	2000	Typ VO-A	68	VL.U0002.4	2.970,00
Multi-shell device for larger, instable loads	270	6	210	2000/1000	Typ VO-A	86	VL.U0002.6	3.662,00
Multi-shell device for larger, instable loads	750	2	415	1500	Typ VO-A	141	VL.U0075.2	4.332,00
Multi-shell device for larger, instable loads	750	3	350	2000	Typ VO-A	151	VL.U0075.3	4.612,00
Multi-shell device for larger, instable loads	650	6	250	2000/1250	Typ VO-A	172	VL.U0075.6	5.788,00
Multi-shell device for larger, instable loads	1250	2	625	1500	Typ VO-A	285	VL.U125.20	6.380,00
Multi-shell device for larger, instable loads	1000	4	350	2500	Typ VO-A	250	VL.U125.4K	7.044,00
Multi-shell device for larger, instable loads	1250	4	415	4000	Typ VO-A	355	VL.U125.4L	7.867,00
Multi-shell device for larger, instable loads	2300	4	480	500/500	Typ VO-B	450	VL.U250.4Q	11.136,00
Multi-shell device for larger, instable loads	2100	2	625	1725	Typ VO-B	465	VL.U250.20	10.149,00
Multi-shell device for larger, instable loads	2200	4	625	4300	Typ VO-B	770	VL.U250.4L	12.762,00
Multi-shell device for larger, instable loads	2200	10	350	4400/1300	Typ VO-B	725	VL.U250.10	15.150,00

*Warning facility integrated by standard

**Prices including packaging for safe transport

Surcharge

H1-Lifters Electric Vacuum Lifters

The Simple Solution for Heavy Loads

The electric vacuum lifter is suitable for the horizontal transport of loads and excels in easy and safe handling.
The SIP vacuum lifters do not need much maintenance, they are specially service-friendly and provide high safety by optical and acoustical warning facilities compliant to DIN EN 13155. They are suitable for indoor and outdoor applications.
The SIP vacuum lifters are consisting of two basic components:
A) Basic unit
B) Suction-cup unit

A) Basic Unit
The basic unit is serving for the generation and monitoring of a vacuum. It is designed as one single and compact component. The vacuum lifter is operated by a generously sized hand lever.
Crane hook fixture: 60 x 120 mm

B) Suction-cup Unit
The suction-cup unit is consisting of one suction cup or of a stable beam structure with several suction cups. The cross-beams and suction cups are continuously adjustable and thus allow for flexible adjustment.

Info

The SIP vacuum lifters may easily and flexibly be adapted to your individual requirements.

Talk to your SIP partner!

HOISTING DEVICES

Type	Load b. capacity [kg]	Max. load size (Reference plates) [mm]	Dead weight [kg]	Suct. bowls number/size [mm]	Length x width x height [mm]	Mains supply parameters [kW]	Order-no.	Price €	
H-E-150	150	2.000 x 1.000 , ab 2	48	1 / Ø 270	480 x 350 x 540	230 V; 50 Hz; 0,3	VL.0E.0150.1	2.190,00	
H-E-300	300	2.000 x 1.000 , ab 2	48	1 / Ø 360	480 x 400 x 540	230 V; 50 Hz; 0,3	VL.0E.0300.1	2.260,00	
H-E-500	500	2.000 x 1.000 , ab 2	56	1 / Ø 495	500 x 500 x 540	230 V; 50 Hz; 0,3	VL.0E.0500.1	2.600,00	
H-E-750	750	2.000 x 2.000 , ab 2	68	1 / Ø 650	650 x 650 x 560	230 V; 50 Hz; 0,3	VL.0E.0750.1	2.870,00	
H-2-150	150	3.000 x 1.500 , ab 2	75	2 / Ø 170	1.500 x 350 x 640	230 V; 50 Hz; 0,3	VL.02.0150.2	2.400,00	
H-2-300	300	3.000 x 1.500 , ab 2	90	2 / Ø 315	1.500 x 350 x 640	230 V; 50 Hz; 0,3	VL.02.0300.2	2.650,00	
H-2-500	500	3.000 x 1.500 , ab 2	95	2 / Ø 340	1.500 x 350 x 660	230 V; 50 Hz; 0,3	VL.02.0500.2	2.860,00	
H-2-750	750	3.000 x 1.500 , ab 2	120	2 / Ø 495	1.500 x 500 x 670	400 V; 50 Hz; 0,6	VL.02.0750.2	3.700,00	
H-2-1000	1.000	3.000 x 1.500 , ab 2	130	2 / Ø 495	1.500 x 500 x 670	400 V; 50 Hz; 0,6	VL.02.1000.2	4.260,00	
H-2-1250	1.250	3.000 x 1.500 , ab 2	160	2 / Ø 650	1.500 x 650 x 700	400 V; 50 Hz; 0,6	VL.02.1250.2	4.790,00	
H-4Q-150	150	2.500 x 1.250 , ab 2	100	4 / Ø 180	1.800 x 800 x 730	230 V; 50 Hz; 0,3	VL.4Q.0150.4	2.930,00	
H-4Q-300	300	2.500 x 1.250 , ab 2	110	4 / Ø 270	1.800 x 800 x 730	230 V; 50 Hz; 0,3	VL.4Q.0300.4	3.190,00	
H-4Q-500	500	2.500 x 1.250 , ab 2	130	4 / Ø 270	1.800 x 800 x 750	230 V; 50 Hz; 0,3	VL.4Q.0500.4	3.930,00	
H-4Q-750	750	2.500 x 1.250 , ab 2	140	4 / Ø 315	1.800 x 800 x 770	400 V; 50 Hz; 0,6	VL.4Q.0750.4	4.580,00	
H-4Q-1000	1.000	2.500 x 1.250 , ab 2	155	4 / Ø 340	1.800 x 800 x 790	400 V; 50 Hz; 0,6	VL.4Q.1000.4	5.190,00	
H-4Q-1250	1.250	2.500 x 1.250 , ab 2	170	4 / Ø 495	1.800 x 1.000 x 830	400 V; 50 Hz; 0,6	VL.4Q.1250.4	5.750,00	
H-4K-300	300	4.000 x 2.000 , ab 2	170	4 / Ø 375	2.850 x 380 x 750	400 V; 50 Hz; 0,6	VL.4K.0300.4	3.950,00	
H-4K-500	500	4.000 x 2.000 , ab 2	175	4 / Ø 375	2.850 x 380 x 760	400 V; 50 Hz; 0,6	VL.4K.0500.4	4.550,00	
H-4K-750	750	4.000 x 2.000 , ab 2	190	4 / Ø 375	2.850 x 380 x 790	400 V; 50 Hz; 0,6	VL.4K.0750.4	4.730,00	
H-4K-1000	1.000	4.000 x 2.000 , ab 2	195	4 / Ø 375	2.850 x 380 x 800	400 V; 50 Hz; 0,6	VL.4K.1000.4	5.560,00	
H-4K-1250	1.250	4.000 x 2.000 , ab 2	215	4 / Ø 495	2.850 x 500 x 820	400 V; 50 Hz; 0,6	VL.4K.1250.4	6.090,00	
H-6Q-150	150	3.000 x 1.500 , ab 1	88	6 / Ø 130	2.200 x 1.000 x 720	230 V; 50 Hz; 0,3	VL.6Q.0150.6	3.480,00	
H-6Q-300	300	3.000 x 1.500 , ab 1	90	6 / Ø 170	2.200 x 1.000 x 720	230 V; 50 Hz; 0,3	VL.6Q.0300.6	3.590,00	
H-6Q-500	500	3.000 x 1.500 , ab 1	95	6 / Ø 210	2.200 x 1.000 x 730	400 V; 50 Hz; 0,6	VL.6Q.0500.6	4.590,00	
H-6Q-750	750	3.000 x 1.500 , ab 1	175	6 / Ø 270	2.200 x 1.000 x 840	400 V; 50 Hz; 0,6	VL.6Q.0750.6	4.850,00	
H-6Q-1000	1.000	3.000 x 1.500 , ab 1	180	6 / Ø 315	2.200 x 1.000 x 840	400 V; 50 Hz; 0,6	VL.6Q.1000.6	6.190,00	
H-6Q-1250	1.250	3.000 x 1.500 , ab 1	195	6 / Ø 340	2.200 x 1.000 x 890	400 V; 50 Hz; 0,6	VL.6Q.1250.6	6.390,00	
H-8Q-150	150	4.000 x 2.000 , ab 1	90	8 / Ø 130	3.200 x 1.400 x 730	230 V; 50 Hz; 0,3	VL.8Q.0150.8	4.230,00	
H-8Q-300	300	4.000 x 2.000 , ab 1	95	8 / Ø 130	3.200 x 1.400 x 730	230 V; 50 Hz; 0,3	VL.8Q.0300.8	4.290,00	
H-8Q-500	500	4.000 x 2.000 , ab 1	115	8 / Ø 210	3.200 x 1.400 x 770	400 V; 50 Hz; 0,6	VL.8Q.0500.8	4.980,00	
H-8Q-750	750	4.000 x 2.000 , ab 1	120	8 / Ø 210	3.200 x 1.400 x 860	400 V; 50 Hz; 0,6	VL.8Q.0750.8	5.250,00	
H-8Q-1000	1.000	4.000 x 2.000 , ab 1	195	8 / Ø 270	3.200 x 1.400 x 860	400 V; 50 Hz; 0,6	VL.8Q.1000.8	6.850,00	
H-8Q-1250	1.250	4.000 x 2.000 , ab 1	210	8 / Ø 315	3.200 x 1.400 x 890	400 V; 50 Hz; 0,6	VL.8Q.1250.8	7.160,00	

The depicted configurations are just examples. Variations specific to the customer or application are of course possible.

Inspection service **2 years warranty**

VacuMaster Lifting made Easy

The VacuMaster Lifter Program for Loads of 125 to 2000 kg

Easy handling with the vacuum lifters of the VacuMaster series. For more rational and human-friendly work. VacuMaster lifters are the ideal tool for handling a variety of workpieces with tight surfaces: sheet metal plates, barrels, glass screens, etc.

Also suitable for rough surfaces like checkered plates and scaly sheets. You may gently move heaviest and unwieldy loads without mechanical damage by tongs, clamps, or chains. The VacuMaster lifters are designed as a modular system. 400 V/50 Hz.

Info

About carrying loads above 1,000 kg we will also gladly help you.

Talk to your SIP partner!

WLL [kg]	Design	Selection aid for sheet metal plate format; thickness [mm]	Oper. handle len. [mm]	Pump-power [m³/h]	Number of suct. plates	Ø [mm]	Traverse length, lw [mm]	Traverse length, cw [mm]	Order-no.	Price/ piece €
125	immobile suction plates	(e.g. barrels)	645	4	1	250	400	-	VM.0125.01	2.230,00
125	immobile suction plates	1000 x 2000; 5,0 - 8,0	645	4	2	210	1600	-	VM.0125.02	2.500,00
125	agile suction plates	1000 x 2000; 1,5 - 4,0 u. 1250 x 2500; 3,0 - 5,0	645	4	4	125	1600	750	VM.0125.04	2.770,00
125	agile and suspended s. plates	1250 x 2500; 0,5 - 2,0	645	4	6	125	1600	750	VM.0125.06	3.100,00
250	immobile suction plates	(e. g. barrels)	665	4	1	360	400	-	VM.0250.01	2.340,00
250	immobile suction plates	1000 x 2000; 5 - 15,0	645	4	2	250	1600	750	VM.0250.02	2.540,00
250	agile suction plates	1250 x 2500; 3 - 10,0	645	4	4	210	1600	750	VM.0250.04	2.940,00
250	agile and suspended s. plates	1250 x 2500; 0,5 - 2,0; 1500 x 3000; 0,5 - 6,0	645	4	6	160	1600	750	VM.0250.06	3.160,00
250	agile and suspended s. plates	2000 x 4000; 0,5 - 4,0	945	8	8	125	3200	1150	VM.0250.08	3.920,00
500	agile and suspended s. plates	1500 x 3000; 0,5 - 6,0	660	8	6	210	2400	750	VM.0500.06	4.060,00
1000	agile suction plates	1250 x 2500; 1,0 - 10,0	910	8	4	360	2000	1150	VM.1000.04	5.150,00

The VacuMaster Lifter Programme for Loads from 125 kg to 500 kg, 90° Pivoting

We are also offering the vacuum lifter VacuMaster as the self-priming lifter VacuMaster ECO version. Its benefit: It is independent from the mains and thus ideal for outdoor usage, no continuous operation costs.
Usage: horizontal transport of airtight workpieces. Prices and accessories on request.

Info

The „Comfort“ version of VacuMaster is delivered with integrated control elements.

Talk to your SIP partner!

VacuMaster Comfort

WLL [kg]	Design	Handling of load	Operation handle length [mm]	Pump-power [m³/h]	Number of suction plates [mm]	Ø [mm]	Traverses length, lw [mm]	Traverses length, cw [mm]	Order-no.	Price/ piece €
125	Immobile suction plates	horizontal/vertical	725	4	2	360	1600	-	VM.125.2.90	5.270,00
125	Agile suction plates	horizontal/vertical	725	4	4	210	1600	750	VM.125.4.90	5.450,00
250	Agile suction plates	horizontal/vertical	725	4	4	360	1600	750	VM.250.4.90	6.050,00
500	Agile suction plates	horizontal/vertical	785	8	4	360	1600	750	VM.500.4.90	7.680,00

VacuMaster Light Ergonomic Possibilities for Handling of Carrying Loads up to 100 kg

Accessories:

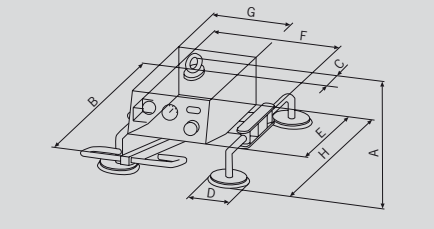
Type	Order-no.	Price/piece €
Spiral hose, Extension l. 2,5 m	VM.LI.SP.SC	90,00

Your benefits:

- Flexible and quick suction adjustment for easy handling of different workpieces
- Most simple installation: Lash to the crane + supply compressed air = ready!
- No irritating hoses, because of integrated evacuation conveyance
- The compact structure allows for untroubled stacking even of small workpieces
- Highest security during operation because of intelligent warning systems
- Low weight assures easy and ergonomic handling
- Short time till amortisation because of low investment costs
- Cleaned up chain hoist control element fixed on universal mounting just at the operation handle

Fields of application:

- Airtight workpieces such as barrels, pieces of furniture, profiles, etc.
- For carrying loads up to 100 kg
- Machine loading, assembly, packing

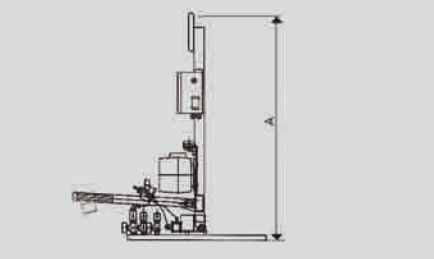


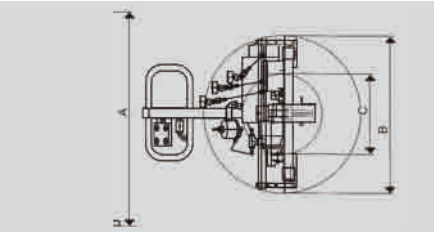
Load bear. cap. [kg]	Surface of load	handl. of the load	A heig. [mm]	B distance handle-dev. mid. [mm]	C Eye-Ø [mm]	Numb. of s. plates [mm]	D Ø suct.plate [mm]	E Length base body [mm]	F Traverse length [mm]	G Width Base body Outer dist. [mm]	H Suct. plates [mm]	Suct. gripper hang-ing	Air cons-umpt. [Nl/min.]	Inter-face	Weight [kg]	Order-no.	Price/ piece €
100	smooth,den. slight.porous	horizontal	267	405	35	1	250	220	-	260	-	starr	105	pneu-matic	15	VM.LI.100.1	1.390,00
100	smooth,den. slight.porous	horizontal	325	405	35	4	120	220	400	260	460	gelenkig	105	pneu-matic	15	VM.LI.100.4	1.900,00

VacuMaster Coil

The VacuMaster Coil is ideally suited for stacking coils on the pallet and subsequent fitting to a coiler mandrel.

- For fine and extra-fine metal sheets, and metal foils
- For steel, tinplate, aluminum, and other non-ferrous metals
- Damage-free grip without mechanic clamps
- Several ring-head suction chambers, each including a vacuum manometer
- Pitching by 90° achieved with electro-mechanic linear actuator, to be adjusted in any intermediate position
- Suction plate made of acrylic glass providing ideal view of the workpiece
- Spiral cable connecting the device to a chain hoist
- Universal bracket for chain hoist control element at the operation handle





Load bear. capac. [kg]	Outer-Ø of the load max. [mm]	InnerØ of the load [mm]	Coil th. of the l. max. at 50/60 Hz	Slit strip width	Handling of the load	A height [mm]	B Outer-Ø of Suct. plate [mm]	C Inner-Ø of Suct. plate [mm]	Number of ring circle clamps	Data of the pump 50 Hz	Weight [kg]	Order-no.	Price/ piece €
500	600-1200	410	400/330	Alum, max. 3mm, Steel max. 1,5 mm	Just pan horiz. and vertic. and 90°	1300	850	410	3	0,55 kW 16 m³/h	140	VM.CO.0500	11.100,00
750	600-1400	410/520	220/160	Alum, max. 3mm, Steel max. 1,5 mm	Just pan horiz. and vertic. and 90°	1300	1050	410	3	0,55 kW 16 m³/h	155	VM.CO.0750	11.980,00
1000	750-1800	410/520	320/240	Alum, max. 3mm, Steel max. 1,5 mm	Just pan horiz. and vertic. and 90°	1300	1200	410	3	0,75 kW 25 m³/h	190	VM.CO.1000	14.270,00

Jumbo Vacuum Tube Lifter

Lifting can be so easy

The Jumbo vacuum tube lifter was specially designed for handling unit loads (packages, buckets, boxes, barrels etc.). Wherever heavy loads have to be removed quickly and efficiently, Jumbo is ready to help. The carrying load may amount to 300 kg, depending on the version (on request).

The show-stopper: One single medium is responsible for holding and lifting: vacuum. Operate faster and more efficient with the Jumbo vacuum tube lifter and take profit from its many advantages: The tube lifters are enormously flexible and operate surprisingly easy. In addition, they may be flexibly adapted for their individual task, due to their modular structure.

Version:
Vacuum fan with sound absorber, lifting tube, rotating union for endless turning of the lifting tube and the operational unit, tube cylinder with operator handle and valve unit. Lifting height 1,700 mm. Varnish: RAL 7035 light grey. Sound level ca. 72 dB(A) (without sound-absorbing box). 3-ph, 230/400 V.

Slewing cranes and single-beam crane facilities with all accessories for lashing the tube lifter are available in many varieties. Ask us!

SIP tube lifter Jumbo without vacuum gripper

Load bearing capacity [kg]	Lifting speed [m/min]	Lift [mm]	Engine power [kW]	Engine voltage [V] (3-ph)	Engine frequency [Hz]	Order-no	Price/ piece €
45	0 - 70	1700	3,0	230/400	50	VL.0045.22*	4.510,00
65	0 - 70	1700	3,0	230/400	50	VL.0065.30*	4.520,00
85	0 - 55	1700	4,0	230/400	50	VL.0085.30*	4.820,00
110	0 - 45	1700	4,0	230/400	50	VL.0110.30	5.430,00

* on request also available as pneumatic version

Info

Ask for pneumatic Jumbo versions. Available for types with load capacity of 35, 45, 65, or 85 kg!

Vacuum Gripper For Jumbo

Single Vacuum Gripper

Round gripper for handling of exposed aggregate concrete plates

Typ	Order-no.	Price/piece €
Single vacuum gripper for VL.0035.22	VL.0035.EG	214,00
Single vacuum gripper for VL.0045.22	VL.0045.EG	214,00
Single vacuum gripper for VL.0065.30	VL.0065.EG	265,00
Single vacuum gripper for VL.0085.30	VL.0085.EG	265,00
Single vacuum gripper for VL.0110.30	VL.0110.EG	355,00

Double Vacuum Gripper

Double vacuum gripper for glued, strapped, or unlocked cardboard boxes

Typ	Order-no.	Price/piece €
Double vacuum gripper for VL.0035.22	VL.0035.DG	485,00
Double vacuum gripper for VL.0045.22	VL.0045.DG	485,00
Double vacuum gripper for VL.0065.30	VL.0065.DG	500,00
Double vacuum gripper for VL.0085.30	VL.0085.DG	495,00
Double vacuum gripper for VL.0110.30	VL.0110.DG	570,00

Bag Vacuum Gripper

Bag vacuum gripper for plastic and paper bags

Typ	Order-no.	Price/piece €
Bag vacuum gripper for VL.0035.22	VL.0035.SG	380,00
Bag vacuum gripper for VL.0045.22	VL.0045.SG	380,00
Bag vacuum gripper for VL.0065.30	VL.0065.SG	420,00
Bag vacuum gripper for VL.0085.30	VL.0085.SG	420,00
Bag vacuum gripper for VL.0110.30	VL.0110.SG	600,00

Accessories for Jumbo

Description	Order-no.	Price €
Feeding hose inner diameter 61 mm for connections between fan and tube lifter	VL.ZFS.061	17,50
Engine circuit breaker for switching the vacuum fan on/off MSS-K-6.3-10.0A (fitting for Jumbo 35 to 300)	VL.MSS.060	139,00
Dust filter for protecting the fan against damages	VL.SF.0000	191,00
Manometer 40 mm Ø, for controller of oper. conditions	VL.MM.0040	54,00
Sound-absorbing cover to reduce fan sound emis. below 65 dB (A)	VL.SDB.000	740,00

We deliver a vast number of further accessories:

- Quick change adapters
- Horizontal rotary arm
- Vertical swivel unit
- Other lifting heights
- Engine circuit-breaker
- Additional sound-absorbing box
- EX protection compliant to ATEX
- Special voltages
- Stainless versions, etc.

Info

We may deliver to you large-area vacuum grippers for inherently stable workpieces of different surface compo-sitions. Guaranteed feasibility at 50 % of gripper allocation already. Talk to your SIP partner!

CRANE TECHNOLOGY

222-226 Cranes
227 Load hook
228-229 Crane control
230-233 Gantry crane
234-235 Suspension rails
236 Winches and Cables
237-241 Crane Scales
242-245 Workshop Cranes
246-249 Crane ropes

WSK Wall mounted crane 180°

Optimal use of the premises

The SIP wall mounted cranes are of extremely compact construction, which can be mounted to a wall or similar structure, brackets for column mounting (Get Quote).
These are produced according to the Machinery Directive and the EU according to the latest DIN 15018 H2B2 as well as the VDE and accident prevention regulations.
The crane bearing is slidable and therefore swivel manually. The pivoting range is 180 ° - Optional swivel stops. The base coat in RAL 1018 (green) is provided. The console colour is RAL 9005 (black). Suitable for indoor use. Also available for outdoors.

Delivery:
- Crane console with storage
- Boom
- Power supply (trailing cable) from main switch (lock)
- E-hoist 400 V, 50 Hz, 24 W with contact control and limit switches, 3 m hub with 2 lifting speeds and overload clutch
- Trolleys and carts
- Trolley attachment
- With complete crane documentation

Optional:
- For loads of 1 t <and upwards, we recommend the use of an E-trolley with 1 or 2 speeds (see E-SIP-chassis electric chain hoists)
- Assembly and testing in accordance with UVV

Info

Do you need a crane with customized options? Talk to us!

Load [kg]	Reach A [m]	Console/E [mm]	Flange width [mm]	Katz heig. [mm]	Lift. speed [m/min]	Pu [kN]	Pv [kN]	Weight max. [kg]	Lift [m]	Order-no.	Price compl. w. elektronic € €
50	2	1/590	64	432	8/2	3,9	1,54	80	3	WSK.0050.2	1.820,00
50	3	1/590	64	432	8/2	5,9	1,6	90	3	WSK.0050.3	2.120,00
50	4	1/590	64	432	8/2	8,1	1,8	110	3	WSK.0050.4	2.150,00
50	5	1/590	73	432	8/2	11,1	2	130	3	WSK.0050.5	2.220,00
50	6	1/710	91	432	8/2	13,3	2,7	190	3	WSK.0050.6	2.385,00
125	2	1/590	64	432	8/2	7,6	2,7	100	3	WSK.0125.2	2.060,00
125	3	1/590	73	432	8/2	11,7	2,8	110	3	WSK.0125.3	2.110,00
125	4	1/710	82	432	8/2	13,5	3,1	150	3	WSK.0125.4	2.230,00
125	5	1/710	91	432	8/2	18,5	3,6	190	3	WSK.0125.5	2.330,00
125	6	1/810	100	432	8/2	20,2	3,9	220	3	WSK.0125.6	2.550,00
250	2	1/590	64	485	4/1	13,6	4,4	115	3	WSK.0250.2	1.955,00
250	3	1/710	82	485	4/1	17,4	4,8	155	3	WSK.0250.3	2.005,00
250	4	1/810	91	485	4/1	21	5,2	195	3	WSK.0250.4	2.135,00
250	5	1/810	100	485	4/1	27,5	5,6	235	3	WSK.0250.5	2.230,00
250	6	2/300	110	485	4/1	34,7	6,7	335	3	WSK.0250.6	2.490,00
500	2	1/710	82	485	4/1	21	8,4	160	3	WSK.0500.2	2.130,00
500	3	1/810	91	485	4/1	27,9	8,4	180	3	WSK.0500.3	2.350,00
500	4	2/605	110	485	4/1	38,4	9,5	300	3	WSK.0500.4	2.470,00
500	5	2/605	120	485	4/1	49,6	10	350	3	WSK.0500.5	3.110,00
500	6	2/605	135	485	4/1	61,9	10,7	420	3	WSK.0500.6	3.215,00
1000	2	2/605	100	570	5/1,25	35,6	15,7	300	3	WSK.1000.2	2.260,00
1000	3	2/605	120	570	5/1,25	54,3	16,3	360	3	WSK.1000.3	2.870,00
1000	4	2/605	135	570	5/1,25	73,7	17,4	410	3	WSK.1000.4	3.035,00
1000	5	2/705	150	570	5/1,25	84,1	17,9	460	3	WSK.1000.5	3.160,00
1000	6	2/705	160	570	5/1,25	103,9	18,8	600	3	WSK.1000.6	3.530,00
1600	2	2/605	110	570	3/0,75	53,9	23,2	310	3	WSK.1600.2**	4.490,00
1600	3	2/705	135	570	3/0,75	73	24,2	400	3	WSK.1600.3**	4.340,00
1600	4	2/705	150	570	3/0,75	98,7	24,8	460	3	WSK.1600.4**	4.450,00
1600	5	2/705	170	570	3/0,75	127	26,1	580	3	WSK.1600.5**	5.225,00
2000	2	2/605	120	570	3/0,75	66,2	28,3	320	3	WSK.2000.2**	3.800,00
2000	3	2/705	150	570	3/0,75	89,6	29,3	420	3	WSK.2000.3**	4.945,00
2000	4	2/705	160	570	3/0,75	121,1	30,1	490	3	WSK.2000.4**	5.145,00

** = after 1600 and E-Chasis, 2 equiped with two speeds.

Order example: WSK.0250.4 load 250 kg, 4 m range

SDK270 pillar jib crane 270°

Compact and effective hoisting in operation

The SIP pillar jib cranes have a very compact design.
They are intended for indoor use.
The pivoting range is 270 ° and can optionally be reduced by pivot stops.
They can be installed on a special foundation (anchor bolts and plate optional) for example a concrete foundation plate. B 250 s ≥ 250 mm (Please ask for a sepparate quote) .
All parts are sandblasted and painted in the base color green RAL 6018. Special paint and zinc plating on request.
These cranes are manufactured according to the Machinery Directive, the EU and according to the latest in DIN 15018 H2B2.
Installation is performed under the VDE and BGR (UVV) regulations.

When planning, please note the minimum distances according to the UVV

Delivery:
- Crane column and boom storage
- Power supply from Crane Main can be switched off with the trailing cable device.
- E-chain up to 1 ton chassis with rolling chassis and contactor control including lift emergency stop with E Chassis, one speed
- Lifting height 3 m, higher reach and taller columns
- Cross travel attachments
- Complete crane documentation
- Starting at 1.6 T with E Chassis

Optionally:
- Up to 1 t available as direct control without end limit
- Installation and acceptance by UVV
- Foundation base plate for bolting the crane
- Anchor bolts with plate
- Annual review and maintenance by your SIP partners

Load [kg]	Reach [m]	lower edge [mm]	Height B [mm]	Flange width [mm]	Pillar bolt circle DL [mm]	Lift. speed [m/min]	Foundation T x Ø [m]	Weight ca. [kg]	Order-no.	Price compl. w.electr. €
125	2	2500	2680	64	230	8/2	0,8 x 0,9	160	SDK3.012.2	2.477,00
125	3	2500	2700	73	230	8/2	0,8 x 1,15	180	SDK3.012.3	2.560,00
125	4	2500	2720	82	290	8/2	0,8 x1,3	240	SDK3.012.4	2.740,00
125	5	2500	2760	100	290	8/2	0,8 x 1,4	300	SDK3.012.5	2.857,00
125	6	2500	2750	110	370	8/2	0,8 x1,5	360	SDK3.012.6	3.140,00
250	2	2500	2680	64	280	8/2	0,8 x 1,05	175	SDK3.025.2	2.805,00
250	3	2500	2720	82	340	8/2	0,8 x 1,35	235	SDK3.025.3	2.860,00
250	4	2500	2750	91	420	8/2	0,8 x 1,35	325	SDK3.025.4	3.495,00
250	5	2500	2790	110	420	8/2	0,8 x 1,45	385	SDK3.025.5	3.579,00
250	6	2500	2790	110	530	8/2	1,05 x 1,55	495	SDK3.025.6	3.798,00
500	2	2500	2720	82	290	4/1	0,8 x 1,35	260	SDK3.050.2	2.950,00
500	3	2500	2750	91	370	4/1	0,8 x 1,5	330	SDK3.050.3	3.517,00
500	4	2500	2790	110	450	4/1	1,05 x 1,55	460	SDK3.050.4	3.640,00
500	5	2500	2840	135	470	4/1	1,05 x 1,65	540	SDK3.050.5	4.566,00
500	6	2500	2900	160	470	4/1	1,05 x 1,75	660	SDK3.050.6	5.006,00
1000	2	2500	2770	100	450	5/1,25	1,05 x 1,45	460	SDK3.100.2	3.438,00
1000	3	2500	2810	120	470	5/1,25	1,05 x 1,65	520	SDK3.100.3	3.734,00
1000	4	2500	2870	150	470	5/1,25	1,05 x 1,80	600	SDK3.100.4	4.760,00
1000	5	2500	2940	170	550	5/1,25	1,05 x 1,95	880	SDK3.100.5	5.144,00
1000	6	2500	2980	180	550	5/1,25	1,05 x 2,1	1000	SDK3.100.6	5.971,00
1600	2	2500	2810	120	470	3/0,75	0,8 x 1,65	527	SDK3.160.2**	5.288,00
1600	3	2500	2850	135	570	3/0,75	0,8 x 1,9	527	SDK3.160.3**	6.030,00
1600	4	2500	2910	160	550	3/0,75	1,05 x 2,1	574	SDK3.160.4**	6.153,00
1600	5	2500	2940	170	550	3/0,75	1,05 x 2,25	663	SDK3.160.5**	6.333,00
2000	2	2500	2810	120	470	3/0,75	1,05 x 1,75	411	SDK3.200.2**	4.922,00
2000	3	2500	2880	150	550	3/0,75	1,05 x 2,0	574	SDK3.200.3**	5.555,00
2000	4	2500	2910	160	550	3/0,75	1,05 x 2,2	663	SDK3.200.4**	6.260,00

** = With contact control, limit power off. E Chassis 2-speed Optional

Order example: SDK-270-250/3-8/2 load 250 kg, 3 m range, 8 / 2 m / min Lifting speed.

SDK360 pillar jib crane 360°

Flexible lifting with the new SIP-pillar jib cranes

The SIP-pillar jib cranes are very compact built, they are intended for indoor use.
The pivoting range is 360 ° and can also be limited by pivot stops.
They can be installed on a special foundation (anchor bolts and plate optional) for example a concrete foundation plate. B 250 s ≥ 250 mm (Please ask for a separate quote).
All parts are sandblasted and painted in the base color green RAL 6018
Special paint and zinc plating on request.
These cranes are manufactured according to the Machinery Directive, the EU and according to the latest in DIN 15018 H2B2.
Installation is performed under the VDE and BGR (UVV) regulations.
When planning, please note the minimum distances according to the UVV.

Info

Do you need a crane with customized options? Talk to us! We will be happy to assist you!

Delivery:
- Crane column and boom storage
- Power supply from Crane Main can be switched off with the trailing cable device.
- E-chain up to 1 ton chassis with rolling chassis and contactor control including lift emergency stop with E Chassis, one speed
- Lift height 2.7 m, with optional multi lift for hoisting columns.
- Cross travel attachments
- Complete crane documentation

Optionally:
- Special sizes upon request
- Up to 1 t available as direct control without end limit
- Also available with electric swing mechanism.
- Installation and acceptance by UVV
- Foundation base plate for bolting the crane
- Anchor bolts with plate
- Annual review and maintenance by your SIP partners

Load [kg]	Reach [m]	lower edge [mm]	Height B [mm]	Flange width [mm]	Pillar bolt circle DL in [mm]	Lift. speed [m/min]	foundation T x Ø [m]	Weight ca. [kg]	Order-no.	Price compl. w. electr. €
125	2	3300	3460	64	230	8/2	0,8 x 0,9	180	SDK4.012.2	2.610,00
125	3	3300	3500	73	230	8/2	0,8 x 1,0	230	SDK4.012.3	3.111,00
125	4	3300	3500	82	290	8/2	0,8 x1,25	300	SDK4.012.4	3.195,00
125	5	3300	3560	100	290	8/2	0,8 x 1,35	380	SDK4.012.5	3.355,00
125	6	3300	3560	100	370	8/2	0,8 x1,45	410	SDK4.012.6	4.278,00
250	2	3300	3500	64	230	4/1	0,8 x 1,0	195	SDK4.025.2	3.197,00
250	3	3300	3520	73	290	4/1	0,8 x 1,15	365	SDK4.025.3	3.327,00
250	4	3300	3520	91	370	4/1	0,8 x 1,35	465	SDK4.025.4	4.259,00
250	5	3300	3610	110	370	4/1	0,8 x 1,45	590	SDK4.025.5	4.508,00
250	6	3300	3610	110	450	4/1	1,05 x 1,55	650	SDK4.025.6	4.783,00
500	2	3300	3520	91	450	4/1	1,05 x 1,15	400	SDK4.050.2	3.477,00
500	3	3300	3540	91	450	4/1	1,05 x 1,35	450	SDK4.050.3	4.521,00
500	4	3300	3610	110	450	4/1	1,05 x 1,45	580	SDK4.050.4	4.569,00
500	5	3300	3640	150	470	4/1	1,05 x 1,65	740	SDK4.050.5	5.085,00
500	6	3300	3670	160	470	4/1	1,05 x 1,70	800	SDK4.050.6	5.651,00
1000	3	3300	3560	110	470	5/1,25	1,05 x 1,75	650	SDK4.100.3	4.668,00
1000	4	3300	3670	160	470	5/1,25	1,05 x 1,95	720	SDK4.100.4	5.395,00
1000	5	3300	3740	160	570	5/1,25	1,05 x 2,15	980	SDK4.100.5	6.135,00
1000	6	3300	3740	170	_	5/1,25	1,05 x 2,35	1080	SDK4.100.6	6.866,00
1600	3	3300	3580	120	570	10/2,5	1,05 x 1,75	700	SDK4.160.3**	6.725,00
1600	4	3300	3670	160	570	10/2,5	1,05 x 1,95	810	SDK4.160.4**	7.115,00
1600	5	3300	3740	180	570	10/2,5	1,05 x 2,15	950	SDK4.160.5**	7.365,00
1600	6	3300	3740	180	_	10/2,5	1,05 x 2,35	1170	SDK4.160.6**	9.010,00
2000	3	3300	3610	135	550	3/0,75	1,05 x 1,9	820	SDK4.200.3**	6.363,00
2000	4	3300	3700	170	550	3/0,75	1,05 x 2,15	830	SDK4.200.4**	7.010,00
2000	5	3300	3740	190	_	3/0,75	1,05 x 2,3	1400	SDK4.200.5**	7.585,00
2000	6	3300	3790	190	_	3/0,75	1,05 x 2,5	1650	SDK4.200.6**	8.430,00

** = With E Chassis, 2 speed

PK Gantry crane provides optimum mobility

The Universal gantry crane, quickly dismantled

The SIP-portal cranes are cranes of extremely compact design and are in accordance with EU Machinery Directive, as well as the DIN 15018 H2B2 and relevant VDE regulations and accident prevention. The entire steel structure has a base coat and a deckan coat RAL 1021 in yellow.
The crane drive is equipped with steering wheels and swivel wheels.

The cranes will be delivered disassembled:

- 2 side panels with chassis
- Trolley with trailing cable
- 1 Hoist with a rolling chassis over 1t, equipped with E-chassis as standard (1 speed)
- 1 Main switch with CEE plug as well as the complete documentation for the crane

Thus, the SIP gantry crane is the universal crane, which can be mounted and dismounted quickly. The hoist has a voltage of 400 V, 50 Hz, contactor control with limit switches.

Optional:

- Direct control without emergency hoist stop
- Other capacities and sizes available on request
- Gantry cranes are also available with manual hoist

Info

In the case of an order placement, you will receive an illustrated overview for confirmation. Do you need a crane with customized options?

Talk to us!

We will be happy to assist you

Load [kg]	clear width [mm]	clear height UK [mm]	height ca. [mm]	Weight [kg]	max. width [mm]	Lift [mm]	Wheelbase [mm]	Lift. speed [m/min]	Order-no.	Price/piece €
500	3045	3000	3200	285	3500	2500	1500	4/1	PK.0500.33	4.020,00
500	4045	3000	3200	300	4500	2500	1500	4/1	PK.0500.43	4.085,00
500	5045	3000	3250	340	5500	2500	1500	4/1	PK.0500.53	4.162,00
500	6045	3000	3250	355	6500	2500	1500	4/1	PK.0500.63	4.215,00
1000	3045	3000	3200	370	3500	2430	1500	5/1,25	PK.1000.33	4.246,00
1000	4045	3000	3220	410	4500	2430	1500	5/1,25	PK.1000.43	4.325,00
1000	5045	3000	3250	480	5500	2430	1500	5/1,25	PK.1000.53	4.450,00
1000	6045	3000	3250	505	6500	2430	1500	5/1,25	PK.1000.63	4.522,00
2000	3000	3000	3350	600	3500	2340	2000	3/0,75	PK.2000.33**	5.789,00
2000	4000	3000	3350	698	4500	2340	2000	3/0,75	PK.2000.43**	5.870,00
2000	5000	3000	3350	839	5500	2340	2000	3/0,75	PK.2000.53**	5.982,00
2000	6000	3000	3410	933	6500	2340	2000	3/0,75	PK.2000.63**	6.270,00
3200	3000	3000	3520	1150	3500	2340	2200	5/1,25	PK.3200.33**	7.380,00
3200	5000	3000	3600	1470	5500	2340	2200	5/1,25	PK.3200.53**	7.803,00

** = With Chassis, 2 speeds

Order example: PK.0500.33 gantry crane, 500 kg load capacity, 3 m clear width, 3 m clear height

Dynamic Shear connector plate for SDK SDK 360 and 270

The perfect anchor for the column jib crane

Plate type	Bolt circle Ø [mm]	Dynamic screws [Stück]	Order-no.	Price €
81	230	12	VAP.SDK.81	325,00
82	290	12	VAP.SDK.82	440,00
83	370	16	VAP.SDK.83	805,00
84	420	16	VAP.SDK.84	835,50
85	450	16	VAP.SDK.85	900,50
86	470	16	VAP.SDK.86	1.265,00
87	570	20	VAP.SDK.87	1.335,00
88	550	24	VAP.SDK.88	1.850,00

Mobilus Slewing Pillar Crane

The Mobilus slewing pillar crane can be located where you need it

- Robust steel construction
- Assembly without a foundation
- Mobile on account of its own travel carriage (additional cost)
- Can swing in any direction
- Comprehensive accessories

Optional:

- Working end stop switch during normal operational start for the maximum height of the hook position

Info

Assembly, approval and revision also by other cranes in accordance with UVV through the SIP crane service!

Assembly and repair of the E-traction. See pages 8-9 in catalogue.

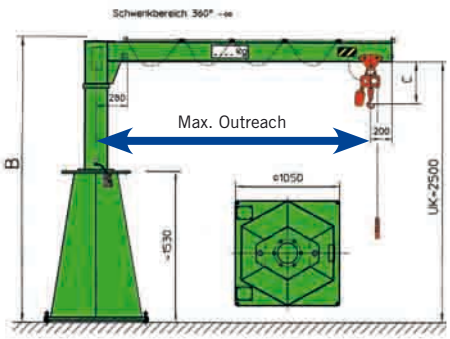
The Mobilus slewing pillar crane makes loading simple and flexible.
The integrated carriage ensures flexible deployment of the crane when it is needed. Designed in accordance with the EC Machine Directive it corresponds to DIN 15018 H2 B2 and the VDE and UVV provisions.
The cantilever arm can be rotated freely and easily. The crane foot and the pillars are made of steel, the boom of profile steel. The whole constructed is pre-treated with steel shot and coated with RAL 6018 colour (yellow/green). Delivery complete with suitable special filler corresponding to the relevant load capacity.

Electrics: Connector for power supply, CEE-surface mounted connector, round cable power supply (with cable holder for up to 3 meters jib length or as a trailing cable with tension cable from 4 meters jib length). With cross-mounted end stops, labels in accordance with UVV, complete documentation for the crane.

For the new electro-chain pulley the following is to be adhered to: Beside the mounted protective controls a sliding clutch and standard emergency hoist limit switch is supplied for the maximum height of the hook position. Thus must not be started up in operation.
Two phase with hand crank, operational voltage: 400 V/50 Hz/48 V

Info

Please pay attention in the case of the UVV crane to the minimum safety distance intervals.



Mobilus slewing pillar crane

Load capacity [kg]	Jib length A [m]	Height B [mm]	Lower edge of support (UK) [mm]	Flange Size [mm]	Size C [mm]	Weight [kg]	Hoistspeed Normal /Fine [m/min]	Filler weight [kg]	Order-No.	Price including electro pulley with electric €
125	2	2710	2500	82	435	602	8/2	416	MOB.125.02	5.526,00
125	3	2710	2500	82	435	619	8/2	1076	MOB.125.03	6.319,00
125	4	2710	2500	82	435	637	8/2	1800	MOB.125.04	7.219,00
125	5	2750	2500	100	435	862	8/2	2585	MOB.125.05	8.343,00
250	2	2710	2500	82	460	602	4/1	1054	MOB.250.02	6.285,00
250	3	2730	2500	91	460	630	4/1	2138	MOB.250.03	7.566,00
250	4	2750	2500	100	460	837	4/1	3286	MOB.250.04	9.031,00
500	2	2730	2500	91	505	609	4/1	2375	MOB.500.02	7.872,00

Accessories:
Crane hand-geared trolley to operate the crane. Order with the crane.

Order-No.	Price/Piece €
MOB.FAHRW	960,00

Load hook Hooks to your specifications

SIP-hooks are individually manufactured to your specifications.
Especially when a hook is to be replaced after a revision of the crane and the hook is no longer available as standard. We can deliver the matching hook, tailored to your needs.

We manufacture hooks and double hooks to DIN 15401 as a complete suspension, with traverse and nut, with ball bearings, with special Traverse, raw or coated, with mounted security trap.

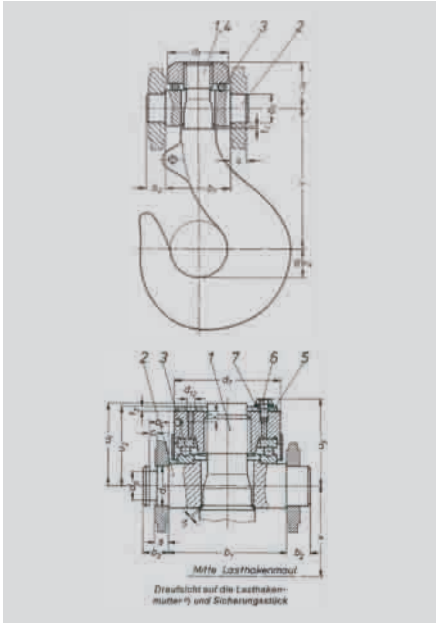
Info

Talk to your SIP partners about the technical details!

Do you need a double hook, talk to your SIP Provider. He will be happy to advise you!

We also supply stainless a steel design.

Nominal size RSN	d1 [mm]	a2 [mm]	h2 [mm]	r6 [mm]	L1 [mm]	e2 [mm]	Weight/ piece [kg]
			Dimensions				
006	14	20	14	27	100	60	0,20
012	16	24	19	34	115	73	0,32
020	20	27	22	39	138	82	0,60
025	20	28	24	42	144	88	0,80
04	24	32	29	49	155	100	1,00
05	24	34	31	53	167	108	1,15
08	30	38	37	61	186	120	1,90
1	30	40	40	65	197	128	2,50
1,6	36	45	48	76	224	145	3,85
2,5	42	50	58	90	253	187	6,50
4	48	56	67	103	285	190	10,00
5	53	63	75	114	318	216	13,50
6	60	71	85	131	380	240	20,00



Strength class									
				Drive group					
P				1Bm	1Am	2m	3m	4m	5m
S			1Bm	1Am	2m	3m	4m	5m	-
T		1Bm	1Am	2m	3m	4m	-	-	-
V	1Bm	1Am	2m	3m	4m	-	-	-	-
Load hook numb.				Load bearing capacity in kg					
006	320	250	200	160	125	100	-	-	-
010	500	400	320	250	200	160	125	100	-
012	630	500	400	320	250	200	160	125	100
020	1000	800	630	500	400	320	250	200	160
025	1250	1000	800	630	500	400	320	250	200
04	2000	1600	1250	1000	800	630	500	400	320
05	2500	2000	1600	1250	1000	800	630	500	400
08	4000	3200	2500	2000	1600	1250	1000	800	630
1	5000	4000	3200	2500	2000	1600	1250	1000	800
1,6	8000	6300	5000	4000	3200	2500	2000	1600	1250
2,5	12500	10000	8000	6300	5000	4000	3200	2500	2000
4	20000	16000	12500	10000	8000	6300	5000	4000	3200
5	25000	20000	16000	12500	10000	8000	6300	5000	4000
6	32000	25000	20000	16000	12500	10000	8000	6300	5000

Transmitter HBC-radiomatic

Type Cubix „Blue Edition“

New design, new technology, new possibilities!

- 6 or 8 two-step push buttons including STOP button
- Integrated all-rubber shock protection New design, new technology, new possibilities!
- INiMH rechargeable battery without memory effect
- Ca. 20 hours of continuous operating time
- Rugged plastic housing, protection IP 54
- Weight: 230 grams with battery

Type quadrix

Best quality in a handy format!

- 8 two-step push-button
- STOP impact switch
- NiMH rechargeable battery without memory effect
- Ca. 35 hours of continuous operating time.
- Rugged plastic housing, protection IP 65
- Integrated all-rubber shock protection
- Weight: 330 grams with battery
- Manual frequency circuit
- Options: Trolley selection via push buttons, radio-matic AFS (Automatic Frequency Selection), security features radiomatic shock-off / roll-detect / zero-g

Type micron 5

The best alternative to the control panel!

- Up to 10 two-step push-buttons
- STOP impact switch
- Electronic key radiomatic iON for the Operation of a spare transmitter
- NiMH rechargeable battery without memory effect
- Ca. 12 hours of continuous operating time.
- Rugged plastic housing, protection IP 55
- Rubber impact protection
- Weight: 450 g including battery
- Manual frequency circuit
- Options: Security Features radiomatic shock-off / roll-detect / zero-g, rotary switch with up to 5 positions, catch-release, tandem operation, radiomatic infrakey, radiomatic AFS (Automatic Frequency Selection)

Type Eco

Master switch transmitter type eco
Compact, comfortable, functional!

- 2 master switches with up to 4 phases
- Up to 6 two-step push-buttons
- 2 toggle or rotate switches
- STOP impact switch
- Electronic key radiomatic iON for the Operation of a spare transmitter
- NiMH rechargeable battery without memory effect
- Ca. 20 hours of continuous operating time.
- Rugged plastic housing, protection IP 65
- Weight: 1,5 kg with battery
- Manual frequency circuit

Options: feedback on LED-release, tandem operation, radiomatic infrakey, radiomatic, AFS (Automatic Frequency Selection)

Radio control receivers Rugged and reliable

Type FSE 512

Best quality for 3-stage drives!

- 12 commands black / white + emergency + infrared relay
- Emergency stop: Category 3 of EN 954-1
- Rugged plastic housing, protection IP 65
- Dimensions: 165 x 165 x 70 m
- Connection: cable screw on, or Harting connector
- Power supply: 42 - 240 V AC (Worldwide power supply)
- Options: clearance takeover, Tandem drive, radiomatic® AFS (Automatic Frequency Selection), radiomatic® infrakey
- Matching Channel: cubix, Quadrix micron, 5, eco

Type FSE 516

- 16 commands black / white + emergency + infrared relay
- 1 analog channel
- Feedback capability
- CANopen Safety interface
- Emergency stop: Category 3 of EN 954-1

Rugged housing made of plastic or aluminum, IP 65

- Dimensions: 269 x 202 x 60 mm (270 x 160 x 115 mm with aluminum housing)
- Connection: Han 32 or gland
- Power supply: 42 - 240 V AC (Worldwide power supply)
- Options: Freigabe-Übernahme, Tandemfahrt, radiomatic® AFS (Automatic Frequency Selection), radiomatic infrakey
- Matching Channel: Quadrix, 5 micron, Eco

	Receiver		508 PG TC 680/690 HR 145	508 PG TX/TC 641 HR 145	510 ME TX/TC 641 HR 165	512 ME TC 680/690 HR 165	512 ME TX/TC 641 HR 165	512 HAN 16 TX/TC 641 HR 165	516 ME TX/TC 641 HR 268	516 ME DECT HR 268	516 HAN32 TX/TC 641 HR 272	516 HAN32 TX/TC 641 HR270
	Order-No.		**FSE.508.TC**	**FSE.508.TX**	**FSE.510.TX**	**FSE.512.11**	**FSE.512.13**	**FSE.512.14**	**FSE.516.11**	**FSE.516.DE**	**FSE.516.12**	**FSE.516.13**
Sender		**Price €**	**385,00**	**465,00**	**495,00**	**488,00**	**568,00**	**766,00**	**640,00**	**695,00**	**990,00**	**1.065,00**
cubix 2A 2st TC 680/690	**KS.CU.2A.21**	**240,00**	●									
cubix 2A 2st TX/TC 641/681	**KS.CU.2A.22**	**280,00**		●	●							
cubix 3A 1st TC 680/690	**KS.CU.3A.11**	**264,00**	●									
cubix 3A 1st TX/TC 641/681	**KS.CU.3A.12**	**304,00**		●	●							
cubix 3A 2st TC 680/690	**KS.CU.3A.21**	**264,00**				●						
cubix 3A 2st TX/TC 641/681	**KS.CU.3A.22**	**304,00**					●	●				
quadrix TC 680/690	**KS.QU.TC.11**	**403,00**				●						
quadrix TX/TC 641/681	**KS.QU.TX.11**	**443,00**					●	●	●		●	●
quadrix TX/TC 641/681 Katzvorw.	**KS.QU.TT.11**	**494,00**							●		●	●
quadrix DECT	**KS.MI.05.11**	**483,00**								●		
micron 5 DS TC 680/690	**KS.MI.05.13**	**470,00**				●						
micron 5 DS TX/TC 641/681	**KS.MI.05.14**	**510,00**			●		●	●	●		●	●
micron 5 DECT	**KS.MI.05.12**	**550,00**								●		
eco Equip. 1 (512) TC 680/690	**KS.EC.E1.11**	**937,00**				●						
eco Equip. 1 (512) TX/TC 641/681	**KS.EC.E1.12**	**977,00**					●	●				
eco Equip. 1 (516) TX/TC 641/681	**KS.EC.E1.13**	**934,00**							●		●	●
eco Equip. 1 (516) DECT	**KS.EC.E1.14**	**974,00**								●		

Legende

2A	2 Drives	**TX/TC 641/681**	HF module 641, 433.100-434 TACAN 750 MHz, 681, frequency 869, 725-869, 975 MHz, single frequency
3A	3 Drives	**PG o. ME**	Kabeleinführung
2st	Buttons / Master switch, 2-stage	**HAN 16 o. 32**	Cable entry 16-pin or 32-pin Harting connector
1st	Switch 1-phase	**HR 145**	145x145x72 mm plastic housing, internal antenna
DS	Rotary switch	**HR 165**	165x165x70 mm plastic housing, internal antenna
Equip.1	Drives, 2-stage, 3 buttons	**HR 268**	269x202x60 mm plastic housing, internal antenna
TC 680/690	HF module 680 Frequency 868-870 MHz; 690 USA- USA-frequency, broadband	**HR 272**	270x160x115 mm plastic housing, internal antenna, HAN Connectors
		HR 270	270x160x115 mm aluminum housing, external antenna connector HAN

Aluminum gantry cranes more flexibility in lifting

The aluminum gantry cranes provide maximum convenience and flexibility. They are easy to transport and can be used especially in inaccessible locations. Here, the setup time is very short, since there are only connections.

The side frames can be folded to save space. The pulleys are not included in the delivery. Hand chain hoists can be found on page 251, matching electric chain hoists from page 221.
Take advantage of the short delivery time and the extensive range of accessories.

Info

Did not find the right version in our offer? Talk to your SIP Provider!

Aluminium gantry crane with drop frames, includes lockable trolley, built in horizontal switcher

Type	Load [kg]	beam length [mm]	Mount on the bolt of the trolley [mm]	Side frame width [mm]	Adjustment area beam support [mm]	Adjustment area adjust. foot [mm]	Weight [kg]	Order-no.	Price/ piece €
low	1.000	4.000	1.360 - 2.360	1.295	600	400	**95**	AP10.10.40	1.900,00
low	1.500	4.000	1.360 - 2.360	1.295	600	400	**102**	AP11.15.40	2.200,00
med.	1.000	4.000	1.750 - 3.000	1.743	850	400	**105**	AP12.10.40	2.200,00
med.	1.500	4.000	1.750 - 3.000	1.743	850	400	**126**	AP13.15.40	2.500,00
high	1.000	4.000	2.325 - 4.025	2.238	1.300	400	**166**	AP14.10.40	3.100,00
high	1.500	4.000	2.325 - 4.025	2.238	1.300	400	**172**	AP15.15.40	3.400,00

Aluminium gantry crane with double straps and folding side frames, includes lockable trolley, built-Horizontal switcher

Type	Load [kg]	beam length [mm]	Mount on the bolt of the trolley [mm]	Side frame width [mm]	Adjustment area beam support [mm]	Adjustment area adjust. foot [mm]	Weight [kg]	Order-no.	Price/ piece €
low	1.000	4.000	1.735 - 2.735	1.295	600	400	177	AP20.10.40	2.800,00
low	1.000	6.000	1.735 - 2.735	1.295	600	400	225	AP21.10.60	4.000,00
med.	1.000	4.000	2.124 - 3.374	1.743	850	400	187	AP22.10.40	3.100,00
med.	1.000	6.000	2.124 - 3.374	1.743	850	400	235	AP23.10.60	4.300,00
high	1.000	4.000	2.709 - 4.409	2.238	1.300	400	237	AP24.10.40	4.000,00
high	1.000	6.000	2.709 - 4.409	2.238	1.300	400	285	AP25.10.60	5.200,00
2 t	2.000	4.000	2.709 - 4.409	2.238	1.300	400	237	AP26.20.40	3.400,00
2 t	2.000	6.000	2.709 - 4.409	2.238	1.300	400	285	AP27.20.60	4.600,00
3 t	3.000	4.000	2.645 - 3.795	2.222	750	400	267	AP28.30.40	4.300,00
3 t	3.000	6.000	2.645 - 3.795	2.222	750	400	351	AP29.30.60	5.500,00

Accessories: Chassis

This allows the mounted crane to be driven when unloaded.
Due to the „forks“ on the footings, to the side frame remains attached by assembly, disassembly.
When loaded, the spring-loaded rollers press in.
The side panel then lies directly your feet.
the adjustable footing can be elevated one at a time.
1 Set = 4 forks

With heavy-duty polyurethane tread
To drive the unloaded crane indoors.

for gantry cranes	Order-no.	Price/set €
all stationary cranes	APZ.FG.001	1.000,00

With super-elastic solid rubber tires
To maneuver the unloaded crane indoors and outdoors.

for gantry cranes	Order-no.	Price/set €
all stationary cranes	APZ.FG.002	1.300,00

Aluminum gantry cranes Mobile

Aluminium gantry crane with drop frames, includes lockable trolley, built in horizontal switcher

Type	Load [kg]	beam length [mm]	Mount on the bolt of the trolley [mm]	Side frame width [mm]	Adjustment area beam support [mm]	Adjustment area adjust. foot [mm]	Weight [kg]	Order-no.	Price/ piece €
low	1.000	4.000	1.720 - 2.120	1.504	400	-	166	AP40.10.40	2.700,00
low	1.500	4.000	1.720 - 2.120	1.504	400	-	172	AP41.15.40	3.000,00
med.	1.000	4.000	2.160 - 3.010	2.012	850	-	192	AP42.10.40	3.000,00
med.	1.500	4.000	2.160 - 3.010	2.012	850	-	198	AP43.15.40	3.300,00
high	1.000	4.000	2.490 - 3.790	2.328	1.300	-	214	AP44.10.40	3.900,00
high	1.500	4.000	2.490 - 3.790	2.328	1.300	-	220	AP45.15.40	4.200,00

Aluminium gantry crane, can be driven while loaded, with double loader and drop frames, includes lockable trolley, built in horizontal switcher

Type	Load [kg]	beam length [mm]	Mount on the bolt of the trolley [mm]	Side frame width [mm]	Adjustment area beam support [mm]	Adjustment area adjust. foot [mm]	Weight [kg]	Order-no.	Price/ piece €
low	1.000	4.000	2.100-2.500	1.504	400	---	237	AP46.10.40	3.600,00
low	1.000	6.000	2.100-2.500	1.504	400	---	285	AP47.10.60	4.800,00
med.	1.000	4.000	2.540-3.390	2.012	850	---	263	AP48.10.40	3.900,00
med.	1.000	6.000	2.540-3.390	2.012	850	---	311	AP49.10.60	5.100,00
high	1.000	4.000	2.875-4.175	2.328	1.300	---	285	AP50.10.40	4.800,00
high	1.000	6.000	2.875-4.175	2.328	1.300	---	333	AP51.10.60	6.000,00
	2.000	4.000	2.540-3.390	2.012	850	---	278	AP52.20.40	4.500,00
	2.000	6.000	2.540-3.390	2.012	850	---	326	AP53.20.60	5.700,00
	3.000	4.000	2.755-3.505	1.870	750	---	418	AP54.30.40	5.400,00
	3.000	6.000	2.755-3.505	1.870	750	---	502	AP55.30.60	6.600,00

Other interesting products in our range:

Aluminium Multi Lift

Aluminium tripod with hand winch

Aluminium tripod

Aluminum load bar in H-design

Aluminum load bar

Aluminium stacker beam

Accessories: wiring / power supply (without chain)

The aluminum gantry crane will be delivered, and ready for use.
three phase current 400 V/16A, 50 Hz.
CEE phase inverter connector.
The electrical connection for the chain hoist is accomplished by plug and socket. (Degree of protection to EN 60 529, IP66)All electrical components are suitable under normal operating conditions for indoor and outdoor use.

For single carriers
For all featured alu porta cranes with single loader

	Order-no.	Price/€
for single carriers	AP.VK.400.1	1.000,00
for double carriers	AP.VK.400.2	1.400,00

For double carriers
For all featured alu porta cranes with double loader

Bridge crane The bridge over your lifting problem.

SIP bridge cranes for single-and double-girder bridges - tailored to your lifting requirement

The SIP bridge cranes offer significant advantages due to the modular concept.
On one hand they are very flexible, because its construction can be tailored made to each specific customer needs.
On the other hand, these tailor-made solutions can be manufactured at a very competitive rate. Of course, there is a complete range of accessories available.

The SIP aluminium bridge cranes are built according to DIN 15018. there are single loaders (EBK) and double loading bridge cranes available.

- Crane Rating: H2/B3 according to DIN 15018
- FEM group 2 m
- Lifting Height: 6 m
- Driving speed: 20 / 5 m /: 40 / 10 m / min, cat.

TypeEB K

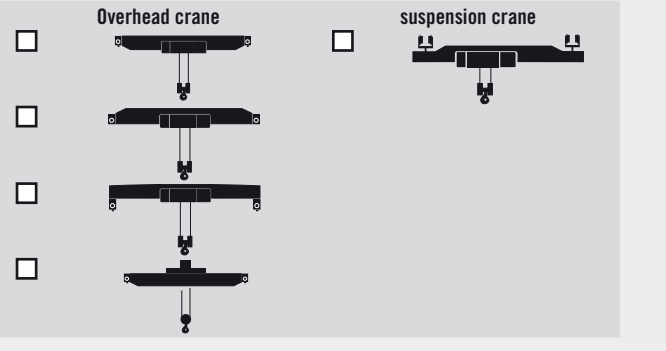
Type ZBK

Crane and lifting drive

Lifting speed	_____	m/min.
Trolley speed	_____	m/min.
Crane speed	_____	m/min.
☐ With Side Stage (ZL-A)		

Crane Rail

☐ is provided on site		
☐ offer too		
Crane Rail Length	_____	mm
Support distance	_____	mm
Crane track rail (H x W)	_____	mm



Do you have any questions? Call us!

My address:

Company: _____

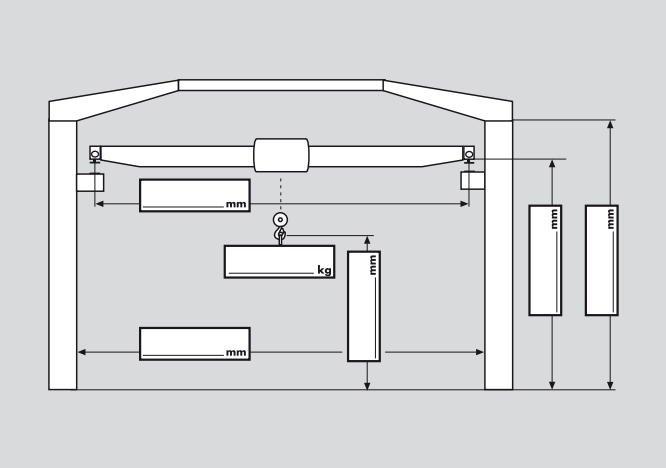
Name: _____

Street: _____

City : _____

Phone number: _____

Fax number: _____



Info

Other crane designs, complete solutions, including assembly or separate runways are also available.
Talk to your SIP Provider.

Gantry crane Comprehensive lifting and transporting

The SIP gantry crane system - combine space and movement

When it comes to planning for new a new construction or upgrading an existing one, for implementing cranes, then the new SIP-gantry system is the ideal solution.
The SIP Portal Crane system is always on its footings. As a rule needs no or very little foundation and is therefore independent from the need of a solid base, can be used in Halls or roof construction, for pillar or other construction materials. The systems can be accurately installed in existing halls or buildings and thus offer a particularly good option for older buildings, when the workshop is being newly furnished, excellent opportunities for effective workplace design.

The portal systems consist of standardized components and are produced at low cost.

There is a high degree of flexibility for installation.
The SIP gantry crane systems are characterized by their stability and easy assembly.
The execution is carried out according to EN guidelines, DIN 15018 H2 B2 and B3 and VDE / UVV regulations.

Load capacity range from: 500 to 5000 kg
Depth range: 3000 to 15000 mm
Field Length: 3000 to 10000 mm
Height ca. 5000 mm
Lots of types of modules can be attached to one another.
We will be happy to also inform you of our special versions.
Talk to your SIP Provider!

Offer inquiry

Requst for gantry crane systems

or room dimensions:
Width= mm
Length= mm
Height= mm

Profi P100	P= kg	L= mm					
Profi P200	P= kg	A= mm	L= mm				
Profi P300	P= kg	B= mm	L= mm				
Profi P400	P= kg	B= mm	L= mm	L1= mm	L2= mm	L3= mm	
Profi P500-Olympia	P= kg	B= mm	L= mm	L1= mm	L2= mm	L3= mm	

Heights measurement for all heights BH BH= mm Desired lifting height HH= mm

If possible, please attach a sketch with the basic dimensions of the desired crane system, or use our illustration and enter the mass

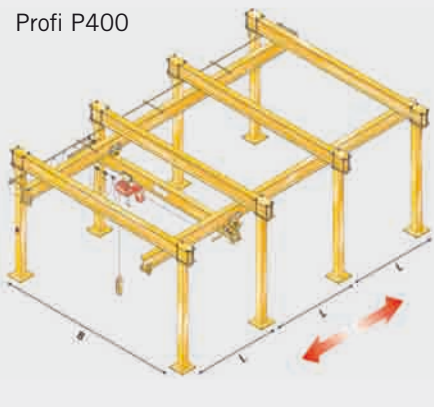
Equipment:

- ☐ Operation in the hall
- ☐ Operation in open area
- ☐ With lifting gear
- ☐ Katz driving, ☐ manual ☐ diveable
- ☐ Katz driving, drivable electrically
- ☐ Crane brige driveable manually
- ☐ Crane bridge, drivable electrically
- ☐ Mounting on concrete floor with
- ☐ Mounting into foundation which will be created
- ☐ Shear connector system
- ☐ Please offer mounting

Profi P100

Profi P200

Profi P400



Profi P500 Olympia

2 years warranty

Crane Technology

Hängebahnen, Hängekrane Aus dem Kranbaukasten KBK

Flexibles Baukastensystem zum flurfreien Transport von Gütern mit bis zu 3200 kg Gewicht

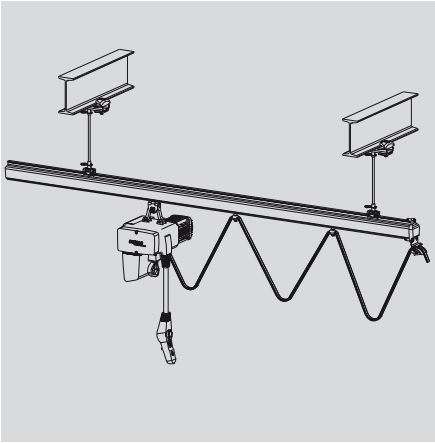
Es stehen fünf unterschiedliche Tragprofilgrößen zur Verfügung, die eine optimale Dimensionierung der Anlage erlauben.
Durch Kunststofflaufrollen und Wälzlagerung wird ein leichter und geräuscharmer Lauf der Fahrwerke gewährleistet.

Das System bietet ein breites Spektrum an Standard-Bauteilen zum Bau von maßgeschneiderten Anlagen für wirtschaftlichsten Materialfluss.

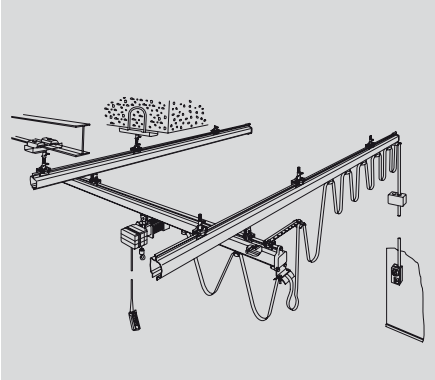
Pendelnde Aufhängungen bewirken eine schonende Krafteinleitung in die Tragkonstruktion.
Es steht eine breite Palette an Standard-Verbindungselementen zum Anschluss der Anlage an eine Vielzahl von Deckenkonstruktionen zur Verfügung.

Die Stromzuführung läuft wahlweise durch hochflexible Kunststoff-Flachleitungen oder durch integrierte Schleifleitung. Die Stahlbauteile sind verzinkt, pulverbeschichtet oder mit Fertiganstrich versehen. Erweiterung oder Umbauten von Anlagen sind jederzeit möglich, da alle Verbindungen gesteckt oder geschraubt werden. Die Anlagen können auch selbst montiert werden.

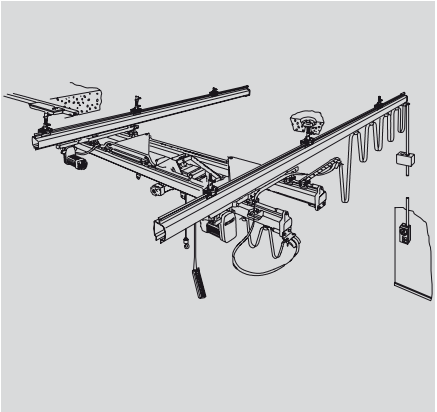
Einschienen-Hängebahn
Für linienförmige, bodenfreie Transporte. Mit Bauteilen wie Gerad- und Bogenstücken, Weichen, Schwenkscheiben und Absenkstationen kann nahezu jede Transportaufgabe bewältigt werden.
Beispiel:
- KBK-Einschienenhängebahn (gerade), Tragfähigkeit 500 kg, Länge 6 m
- Aufhängung an I-Profilträger, Flanschbreite 66-142 mm
- Mit Kettenzug DC, Hakenweg 5 m, Hubgeschwindigkeit 8/2 m/min, komplett mit elektrischer Ausrüstung



Einträger-Hängekran
Sie ermöglichen dreidimensionale, weitläufige Transporte zum Bedienen rechteckförmiger Flächen.
Beispiel:
- KBK-Einträgerhängekran, Tragfähigkeit 250 kg, Kranträgerlänge 4 m, Länge Kranbahn 10 m
- Aufhängung an I-Profilträger, Flanschbreite 66-142 mm
- Mit Kettenzug DC, Hakenweg 5 m, Hubgeschwindigkeit 8/2 m/min, komplett mit elektrischer Ausrüstung



Zweiträger-Hängekran
Sie erreichen größere Tragfähigkeiten, bzw. bei gleicher Tragfähigkeit größere Spannweiten als Einträger-Hängekrane.
Beispiel:
- KBK-Zweiträgerkran, Tragfähigkeit 1000 kg, Kranträgerlänge 6 m, Länge Kranbahn 12 m
- Aufhängung an I-Profilträger, Flanschbreite 66-142 mm
- Mit Kettenzug DC, Hakenweg 5 m, Hubgeschwindigkeit 6/1,5 m/min, komplett mit elektrischer Ausrüstung



Für Ihre Anfrage verwenden Sie bitte das Anfragehilfsblatt auf der folgenden Seite.

Info

Anlagen für andere Traglasten, andere Spannweiten/Aufhängeabstände erhalten Sie auf Anfrage bei uns!

Hängebahnen, Hängekrane Aus dem Baukasten

Wirtschaftlich Güter bewegen und transportieren

Traglastbereich bis 3.200 kg

Tragfähigkeit der Anlage _____ **kg** (einschließlich Gewicht Lastaufnahmemittel, wie Greifer, Gabel usw.)

Linientransport

Länge der Bahn _____ m

Kontur der Bahn ☐ gerade ☐ mit Verzweigungen
☐ Kurvenbahn

Verfahren Katze ☐ von Hand
☐ elektrisch ☐ 1 Geschwindigkeit
☐ 2 Geschwindigkeiten

Flächentransport

Länge der Kranbahn (A) _____ m

Länge der Kranbrücke (B) _____ m

Anzahl der Krane auf der Bahn _____ Stück

Verfahren Kran
☐ von Hand (Standard bis 1000 kg)
☐ elektrisch ☐ 1 Geschwindigkeit
☐ 2 Geschwindigkeiten

Verfahren Katze
☐ von Hand (Standard bis 1000 kg)
☐ elektrisch ☐ 1 Geschwindigkeit
☐ 2 Geschwindigkeiten

Einfach diese Seite kopieren, ausfüllen und an uns faxen!

Stromzuführung

☐ Schleppleitung (Standard) ☐ 400 V/50 Hz
☐ Schleifleitung ☐ andere _____

Hebezug

☐ Elektrokettenzug ☐ mit zwei Hubgeschwindigkeiten
☐ stufenlos
☐ anderes Hebezeug _____

höchste Hakensteuerung über Flur _____ m

Aufhängung

☐ an vorhandener Deckenkonstruktion ☐ aus Stahlprofilträgern Trägerabstand _____ m
☐ aus Beton und Betonbindern Binderabstand _____ m
☐ aus Beton
☐ sonstige Konstruktionen _____

☐ an Stahlbau-Hilfskonstruktion ☐ vorhanden
☐ nicht vorhanden

Durchschnittliche Benutzungsdauer _____ h/Tag

Besonderheiten der Umgebung am Aufstellungsort (z. B. besonders staubige, feuchte, heiße Umgebung)

_____

Haben Sie Fragen? Rufen Sie uns an!

Bitte senden Sie mir:

☐ Ein entsprechendes Angebot

☐ kompetente Beratung

Meine Anschrift:

Firma _____

Name _____

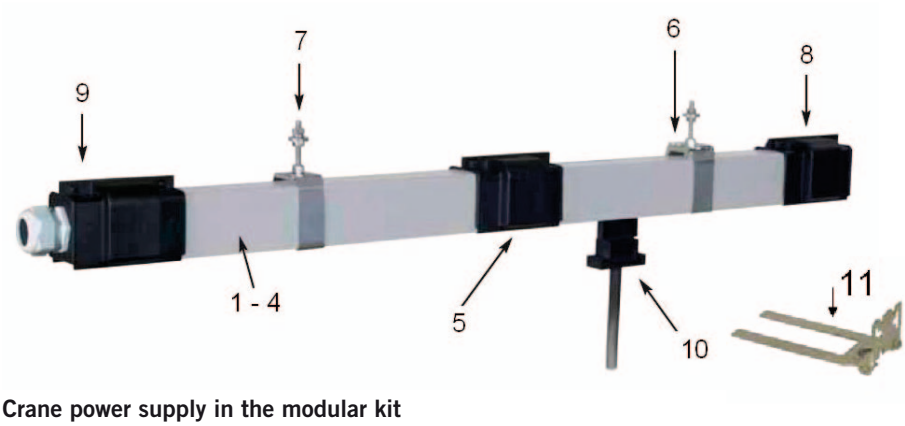
Straße _____

Ort _____

Telefonnummer _____

Telefaxnummer _____

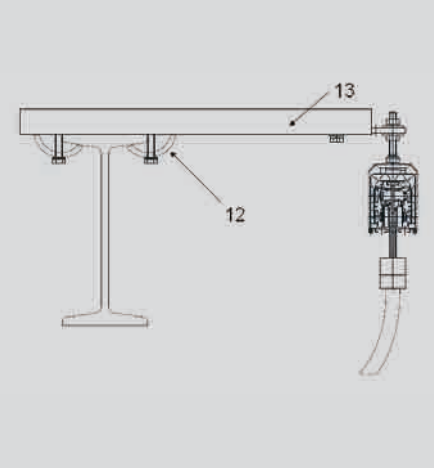
Crane electrics Conductor



The compact 5-pole, closed conductor is used to power portable products, such as cranes.
The expandable conductor line system is characterized by quick and easy installation, flexibility and security.
The assembly can be achieved by the clip-on connector parts, track support and fixed point very easily and safely.
The KBH meets the VDE, European and international standards and regulations and is touch protected according to IP23.

Crane power supply in the modular kit
Safety slip lines KBH

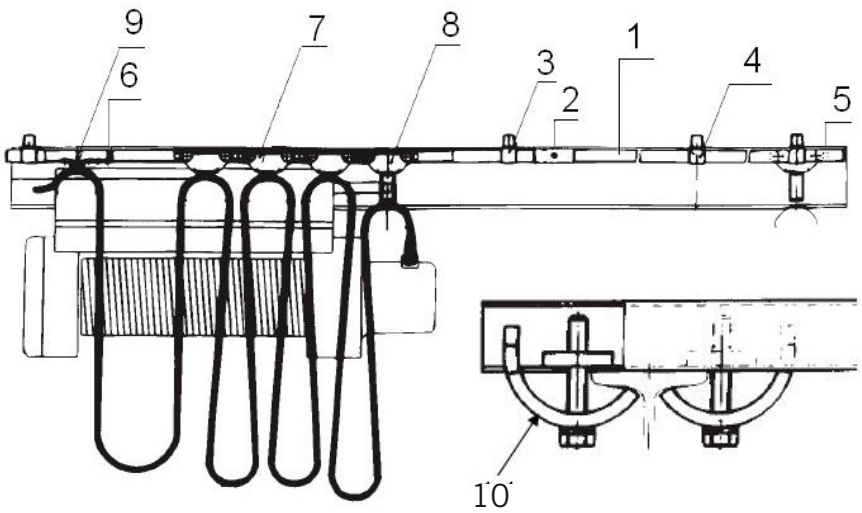
Position	Label	Order-no.	Price/piece €
1-4	Synthetic feeder		
	KBHF 4/40-1	SL.600.001	46,75
	KBHF 4/40-2	SL.600.002	55,70
	KBHF 4/40-3	SL.600.003	74,60
	KBHF 4/40-4	SL.600.004	88,00
5	Joint cap	SL.600.005	3,28
6	Rigid suspension	SL.600.007	5,46
7	Sliding hangers	SL.600.000	4,16
8	End cap	SL.600.008	7,49
9	connecting box	SL.600.422	84,00
10	Collector	SL.600.096	61,10
11	towing arm	SL.600.335	13,70
12	Clamping claw	SL.600.390	3,43
13	Screw console from section of the track, support for screw console	SL.600.590	10,60



Festoon systems S1-rails

Cable carriers are used for guiding portable power lines and hoses.

They comply with VDE standards.
It can be used both flat and round cables.



Position	Label	Order-no.	Price/ pcs. €
1	Rail S1, 4 m long	LW.312.944	24,10
1	Rail S1, 6 m long	LW.312.946	36,10
2	Connector	LW.312.050	6,49
3	Sliding hangers	LW.312.380	5,15
4	Rigid suspension	LW.312.450	6,18
5	End cap	LW.312.023	0,67
6	Buffer stop	LW.312.300	3,81
7	Festoon	LW.312.070	11,55
8	Lead carrier	LW.312.278	14,10
9	End clamp	LW.312.303	4,84
10	clamping claw	LW.312.390	3,40
11	Hook bracket	LW.312.392	9,60
12a	Control trailer 1/16m	LW.312.371	98,00
12b	Control trailer 1/24m	LW.312.370	108,00

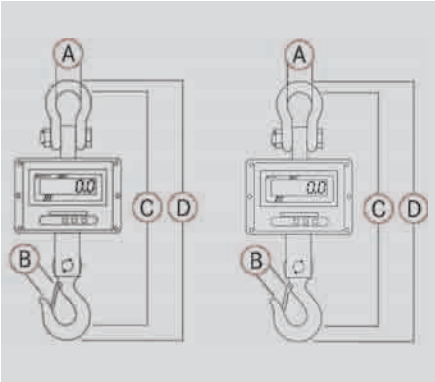
Crane scale HFM High definition industrial crane scale up to 10 t

The professional device for robust deployment

- For demanding use in production, quality control, logistics. On account of the stable construction and robust design suitable for long-term use in an industrial environment
- High mobility on account of battery operation, compact design and low weight, suitable of ruse in several locations (Production, warehouse, despatch, ...).
- Adaptable to busy environmental conditions through changing legibility
- Internal battery operation battery life some 60 h, charge time some 12 h with power adapter, optical LED load display
- Data-Hold function: the weight display can be frozen via the HOLD button until pressed again
- Includes shackles and hooks

Optimal Handling

Radio remote control as a standard, reach some. 20 m. All functions can be selected (except On/Off).
Size: W x L x H 48 x 10 x 95 mm, battery size AAA (2 x 1,5 V) included.



Model	Weighing [kg]	Legibility [g]	Net weight [kg]	Casing size B x T x H [mm]	Toleranc [kg]	Order-No.	Price €
HFM 1T0.1	1000	100	16	270x175x200	±0,5	HFM.01T.1.0	570,00
HFM 3T0.5	3000	500	18	270x175x200	±1,0	HFM.03T.1.0	600,00
HFM 5T0.5	5000	500	23	300x190x230	±1,0	HFM.05T.1.0	770,00
HFM 10T1	10000	1000	35	300x190x230	±5,0	HFM.10T.1.0	1.060,00

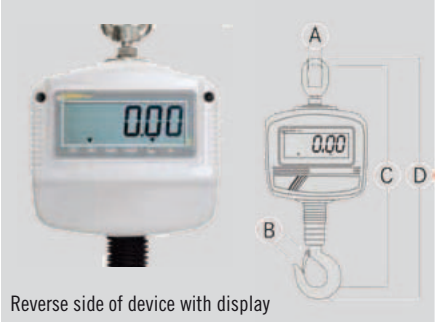
SUPER PRICE | Inspection service | 2 year warranty

Compact Crane scale HFB

The professional alternative for up to 600 kg

NEW

- Casing of unbreakable plastic, compact design
- Revolving hooks with safety lock
- Secondary display on the reverse side of the scale
- Internal battery with charge display, life some 30 hours, charge time some 8 hours
- Includes remote controls, reach some 20 m, batteries included



Reverse side of device with display

Model	Legibility [g]	Weighing [kg]	A [mm]	B [mm]	C [mm]	D [mm]	Weight [kg]	Order-No.	Price €
HFB 150K50	50	150	26	25	358	390	3,2	HFB.00150	260,00
HFB 300K100	100	300	26	25	358	390	3,2	HFB.00300	275,00
HFB 600K200	200	600	26	25	358	390	3,2	HFB.00600	275,00

SUPER PRICE | Inspection service | 3 years warranty | 24-h-delivery-service

Tension dynamometer Scale range 250 t

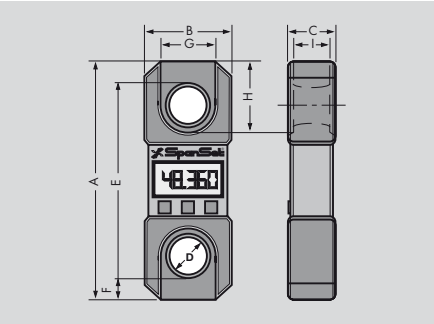
Even heavy loads are lifted easily

- Tare printing of the complete weight range
- Peak weight display
- Automatic reset when turned on
- Automatic shutdown to save the battery
- Low power consumption: 250 hours and more with only one set of batteries
- Weather proof membrane on the key-board
- Temperature rang –10°C bis +40°C
- Weather proof according to IP65

Precision measurement in a case
Wherever a weight is to be verified, the mobile SpanSet tension meter is essential.
Small, light and precise (±0,2% v.E.), provides easy to read numbers.

Simple to use and reliable
Whether in dispatch, in production, for example, in checking goods coming in, or on a building sites to check materials: The mobile, handy SpanSet weighing device determines the weight accurately and quickly.
A range of shackles allows it to be fitted on to various types of crane hooks.

Meas. range to... [t]	Smallest ind.step [kg]	Weight [kg]	LCD-digit heig. [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	Order-no.	Price/piece without shackle €
0,25	0,10	1,1	18	190	83	56	16	166	12	47	43	16	SK.0000.25	1.640,00
0,50	0,20	1,1	18	190	83	56	16	166	12	47	43	16	SK.0000.50	1.668,00
1,25	0,50	1,1	18	190	83	56	16	166	12	47	43	16	SK.0001.25	1.696,00
2,50	1,00	1,4	18	214	83	56	24	184	15	47	50	25	SK.0002.50	2.395,00
5,00	2,00	1,9	18	234	90	56	32	197	15	54	58	32	SK.0005.00	2.458,00
12,50	5,00	3,8	25	310	110	58	47	243	32	70	92	48	SK.0012.50	2.699,00
25,00	10,00	6,6	25	360	134	68	56	272	44	84	114	58	SK.0025.00	3.034,00
50,00	20,00	15,0	25	440	164	98	72	337	54	104	142	86	SK.0050.00	4.224,00
100,00	50,00	46,0	25	660	260	118	108	488	83	174	227	104	SK.0100.00	11.138,00
250,00	100,00	215,0	25	905	424	248	150	685	110	250	310	190	SK.0250.00	32.483,00



Tension dynamometer LLX2 with removable operating device

- High precision 0,1% v.E.
- Attachment point st various levels
- Shock and weather tight: shield type IP66 / NEMA 4
- Remote controls compatible with all LLX2 weighing devices
- Various network options between Weight devices and control unit.
- Remote control range of 80 m
- Easy to use thanks to the well structured menu options
- Low consumption rates, depending on the use of 300 h to 1000 h
- USB port to attach to a computer

The remote control unit of the LLX2 can be docked on weighing device, or be placed elsewhere as a remote display unit. Each individual weighing device can be tuned into one another, so that three weight values from three different weighing devices can be displayed on the same control unit.
The patented attachment eyelets allow the connection even to everyday shackles as well as with all regulated chain link methods. The LLX2 is also available with parallel anchorage eyelets (coplanar).
The frequency band 2.4 GHz enables a wide range of 80 m including the simultaneous operation of multiple units, side by side without interfering with each other.
Battery life of the control unit: 48 hours.

Tensile force measuring instrument with control unit

Meas. range[t]	Smallest Meas. val.[daN]	Weight [kg]	Order-no	Price/ piece€
0,5	0,1	2,3	EK.108109	2.497,00
1	0,2	2,3	EK.108119	2.617,00
2	0,5	2,3	EK.108129	2.735,00
3,2	0,5	2,3	EK.108139	2.854,00
5	1	3,35	EK.108149	2.973,00
6,3	1	3,35	EK.108159	3.092,00
10	2	6,45	EK.108169	3.617,00

Surcharge

Without a control unit

Measuring range [t]	Order-no.	Price/piece €
0,5	EK.108179	1.792,00
1	EK.108189	1.911,00
2	EK.108199	2.030,00
3,2	EK.108209	2.149,00
5	EK.108219	2.269,00
6,3	EK.108229	2.388,00
10	EK.108239	2.899,00

Separate control panel

We. [kg]	Digit heig.[mm]	Order-no.	Price/pc. €
0,18	25	EK.108249	1.059,00

Info

For the LLX2 there are a number of accessories, for example EDV network tuning, various extras.

SSW-load scale MWX with optional IR and remote control access

Flexibly check load weights - up to 12.5 t

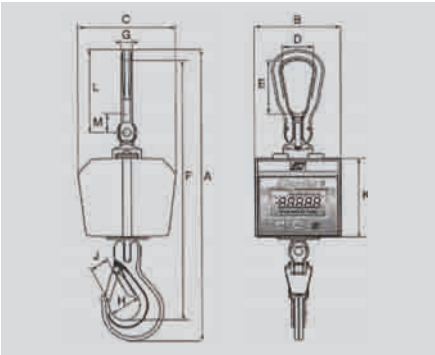
SSW scales with a range of up to 12,5 t. They can be hung anywhere, where there is an attachment point available. Whether in production, to control the goods coming in, from inventory and material checks, in in shipping or building site
SpanSet scales are equipped with an LCD screen. These display the weight in a choice of kg, t, daN or kN.

Options:
SSW Scale MWX+IR:
As MWX, but with the infrared remote control.
SSW Scale MWX+TR:
As MWX but with tuner (Frequency 433,92 Mhz).

Optionally:
Plastic Cases

Features SSW load balance MWX:

- Tare printing of the complete weight range
- Issued with Peak Weight display as standard
- Automatic reset when turned on
- Automatic shutdown to save the battery
- Low consumption
- Operated through a flat, waterproof membrane on the front side, under the display



SSW Scale MWX Standard

Meas. range to... [t]	Smallest indiv. step [kg]	Weight [kg]	LCD-digit height [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	J [mm]	K [mm]	L [mm]	M [mm]	Order-No.	Price/piece €
0,5	0,2	4,3	25	470	136	160	50	87	423	17	44	30	126	128	18	SW.0000.50	1.456,98
1,0	0,5	4,3	25	470	136	160	50	87	423	17	44	30	126	128	18	SW.0001.00	1.514,63
2,0	1,0	4,3	25	470	136	160	50	87	423	17	44	30	126	128	18	SW.0002.00	1.618,26
3,2	1,0	4,3	25	470	136	160	50	87	423	17	44	30	126	128	18	SW.0003.20	1.929,27
5,0	2,0	9,0	44	694	206	203	85	148	620	27	71	41	167	225	26	SW.0005.00	2.257,50
6,3	2,0	9,0	44	694	206	203	85	148	620	27	71	41	167	225	26	SW.0006.30	2.378,46
12,5	5,0	20,5	44	913	206	203	98	203	800	54	80	63	167	316	50	SW.0012.50	2.724,02

SSW Scale MWX+IR:
With infra red remote control

Version	Order-no.	Price/piece €
like Type MWX	SW.IR00.50	1.877,51
like Type MWX	SW.IR01.00	2.050,23
like Type MWX	SW.IR02.00	2.159,64
like Type MWX	SW.IR03.20	2.470,55
like Type MWX	SW.IR05.00	2.591,61
like Type MWX	SW.IR06.30	2.724,02
like Type MWX	SW.IR12.50	3.017,70

Surcharge

SSW Scale MWX+TR:
With band tuner

Version	Order-no.	Price/piece €
like Type MWX	SW.TR00.50	2.240,18
like Type MWX	SW.TR01.00	2.361,24
like Type MWX	SW.TR02.00	2.482,20
like Type MWX	SW.TR03.20	2.660,70
like Type MWX	SW.TR05.00	3.023,48
like Type MWX	SW.TR06.30	3.328,71
like Type MWX	SW.TR12.50	3.749,13

Crane Scale Light with a range of 20 t

The economical solution for heavy loads

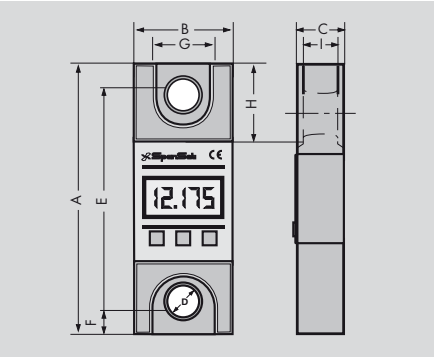
- Lightweight
- Weatherproof according to IP 65
- Overload indication after 110% of the load range
- Tare printing of the complete weight range
- Long life batteries, up to 100 hours
- Digital Display
- 18mm character size
- A lighter version of the SK tension taronomoter
- For users, where the maximum exactitude is not the biggest worry.
- Max. Deviation 0,8% of end value (SK=0,2%)
- From 0,25 t – 20,0 t
- No signal output for remote reading devices

Built to the demands of the electromagnetic guidelines and the European standard EN 55022 and EN 50082.2.

Info

For special designs please call us, we are happy to help.

Matching shackles and hooks for the Crane Scale Light can be found on pages 124 - 125!



Meas. range to... [t]	Smallest indiv. step [kg]	Max. display	Max. deviation ±[kg]	Weight [kg]	LCD-digit heig. [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	Order-no.	Price/piece without shackle €
0,25	0,50	250	2	1,1	18	220	90	42	14	196	12	35	36,5	16	SL.0000.25	900,69
0,5	1,00	500	4	1,1	18	220	90	42	14	196	12	35	36,5	16	SL.0000.50	966,32
1,0	2,00	1000	8	1,1	18	220	90	42	14	196	12	35	36,5	16	SL.0001.00	1.022,81
2,0	5,00	2000	15	1,3	18	233	90	48	22	207	13	45	46,5	25	SL.0002.00	1.265,78
3,2	5,00	3200	25	1,5	18	243	97	48	22	207	18	45	51,5	25	SL.0003.20	1.387,89
6,4	10,00	6400	50	2,3	18	275	115	48	28	217	29	54	70	31	SL.0006.40	1.505,49
10,0	20,00	10000	80	4,0	18	325	110	62	42	257	34	80	95	51	SL.0010.00	1.681,58
20,0	50,00	20000	150	7,0	18	371	134	72	54	269	51	84	120	65	SL.0020.00	1.905,02

Surcharge

Order example: SL.0003.20 Crane Scale Light weight range to 3,200 kg

Hanging scale HCB with carabiner hook

For small loads at a low price

- Stainless steel carabiner hook with safety lock, 15 mm opening
- Justifying program including Tare-ing over the entire measuring range
- Data-hold function, the weight display is „frozen“ by pressing the hold button for 5 seconds
- Batteries included 3 x 1.5V Mignon, 300 hours of operation
- Automatic shutdown
- S-hooks made of stainless steel, 25 mm opening

Robust suspension scale with 12 mm large, easy to read LCD digits, measuring 80 x 45 x 150 mm, weight ca. 400 g.

Info

You get the HCB Hanging scale with DKD certificate, upon which characteristics of the hand scale information is stated.

For special designs please call us, we are happy to help.

Smallest Measuring step [kg]	Measuring range to... [kg]	Tolerance {g}	Order-no. €	Price/piece €
0,05	20	±50	H.020K.050	85,00
0,1	50	±100	H.050K.100	90,00
0,2	100	±200	H.100K.200	110,00
0,5	200	±200	H.200K.500	99,00

2 year warranty

Hanging scale CH With a practical handle

- With a practical handle
- Data-hold function, the weight display is „frozen“ by pressing the hold button for 5 seconds
- Includes 9V battery
- Automatic shutdown
- Stainless Steel Hooks
- In addition, with 100 cm measuring strap

Useful hanging scale, ideal for use as a hand scale, 11 mm LCD digits, Dimensions 90 x 30 x 175 mm, weight 250 g.

Smallest Measuring step [kg]	Measuring range to... [kg]	Tolerance {g}	Order-no. €	Price/piece €
0,02	15	±20	MH.15K.020	55,00
0,05	50	±50	MH.50K.050	60,00
0,1	50	±100	MH.50K.100	50,00

2 year warranty

Hanging scale HDB with handle

- Data-hold function, the weight display is „frozen“ by pressing the hold button for 5 seconds
- Batteries included 3 x 1.5V Mignon, 180 hours of operation
- Automatic power off after 5 minutes
- Stainless Steel Hooks

LCD display with 12 mm digits, Dimensions W 70 mm x 25 mm H x 105 mm (with hook 195 mm), weight 150 g.

Smallest Measuring step [kg]	Measuring range to... [kg]	Tolerance {g}	Order-no. €	Price/piece €
0,005	5	±15	HDB.05K.05	42,00
0,01	10	±30	HDB.10K.10	42,00

2 year warranty

Individual crane manufacturing Your question sheet

All the offered scales on the following pages, are also available as a custom design

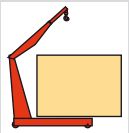
Please answer the deciding question:

Simply copy this page, fill out and fax it to us!

Yes!

Then fill in the standard model and the desired size.

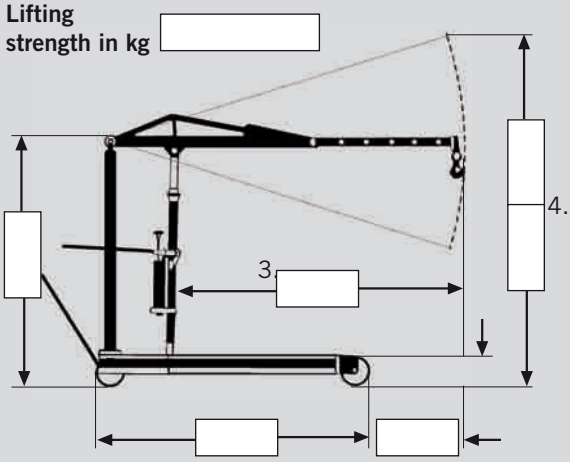
Can the load be **under passed** or **be circled?**



No!

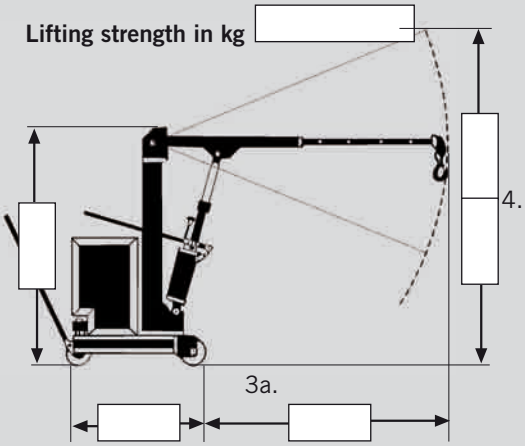
Then fill in the standard model and the desired size.

Standard version
Lifting strength in kg _____



Counter weight version

Lifting strength in kg _____



Also, please answer these questions:

What do you want to lift, and how often? _____
What lifting capacity is needed? _____ kg
For which length (3. or 3a.)? _____
Length 3./3a.is necessary with hook 4 from _____ mm to _____ mm
What corridor space is available? _____ mm
What chassis width (only for standard version)? _____ mm
What chassis width outside? _____ mm
Special note: for example, floor loading, lift dimensions, etc. _____
What is the floor made of? _____
If the crane swing too? ☐ 90° ☐ 100° ☐ 180° ☐ 270° ☐ 360°
Do you have any question? Just give us a call!

Please send me:

- ☐ A corresponding offer
- ☐ Your standard offer for industrial scales and Light weight scales
- ☐ Your complete program: Industrial Scales Light weight scales, Fork Lift Trucks, Stacker, Drum gripper, Presses

My address:

Company _____
Name _____
Street _____
City _____
Phone number _____

Hinged Light Weight Crane max. 1000 kg carrying capacity

The Foldable Option

Stable steel structure, easily folded away in eight quick steps by a single person.

Lifting: Easy by integrated manual pump
Lowering: Sensitive by spring-loaded drain valve – load fixable in any height
Move: Easy manual pull or push

- Other versions, especially parallel ones with hinge function, on request
- Ask for our special offers in light-metal cranes for occasional use
- Technical alterations reserved

Carrying load max. [kg]	C.load when unloading in fr.of lics hydraulics maximal [mm/kg]	minimal [mm/kg]	Lifting height min/max on hook bolt Boom pulled in/out [mm]	[mm]	Carriage width [mm]	Pillar height [mm]	Height for fork lift [mm]	Carriage length [mm]	Order-no.	Price/ piece €
500	700/500	1000/150	50/2360	350/2130	-/900	1570	150	1540	HB.PH.0500	670,00
1000	800/1000	1100/300	50/2320	350/2180	-/980	1700	180	1740	HB.PH.1000	855,00

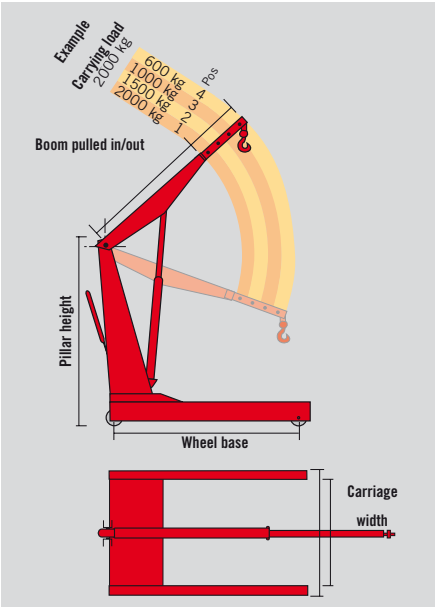
Surcharge Inspection service

Light Weight Crane max. 2000 kg carrying capacity

Easy Lifting in the Workshop

The demountable engine crane is designed as a simple version for lifting and transporting of loads up to 2000 kg. It is equipped with a parallel chassis, and if not used may be demounted with tools. Compliant to BGVD 27.

- Stable, welded steel structure
- Lifting with double-action manual hydraulics
- Lowering with adjustable valve
- Made in Europe



Carrying load max [kg]	C.load when unloading in fr.of hydraulics Pos. 1 [mm/kg]	Pos. 2 [mm/kg]	Pos. 3 [mm/kg]	Pos. 4 [mm/kg]	Lifting height min/max on hook bolt Boom pulled in/out [mm]	[mm]	Carriage width ins./outs. [mm]	Pillar height [mm]	Wheels [mm]	Wheel base [mm]	Weight [kg]	Crane checking bock	Order-no.	Price/ piece €
1500	870/1500	1020/1200	1170/800	1320/500	450-3010	500-2680	1000/1150	1935	200/150	1810	200	on request	HB.LK.1500	1.965,00
2000	960/2000	1110/1500	1260/1000	1410/600	800-3300	600-2900	1170/1350	2055	200/180	1915	245	on request	HB.LK.2000	2.202,00
3000	1100/3000	1250/2700	1400/2550	1550/2000	1000/3250	800-3800	1230/1460	2270	250/250	2350	300	on request	HB.LK.3000	4.415,00

Surcharge Inspection service

Small Crane with Counterweight

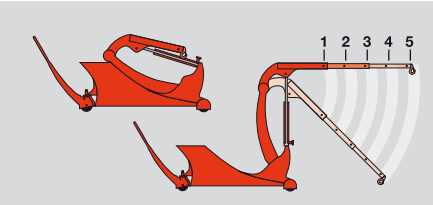
Stabile factory crane with large outreach

The small SIP crane is the ideal assistant for moving loads up to 500 kg. Because of its generously dimensioned free reach it is ideally suited for all tasks of moving loads under which you cannot drive and which are difficult to access.
With its removable pillar the small SIP small crane does not only look appealing but is also very easy to handle:

- Extra-large ball bearing mounted wheels with foot protection
- Easy-going, central draw-bar steering/ braking
- Boom length 925 – 2085 mm
- Huge turn range up to 180°
- Draw-bar steering, removable for transporting
- With practical tool tray
- Lift ca. 60 to 120 mm per lifting unit
- For standard workshop use (ca. 30-50 times per month)
- Industrial versions for frequent use on request

Info

Easy-going lifting because of extra-long pump lever via hydraulic pump



C.load when unloading in fr.of hydraulics Pos. 1 [mm/kg]	Pos. 2 [mm/kg]	Pos. 3 [mm/kg]	Pos. 4 [mm/kg]	Pos. 5 [mm/kg]	Lift. h. maximal [mm]	Drive throught width/height [mm]	Height folded [mm]	Complete length [mm]	Wheels [mm]	Wheel base R [mm]	Weight incl. filling [kg]	Order-no.	Price/piece €
465/250	755/165	1045/120	1335/95	1625/80	2800	800/-	1020	1775	150	1500	600	HB.ITI.250	2.679,00
465/350	755/230	1045/170	1335/135	1625/110	2800	800/-	1020	1775	150	1500	600	HB.ITI.350	2.689,00
465/500	755/360	1045/265	1335/210	1625/175	2800	800/-	1020	1775	150	1500	600	HB.ITI.500	2.699,00

Surcharge | Inspection service

ITI 500 Batt. Battery-powered Engine Crane

Battery-powered version for effortless handling

On pushing buttons, version ITI 500 Batt. Lift provides battery-powered lifting with persistent speed, saving physical force and being health-friendly. Compact making with modern design and integrated counterweight. Completely charged, ready for immediate operation.

- Including battery and charger
- 180° steering wheel turn
- Devices with battery-powered mobile drive available on request
- Up speed 20 to 26 mm/s, down speed restrictable to 0 for sensitive lowering

Info

These are the crucial advantages of the Hydrobull engine cranes: The engine cranes are made by a company which has accumulated more than 70 years of experience in crane building compliant to legal EC regulations

- **Lowering of load is precise to the millimeter, enabled by a sensitive valve lever**
- **Approved special hydraulics**
- **Boom adjustable to 5 carrying capacity positions**
- **Huge ball bearing mounted polyamide wheels enable comfortable moving with or without load**
- **Pump lever and bolts are anti-corrosively galvanised**
- **The counterweight enables free reach in front of the wheels, p. e. when accessing machines, ramps, etc.**

Carrying load max	C.load when unloading in fr.of hydraulics Pos. 1 [mm/kg]	Pos. 2 [mm/kg]	Pos. 3 [mm/kg]	Pos. 4 [mm/kg]	Pos. 5 [mm/kg]	Lifting h. min./max. [mm]	Drive thr. width/height [mm]	Wheel base [mm]	Weight [kg]	Crane checking book	Order-no.	Price/ piece €
500	465/500	755/380	1045/305	1335/255	1625/220	0/2800	800/1800	1500	745	included	HB.ITI.5BA	6.905,00

Surcharge | Inspection service

Industrial Crane up to 3000 kg carrying capacity

Professional Quality for Tough Workdays with mechanic drive positioner

Robust, persistent welded structure for daily and precise operation, p. e. in industry or manufacture. Boom adjustable in 13 positions with DIN-conforming safety swivel hook. Unique precision pump with 4 speed/force positions included. Load may be fixed in any height for days. The crane may be positioned to the millimeter precise because of its parallel chassis and the mechanic drive positioner. This is of special advantage if only one single person is available for operation.
Compliant to UVV BGV D 27, certified with CE label by MOT (TÜV).
Varnish/powder red.

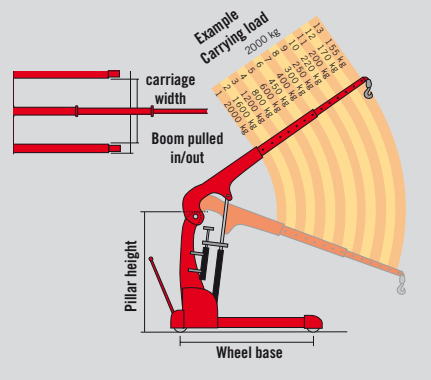
Mechanic drive positioner

Info

Optionally you may also acquire a mechanical telescopic boom - ideal for adjusting loads during assembly and disassembly of machine parts, tools, etc.

System type BA:
The types 1000 kg and 2000 kg are also available with battery-powered LIFTING drive:

- On pushing button with persistent speed
- Saving physical force
- Health-friendly



Carrying load on radius before hydraulics

Carrying load max [kg]	Pos. 1 [kg/mm]	Pos. 2 [kg/mm]	Pos. 3 [kg/mm]	Pos. 4 [kg/mm]	Pos. 5 [kg/mm]	Pos. 6 [kg/mm]	Pos. 7 [kg/mm]	Pos. 8 [kg/mm]	Pos. 9 [kg/mm]	Pos. 10 [kg/mm]	Pos. 11 [kg/mm]	Pos 12 [kg/mm]	Pos. 13 [kg/mm]	Order-no.
	Carrying load/unload in front of hydraulics /in clamps in the front in mm													
1000	1000/700	820/850	660/1000	460/1150/ (138)	355/1300/ (288)	280/1450/ (438)	240/1600/ (588)	180/1750/ (738)	150/1900/ (888)	130/2030/ (1038)	110/2200/ (1188)	100/2350/ (1338)	90/2500/ (1488)	HB.IK.10.FP
2000	2000/1100	1600/1275	1200/1450	800/1625/ (155)	600/1800/ (330)	450/1975/ (505)	400/2150/ (680)	300/2325/ (855)	250/2500/ (1030)	220/2675/ (1205)	200/2850/ (1380)	170/3025/ (1555)	155/3200/ (1730)	HB.IK.20.FP
3000	3000/1100	2700/1275	1900/1450	1350/1625/ (70)	1000/1800/ (245)	830/1975/ (420)	700/2150/ (595)	500/2325/ (760)	400/2850/ (935)	330/2675/ (1110)	270/2850/ (1285)	230/3025/ (1460)	200/3200/ (1635)	HB.IK.30.FP
1000	1000/650	880/800	780/1000	700/1150	650/1300	600/1450/ (175)	550/1600/ (325)	255/1750/ (475)	235/1900/ (625)	220/2050/ (775)	210/2200/ (925)	197/2350/ (1075)	185/2500/ (1225)	HB100.BA.FP
2000	2000/1100	1800/1275	1650/1450	1500/1625	1400/1800	1300/1975/ (15)	1200/2150/ (190)	570/2325/ (365)	540/2500/ (540)	510/2675/ (715)	485/2850/ (890)	460/3025/ (1065)	440/3200/ (1240)	HB200.BA.FP

Industrial crane, standard

Type	Carrying load max. [kg]	Carriage width inside/ outside [mm]	Pillar height [mm]	Wheels [mm]	Height for fork lift [mm]	Wheel base [mm]	Weight [kg]	Crane checking book	Order-no.	Price/piece €
Parallel	1000	830/980	1625	2 x 125, 1 x 200	155	1600	300	included	HB.IK.10.FP	5.780,00
Parallel	2000	1050/1250	1950	3 x 200	230	1895	550	included	HB.IK.20.FP	7.185,00
Parallel	3000	1400/1600	1950	2 x 250, 1 x 200	270	1980	800	included	HB.IK.30.FP	9.920,00
Parallel	1000	830/980	1650	2 x 125, 1 x 200	155	1830	325	included	HB100.BA.FP	9.095,00
Parallel	2000	1050/1250	1950	3 x 200	230	2385	550	included	HB200.BA.FP	15.525,00

Surcharge | Inspection service

With detailed consultation being obligatory for this kind of cranes and many special versions being available, we can give prices only on request!

Wire Ropes Meter goods according to EN 12385-4

Every meter a quality of its own

Here, you will find the right steel rope as meter goods for a wide range and variety of applications.
If you have questions regarding the correct choice of cable for your specific application needs, just speak to your SIP Provider.
We are happy to help!

Info

SIP Tests and repairs according to Arb-SchG!

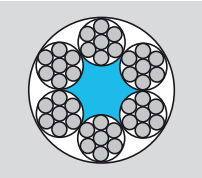
See pages 8-9.

Guy Ropes and shrouds

- Round strand, galvanized
- 6x7- 6x7-FC (fiber core)
- EN 12385-4 (DIN 3055) Table 5
- Lifting Power 1770 N / mm²

Application:
Guy rope

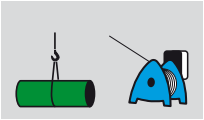
Rope Ø [mm]	Weight [kg/m]	Min.breaking strength [kN]	Order-no.	Price€ lin. m
2	0,0143	2,35	DM.102.000	0,51
3	0,0322	5,29	DM.103.000	0,74
4	0,0572	9,41	DM.104.000	0,85
5	0,0894	14,70	DM.105.000	1,03
6	0,129	21,10	DM.106.000	1,32



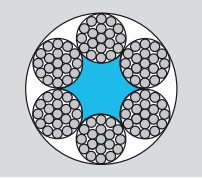
Winches and slings

- Round strand, galvanized
- 6x19M-FC (Fibre Core) Standard
- EN 12385-4 (DIN 3060) Table 12
- Lifting Power 1770 N / mm²

Application:
Guy rope
Winch rope



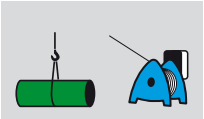
Rope Ø [mm]	Weight [kg/m]	Min.breaking strength [kN]	Order-no.	Price€ lin. m
3	0,0311	4,90	DM.203.000	1,07
4	0,0554	8,70	DM.204.000	1,43
5	0,0865	13,60	DM.205.000	1,69
6	0,125	19,60	DM.206.000	1,84
8	0,221	34,80	DM.208.000	2,40
10	0,346	54,40	DM.210.000	3,38



Winches and slings

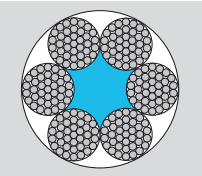
- Round strand, galvanized
- 6x37M-FC (fiber core)
- EN 12385-4 (DIN 3066) Table 13
- Lifting Power 1770 N / mm²

Application:
Guy rope
Winch rope



Rope Ø [mm]	Weight [kg/m]	Min.breaking strength [kN]	Order-no.	Price€ lin. m
8	0,221	33,4	DM.308.000	3,60
10	0,346	52,2	DM.310.000	4,05
12	0,498	75,1	DM.312.000	5,13
13	0,585	88,2	DM.313.000	5,71
14	0,678	102,0	DM.314.000	6,65
16	0,886	134,0	DM.316.000	7,81
18	1,120	169,0	DM.318.000	9,32
20	1,380	209,0	DM.320.000	11,05
22	1,670	253,0	DM.322.000	12,95
24	1,990	301,0	DM.324.000	15,10

Order example: DM.308.150 expand steel rope cable with an 8 mm diameter, length 150 m



Safety and Guy Ropes

- Galvanized steel wire ropes
- 6x7- 6x7-FC (fiber core)
- EN 12385-4
- Lifting Power 1770 N / mm²
- Transparent PVC coating

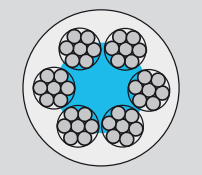
Also suitable as a control cable for dredging and blocking areas off.

Application:
Guy rope

Rope-Ø [mm]	Weight [kg/m]	Min.breaking strength [kN]	Order-no.	Price€ lin. m
1,8 by 2,5	0,018	1,4	DM.602.000	0,51
2 by 3	0,028	2,35	DM.603.000	0,62
3 by 4	0,038	5,2	DM.604.000	0,99
3 by 5	0,040	5,2	DM.605.000	1,30
4 by 6	0,071	9,4	DM.606.000	2,33
6 by 8*	0,147	21	DM.608.000	3,40
8 by 10*	0,249	37,4	DM.610.000	4,08

*Wire rope 6 x 19 + fibre enclosure DIN 3060

Surcharge | Inspection service



Galvanized steel rope cable with PVC coating

Wire Ropes Meter goods according to EN 12385-4

High grade

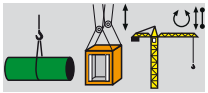
Info

Need galvanized Rope or stainless steel rope, please contact us. Your SIP partner will be happy to advise you.

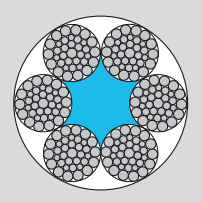
Crane Ropes

- Round strand, greased blank
- 6x36WS-FC (fiber core) Warrington Seale
- EN 12385-4 (DIN 3064) Table 9
- Lifting Power 1770 N / mm²

Application:
Elevating, holding, lifting, attachment, sling, winch rope



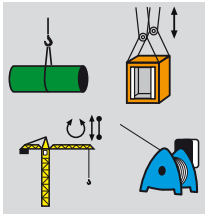
Rope Ø [mm]	Weight [kg/m]	Min.breaking strength [kN]	Order-no.	Price€ lin. m
13	0,643	98,7	DM.413.000	5,53
14	0,745	114,0	DM.414.000	6,43
16	0,973	149,0	DM.416.000	7,46
18	1,230	189,0	DM.418.000	8,83
20	1,520	234,0	DM.420.000	10,50
22	1,840	283,0	DM.422.000	12,20
24	2,190	336,0	DM.424.000	14,20
26	2,570	395,0	DM.426.000	16,60



Tractor, crane and winch cables

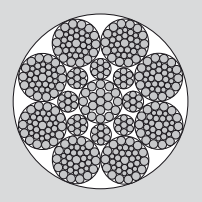
- Round strand, greased blank
- 8x36WS-IWCR (steel core) Warrington Seale EN 12385-4 (DIN 3067) Table 10
- Lifting Power 1770 N / mm²

Application:
Elevating, holding, lifting, attachment, sling, locking rope, winch rope



Rope Ø [mm]	Weight [kg/m]	Min.breaking strength [kN]	Order-no.	Price€ lin. m
13	0,735	106	DM.513.000	8,12
16	0,11	151	DM.516.000	10,85
18	1,41	204	DM.518.000	12,40
20	1,74	252	DM.520.000	14,75
22	2,11	305	DM.522.000	16,95
24	2,51	363	DM.524.000	19,80
25	2,72	405	DM.525.000	21,10

Surcharge **Inspection service**



Cutting costs for cables:

Please note the minimum order

invoice total	under	€	25,00	= 20% of the value
	from	€	25,00	= 10% " "
	from	€	50,00	= 5% " "
	from	€	150,00	= 4% " "
	from	€	250,00	= 3% " "

Info

So you can roll your rope in or out properly.

Special ropes wire rope meter goods

Always the best choice

Why should you use Casar special wire ropes?

1. To cut costs
2. To achieve high breaking strength
3. If problems occur with standard cables

The benefits!
Ca. 50% total cost savings
Ca. 200% more tonnage production

With uusing the Casar special wire ropes you have an initial higher cost, but consider this:

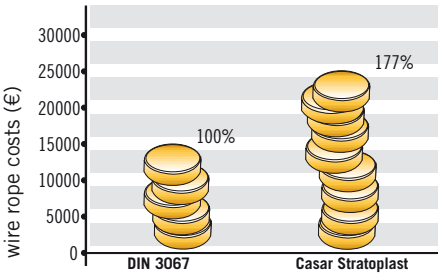
- No multiple assembly
- No loss of production
- Improved smoothness

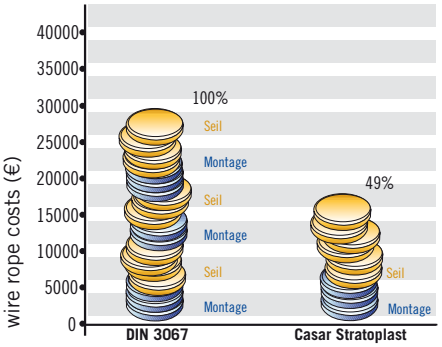
The result:
During the period in which the Casar had reached the end of its lifespan, three DIN cables had to be purchased and assembled to produce the same tonnage output.

Info

We supply all grades of steel rope in the strength of 1770 N / mm², 1960 N/mm², 2160 N/mm².

Quality makes the difference

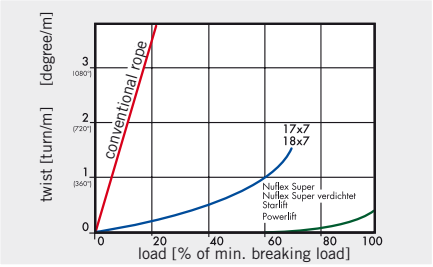




Costs for 1.3 million tons (tonnes production)

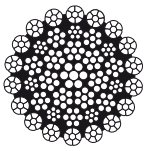
For special applications and long life, we recommend the use of special cables.

- High breaking strength
- Intensive lubrication
- Optimum cable geometry



Special cables Meter goods

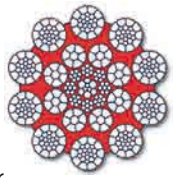
Casar Eurolift



- Free rotating, flexible hoisting rope with sealed strands
- Extremely high braking point
- Good resistance to pressure on the drum
- Intensive lubrication

Rope-Ø [mm]	Weight [kg/m]	1960 N/mm² Min. breaking str. [kN]	Order-no.	Price blank €/%m
10	0,50	89,6	CA.EL.10.00	1.108,00
11	0,60	108,8	CA.EL.11.00	1.161,00
12	0,71	130,8	CA.EL.12.00	1.141,00
13	0,83	152,7	CA.EL.13.00	1.187,00
14	0,96	179,1	CA.EL.14.00	1.229,00
15	1,10	204,0	CA.EL.15.00	1.367,00
16	1,27	230,6	CA.EL.16.00	1.412,00
18	1,60	293,9	CA.EL.18.00	1.611,00
20	1,98	362,2	CA.EL.20.00	1.819,00
22	2,39	441,4	CA.EL.22.00	2.095,00
24	2,84	524,3	CA.EL.24.00	2.326,00
25	3,04	567,9	CA.EL.25.00	2.552,00

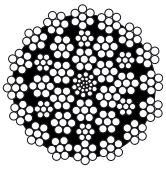
Casar Superplast



- 10-stranded rope with sealed outer strands
- Corrosion protected steel core, with plastic liner between the outer layer and inner layers.
- Very high braking point

Rope-Ø [mm]	Weight [kg/m]	1960 N/mm² Min. breaking str. [kN]	Order-no.	Price blank €/%m
10	0,47	90,9	CA.SU.10.00	1.176,00
11	0,57	108,9	CA.SU.11.00	1.119,00
13	0,79	151,8	CA.SU.13.00	1.090,00
14	0,90	173,8	CA.SU.14.00	1.183,00
16	1,18	226,5	CA.SU.16.00	1.394,00
18	1,52	292,8	CA.SU.18.00	1.581,00
20	1,87	359,4	CA.SU.20.00	1.857,00
22	2,24	432,2	CA.SU.22.00	2.218,00
24	2,69	517,4	CA.SU.24.00	2.480,00
25	2,91	585,0	CA.SU.25.00	2.739,00

Casar Starlift rotation free



- Rotation resistant wire rope with sealed steel core
- Very high braking point
- Intensive lubrication
- Long life

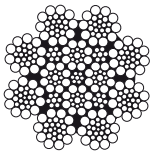
Rope-Ø [mm]	Weight [kg/m]	1960 N/mm² Min. breaking str. [kN]	Order-no.	Price blank €/%m
10	0,46	76,6	CA.SL.10.00	699,00
12	0,67	110,7	CA.SL.12.00	818,00
14	0,91	150,5	CA.SL.14.00	994,00
16	1,18	197,2	CA.SL.16.00	1.112,00
18	1,49	246,5	CA.SL.18.00	1.365,00
20	1,86	307,5	CA.SL.20.00	1.652,00
22	2,25	373,2	CA.SL.22.00	1.926,00
24	2,67	443,5	CA.SL.24.00	2.140,00

Casar Stratoplast

- High bending strength
- Low vibration sensitivity
- Corrosion protection of steel core with plastic layer between the outer strands and steel core
- Intensive lubrication

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² Min. breaking str. [kN]	Order-no.	Price blank €/%m
10	0,44	74,0	CA.SP.10.00	705,00
12	0,61	106,6	CA.SP.12.00	774,00
14	0,85	144,6	CA.SP.14.00	1.031,00
16	1,12	189,0	CA.SP.16.00	1.224,00
18	1,41	239,8	CA.SP.18.00	1.387,00
20	1,77	295,3	CA.SP.20.00	1.624,00
22	2,18	356,2	CA.SP.22.00	1.945,00

Casar Alphalift



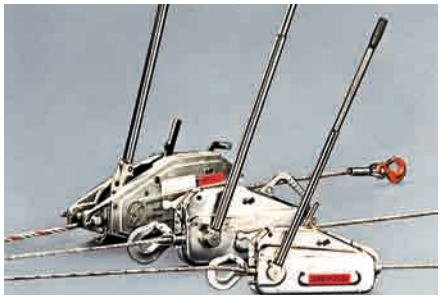
- Stretching Arm
- Highly flexible
- 8-stranded anti over-laping rope in parallel construction
- Very high braking point

Rope-Ø [mm]	Weight [kg/m]	1770 N/mm² Min. breaking str. [kN]	Order-no.	Price blank €/%m
6	0,15	31,5	CA.AL.06.00	710,00
7	0,21	42,6	CA.AL.07.00	512,00
8	0,28	55,0	CA.AL.08.00	595,00
9	0,35	72,0	CA.AL.09.00	598,00
10	0,43	84,0	CA.AL.10.00	696,00
11	0,52	102,9	CA.AL.11.00	840,00
12	0,62	123,2	CA.AL.12.00	876,00
13	0,72	143,3	CA.AL.13.00	958,00

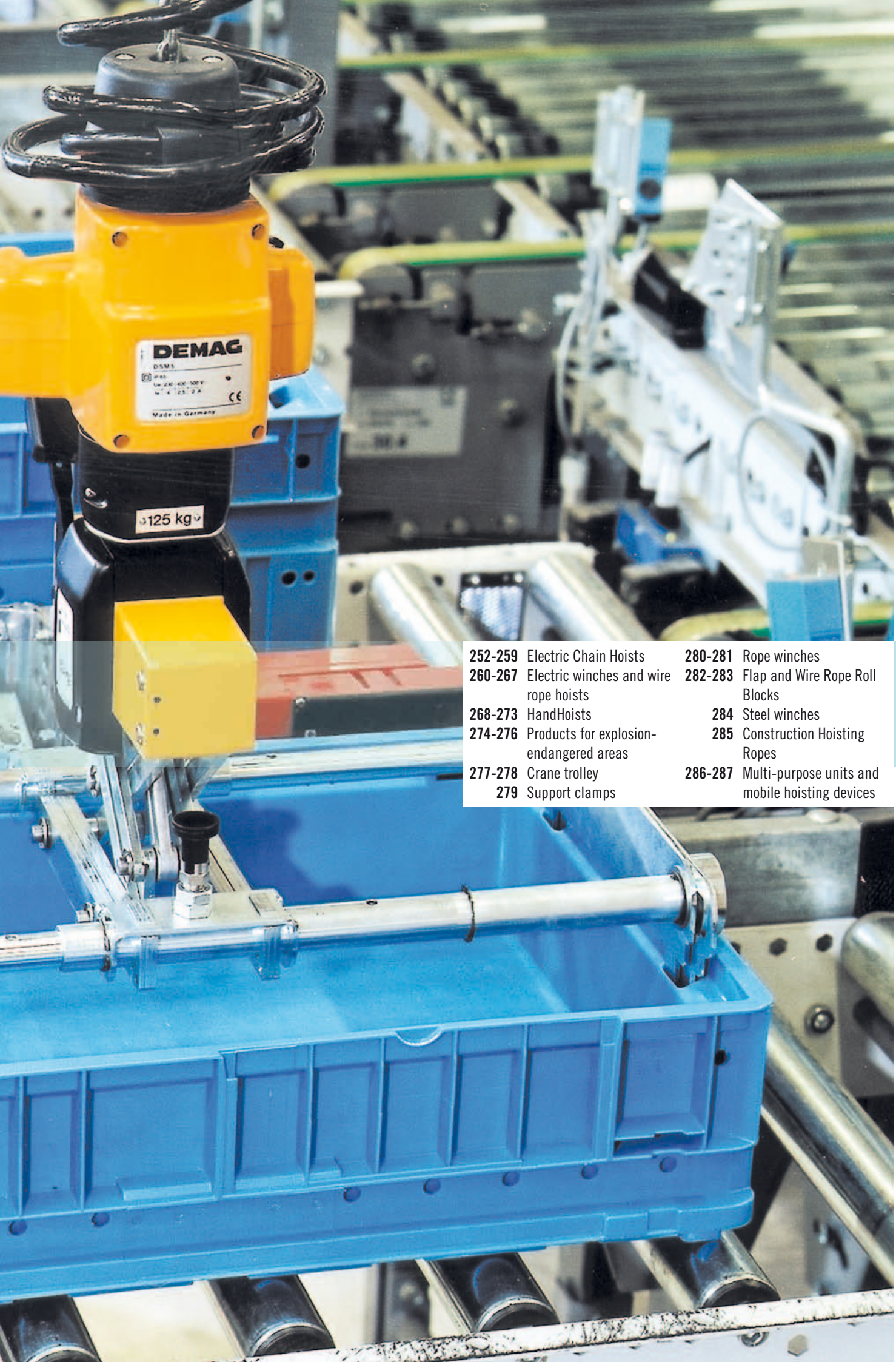
Surcharge

Info

Only rotation resistant ropes are allowed to work with vertebrates!



Hoists



252-259 Electric Chain Hoists
260-267 Electric winches and wire rope hoists
268-273 HandHoists
274-276 Products for explosion-endangered areas
277-278 Crane trolley
279 Support clamps
280-281 Rope winches
282-283 Flap and Wire Rope Roll Blocks
284 Steel winches
285 Construction Hoisting Ropes
286-287 Multi-purpose units and mobile hoisting devices

Monti Compact and Mobile Electric Chain Hoist

The ideal mounting assistant

The Monti electric chain hoist is the ideal mounting assistant. Because of its easy and compact design, the chain hoist is easy to install and easy to transport inside the accompanying case. Soft warm-up of the engine enables exact positioning. The hoist provides 2 speeds: main up speed and precision up speed, continuously adjustable. It is equipped with overload fastener by slip-clutch and limit switch for top and bottom final hook position.
Chain box for 3 m standard lift included. Ready for operation with control system, chain, and power cable. Available for 240 kg and for 480 kg.

- 230 V, 1 Ph, 50 Hz engine
- Degree of protection IP 54, insulation class F
- 24 Volt control voltage with emergency break
- FEM classification: 1 Am (M4)
- Length of control cable 2.5 m
- Power cable with isolated ground receptacle 1.5 m

Mobile SIP electric chain hoist Monti with suspension hook, incl. case
- Prices for 3 m lifting height
- 1.5 m control cable
- Chain box
- Direct control
- Emergency break
- 230 V, 1 Ph, 50 Hz

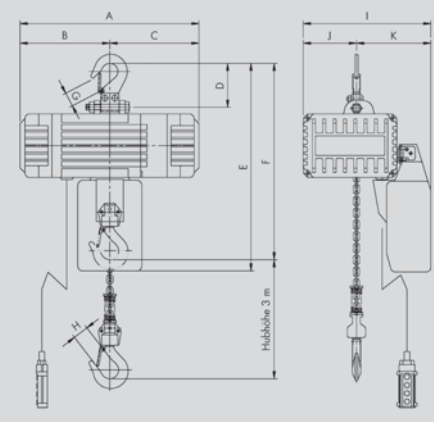
Info

Do you need the mobile SIP electric chain hoist Monti with longer lifting chain, larger chain box or extended control cable? Ask your SIP partner!

Car. load [kg]	Engine power [W]	Switch-on period [% ED]	Lifting speed contin./const.	Chain strength	Chain size [mm]	Weight ca. [kg]	Order-no.	Price/ piece €
240	600	30	0-3,4/12,8	1	4 x 12	16,5	PL.MONT.24	999,00
480	600	30	0-1,6/6,3	2	4 x 12	19,4	PL.MONT.48	1.090,00

Other liftings heights or add. chain length on request!

Type	Dimensions [mm]										
	A	B	C	D	E	F	G	H	I	J	K
PL.MONT.24	364	182	182	89	423	400	25	25	260	108	152
PL.MONT.48	364	182	182	109	423	497	31	30	260	84	176



Manulift Electric chain hoist

Power-saving device operated with one hand

Rocker switch, s. Order-No. ...V2**R**

Operate with one hand – left- or right-handed by means of a double rocker switch

The Manulift DCM-Pro was designed for safe and rapid load handling using only one hand. The new DCM-Pro consists of a lifting unit of the chain hoist DC-Pro and a connector control device DSM-C connected by a helical cable. On account of the control device being attached to the hoisting device – for left- and right-handed – the user only needs one hand to operate the chain hoist and move the load.

The quick action gear makes changing hoists easy. All Manulift hoisting devices have a coupling pin with screw safety catch which fits into the rapid action gear. By raising the release box it is released simply.

Load bearing capacity [kg]	Version	Lifting height [m]	Lifting speed main lift [m/min]	Lifting speed fine lift [m/min]	ED [%]	Height chain hoist (C-Measure) without wheel base [mm]	Height chain hoist (C-Measure) with wheel base U11 [mm]	Order-no.	Price/ piece €
80	DCM 1-80 V 8/2	2,8	8	2	60 (40/20)	694	746	DML.08.V1F	1.680,00
80	DCM 2-80 V 16/4	2,8	16	4	60 (40/20)	694	746	DML.08.V2F	1.910,00
80	DCMS 1-80 VS 30-30 [1]	2,8	30	0,15	20–60 [3]	694	746	DML.08.V1E	2.480,00
125	DCM 1-125 V 8/2	2,8	8	2	60 (40/20)	694	746	DML.12.V1F	1.680,00
125	DCM 2-125 V 16/4	2,8	16	4	60 (40/20)	694	746	DML.12.V2F	1.910,00
125	DCMS 1-125 VS 30-30 [1]	2,8	30	0,15	20–60 [3]	694	746	DML.12.V2E	2.480,00
125	DCRS 1-125 VS 30-30 [1]	2,8	30	0,15	20–60 [3]	754	806	DML.12.V2R	2.648,00
250	DCM 2-250 V 8/2	2,8	8	2	60 (40/20)	694	746	DML.25.V1F	1.971,00
250	DCM 5-250 V 16/4	2,8	16	4	60 (40/20)	746	798	DML.25.V2F	2.136,00
250	DCMS 2-250 VS 16-30 [1]	2,8	16 (30) [2]	0,15	20–60 [3]	694	746	DML.25.V20	2.835,00
250	DCRS 2-250 VS 16-30 [1]	2,8	16 (30) [2]	0,15	20–60 [3]	754	806	DML.25.V2R	2.989,00

[1]Continuous speed control [2]Acceleration without load [3]20% ED at lowest up speed, 60% ED at or above nominal up speed

Manulift Accessories Claw

The optimal claw selection for flexible hoisting

NEW

Revolving load hook
250 kg

Claw hook
125 kg

Load belt
125 kg

Sheer pliers to grab
cornered goods
125 kg

Sheer pliers to grab round
goods 125 kg

NEW

Load hook adapter
250/500 kg

A large selection of tried and tested hoisting devices allows optimal and flexible adaption to the task. The spectrum ranges from the normal load hooks to the various sheer pliers and parallel grip systems.

Info

Using the flexible coupling pin individuals loads can be raised!

NEW

Accessories	Bestell-Nr.	Preis/ Stück €
Load hook	DMLZ.SZ.LH	37,00
Claw hook	DMLZ.SZ.GH	56,00
Load belt	DMLZ.SZ.TR	66,00
Sheer plier Type A*	DMLZ.SZ.TA	on request
Sheer plier Type B*	DMLZ.SZ.TB	on request
Load hook - adapter A	DMLZ.SZ.LA	80,00
Load hook - adapter B	DMLZ.SZ.LB	80,00
Coupling pin	DMLZ.SZ.KS	14,00

*When ordered please state range.

Manulift-Accessories Parallel grip system PGS

Loads up to 125 kg under control

PGS-container gripper

PGS-shaft gripper

PGS-gripper

Info

KBK profiles are to be found on Page 234 of the catalogue.

Info

Grips for other containers on request.

Grippers for container type	Container size [mm]	[mm]	Gripper version	Order-no.	Price/piece €
Eurobox (Inner gripper)	600 x 400		fixed	DM.GB.EB.64	1.590,00
Eurobox (Outer gripper)		400 x 300	fixed	DM.GB.EB.43	1.637,00
KLT	600 x 400		fixed	DM.GB.KL.64	1.305,00
KLT		400 x 300	fixed	DM.GB.KL.34	1.305,00
KLT	600 x 400	400 x 300	adjustable	DM.GB.KL.VS	1.400,00
L/R-KLT	600 x 400		fixed	DM.GB.LR.64	1.305,00
L/R-KLT		400 x 300	fixed	DM.GB.LR.43	1.305,00
L/R-KLT	600 x 400	400 x 300	adjustable	DM.GB.LR.VS	1.400,00
MF (SSI Schäfer)	600 x 400		fixed	DM.GB.SS.64	1.305,00
MF (SSI Schäfer)		400 x 300	fixed	DM.GB.SS.43	1.305,00
Eurotec (Utz)	600 x 400		fixed	DM.GB.UT.64	1.305,00
Eurotec (Utz)		400 x 300	fixed	DM.GB.UT.43	1.305,00
			PGS-shaft-gripper W1	DM.GB.PW.W1	On request
			PGS-shaft-gripper W2	DM.GB.PW.W2	On request
			PGS-shaft-gripper W3	DM.GB.PW.W3	On request
			PGS-gripper	DM.GB.PG.KG	On request

NEW

KLT-Gripper Flexible Lifting and Pitching of Boxes

The box gripper for electric hoists or Manulift

SIP is offering you a vast supply of grippers for SLC containers. The individual grippers are ergonomically designed, so that they are easy to operate. Their low weight also contributes to the easy handling. We are supplying the SLC grippers with integrated Manulift connections, see page 254, or with eyelet for electric hoists.

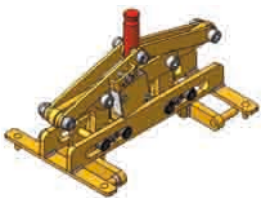
The SLC grippers are fitting for SLC container types 34..., 43... and 64...
We may also supply SLC box grippers according to your specifications, p. e. with suspension eyelet instead of Manulift connection. Ask us about that!

Box gripper	Type	KLT-Box Typ 34...	KLT-Box Typ 43...	KLT-Box Typ 64...	Connection	Load bearing capacity [kg]	Weight [kg]	Order-no.	Price/piece €
Lifting gripper01E	01E				Manulifter	50	5	KLT.HG.01E	1.159,00
Lifting gripper01A	01A				Manulifter	50	6	KLT.HG.01A	1.185,00
Lift. gripper 01D	01D				Manulifter	50	6	KLT.HG.01D	1.210,00
Tilt gripper w. counter weight Arrangement Front-side	02C				Manulifter	50	19	KLT.HG.02C	2.245,00
	02A				Manulifter	50	21	KLT.HG.02A	2.287,00
	02E				Manulifter	50	24	KLT.HG.02E	2.328,00
Tilt gripper Arrangement Front-side	02F				Manulifter	50	13	KLT.HG.02F	2.451,00
	02B				Manulifter	50	15	KLT.HG.02B	2.410,00
	02G				Manulifter	50	17	KLT.HG.02G	2.451,00

Surcharge

KLT Typ 34 ... (3414 - 3417)		KLT Typ 43 ... (4314 - 4328)		KLT Typ 64 ... (6414 - 6428)	
L x B	300 x 200 mm	L x B	400 x 300 mm	L x B	600 x 400 mm
H	140 od. 170 mm	H	140 od. 280 mm	H	140 od. 280 mm

More gripper for example parallel gripper, stainless steel gripper and more are available on request...



Electric Chain Hoist with Contactor Control

Compact Electric Hoist GCH with Low Height

Equipment:

- 3 m lifting height by standard
- Rotary limit switch for top and bottom final hook position, adjustable
- Galvanised load chain compliant to DIN EN 818-7-T
- Eyelet suspension
- Control board with 1.8 m control cable
- Overload fastener by slip-clutch
- FEM-conforming design.
- Operation voltage 3 Ph / 400 Volt / 50 Hz
- 42 Volt contactor control
- Degree of protection IP 55
- Insulation class F
- Certified as compliant to DIN EN ISO 9001:2008
- Incl. test record conforming to CE and UVV regulations
- Compact design with small hook size

Info

GCH accessories are available on following pages.

TYP	Load bearing capacity in kg acc. to FEM*					Lifting speed	Motor power	3 x 400 V 50 Hz	Weight with 3 m lift	design height	Order-no.	Price	Price more lift per m**
	1Bm M3 [kg]	1Am M4 [kg]	2m M5 [kg]	3m M6 [kg]	4m M7 [kg]	[m/min.]	[kW]	[A]	[kg]	[mm]	GCH with 3 m lift	€	€
GCH 250/1N	250	200	160	125	100	8	0,36	1,3	16	362	H.20.500.03	956,00	21,00
GCH 250/1NF	250	200	160	125	100	8/2	0,36/0,09	2,7/3,0	17	362	H.20.501.03	1.095,00	21,00
GCH 250/1SF	160	125	100	80	60	12,5/3	0,36/0,09	2,7/3,0	17	362	H.20.502.03	1.117,00	21,00
GCH 250/1HF	100	80	60	50	40	20/5	0,36/0,09	2,7/3,0	17	362	H.20.503.03	1.133,00	21,00
GCH 250/2N	500	400	320	250	200	4	0,36	1,3	18	395	H.20.504.03	1.042,00	38,00
GCH 250/2NF	500	400	320	250	200	4/1	0,36/0,09	2,7/3,0	19	395	H.20.505.03	1.181,00	38,00
GCH 250/2SF	320	250	200	160	125	6,3/1,5	0,36/0,09	2,7/3,0	19	395	H.20.506.03	1.204,00	38,00
GCH 500/1N	500	400	320	250	200	8	0,72	2,1	17	377	H.20.507.03	1.151,00	26,00
GCH 500/1NF	500	400	320	250	200	8/2	0,72/0,18	2,9/3,0	18	377	H.20.508.03	1.290,00	26,00
GCH 500/1SF	320	250	200	160	125	12,5/3	0,72/0,18	2,9/3,0	18	377	H.20.509.03	1.313,00	26,00
GCH 500/1HF	200	160	125	100	80	20/5	0,72/0,18	2,9/3,0	17	377	H.20.510.03	1.328,00	26,00
GCH 500/2N	1.000	800	630	500	400	4	0,72	2,1	19	417	H.20.511.03	1.261,00	47,00
GCH 500/2NF	1.000	800	630	500	400	4/1	0,72/0,18	2,9/3,0	20	417	H.20.512.03	1.401,00	47,00
GCH 500/2SF	630	500	400	320	250	6,3/1,5	0,72/0,18	2,9/3,0	20	417	H.20.513.03	1.424,00	47,00
GCH 1000/1N	1.000	800	630	500	400	8	1,45	3,7	45	526	H.20.514.03	1.571,00	32,00
GCH 1000/1NF	1.000	800	630	500	400	8/2	1,45/0,36	4,0/3,0	46	526	H.20.515.03	1.702,00	32,00
GCH 1000/1SF	630	500	400	320	250	16/4	1,83/0,46	6,0/3,0	48	526	H.20.516.03	1.780,00	32,00
GCH 1000/2N	2.000	1.600	1.250	1.000	800	4	1,45	3,7	50	577	H.20.517.03	1.737,00	60,00
GCH 1000/2NF	2.000	1.600	1.250	1.000	800	4/1	1,45/0,36	4,0/3,0	51	577	H.20.518.03	1.870,00	60,00
GCH 1000/2SF	1.250	1.000	800	630	500	8/2	1,83/0,46	6,0/3,0	53	577	H.20.519.03	1.947,00	60,00
GCH 1600/1N	1.600	1.250	1.000	800	630	8	2,44	6,6	63	608	H.20.700.03	2.213,00	44,00
GCH 1600/1NF	1.600	1.250	1.000	800	630	8/2	2,44/0,61	6,0/4,0	65	608	H.20.701.03	2.368,00	44,00
GCH 1600/1SF	1.000	800	630	500	400	12,5/3	2,40/0,58	6,0/4,0	65	608	H.20.702.03	2.445,00	44,00
GCH 1600/2N	3.200	2.500	2.000	1.600	1.250	4	2,44	6,6	73	690	H.20.703.03	2.433,00	84,00
GCH 1600/2NF	3.200	2.500	2.000	1.600	1.250	4/1	2,44/0,61	6,0/4,0	75	690	H.20.704.03	2.588,00	84,00
GCH 1600/2SF	2.000	1.600	1.250	1.000	800	6,3/1,5	2,40/0,58	6,0/4,0	75	690	H.20.705.03	2.665,00	84,00
GCH 2000/1N	2.000	1.600	1.250	1.000	800	8	3,05	7,5	65	608	H.20.706.03	2.425,00	57,00
GCH 2000/1NF	2.000	1.600	1.250	1.000	800	8/2	3,05/0,77	7,5/4,5	67	608	H.20.707.03	2.580,00	57,00
GCH 2000/1SF	1.250	1.000	800	630	500	12,5/3	2,58/0,72	7,5/4,5	67	608	H.20.708.03	2.658,00	57,00
GCH 2000/2N	4.000	3.200	2.500	2.000	1.600	4	3,05	7,5	76	690	H.20.709.03	2.722,00	110,00
GCH 2000/2NF	4.000	3.200	2.500	2.000	1.600	4/1	3,05/0,77	7,5/4,5	78	690	H.20.710.03	2.876,00	110,00
GCH 2000/2SF	2.500	2.000	1.600	1.250	1.000	6,3/1,5	2,98/0,72	7,5/4,5	78	690	H.20.711.03	2.954,00	110,00
GCH 2500/1N	2.500	2.000	1.600	1.250	1.000	6,4	3,05	7,5	65	608	H.20.712.03	2.599,00	57,00
GCH 2500/1NF	2.500	2.000	1.600	1.250	1.000	6,5/1,6	3,05/0,77	7,5/4,5	67	608	H.20.713.03	2.755,00	57,00
GCH 2500/1SF	1.600	1.250	1.000	800	630	10/2,5	3,05/0,77	7,5/4,5	67	608	H.20.714.03	2.832,00	57,00
GCH 2500/2N	5.000	4.000	3.200	2.500	2.000	3,2	3,05	7,5	76	690	H.20.715.03	2.895,00	110,00
GCH 2500/2NF	5.000	4.000	3.200	2.500	2.000	3,2/0,8	3,05/0,77	7,5/4,5	78	690	H.20.716.03	3.050,00	110,00
GCH 2500/2SF	3.200	2.500	2.000	1.600	1.250	5/1,3	3,05/0,77	7,5/4,5	78	690	H.20.717.03	3.127,00	110,00

** Loading chain with steering cable

Order example: Please also enter lift! H.20.500.05 GCH 250/1N with 5 m lift

Electric chain hoists with direct control and robust design

Typ GCHO up to 2 t

- Less moving parts
- Compact housing with lid made of resistant aluminum die-cast

Features:

- Main and fine tune lifting speeds
- 3 m standard lift
- Galvanized load chain according to DIN EN 818-7-T
- Includes chain storage for up to 3 m
- Control panel with 1.8 m control cable
- Eyelet suspension
- Overload protection by slipping clutch
- Design FEM
- V/50 Hz voltage 3-Ph/400
- Direct control 400 V
- Protection IP 55
- Insulation class
- Certified according to DIN EN ISO 9001:2008
- Incl. Log book in accordance with the EC and UVV rules
- Compact design with low hook dimensions

TYPE	Load bearing capacity in kg acc. to FEM*					Lifting speed	Engine power	3 x 400 V 50 Hz	Weight with 3 m lift	Order-no.	Price	Price add. lift per m*
	1Bm M3 [kg]	1Am M4 [kg]	2m M5 [kg]	3m M6 [kg]	4m M7 [kg]	[m/min.]	[kW]	[A]	[kg]	GCHO with 3 m Hub	€	€
GCHO 250/1NF	250	200	160	125	100	8/2	0,36/0,09	2,7/3,0	17	H.20.083.03	950,00	17,00
GCHO 250/2NF	500	400	320	250	200	4/1	0,36/0,09	2,7/3,0	19	H.20.084.03	1.020,00	32,00
GCHO 500/1NF	500	400	320	250	200	8/2	0,72/0,18	2,9/3,0	18	H.20.085.03	1.090,00	22,00
GCHO 500/2NF	1.000	800	630	500	400	4/1	0,72/0,18	2,9/3,0	20	H.20.086.03	1.175,00	40,00
GCHO 1000/1NF	1.000	800	630	500	400	8/2	1,45/0,36	4,0/3,0	46	H.20.120.03	1.500,00	27,00
GCHO 1000/2NF	2.000	1.600	1.250	1.000	800	4/1	1,45/0,36	6,0/3,0	51	H.20.122.03	1.595,00	50,00

Example order: Please specify hub! H.20.083.05 GCHO 250/1NF with 5 m lift

Accessories for electric chain hoists for GCH and GCHO

Chain storage for type	Chain storage size		Order-no.	Price €
GCH / GCHO 250	up to 8 m chain	Plastic	H.20.754.08	on request
	up to 16 m chain	Plastic	H.20.755.16	on request
	up to 25 m chain	Textile	H.20.756.25	on request
GCH / GCHO 500	up to 6 m chain	Plastic	H.20.754.06	on request
	up to 12 m chain	Plastic	H.20.755.12	on request
	up to 20 m chain	Textile	H.20.756.20	on request
GCH / GCHO 1000	up to 8 m chain	Plastic	H.20.757.08	on request
	up to 35 m chain	Textile	H.20.758.35	on request
GCH 1600	up to 20 m chain	Textile	H.20.758.20	on request
GCH 2000/2500	up to 15 m chain	Textile	H.20.758.15	on request

More sizes and lifting heights on request!

Info

Special versions on request:

- **Motor with frequency control gear**
- **Low profile for low ceilings**
- **Synchronized electric chain hoists for long, bulky loads**
- **Chain and Telescope-Handy for accurate, comfortable placement**
- **Rust resistant electric chain hoist**
- **Electric chain hoists for Theaters, Studios und Stages BGV C1**
- **Electric chain hoists for Staub Ex zone EX II 3D IP 65 T 130 ° C**
- **Electric chain hoists and trolleys for 1-Ph/230V**
- **Electric chain hoists with special voltage**

Hook hanging	Order-no.	Price €
TYP 250 / TYP 500	H.20.760.00	37,00
TYP 1000	H.20.761.00	58,00
TYP 1600 / TYP 2000 / TYP 2500	H.20.762.00	136,00

Info

For electric chain hoists, we provide you with electric trolleys and carts.

Further information can be found in the catalog, pages 258 to 259. Or talk to us!

Add. accessories for GCH	Order-no.	Price€
Eng.therm.prot./ Klixon 120°C	H.20.073.00	108,00
High tension	H.20.076.00	113,00
High rotation tension	H.20.078.00	113,00
CEE-plug with 5m cables	H.20.080.00	85,00
Hour meter	H.20.553.00	90,00
Radio Control Uni Puller	H.20.557.00	1.200,00
Radio Control with el. trolley	H.20.558.00	1.400,00
long travel limit switch	H.20.559.00	350,00
rain hood from textile	H.20.561.00	a. Anfr.

Electric chain hoist in compact design

This super flat and highly stressable electric chain hoist

The electric chain hoist sets standards in hoisting devices. Fitted with special patented safety, brake and gear systems it offers maximum hoist height on account of its super flat design. This series combines the most modern technology in module construction with long life and good design.

- All electric hoist chains have fastening eyes or hook mountings for stationery mounting, also supplied with rolling or electro carriage

- A large range of hoists with one or two hoist speeds
- With direct control or 24-V protective control (additional cost)
- Large range of accessories such as electrical end switch, gear end switch, remote controls, integrated pulse generator and much more
- Special voltages, special frequencies and single phase chain hoists available

Electric chain hoist with single hole eye, rolling and electro carriage

Prices incl. chain for 3 m hoist height, 1,5 m cable, direct control (*Patented serial number), EMERGENCY stop, 400 V, 3 ph, 50 Hz

Type	Load Cap. [kg]	Number of loads strands	Hoisting speed [m/min]	Mec. speed	Order No. with one hole suspension eye	Price €	Chain storage up to 3 m hoisting heigh	Price €	Order No. With electric trolley 5+20m/min	Price €	Price Chain storage up to 3 m hoisting heigh €
020/52	125	1	8	3m	SK.0.0001.A	643,00	SK.R.0001.A	753,00	SK.E.0001.A	1.358,00	20,80
021/53	125	1	8/2	3m	SK.0.0001.B	804,00	SK.R.0001.B	914,00	SK.E.0001.B	1.519,00	20,80
021/52	160	1	6/1,5	3m	SK.0.0001.C	812,00	SK.R.0001.C	922,00	SK.E.0001.C	1.528,00	20,80
020/53	250	1	6	3m	SK.0.0002.A	726,00	SK.R.0002.A	836,00	SK.E.0002.A	1.441,00	20,80
030/50	250	1	12	2m	SK.0.0002.B	766,00	SK.R.0002.B	876,00	SK.E.0002.B	1.481,00	20,80
021/51	250	1	8/2	2m	SK.0.0002.C	829,00	SK.R.0002.C	939,00	SK.E.0002.C	1.544,00	20,80
030/53	320	1	10	1Bm	SK.0.0003.A	771,00	SK.R.0003.A	897,00	SK.E.0003.A	1.551,00	20,80
021/52	320	2	3/0,75	3m	SK.0.0003.B	868,00	SK.R.0003.B	978,00	SK.E.0003.B	1.614,00	20,80
020/53	500	2	3	3m	SK.0.0003.A	782,00	SK.R.0005.A	892,00	SK.E.0005.A	1.498,00	20,80
070/51	500	1	10	2m	SK.0.0005.C	891,00	SK.R.0005.C	1.017,00	SK.E.0005.C	1.671,00	24,30
021/51	500	2	4/1	2m	SK.0.0005.D	885,00	SK.R.0005.D	995,00	SK.E.0005.D	1.601,00	20,80
030/52	1000	2	4	1Bm	SK.0.0010.A	858,00	SK.R.0010.A	984,00	SK.E.0010.A	1.638,00	20,80
070/55	1000	1	6	1Am	SK.0.0010.C	1.089,00	SK.R.0010.C	1.298,00	SK.E.0010.C	1.891,00	24,30
071/53	1000	2	5/1,25	2m	SK.0.0010.E	998,00	SK.R.0010.E	1.124,00	SK.E.0010.E	1.778,00	24,30
090/55	1600	1	8	2m	SK.0.0016.A	1.496,00	SK.R.0016.A	1.830,00	SK.E.0016.A	2.327,00	49,40
091/56*	1600	1	10/2,5	2m	SK.0.0016.B	1.849,60	SK.R.0016.B	2.183,60	SK.E.0016.B	2.798,10	49,40
070/55	2000	2	3	1Am	SK.0.0020.A	1.175,00	SK.R.0020.A	1.384,00	SK.E.0020.A	1.977,00	24,30
071/55	2000	2	3/0,75	1Am	SK.0.0020.C	1.176,00	SK.R.0020.C	1.385,00	SK.E.0020.C	1.978,00	24,30
091/52	2000	2	5/1,25	3m	SK.0.0020.D	1.753,00	SK.R.0020.D	1.952,00	SK.E.0020.D	2.574,00	49,40
090/55	3200	2	4	2m	SK.0.0032.A	1.634,00	SK.R.0032.A	1.968,00	SK.E.0032.A	2.465,00	49,40
091/56*	3200	2	5/1,25	2m	SK.0.0032.B	1.987,60	SK.R.0032.B	2.321,60	SK.E.0032.B	2.936,10	49,40
110/52*	5000	2	5	2m	SK.0.0050.A	2.668,40	SK.R.0050.A	3.749,40	SK.E.0050.A	4.302,90	49,40
111/52*	5000	2	5/1,25	2m	SK.0.0050.B	2.964,60	SK.R.0050.B	4.045,60	SK.E.0050.B	4.600,10	49,40
110/54*	6300	2	4	1Bm	SK.0.0063.A	2.720,40	SK.R.0063.A	3.801,40	SK.E.0063.A	4.355,90	49,40
111/54*	6300	2	4/1	1Bm	SK.0.0063.B	3.016,60	SK.R.0063.B	4.097,60	SK.E.0063.B	4.652,10	49,40

* includes 24 V protective control and electrical end switches

= With electric trolley 4+16 m/min

Main dimensions

	Dimensions [mm] A	B	C	F	G	G2	J	N
SK.0.0001.A	212	192	218	37	360	401	20	292
SK.0.0001.B	212	192	218	37	360	401	20	292
SK.0.0001.C	212	192	218	37	360	401	20	292
SK.0.0002.A	212	192	218	37	360	401	20	292
SK.0.0002.B	212	192	218	37	375	401	20	292
SK.0.0002.C	212	192	218	37	360	401	20	292
SK.0.0003.A	212	192	218	37	375	401	20	292
SK.0.0003.B	212	192	218	37	413	454	22	292
SK.0.0003.A	212	192	218	37	413	454	22	292
SK.0.0005.C	266	232	274	47	414	460	22	292
SK.0.0005.D	212	192	218	37	413	454	20	292
SK.0.0010.A	212	192	218	37	428	463	22	292
SK.0.0010.C	266	232	274	47	414	460	22	292
SK.0.0010.E	266	232	274	47	524	570	28	292
SK.0.0016.A	358	285	359	58	516	550	28	385
SK.0.0016.B	358	285	359	58	516	550	28	385
SK.0.0020.A	266	232	274	47	524	570	28	292
SK.0.0020.C	266	232	274	47	524	570	28	292
SK.0.0020.D	358	285	359	58	625	659	30	385
SK.0.0032.A	358	285	359	58	625	659	30	385
SK.0.0032.B	358	285	359	58	625	659	30	385
SK.0.0050.A	358	285	363	66	740	806	42	409
SK.0.0050.B	358	285	410	66	740	806	42	409
SK.0.0063.A	358	285	363	66	740	806	42	409
SK.0.0063.B	358	285	410	66	740	806	42	409

Info

Special versions on request:

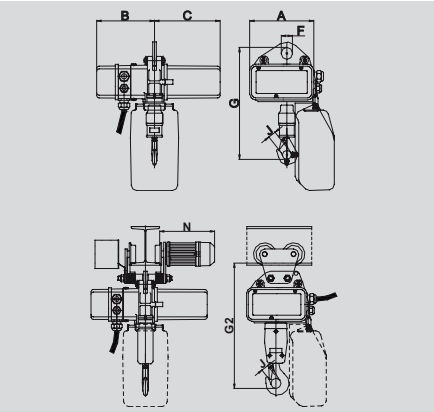
- **Special versions for synchronous hoisting of long objects**
- **Electrical chain hoists for theatres, studios and stages accord. To BGV C1**
- **Super short version / foot mounting available**
- **Rapid delivery of spare parts**
- **Other loads and speeds on request**

24 V Protective controls

Version	Order-No.	Price in €
1 Hoisting speed	SK.SS.01.00	164,30
2 Hoisting speeds	SK.SS.02.00	168,50
2 Drive speeds	SK.SS.03.00	117,50

Hook suspension

Model	Order-No.	Price in €
020/..., 021/...	SK.HA.020.0	51,50
030/...	SK.HA.030.0	51,50
070/..., 071/...	SK.HA.070.0	56,20
090/..., 091/...	SK.HA.090.0	82,20
110/..., 111/...	SK.HA.110.0	202,80

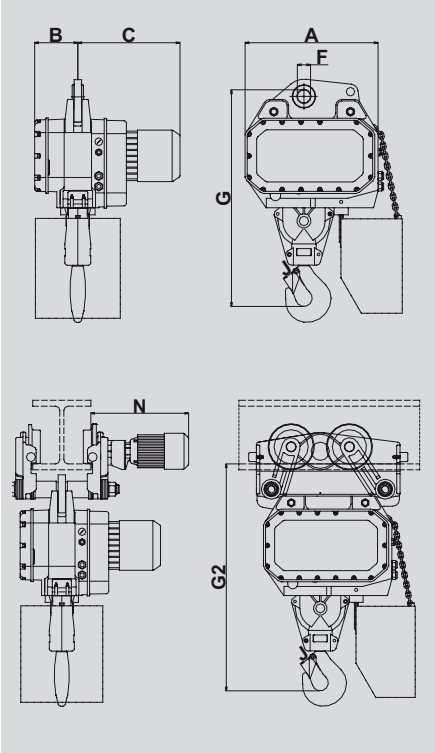


Electric chain hoist for hoisting heavier loads

Robust – strong – compact

The electrical chain hoist for hoisting heavier loads can be used for various purposes. Its compact design offers maximum hoist height taking up a minimum of space. Above all, the newly developed Type 235/50 with patented safety, brake gear system combines the most modern technology in module construction with long life for loads of up to 25 000 kg.

- All electric chain hoists can be supplied with suspension eyes or electrical carriage
- Hook suspension for Type 13/00X available
- Electrical end switch to limit the highest and lowest load position
- 24-V protective controls
- Gear end switch, remote control, integrated pulse generator, thermo-protective switch for the motor and much more on request
- Special voltages and frequencies in the range



Electrical chain hoist with integrated suspension eye or electrical carriage
Prices include chains for 3 m hoist height, 1,5 m control cable 24 V protective controls, electrical end switch, EMERGENCY stop button, 400 V, 3 ph, 50 Hz

Type	Load capacity	Number of load strands	Hoisting speed [m/min]	Mechanism group	Order No. with one hole susp. eye	Price €	Order No. with electric trolley 4+16 m/min	Price €	Price Chain storage up to 3 m hoisting h. €
13/00X	4000	1	5,6/1,4	2m	SK.N0.04.00	4.996,00	SK.EF.04.00	7.050,00	220,50
13/00X	5000	1	5,6/1,4	1Am	SK.N0.05.00	4.996,00	SK.EF.05.00	7.050,00	220,50
13/00X	6300	1	5,6/1,4	1Bm	SK.N0.06.00	4.996,00	SK.EF.06.00	7.050,00	220,50
13/00X	8000	2	2,8/0,7	2m	SK.N0.08.00	5.384,00	SK.EF.08.00	7.461,00	220,50
235/50	8000	1	6,4/1,6	2m	SK.N0.08.50	12.370,00	SK.EF.08.50	14.537,00	557,50
13/00X	10000	2	2,8/0,7	1Am	SK.N0.10.00	5.384,00	SK.EF.10.00	7.461,00	220,50
235/50	10000	1	6,4/1,6	2m	SK.N0.10.50	12.370,00	SK.EF.10.50	14.537,00	557,50
13/00X	12500	2	2,8/0,7	1Bm	SK.N0.12.00	5.384,00	SK.EF.12.00	7.461,00	220,50
235/50	12500	1	6,4/1,6	1Bm	SK.N0.12.50	12.370,00	SK.EF.12.50	14.537,00	557,50
235/50	16000	2	3,2/0,8	2m	SK.N0.16.00	14.527,00	SK.EF.16.00	19.119,00	557,50
235/50	20000	2	3,2/08	1Am	SN.N0.20.00	14.527,00	SK.EF.20.00	19.119,00	557,50
235/50	25000	2	3,2/0,8	1Bm	SK.N0.25.00	14.527,00	SK.EF.25.00	19.119,00	557,50

Main dimensions

	Dimensions [mm]							
Order-No.	A	B	C	F	G	G2	J	N
SK.N0.04.00	569	184	434	56	825	902	42	430
SK.N0.05.00	569	184	434	56	825	902	42	430
SK.N0.06.00	569	184	434	56	825	902	42	430
SK.N0.08.00	569	184	434	56	919	997	52	430
SK.N0.08.50	695	423	556	42	1194	1287	54	430
SK.N0.10.00	569	184	434	56	919	997	52	430
SK.N0.10.50	695	423	556	42	1194	1287	54	430
SK.N0.12.00	569	184	434	56	919	997	52	430
SK.N0.12.50	695	423	556	42	1194	1287	54	430
SK.N0.16.00	695	423	556	63	1456	1700	68	430
SN.N0.20.00	695	423	556	63	1456	1700	68	430
SK.N0.25.00	695	423	556	63	1456	1700	68	430

Info

Testing services

We can test your electrical chain hoists regularly. Contact us!

Info

Many further versions such as reduced load capacities and special speeds are available. Contact us!

Hook suspension

Type	Order-No.	Price in €
13/00X	SK.HA.013.0	483,00

Tirak-winch ideal for frequently changing operating location

The mobile traction winch for lifting and pulling

Cable length: up to 500 meters

Type A: Tirak winch with frame and automatic rope winder

Type B: Tirak winch with in frame with power driven cable drum

Type A + B: Limit switch in outgoing cable, hanging control unit on a 2 m cable

In use - quick, easy, versatile and mobile

- For assembly on construction sites
- To carry out work on finished buildings
- To tow internally operated transport equipment
- For use in theaters, TV and film studios

The equipment - useful, practical, safe!

The careful storage of the rope while not in use ensures a long service life.
Site friendly electric input with 100% duty cycle (60% for MX 15) guarantees a reliable continuous operation.
EC compliant equipment.
The best reference for reliability and safety!

Info

Many other versions available, for example, different speeds and higher engine performance. Talk to your SIP partners!

Hoists

Tirak-winch

	Label	Load bear. c. [kg]	Speed * [m/min.]	Engine freq. [V]	Weight wo rope [kg]	Rope-Ø [mm]	Rope length [m]	Dimensions L [mm]	B [mm]	H [mm]	Order-no.	Price/piece w/o rope €
Type A	Typ A	300	9	400	60	8	60	660	450	490	MX.03A.000	6.515,00
	Typ A	500	9	400	75	8	60	800	500	550	MX.05A.000	7.625,00
	Typ A	800	9	400	80	8	60	800	500	550	MX.08A.000	8.437,00
	Typ A	980	9	400	80	9	50	800	500	550	MX.09A.000	8.603,00
	Typ A	1500	9	400	85	10	40	800	500	550	MX.15A.000	9.226,00
Type A	Typ B	500	9	400	115	8	500	870	640	700	MX.05B.000	9.184,00
	Typ B	800	9	400	120	8	500	870	640	700	MX.08B.000	10.246,00
	Typ B	980	9	400	120	9	400	870	640	700	MX.09B.000	10.531,00
	Typ B	1500	9	400	130	10	350	870	640	700	MX.15B.000	11.457,00

*Other speeds available upon request!

Order example: MX.09A.060 TIRAK® Type A winch with 980 kg capacity

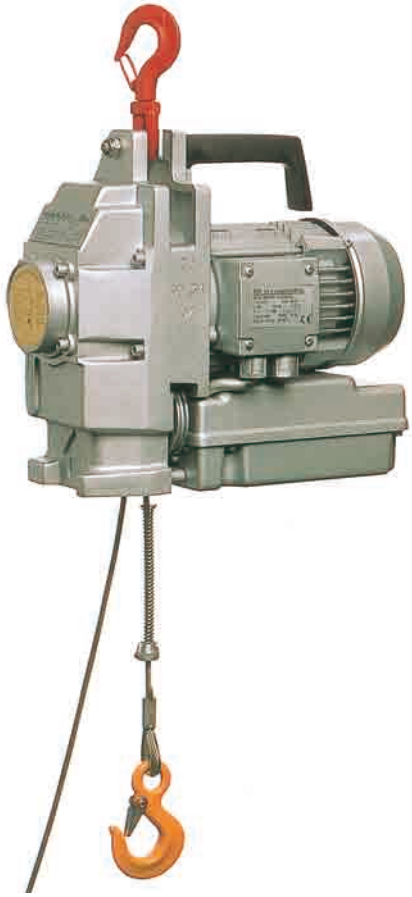
Surcharge

Anti rotating ropes available of any length (without reel)

Order-No.	Price per m €	with cone point and swivel hook and thimble Price/piece €
MS.D.08.000	6,30	122,00
MS.D.09.000	7,56	122,00
MS.D.10.000	10,80	122,00

Minifor-rope hoist Portable cable (rope length to your choice)

The crane out of a suitcase!



Affordable helper for quick installation jobs
Whether you „from the building game“, whether you earn your money with Installation jobs, whether you are responsible for the maintenance of a business: Take advantage of the versatility of the new MINIFOR - you will quickly realize that with that with the amount of the time saved, it will repay itself in no time!

- Any cable length
- Light weight, with a handy carrying handle
- Can be put into operation quickly
- Height limit and cable output safety fuse

Basic Features:
Minifor with pendant control cable of 2,5 m, 10 m cable (other lengths on request), 6.5 mm diameter, with hooks to reel, two limit switch springs with Allen key

Typ A in sheet steel box
Typ B in cardboard packaging

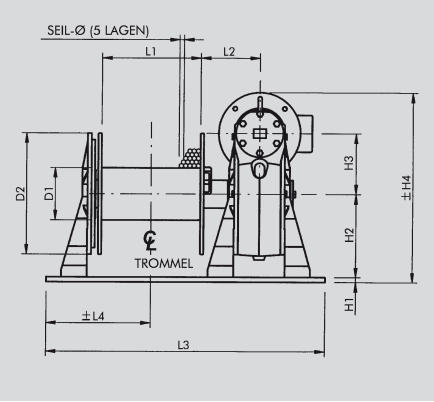
	Label	Load bearing cap. [kg]	Speed [m/min.]	Engine freq. [V]	Weight wo rope [kg]	Rope Ø [mm]	Dimensions L [mm]	B [mm]	H [mm]	Order-no.	Price/piece €
Type A	Type A	100	15	230	21	6,5	355	180	420	MF.0100.10	2.499,00
	Type A	300	5	230	21	6,5	355	180	420	MF.0300.10	2.624,00
Type B	Type B	300	12	400	31,6	6,5	427	200	412	MF.S300.10	3.364,00
	Type B	300	12	230	31,6	6,5	427	200	412	MF.S301.10	3.294,00
	Type B	500	7	400	31,6	6,5	427	200	412	MF.0500.10	3.445,00
	Type B	500	7	230	31,6	6,5	427	200	412	MF.0501.10	3.399,00

Surcharge

Electrical trolley hoist MC-E

Robust – strong – compact

The compact and robust trolley hoist MC-E with self-locking planetary gearbox which functions as a brake is particularly suitable for pulling loads in a horizontal position, for example, shunting wagons, bringing vehicles without engines into factory halls or collection of felled trees. If a load has to be raised or lowered or moved in an inclined position the engine is used as a brake to brake lowered loads. Operation up to 100% ED, protective type IP54,
3-Ph/400 Volt/50 Hz for all sizes,
1-Ph/230 Volt/50 Hz für MCW 250-750.



Components

The MC winches can be adapted with additional fittings to meet your requirements. The basic version is not ready for operation. It requires controls, for example, a protective control in a switch box with control panel on the top or a pendant control station.

Complete versions

The package contains the winch with the brake motor, a 24V switch panel with buttons and an emergency stop button as well as 3 m connecting cable with plug. Optionally you can order a rope corresponding to your needs.

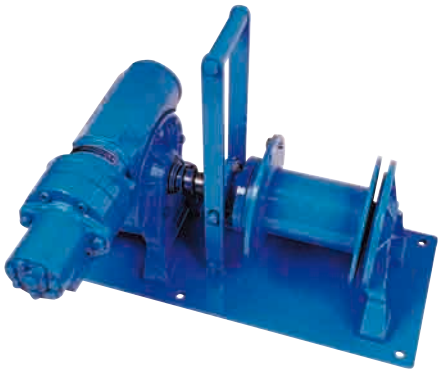
Electrical trolley hoist (230 Volt) Typ	Max. power 1. Rope Layer [daN]	Max. power 5. Rope Layer [daN]	Max. hoist 1. Rope Layer [kg]	Max. hoist 5. Rope Layer [kg]	Recommended rope diameter [mm]	Speed 1. Rope layer [m/min.]	Rope tense 1. Rope layer [m]	Rope tense 5. Rope layer [m]	Motor-capacity [kW]	Weight without rope [kg]	Basic version 230 V Order-No.	Price €	Version with brake motor 230 V Order-No.	Price €	Complete version 230 V Order-No.	Price €
250	250	170	200	135	6	5	2	19	0,75	22	M2.EG.0250	1.305,00	M2.EB.0250	1.536,00	M2.EK.0250	2.622,00
500	500	340	400	275	6	5	2	19	1,5	35	M2.EG.0500	1.495,00	M2.EB.0500	1.738,00	M2.EK.0500	2.825,00
750	700	460	550	360	7	5	6	42	1,8	55	M2.EG.0750	1.853,00	M2.EB.0750	2.114,00	M2.EK.0750	3.199,00

Electrical trolley hoist (400 Volt) Typ	Max. power 1. Rope Layer [daN]	Max. power 5. Rope Layer [daN]	Max. hoist 1. Rope Layer [kg]	Max. hoist 5. Rope Layer [kg]	Recommended rope diameter [mm]	Speed 1. Rope layer [m/min.]	Rope tense 1. Rope layer [m]	Rope tense 5. Rope layer [m]	Motor-capacity 400 V (S2) [kW]	Weight without rope [kg]	Basic version 400 V Order-No.	Price €	Version with brake motor 400 V Order-No.	Price €	Complete version 400 V Order-No.	Price €
250	250	170	200	135	6	6	2	19	0,75	22	M4.EG.0250	964,00	M4.EB.0250	1.109,00	M4.EK.0250	2.195,00
500	500	340	400	275	6	6	2	19	1,1	35	M4.EG.0500	1.120,00	M4.EB.0500	1.270,00	M4.EK.0500	2.356,00
750	750	490	600	390	7	6	6	42	1,5	55	M4.EG.0750	1.645,00	M4.EB.0750	1.813,00	M4.EK.0750	2.899,00
1200	1200	750	960	600	8	5	5	38	2,2	92	M4.EG.1200	2.079,00	M4.EB.1200	2.258,00	M4.EK.1200	3.615,00
1700	1700	1055	1300	805	10	6	7	50	4	140	M4.EG.1700	3.061,00	M4.EB.1700	3.274,00	M4.EK.1700	4.666,00
2200	2200	1365	1700	1055	12	7	9	63	5,5	180	M4.EG.2200	3.759,00	M4.EB.2200	3.999,00	M4.EK.2200	5.579,00

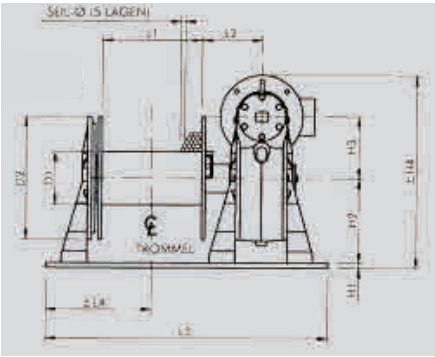
Type	Dimensions (mm)																		Weight
	D1	D2	L1	L2	L3	L4	L5	L6	L7	H1	H2	H3	H4	W1E	W2	W3	W4	Loch Ø	kg
MC-E 250	100	180	60	81	118	111	111	143	–	100	62	233	–	310	90	95	140	11,5	20
MC-E 500	100	200	60	91	129	146	121	186	–	142	87	309	–	358	110	140	220	11,5	35
MC-E 750	100	200	150	104	500	187	320	150	15	10	142	87	320	358	110	270	240	13	55
MC-E 1200	100	250	150	125,5	560	203	340	180	20	10	170	110	380	421	140	325	285	17	92
MC-E 1700	121	280	200	146,5	640	232	415	185	20	15	195	130	443	492	154	370	320	17	140
MC-E 2200	146	320	250	155	710	260	470	200	20	15	220	150	510	519	180	410	360	17	180

Hydraulic cable winch MC-H

Hoisting and pulling in EX ranges



This hydraulic driven winch was developed with self-locking planetary gearbox for hoisting and pulling loads of up to 2.500 kg. This winch is deployed in certain EX ranges, particularly in oil and gas exploration but also in dredging, fishing, mining and ship construction. On account of the modular flexible design it is possibleto add many options to adapt this winch to your particular needs. While types MC-H 500 and MC-H 700 are completely self-braking and do not have an additional brake, the types MC-H 1200 to MC-H
2500 have a reliable valve brake.



Hydraulic cable winch type	volume flow [l/min.]	Hoist power 1. Rope layer [kg]	Hoist power 3. Rope layer [kg]	Recommended rope [mm]	Speed 1. Rope layer [m/min.]	Rope reel 1. ropelayer [m]	Rope reel 3. ropelayer [m]	Pressure [bar]	Without controls Order-No.	Price €
500	20	500	400	6	6,5	2	10	50	MC.H0.0500	1.298,00
700	20	700	540	8	6,5	5	20	60	MC.H0.0700	1.804,00
1.200	50	1.200	940	9	9	5	21	95	MC.H0.1200	3.421,00
2.000	60	2.000	1.560	12	10	8	28	105	MC.H0.2000	4.450,00
2.500	60	2.500	1.965	13	11	9	36	130	MC.H0.2500	5.269,00

Type	Dimensions (mm)																		Weight
	D1	D2	L1	L2	L3	L4	L5	L6	L7	H1	H2	H3	H4	W1H	W2	W3	W4	Loch Ø	kg
MC-H 500	100	200	60	91	–	146	121	186	–	142	87	289	–	253	110	140	220	11,5	35
MC-H 700	100	200	150	104	500	187	320	150	15	10	142	87	309	253	110	270	240	13	50
MC-H 1200	121	250	150	125,5	560	203	340	180	20	10	170	110	354	400	140	325	285	17	82
MC-H 2000	159	280	200	146,5	640	232	415	185	20	15	195	130	440	456	154	370	320	17	134
MC-H 2500	178	320	250	155	710	280	470	200	20	15	220	150	510	467	180	410	360	17	170

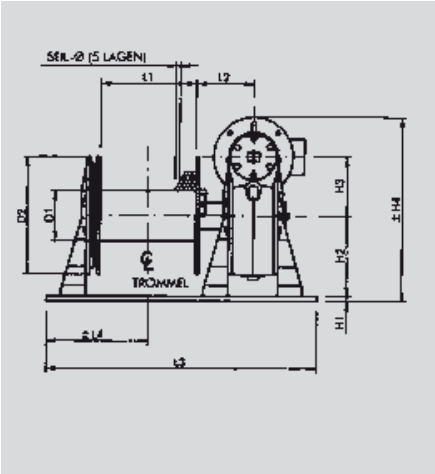
Compressed air cable winch MC-L

With planetary gearbox

Info

Do you need technical data on the compressed air winch MC-L or an offer? Contact us and we are happy to help.

In principle constructed like the electrical winch MC-E, this cable winch Type MC-L with lamella air motor. The self-locking planetary gearbox brakes the smaller winch. The MC-L cable winch is deployed in certain ex ranges such as oil and gas exploration, fishing, mining and ship construction. On request push button remote controls are available. The winch can be equipped with support yokes to allow mobile assembly.



Electric winch for construction and assembly sites

Light and handy

The electric winch PORTY which was designed specifically for the use on construction sites and installations for industry and trade.
They can be carried on the connecting rods.
The fundamental question - fixing the winch - is to be done by a structural engineer.

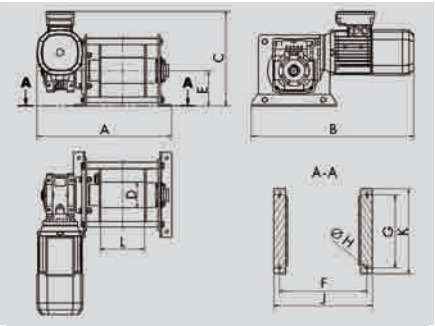
Optionally available
The standard version is powered with 400 V AC or 230 V alternating current. Alternatively, other voltages available. As further control options (3-Ph), we offer direct control, contact control steering and frequency converter control.

Technology:
- Mechanism Group 1Bm
- Protection IP54, insulation class F, 60% ED
- Conforms to UVV winches, lifting and towing equipment to BGV D8 and the EC Machinery Guidelines
- German Certificate of Origin
- Wire ropes DIN 3069 or DIN 3055 + CF recommended

Other Accessories
The drum may be extended for longer rope in 10 cm steps. Grooving and cable press feature recommended for a clean winding with a longer cable life.
The contact control and frequency converter can be used for example as a slack rope switch, as well as a thermal monitoring of the engine, overload safety, to the remote control and control station.

Porty-Type		125	250	500	750	990	1250
P. str. in 1. rope length	[daN]	125	250	500	750	990	1250
P. str. in 5. rope length	[daN]	80	160	320	500	640	800
lifting str in 1. r. length[1]	[kg]	100	200	400	600	800	1000
lifting str in 5. r. length[1]	[kg]	65	125	250	400	500	640
rec. rope diameter	[mm]	4	4	6	7	8	8
Rope speed 1. r. length	[m/min.]	12	10	7	6	5,5	5,5
Rope speed 1. r. length	[m/min.]	18	15	10	9	8	8
Usable rope take up 1.rope pos.[2]	[m]	6	6	6	7	7	7
Max rope take up 5.rope pos.[2]	[m]	40	40	40	50	50	50
Engine power 3-Ph/400V/50Hz	[kW]	0,37	0,55	1,1	1,1	1,5	1,85
With equip. (400 V)*	**Order-no.**	**ES1.0125.0**	**ES1.0250.0**	**ES1.0500.0**	**ES1.0750.0**	**ES1.0990.0**	**ES1.1250.0**
	Price/piece €	**1.256,00**	**1.368,00**	**1.615,00**	**1.995,00**	**2.270,00**	**2.325,00**
With equip. (230 V)*	**Order-no.**	**ES2.0125.0**	**ES2.0250.0**	**ES2.0500.0**	**ES2.0750.0**	**ES2.0990.0**	**ES2.1250.0**
	Price/piece €	**1.435,00**	**1.515,00**	**1.865,00**	**2.245,00**	**on req.**	**on req.**

* The equipment has a direct control with a control unit, emergency stop, 3 m power cord t with network plug, but without rope



Add. equipment

Rope compl. with hook[3]	**Order-no.**	**EA1.0125.0**	**EA1.0250.0**	**EA1.0500.0**	**EA1.0750.0**	**EA1.0990.0**	**EA1.1250.0**
	Price/m €	**74,00**	**74,00**	**109,00**	**130,00**	**155,00**	**155,00**
Grooved drum	**Order-no**	**EA2.0125.0**	**EA2.0250.0**	**EA2.0500.0**	**EA2.0750.0**	**EA2.0990.0**	**EA2.1250.0**
	price/piece €	**120,00**	**120,00**	**155,00**	**175,00**	**195,00**	**195,00**

Further additions, extra cost compared to basic price

Drum extension per 10cm	**Order-no**	**EZ1.0125.0**	**EZ1.0250.0**	**EZ1.0500.0**	**EZ1.0750.0**	**EZ1.0990.0**	**EZ1.1250.0**
	Price/10 cm €	**52,00**	**52,00**	**81,00**	**87,00**	**98,00**	**98,00**
Contact controller 42 V	**Order-no**	**EZ2.0125.0**	**EZ2.0250.0**	**EZ2.0500.0**	**EZ2.0750.0**	**EZ2.0990.0**	**EZ2.1250.0**
with Buttons	**price/piece €**	**335,00**	**335,00**	**335,00**	**335,00**	**335,00**	**335,00**
Spindle switch as	**Order-no**	**EZ3.0125.0**	**EZ3.0250.0**	**EZ3.0500.0**	**EZ3.0750.0**	**EZ3.0990.0**	**EZ3.1250.0**
Operation stop switch[4]	**price/piece €**	**275,00**	**275,00**	**275,00**	**275,00**	**275,00**	**275,00**

1. In the hoisting sector, through hightened safety factors the Max, Load capacity is slightly decreased.
2. In the first rope housing ther must be at least 3 safety winders attached to the drum.
3. Rope 6* 7, 1770 N/mm Max. Rope Length. Specify other rope lengths with your order
4. Only available with the contact control or frequency converter control

Construction rope load pressure brake

lightweight and compact - easy to handle

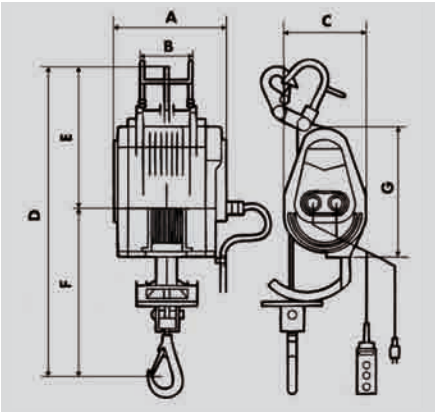
The SIP Construction rope winch is equipped with a load pressure brake. This will always offer a safe and immediate braking. The unit comes with a safety hook as standard issue.

- Automatic engine shutdown when the rope coils
- 5 m power cable, safety plug
- Ready to use and fully equipped with rope and safety hook
- 10 m control cable for remote control
- Swivel hook to 360 ° with safety lock
- Motor protection IP 44
- Panel IP 65, waterproof, with emergency stop

Info

Optionally available:
- **Swing-arm, 180**
- **10 m control cable extension**

Speak with your SIP partner



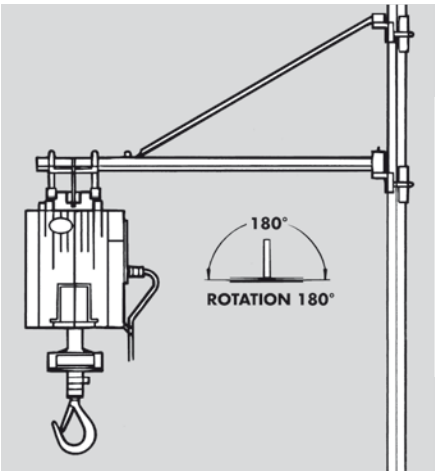
Type	Load bear. capacity [kg]	Rope speed under full load [m/min]	Engine 230 V [kW/A]	Lift.height (rope [m]	Rope-Ø [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Weight [kg]	Order-no.	Price €
BW-80	80	30	0,8/4	23	4	200	104	168	605	266	339	270	18	PA.C.0800	690,00
BW-230	230	14	1,3/6,5	24	5	244	115	182	640	280	360	285	24	PA.C.2300	980,00

Price for control cable extnsion 14,20 €/m²

Accessories for the Construction Rope

To operate the cable the swivel arm is recommended. It rotates up to180°. With 2 clamps on a vertical pipe it has a load capacity of 230 kg.

Order-no.	Price/piece €
PA.C.BSZ.00	98,00



Electric winch for lifting, pulling, lowering ...

Security can be so versatile.

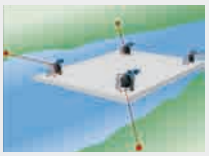
Capacity 125 kg to 3,200 kg
The robust winch for lifting, lowering and pulling of loads of all kinds. The modern design, proven technology and superior quality standard of these electric winches guarantee a smooth and durable operation.
Due to the use of high quality worm and spur gears, it offers a silent and quiet running.

Application examples with more SIP winches:

Standard version

for multi rope operation

with extended drum



2-speeds

for positioning

with slack rope switch

with electronic overload protect.

Electric Winch

Practice-oriented variety equipment

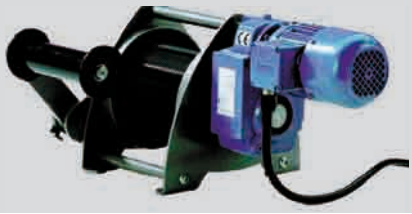
Other features:

- Maintenance free worm and spur gear-boxes - in oil bath
- Electric ventilating spring pressure disc brake for safe braking and holding the load
- Powerful AC motor for multi-range voltages
- Grooved drum for clean and wear free rope winding

Info

E-winches with slack rope switches are also available.

Speak with your SIP partner.



Electric rope winches with direct control, including control hub

Load 1. Layer * [kg]	Rope speed [m/min]	Engine perform. [kW]	Mecha-nism group	Rope-Ø [mm]	Dimensions A [mm]	B [mm]	C Ø [mm]	F [mm]	G/K [mm]	H [mm]	L [mm]	M Ø [mm]	Order-no.	Price/piece w/o rope €
125	5,1	0,25	1Bm	4	185	170	12	379	200/422	225	180	64	SL.12.DS.00	1.398,00
250	2,5	0,25	1Bm	4	185	170	12	390	200/435	242	180	64	SL.25.DS.00	1.463,00
250	5,1	0,37	1Bm	4	185	170	12	390	200/435	242	180	64	SL.26.DS.00	1.528,00
500	3,5	0,31	1Am	6	215	300	13,5	710	340	333	200	108	SL.50.DS.00	1.793,00
630	6,8	0,75	1Bm	6	215	300	13,5	725	340	343	200	86	SL.63.DS.00	1.969,00
980	3,4	0,59	1Am	9	270	400	18	852	465	490	250	175	SL.98.DS.00	2.725,00

* The load capacity of the following documents is less

Electric rope hoists with contactor control and end gear switch

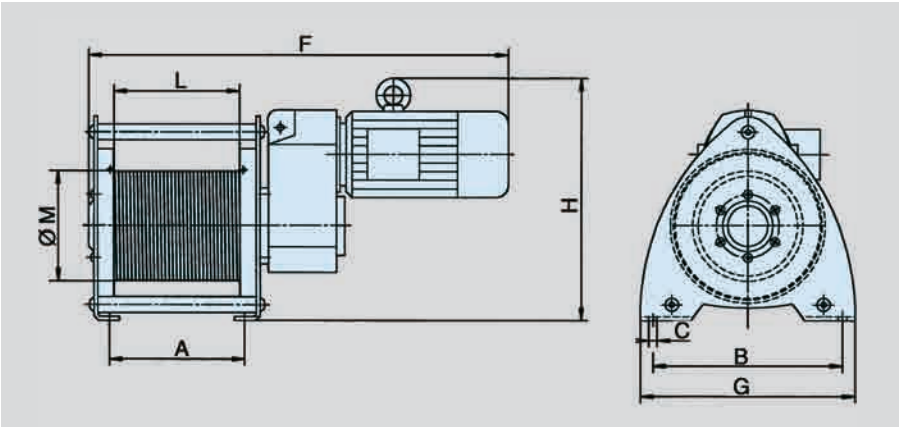
Load 1. Layer * [kg]	Rope speed [m/min]	Engine perform. [kW]	Mecha-nism group	Rope-Ø [mm]	Dimensions A [mm]	B [mm]	C Ø [mm]	F [mm]	G/K [mm]	H [mm]	L [mm]	M Ø [mm]	Order-no.	Price/piece w/o rope €
250	5,1	0,37	1Bm	4	185	170	12	390	200/435	242	180	64	SL.26.SS.00	1.960,00
500	3,5	0,31	1Am	6	215	300	13,5	710	340	333	200	108	SL.50.SS.00	2.260,00
980	3,4	0,59	1Am	9	270	400	18	852	465	490	250	175	SL.98.SS.00	3.210,00
1250	5,9	1,32	1Bm	9	270	400	18	907	465	490	250	138	SL.10.SS.00	3.786,00
1600	3,9	1,09	1Am	12	320	510	22	1014	570	614	300	218	SL.20.SS.00	5.160,00
3200	6,3	3,00	1Am	14	320	510	22	1091	570	684	300	242	SL.30.SS.00	5.892,00

Surcharge

*The load capacity of the following documents is less

Control Panel

Contactor control



Useful information for operating and using manual hoisting devices

General instruction for using hand hoisting devices

Hand hoisting devices are subject to influences which can cause damage. The use of damaged hand hoisting devices can cause dangerous situations and even personal injury. The testing of hand hoisting devices requires great care and must be carried out only by qualified professionals.

Testing hand hoisting devices:
The frequency for testing hand hoisting devices (tools) is listed in the risk assessment according to § 3 of labour safety provisions.
The testing scope for the device is based on BGG 956-1.
The corresponding requirements of the manufacturer are to be taken into account and are found in the operating manual for carrying out tests.

Hand hoisting devices operate only 100 %, when they hoist at least 10% of the maximum load for hand hoisting devices.

Please ensure!
Manual hoists only work 100% if they raise at least 10% of the maximum load of the hand hoist.

To avoid overstress of the hand hoisting device our range of products offers all ratchet hoists for overload protection. This is a mounted slipping clutch set at the factory to maximum load. This may deviate upwards or downwards. The overload safety device is only supplied for the ratchet lever hoist.

Use limitations:

Transportation of people
The use of hand hoisting devices is prohibited for the transportation of people!
Only specially approved hoists can be used for the latter. Speak to your SIP partner about this.

Temperature
Usually hand hoisting devices should be used in the temperature range of -10° to +50° C. These values are guidelines and can deviate depending on the device. The valid details are included in the operating manuals of the various devices. Upon request devices can be supplied for higher and lower temperatures.

Impact stress
The load capacities provided assume impact-free use of the hand hoisting device. If a load falls it stresses the device far in excess of its capacities and is not permitted. (large stress impact).

ATEX (EX – protection) is found of page 274 of the catalogue.
The use of hand hoisting equipment always requires a risk assessment and an explosive protection document according to § 3, § 5 and §7.
Advice is an urgent requirement. Contact your SIP partner.

Info

We perform the annual inspection of your lifting equipment and winches.

Give us a call! More about our inspection service can be found on pages 8 - 9 of this catalogue.

Lifting clamp Premium AZ-S

High quality for hoist loads up to 20.000 kg

*)

*) Example
(Colour differences possible)

The hand chain hoist AZ-S is a premium hoist of outstanding quality. Fitted with a round steel load chain in accordance with EN 818-7- Made in Germany, with corrosion protection of the chain and the moving parts, galvanized zinc coated in line with DIN 763, standard load height 3,0 m (load and hoist chain).

Special hoist lengths are always possible. A per meter supplement is added to the costs for each additional meter.

Properties:

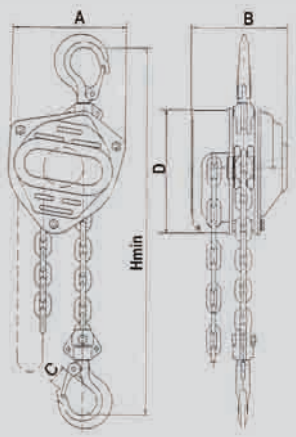
- Robust, closed sheet steel casing
- Load pressure break with asbestos-free friction disc
- Load and hoist hooks with high elongation at tear
- Axle with ball bearing lowering the friction
- Compact design
- 100 % testing of all hoists

Info

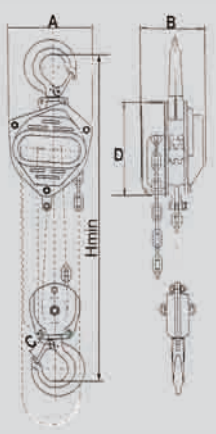
The chain storage area is optional upon request.

Load capacity [kg]	Number of chain strands	standard lift height [m]	Chain dimension [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	H [mm]	Weight [kg]	Lift capacity rated loaded [daN]	Order-No.	Price €	Price per m a.l. €
500	1	3	6 x 18	140	150	19,0	150	340	11,0	22	9031.0010	143,50	23,75
1.000	1	3	6 x 18	165	155	24,5	170	380	14,0	35	9031.0020	168,50	23,75
2.000	2	3	6 x 18	190	155	29,5	170	500	20,0	39	9031.0030	278,50	28,05
3.000	2	3	8 x 24	215	175	32,0	195	600	28,0	39	9031.0040	383,00	47,50
5.000	2	3	10 x 30	228	167	46,0	252	704	48,0	42	9031.0050	549,50	79,90
10.000	4	3	10 x 30	367	167	54,0	252	720	87,0	46	9031.0060	1.377,00	151,00
20.000	8	3	10 x 30	598	200	65,0	252	1000	200,0	50	9031.0070	3.249,00	322,00

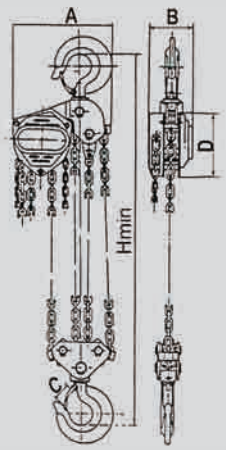
Surcharge



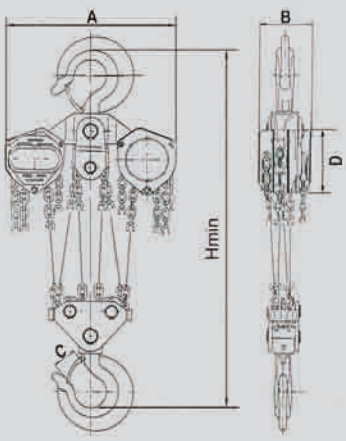
500 / 1.000 kg



2.000 / 3.000 / 5.000 kg



10.000 kg



20.000 kg

Lever hoist Premium AZ-S

High quality for hoist loads of up to 9.000 kg

NEW

250 - 9.000 kg
*) Example
(Colours may vary)

The lever hoist Premium AZ-S can be used for hoisting and turning.

The lever hoist is fitted with a round steel load chain in line with EN 818-7, quality class T for lever hoists Made in Germany. The load chain and moving parts are galvanized zinc coated. The hoist is 1,5 m long.

Special lengths are always available. A supplement per additional meter is added to the cost.

Properties:
- Chain guide integrated in the casing
- Free-wheeling circuit for fast handling
- Light pull through of the unloaded chain
- Load pressure brake with asbestos-free friction disc
- Lowest power effort at full load (values see table)
- Chain protection and capped bolts on the load hook
- Minimum load 10 % of nominal load
- 100% testing of all devices

Info

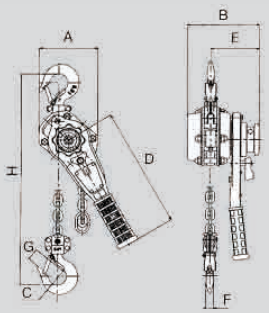
The lever hoist Premium AZ-S is also available with optional KSS chain lock, as in Fig. on left. Product infos on page 271.

Info

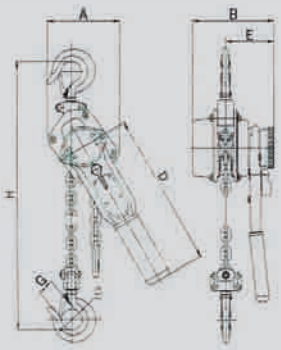
Do you need lever hoists in special sizes? Contact us.

Load capacity [kg]	Number of chain strands	Standard lift height [m]	Chain dimension [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Lift capacity rated loaded [daN]	Weight (1,5 m load) [kg]	Order-No.	Price / Piece €	Price per m a.l. €	Price KSS €
250	1	1,0	4 x 12	65	95	32	170	70	10	22	240	30	2,0	9031.0110	95,00	11,00	-
750	1	1,5	6 x 18	138	162	37	248	90	21	25	340	22	7,0	9031.0120	190,00	15,50	67,00
1.500	1	1,5	7,1 x 21,2	142	182	43	320	110	25	27	400	33	11,0	9031.0130	246,00	19,50	102,50
3.000	1	1,5	10 x 30	200	210	50	410	120	30	32	490	37	20,0	9031.0140	356,00	37,00	128,00
6.000	2	1,5	10 x 30	240	210	60	410	120	34	38	670	42	30,0	9031.0150	631,50	72,50	128,00
9.000	3	1,5	10 x 30	320	200	84	415	114	-	48	680	48	43,0	9031.0160	955,50	107,50	128,00

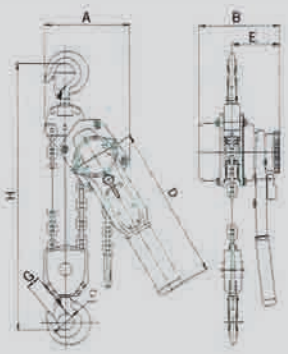
Surcharge



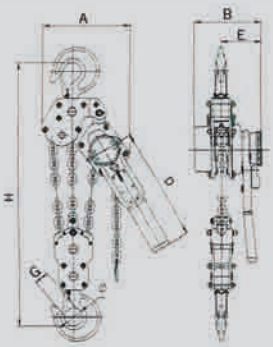
250 kg



500 - 3.000 kg



6.000 kg



9.000 kg

Lever hoist Premium AZ-O with overload protection

High quality for hoist loads up to 9.000 kg with overload protector

NEW

The premium AZ–O lever hoist is used for hoisting and turning. It is fitted with a round steel load chain in line with EN 818-7- quality class T for hoisting devices. Made in Germany.
Load chains and moving parts are galvanized zinc coated.
The lever hoist is fitted with an overload protector to protect the hoist. The setting for the overload protector reacts at up to 10% of the nominal load.
To facilitate easy setting of the lever hoist, the overload protector (friction clutch) is fitted in the ratchet lever.
The premium AZ-O lever hoist is suitable for use in overhead lines and is also fitted with a further manual lock (chain lock). The hoist is a standard 1,5 meters in length.

Properties:
- Chain guide integrated in the casing
- Free-wheeling circuit for fast handling
- Easy pull through of the unloaded chain
- Cast hand crank
- Load pressure brake with asbestos-free friction disc
- Lowest effort at full load (values see table)
- Chain protector and capped bolts on the load hook
- 100% testing of all hoists

Special lengths are always available. A supplement per additional meter is added to the cost.

Info

We conduct regular checks of your hoists in accordance with BGR!
Talk to us.

Load capacity [kg]	Number of chain strands	Standard lift height [m]	Chain dimension [mm]	Dimensions A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	H [mm]	L [mm]	Lift capacity rated loaded [daN]	Weight (1,5 m lift.) [kg]	Order-No.	Price / Piece €	Price per m a.l. €	Price KSS €
750	1	1,5	6 x 18	155	95	135	285	30	320	37	14	8,9	90.300.105	223,50	15,15	67,00
1.500	1	1,5	8 x 24	180	105	155	370	36	380	45	24	13,9	90.300.115	289,50	19,45	102,50
3.000	1	1,5	10 x 30	215	130	200	410	40	480	50	32	24,3	91.300.125	419,00	36,65	128,00
6.000	2	1,5	10 x 30	215	130	200	410	50	600	64	34	38,6	90.300.135	743,00	72,30	128,00
9.000	3	1,5	10 x 30	215	130	330	410	58	700	85	36	56,9	90.300.185	1.124,00	107,50	128,00

Surcharge

* Additional costs for chain storage made from reinforced PVC fabric with mounting

KSS - Chain lock

MADE IN GERMANY

The KSS chain lock can be used to secure chain hoists in overhead line construction.

Nominal size [mm]	Chain dimension [mm]	Load capacity [kg]	A [mm]	B [mm]	C [mm]	D [mm]	Weight/ Piece [kg]	Order-No.	Price
6	6 X 18	800	51	68	44	22	0,3	109.499.60	61,80
8	8 X 24	1600	65	83	56	26	0,5	109.499.40	98,30
10	10 X 30	3200	69	92	68	33	0,8	109.499.50	123,00

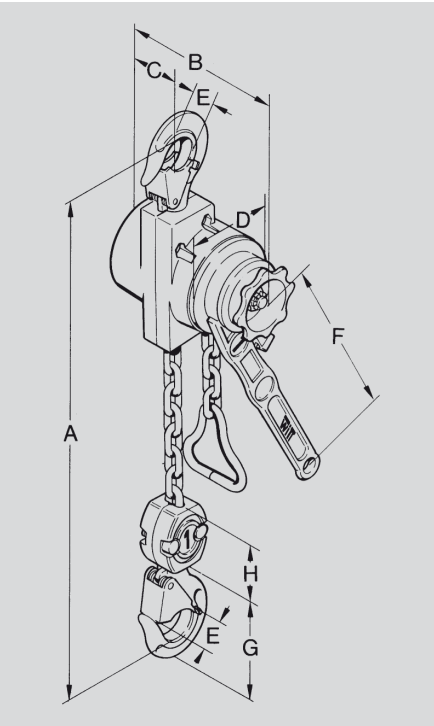
Surcharge

Lever Action 1,5 t - 2,5 t

The compact helper for the workshop

The SIP lever action serves for lifting, pulling, spanning or protecting of loads. It has a robust cast housing and is extremely resistant against outside effects. Technically it is characterized by a totally enclosed planetary gear as well as the bearing of all turning parts in ball, needle or sliding bearings.
The lever action works satisfactorily when moving and positioning heavy machines, when fastening heavy loads on means of transport, when moving pipes and with many other works.

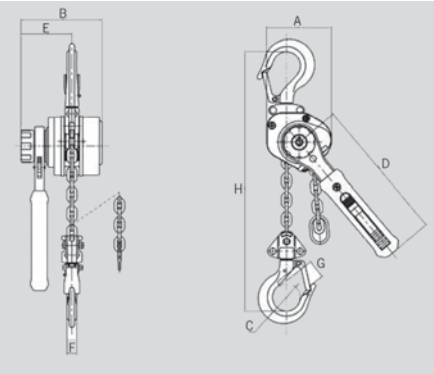
Type	1,5t [mm]	2,5t [mm]
A smallest size	345	440
B	160	185
C	65	72
D	93	140
E	27	31,5
F	365	395
G	95	133
H	62	88



Load b. cap. [kg]	Number of chain str.	Lift per ratchet turn [mm]	Lever pressure full load[kg]	Weight w/o chain [kg]	Weight compl. [kg]	W. for 1m chain [kg]	Chain dim. [mm]	Standard lift [m]	Order-no.	Price €	Order-no. per m a.l.	Price €
1500	1	33	28	7,5	9,2	1	7,1 x 21	1,5	WHZ.536.72	675,50	WHZ.110.24	18,40
2500	1	37	40	18	22	2,7	11 x 31	1,5	WHZ.535.78	840,50	WHZ.120.94	45,60

Lever hoist Premium AZ-A with aluminium casing

The SIP lever hoist Alu proves its worth on account of its light weight and low height in locations where space is confined.
The device is operated by swinging the ratchet arm to and fro. By means of a small lever attached to the ratchet hoist, one can switch from raising to lowering. The casing and hadn wheel are made of aluminium. The tight chain can be released by turning the hand wheel or drawing the unloaded chain.



Info

Do you need a customised aluminium lever hoist? Contact us.

Load capacity [kg]	Number of chain str.	Standard lift [m]	Chain dimension [mm]	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	g [mm]	h [mm]	Lift capacity rated loaded [daN]	Weight (1,5 m load) [kg]	Order-no.	Price / Piece €	Price per m a.l. €
250	1	1,0	3 x 9	65	90	32	145	60	11	20	225	20	1,50	90.300.261	182,50	17,50
500	1	1,5	4 x12	80	100	35	160	65	12	21	255	23	2,30	90.300.262	260,50	18,50
750	1	1,5	5 x 15	90	110	35	180	65	15	23	270	29	3,40	90.300.263	310,50	19,50
1.500	1	1,5	7,1 x 21,2	110	130	42	220	80	20	32	340	32	6,30	90.300.264	432,50	20,50

Surcharge

Replacement loading chains For lifting gear

Replacement loading chains DIN 818-7 Quality class T for lifting gear

- Higher service lives with use of special goods
- Special qualities not available in all dimensions
- Special dimensions on request
- Subject to technical changes
- Quality made in Germany

Please consider!
The selection table gives only a rough classification of the chain quality applications. A selection according to this table does not relieve the user from determining the operation conditions exactly and to co-ordinate the necessary chain quality with the SIP partner.

Case-hardened chains, execution DAT

Dimensions	Qual.	Order-no.	Price € lin. m
4,0 x 12,0 gv	RTS	ELK.E.2600	19,80
5,0 x 15,0 gv	RTS	ELK.E.2610	20,25
5,0 x 16,0 gv	RTS	ELK.E.2615	19,30
6,0 x 18,0 gv	RTS	ELK.E.2650	21,85
6,0 x 18,6 gv	RTS	ELK.E.2655	21,85
6,3 x 19,0 gv	RTS	ELK.E.2640	29,05
6,3 x 19,1 gv	RTS	ELK.E.2645	29,05
6,5 x 18,5 gv	RTS	ELK.E.2630	27,75
6,5 x 19,5 gv	RTS	ELK.E.2620	29,05
7,0 x 21,0 gv	RTS	ELK.E.2660	24,35
7,0 x 21,9 gv	RTS	ELK.E.2665	24,35
7,1 x 21,2 gv	RTS	ELK.E.2680	24,35
7,0 x 22,0 gv	RTS	ELK.E.2668	24,35
7,9 x 21,9 gv	RTS	ELK.E.2700	30,00
8,0 x 24,0 gv	RTS	ELK.E.2720	35,10
9,0 x 27,0 gv	RTS	ELK.E.2750	33,45
9,5 x 28,6 gv	RTS	ELK.E.2740	40,80
10,0 x 28,0 gv	RTS	ELK.E.2760	45,80
10,0 x 30,2 gv	RTS	ELK.E.2775	45,80
11,0 x 31,0 gv	RTS	ELK.E.2780	62,10
11,0 x 33,0 gv	RTS	ELK.E.2790	59,30
13,0 x 36,0 gv	RTS	ELK.E.2791	85,40

Surcharge

gv=galvanized

Annealed chains, execution T

Dimensions	Qual.	Order-no.	Price € lin. m
4,0 x 12,0 gv	RT	ELK.H.2200	14,85
5,0 x 15,0 gv	RT	ELK.H.2210	15,25
5,6 x 17,0 gv	RT	ELK.H.2230	15,25
6,0 x 18,0 gv	RT	ELK.H.2240	16,50
6,0 x 18,5 gv	RT	ELK.H.2255	16,50
6,3 x 19,0 gv	RT	ELK.H.2250	21,80
6,3 x 19,1 gv	RT	ELK.H.2245	17,85
7,1 x 20,2 gv	RT	ELK.H.2280	22,50
7,1 x 21,0 gv	RT	ELK.H.2290	18,55
7,1 x 21,2 gv	RT	ELK.H.2300	18,55
7,9 x 23,0 gv	RT	ELK.H.2320	22,65
8,0 x 24,0 gv	RT	ELK.H.2340	21,55
9,0 x 27,0 gv	RT	ELK.H.2350	25,25
9,5 x 28,6 gv	RT	ELK.H.2370	29,30
10,0 x 28,0 gv	RT	ELK.H.2380	30,05
10,0 x 30,0 gv	RT	ELK.H.2395	30,05
10,0 x 31,0 gv	RT	ELK.H.2400	28,70
11,1 x 33,3 gv	RT	ELK.H.2410	45,15
13,0 x 36,0 gv	RT	ELK.H.2420	64,30

gv=galvanized

HandHoists VH according to ISO 16872

Dimensions	Qual.	Order-no.	Price € lin. m
3,0 x 9,0 gv	RT	ELK.VH.030	18,80
4,0 x 12,0 gv	RT	ELK.VH.040	19,45
5,0 x 15,0 gv	RT	ELK.VH.050	20,65

gv=galvanized

Info

Operation-temperature: -10°C - +150°C.

Operation-temperatur at DAT and T: -40°C - +200°C.

Selection table for lifting gear chains

Operational criteria	RTB	RTD	RTS	RT	RSA/RPA
Electrical lifting gear	x	x	X	(x)[1]	x
Pneumatic/hydraulic lifting gear	x	x	X	(x)[1]	x
Hand lifting gear				x	x
Cyclical operation/automation	x	x			
Food operation	x	x	X		x
Explosion-proof empl./offshore	(x)[1]	(x)[1]	(X)[1]	(X)[1]	x
Chemical employments	(x)[1]	(x)[1]	(X)[1]		x
Crafts operation few employments			X	x	
Turning mechanisms				(x)[2]	
Stationary lift mechanisms	x	x	X	x	(x)[1]
Employments without lubrication	x				
Mining industry - underground em.				x	x

(x) 1 after consultation with the SIP partner, (x) 2 after definition of the professional association

Info

Our load chains are also available in other surface protection, available in matt blue Corrud.

Useful information for EX areas

Hoisting devices for explosions-endangered areas

Info

Request our special catalogue for Ex hoists. We are happy to advise you.

In mining, the chemicals industry and various other industrial sectors there is often a need to deploy devices for areas where there is a risk of explosion. The emission of combustible gases, vapours or mist can create an explosive atmosphere in combination with oxygen/air mixture. When it catches fire an explosion occurs which can cause serious damage to objects and injury to humans.

Note! An exception is the IIB gases "hydrogen sulphide" and "ethylene oxide" as well as light metal and impact sensitive dusts.

Danger!

Simultaneous presence of explosion-endangered atmospheres of gases and dust is prohibited!

For such uses SIP hoists includes devices for the following maximum deployment conditions in Ex areas:

Hand and compressed air devices	Electrical devices
Device group II	Device group II
Device category for gases 2G and 3G	Device category 2 and 3
Device category fir dusts 2D and 3D	
Zone 1,2 and 21,22	Zone 1,2
Explosion group gases IIB	Explosion group Gases IIB
temperature class T3 or T4	Temperature class T3 or T4
Explosion group dusts	Temperature class 135°C or 200°C

Product range: Explosion-endangered hoists		max. Ex class for gases or dusts	Catalogue page
Hand vehicles			
- Rolling trolley	19/90	II 2G IIB c T4 / II 2G c 135°C	276
- Motor trolley	22/90	II 2G IIB c T4 / II 2G c 135°C	276
Hand chain hoists			276
- load capacity up to 3t/2-5t/2 to 10t/4	9/98	II 2G IIB c T4 / II 2G c 135°C	
Compressed air chain hoist			275
- stationary - as rolling- / motor- / compressed air trolley	70/06	II 2G IIB c T4 / II 2G c 135°C	
Compressed air cable winch			On request
- Beta electrical winch	43/86	II 2G IIB c T4 / II 2G c 135°C	
Electrical chain hoist			On request
- as rolling-/ motor-/ electrical trolley	90/09	II 2G IIB T4	

Air hoists for Industry and trade

The practical, compact all-rounder

The SIP air hoist is specially designed for industrial and handcraft use.
It is extremely compact and can easily be transported to various locations.
Since the SIP Air Pressure Unit only consists of a few components, it is very user friendly and low maintenance.
The secret lies in the patented motor-brake system in the rugged aluminum housing.
The direct control through the control buttons includes an emergency stop valve and automatic end stop at the top and bottom are equipped with the Mini Series rubber pads.
The compressed power drive air is simply connected by the hose nozzle to the swivel nut.
The operating pressure is 6 bar.
Operating temperature -20 ° C to about +50 ° C
Load capacity: 125 kg, 250 kg, 500 kg and 980 kg

Surprising in every detail:
- Sensitive button control
- Infinitely variable lifting speed
- Low maintenance brake
- Chain box as standard issue
- Complete with hanging hook
- EX-protected design
- According to ExII3GDIIAT4

Info

Optionally, you can get your air hoist:
- **Manual trolleys can be found on pages 276-277**
- **Easily adjustable to fit any girder flange width**

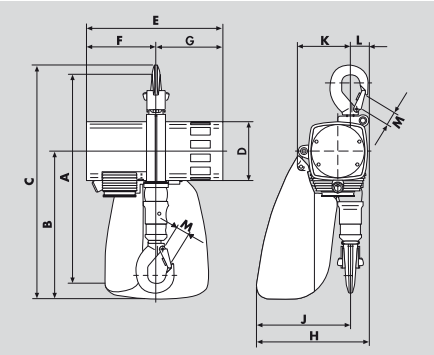
Talk to your SIP partners!

Nom l. b. cap [kg]	Engine power [kW]	Lift. height [m]	Lifting speed w/o load [m/min.]	Lifting speed with nom. load [m/min.]	Lowering sp.- with nominal load [m/min.]	Steer.- length [m]	Numb. of chain strands	Air cons. [m3/min]	Air-conn. [Ø-ins.]	Rope site [mm]	Air pres. [bar]	Weight [kg]	Order-no.	Price/ piece €
125	0,4	3	40	15	30	2	1	0,7	G 3/8	9	6	9,5	NH.0125.03	1.919,00
125	0,4	5	40	15	30	4	1	0,7	G 3/8	9	6	10,0	NH.0125.05	2.030,00
125	0,4	8	40	15	30	6	1	0,7	G 3/8	9	6	10,5	NH.0125.08	2.166,00
250	0,4	3	20	8	16	2	1	0,7	G 3/8	9	6	10,5	NH.0250.03	2.106,00
250	0,4	5	20	8	16	4	1	0,7	G 3/8	9	6	11,0	NH.0250.05	2.216,00
250	0,4	8	20	8	16	6	1	0,7	G 3/8	9	6	11,5	NH.0250.08	2.353,00
500	1,0	3	20	10	18	2	1	1,6	G 1/2	13	6	21,0	NH.0500.03	2.592,00
500	1,0	5	20	10	18	4	1	1,6	G 1/2	13	6	23,0	NH.0500.05	2.722,00
500	1,0	8	20	10	18	6	1	1,6	G 1/2	13	6	25,0	NH.0500.08	2.883,00
980	1,0	3	10	5	10	2	1	1,6	G 1/2	13	6	23,0	NH.1000.03	2.756,00
980	1,0	5	10	5	10	4	1	1,6	G 1/2	13	6	25,0	NH.1000.05	2.886,00
980	1,0	8	10	5	10	6	1	1,6	G 1/2	13	6	27,0	NH.1000.08	3.046,00

Surcharge | Prüfservice

Main measures

Order-no.	A	B	C	D	E	F	G	H	J	K	L	M
NH.0125...	328	232	367	92	213	109	104	177	148	83	29	19
NH.0250...	328	232	367	92	213	109	104	177	148	83	29	19
NH.0500...	458	316	505	122	292	148	144	234	194	119	40	28
NH.1000...	458	316	505	122	292	148	144	234	194	119	40	28

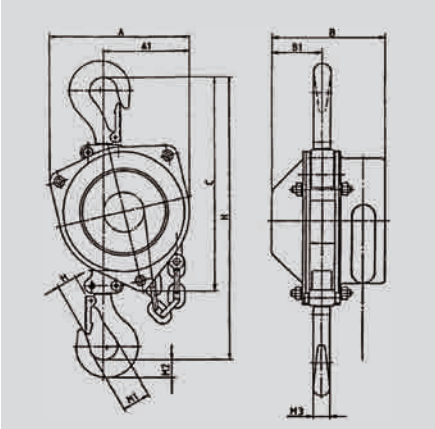


Spur gear pulley EX SIP-lifting gear for EX-areas

SIP-Spur gear pulleys for the use in explosion-endangered areas

- Compact, sturdy steel plate housing
- Industrial quality
- Overload safety due to slip clutch
- Small hand chain pull
- Galvanized round steel chain according to EN 818-7
- German certificate of origin
- Load-carrying capacity up to 25 t
- 3 m hanging height standard

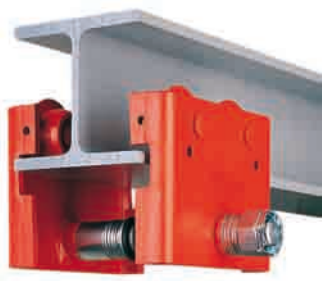
Further executions on request.
You will find suitable substitute load chains on the preceding side.



Load bearing capacity [kg]	Chain strands	Tempera-tue class [°C]	Dimensions a [mm]	a1 [mm]	b [mm]	b1 [mm]	c [mm]	h [mm]	m [mm]	m1 [mm]	m2 [mm]	m3 [mm]	Weight [kg]	Order-no.	Price 3 m hanging height €	Surcharge per m added lift €
500	1	T4/135	141	87	108	48	216	288	22	35	20	15	8,9	SRF.1.0050	905,00	32,00
1000	1	T4/135	168	102	131	57	256	345	26	40	25	18	12,2	SRF.1.0100	935,00	42,00
1500	1	T4/135	212	129	146	68	321	423	30	44	29	22	19,6	SRF.1.0150	1.080,00	49,00
2000	2	T4/135	163	88	131	57	286	491	34	50	33	23	13,6	SRF.2.0200	1.155,00	70,00
3000	2	T4/135	202	108	146	68	354	593	38	54	39	28	27,0	SRF.2.0300	1.280,00	84,00
5000	2	T4/135	236	128	168	81	412	702	41	64	46	32	42,0	SRF.2.0500	1.645,00	98,00
10000	4	T4/135	415	130	168	81	479	755	58	87	65	46	105,0	SRF.4.1000	5.885,00	168,00
10000	2	T3/200	346	218	282	141	568	824	49	71	67	53	100,0	SRF.2.1000	2.680,00	182,00
15000	3	T3/200	425	255	282	141	758	1115	55	90	85	67	135,0	SRF.3.1500	8.960,00	245,00
20000	4	T3/200	463	293	282	141	787	1165	69	100	95	75	170,0	SRF.4.2000	9.460,00	322,00
25000	5	T3/200	510	326	282	141	798	1233	76	112	106	85	198,0	SRF.5.2500	11.545,00	399,00

Hoists

Mono rail chassis EX For explosion-endangered areas



- Execution as roll chassis or as hasp chassis
- Integrated crash and accumulating protection
- Galvanized load pin, setting shims and attaching nuts
- Strength calculation according to DIN 15018
- Easily displaceable by castors running in ball bearings
- Castor profile suitably for all norm carriers
- German certificate of origin
- Temperature class T4 135°C

Roll chassis

Load bearing cap. [kg]	Flange width [mm]	Weight [kg]	Order-no.	Price €
500	50-146	4,1	ESF.R.0050	315,00
1000	50-179	6,8	ESF.R.0100	355,00
1500	50-173	7,8	ESF.R.0150	410,00
2000	50-173	7,8	ESF.R.0200	445,00
3200	66-186	16,6	ESF.R.0320	635,00
5000	74-182	31,5	ESF.R.0500	760,00
10000	119-160	88,0	ESF.R.1000	1.690,00

Surcharge

Additional executions on request

Hasp chassis

Load bearing cap. [kg]	Flange width [mm]	Weight [kg]	Order-no.	Price €
500	50-146	5,4	ESF.H.0050	475,00
1000	50-179	8,1	ESF.H.0100	480,00
1500	50-173	9,2	ESF.H.0150	560,00
2000	50-173	10,9	ESF.H.0200	585,00
3200	66-186	18,6	ESF.H.0320	830,00
5000	74-182	36,0	ESF.H.0500	970,00
10000	119-160	92,0	ESF.H.1000	1.900,00

Info

Please ask for the surcharge for larger carrier flanges at your SIP partner.

Please consider:

In EX areas only corresponding labeled products should be used according to:

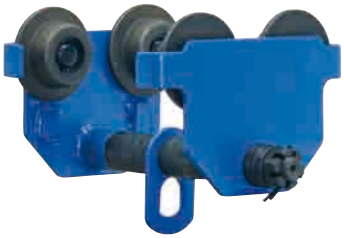
EX zone 1 CE ex II 2G IIB C T4

EX zone 21 CE ex II 2D C 135°C

The IIB gases hydrogen sulfide and Ethylenoxid are exeptions here.

Crane trolley hoisting mobility

PTM- & GTM-crane trolley



Hand trolley PTM

Winch chain trolley hoist GTM

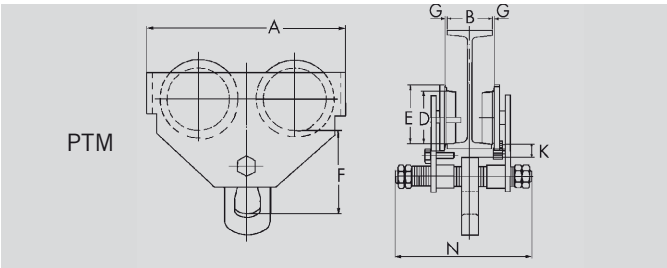
The hand trolleys are moved by pushing against the load, the winch chain crane trolley is operated by pulling on the continous revolving chain to move it from left to right. The SIP-pulleys of the same load bearing capacity can be hinged and unhinged hassle free with the carrying hook into the wide eye, whereby swinging load is balanced. The hand chains are galvanized to protect the operator and for a long life.
The assembly is mounted by sliding onto the open carrier.

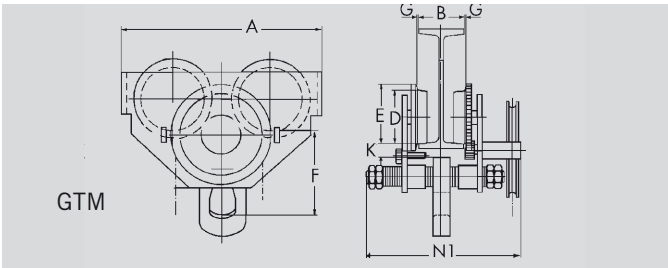
Solid side panels
Equal load balance distribution on four wheels feature through self justifying swing action about the pin axis!
Four safety latches on the side panels provide support for wheel break, rail cleansing and fall protection.

Ball bearing wheels
In the wheels is a quality, permanently lubricated ball bearing housing with seals.
They offer a quiet and safe running of the trolleys.

Large settings field
With the easy exchange of spacers, PTM & GTM trolleys can adjust to many carriers.
The standard bolts are for small widths, Bolt size 2 can accommodate right up to large HE B beams with a 300 mm width (for special carries: Prices on request).

Precise Wheels
Spherically shaped wheels made of high strength steel castings with high flanges allow smooth running of all forms of load.





Type	Hand trolley PTM	0,5	1	2	3	5	10	
Type	Winch c. trolley hoist GTM	0,5	1	2	3	5	10	20
Ōoad capacity	t	0,5	1	2	3	5	10	20
Flangewidth B min. - max. PTM / GTM	mm	50 – 203 / 64 – 203	64 – 203	88 – 203	100 – 203	114 – 203	124 – 203	136 – 203
Min. curve diameter	m	0,8	0,9	1	1,2	1,3	1,7	2,8
Length hand chain GTM	m	2,5	2,5	2,5	2,5	2,5	2,5	2,5
A (Size)	mm	199	246	276	332	377	389	574
D	mm	55	68	80	100	110	136	175
E	mm	67	81,5	94	115,5	127	156	200
F	mm	105	125	150	171	196	285	315
G	mm	2	2	2	3	3	3	3
K	mm	30	38	38	40	42	22	30
N	mm	295	311	327	343	355	403	–
N1	mm	326	338	349	362	374	480	537
Netto-weight PTM	kg	7	10,5	17,5	27	41	48	–
Netto-weight GTM	kg	11	14,5	21,5	31	46	95	244
PTM	Order-no.	LK.G20.000	LK.G20.001	LK.G20.002	LK.G20.003	LK.G20.004	LK.G20.005	–
	Price €	72,00	97,00	150,00	210,00	399,00	835,00	
GTM with 2.5 m length control	Order-no.	LK.G20.006	LK.G20.007	LK.G20.008	LK.G20.009	LK.G20.010	LK.G20.011	LK.G20.012
	Price €	136,00	136,00	204,00	262,00	472,00	998,00	1.260,00
Big flange width min. - max.	mm	64 – 305	64 – 305	88 – 305	100 – 305	114 – 305	124 – 305	136 – 305
	Order-no.	LK.G20.013	LK.G20.014	LK.G20.015	LK.G20.016	LK.G20.018	LK.G20.019	LK.G20.047
	Price €	32,00	73,00	84,00	126,00	126,00	126,00	189,00
More operating chain length p. m	Order-no.	LK.G20.017	LK.G20.017	LK.G20.017	LK.G20.017	LK.G20.017	LK.G20.017	LK.G20.017
	Price €	13,00	13,00	13,00	13,00	13,00	13,00	13,00
Locking device	Order-no.	LK.G10.180	LK.G10.181	LK.G10.182	LK.G10.183	LK.G10.184	LK.G10.185	LK.G10.186
	Price €	370,00	370,00	370,00	370,00	370,00	370,00	370,00
Extended hand wheel	Order-no.	LK.G10.190	LK.G10.191	LK.G10.192	LK.G10.193	LK.G10.194	LK.G10.195	LK.G10.196
	Price €	150,00	150,00	150,00	150,00	150,00	150,00	150,00

Surcharge

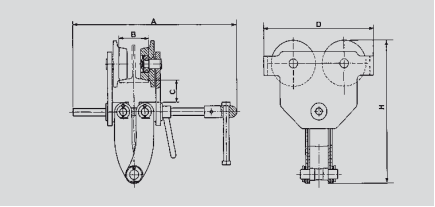
Folding roller suspension AZ-KF for load transport

Easy to attach and easy to use

- Spindle adjustment allows quick adjustment to the existing carriage width
- Safety against unintentional setting interference
- Galvanised Equipment

Load capacity [kg]	A [mm]	B [mm]	C [mm]	D [mm]	H [mm]	Order-no.	Price/piece €
500	340	63-203	25,4	175	263-324	AB.F.01791	242,00
1.000	340	63-203	25,4	175	263-324	AB.F.01792	259,50
2.000	340	76-203	25,4	280	339-387	AB.F.01793	319,50
3.000	345	76-203	26	345	374-438	AB.F.01794	438,00
5.000	465	100-305	31	395	450-528	AB.F.01795	767,50

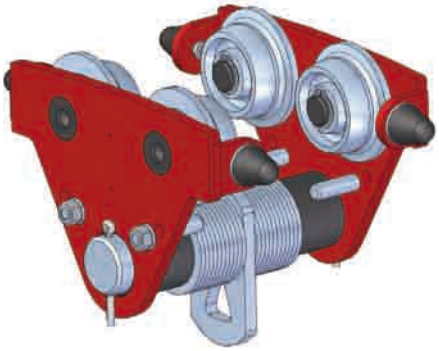
SUPER PRICE Surcharge



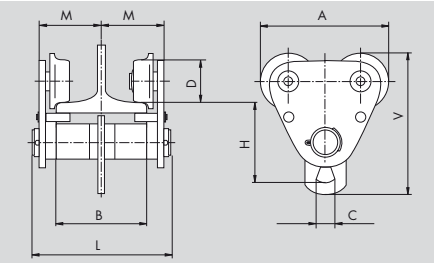
Carriage Ecoline for 500 to 3200 kg load capacity

MADE IN EUROPE

For easy transport also with reel



- Solid and compact construction
- adjustment to the existing carriage width
- Even for narrow diameter
- Very smooth
- Reel carriage with 3 m chain



Type	B Flange-width [mm]	Load bear.-capacity WLL [kg]	A [mm]	M [mm]	N [mm]	V [mm]	L [mm]	H [mm]	C [mm]	D Minimal height [mm]	Length reel chain [m]	Weight [kg]	Order-no.	Price/piece €
A	58-113	1000	157	52-80	–	177	178	100	24	70		8,1	TT.010.113	90,85
B	113-226	1000	157	78-134	–	177	286	100	24	70		9,5	TT.010.226	95,00
A	58-113	1000	157	52-80	99-126	209	178	100	24	70	3	8,1	TT.H.10.113	131,00
B	113-226	1000	157	46-134	92-180	209	286	100	24	70	3	9,5	TT.H.10.226	186,00
A	90-113	1600	259	80-91	168-179	269	212	121,5	27	90	3	25	TT.H.16.113	189,50
B	90-226	1600	259	77-145	168-236	269	324	121,5	27	90	3	26	TT.H.16.226	204,00
A	106-125	3200	326	86-96	179-189	309	239	134	39	–	3	32,5	TT.H.36.113	255,00
B	106-226	3200	326	86-146	178-238	309	340	134	39	–	3	34	TT.H.36.226	260,00

SUPER PRICE Surcharge

IPTKU Universal lifting clamps

Horizontal transportation of supports

The IPTKU support clamp is not your standard support clamp. It is the new standard. Fitted with a supple bearer ring which increases the load angle and has an additional double lock system (IPTKUD). For use as a temporary tackle eye a lifting clamp or a lashing clamp. It can also be delivered with a 3.1 certificate.

Also available:
IPTKUM clamp as anchor device Class B according to EN-795 for the personal protection range.

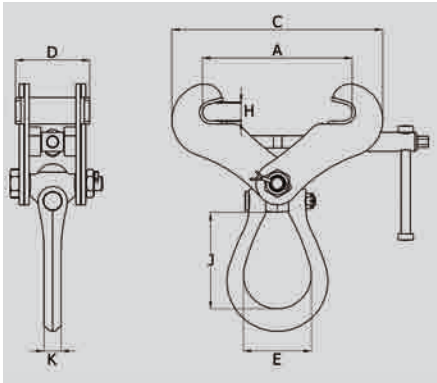
Optionally:
Special Offshore-model, Modell IPTKO (including 3.1 B-certificate)

Info

100% WLL at 45° loading crosswise can be attained provided that special requirements for the flange width and mounting are met. Contact us.

IPTKUD

Label	Load capacity [kg]	Mouth A [mm]	C [mm]	D [mm]	E [mm]	H [mm]	J [mm]	K [mm]	Weight [kg]	Order-No.	Price/ Piece €
2 IPTKU	2000	75-190	A+100	121	76	22	99	19	5,8	IP.TK.U0.02	163,00
3 IPTKU	3000	75-190	A+100	121	89	22	122	22	6,5	IP.TK.U0.03	210,50
4 IPTKU	4000	120-280	A+150	140	89	40	122	22	9,9	IP.TK.U0.04	277,50
5 IPTKU	5000	120-350	A+175	140	89	40	122	22	12,0	IP.TK.U0.05	372,50
10 IPTKU	10000	200-460	A+300	250	105	60	152	26	38	IP.TK.U0.10	613,50
2 IPTKUD	2000	75-190	A+100	165	76	22	99	19	5,8	IP.TK.UD.02	on request
3 IPTKUD	3000	75-190	A+100	165	89	22	122	22	6,5	IP.TK.UD.03	on request
4 IPTKUD	4000	120-280	A+150	185	89	40	122	22	9,9	IP.TK.UD.04	on request
5 IPTKUD	5000	120-350	A+175	185	89	40	122	22	12,0	IP.TK.UD.05	on request
10 IPTKUD	10000	200-460	A+300	250	105	60	152	26	38	IP.TK.UD.10	on request



Transport clamps for steel beams

The flexible anchor point

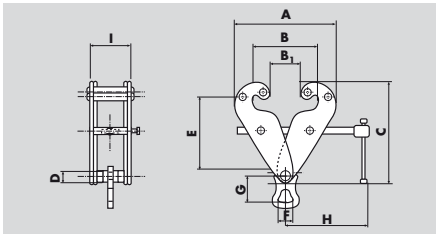
- Lightweight, compact design
- Universal application
- Can be used as a link, clamp and anchor point.
- Large clamping range (B-B1, see table)
- Up to 15 ° lateral loads

Info

Need other width „B“ or special designs? Contact your SIP Provider.

Load bear. cap. WLL [kg]	Dimensions max. A [mm]	B [mm]	B1 [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	Weight with bolts [kg]	Weight w. eye [kg]	Order-no.	Price/ piece €
1000	360	270	220	220	20	108-155	27	58	61	55	2,9	3,1	TK.Z.01000	67,90
2000	360	270	220	220	25	108-155	27	58	61	55	2,9	3,1	TK.Z.02000	83,70
3200	440	325	310	240	40	145-285	–	-	240	75	6,5	7,0	TK.Z.03000	104,20
5000	440	325	295	285	45	-	37	88	240	105	8,4	9,0	TK.Z.05000	142,30
10000	440	325	295	285	–	-	55	109	240	120	12,0	15,5	TK.Z.10000	208,40

SUPER PRICE Surcharge



Console winch mounting 150-1200 kg tongue

Pulls in every weather condition

650-900 kg

150-350 kg

1.200 kg
with unwind
automatic

The SIP console winch , thanks to its galvanized coating, is specially suited for the outdoors. eg for boat and trailer construction. It is very easy and safe to operate, and thanks to the spur gears it offers a high efficiency. The attached load pressure brake prevents unwanted sinking under load.

- Smooth
- Easily attaches to the console
- All parts are galvanized

Info

Console winches in stainless steel with 250, 650 and 1000 kg available!

Tensile load 1. rope posit. [kg]	Tensile load upper rope [kg]	Trwg. DIN 15020 [1EM]	Rope-Ø [mm]	Rope take over [m]	Number of max. rope layers	Lift per lever stroke [mm]	Needed crank force [daN]	Weight [kg]	Order-no.	Price/piece w/o rope €
150	75	1 Em	4	11	6	125	17	4,2	LB.0150.00	119,00
350	170	1 Em	4	20	6	125	25	4,8	LB.0350.00	125,00
650	290	1 Em	6	20	8	55	22	8,0	LB.0650.00	160,00
900	400	1 Em	7	15	7	59	24	8,5	LB.0900.00	186,00
900	400	1 Em	7	15	7	59	24	8,7	LB.0900.AU	248,00
1200	430	1 Em	7**	26	10	45	22	12,1	LB.1350.00	266,00
1200	430	1 Em	7**	26	10	45	22	12,4	LB.1350.AU	336,00

Recommended Wire: DIN 3060 FE-SZ-1770 ZNK Spa *, DIN 3060 SE-SZ-2160 ZNK Spa **

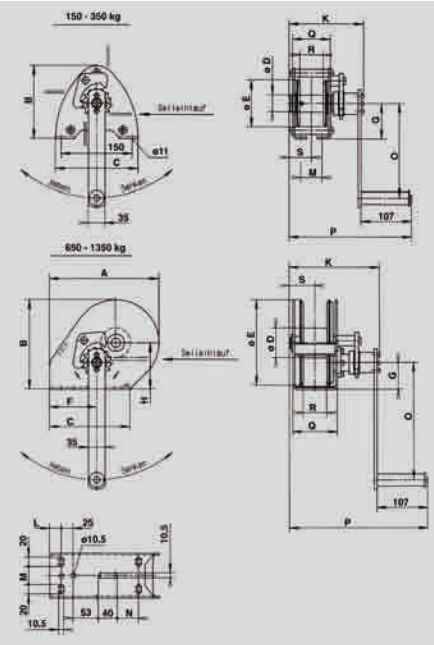
Order-no. number	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	K mm	L mm	M mm	N mm	O mm	P mm	R mm
LB.0150.00...	–	155	175	36	100	–	75	–	159	–	45	–	200	260	50
LB.0350.00...	–	155	175	36	100	–	75	–	189	–	75	–	320	290	80
LB.0650.00...	232	192	210	63,5	183	100	58	100	192	25	38	–	250	293	50
LB.0900.00...	232	192	210	63,5	183	100	58	100	192	25	38	–	320	293	50
LB.0900.AU...	232	192	210	63,5	183	100	58	100	226	25	38	–	320	303	50
LB.1350.00...	273	266	240	63,5	255	78	75	138	192	35	30	53	320	293	50
LB.1350.AU...	273	266	240	63,5	255	78	75	138	226	35	30	53	320	303	50

Folding crank

vario crank

In addition, also available with the following equipment:

- Winches with Automatic roll out for pulling out the rope by hand, towing capacity 900 kg and 1200kg
- Vario crank lever with Adjustable Arm
- Folding crank, with detachable handle



Wall winch can shift quite a lot

Galvanized wall winch

The SIP wall winch offers simple and safe handling. Thanks to the spur gear, you can rely on high efficiency and can easily be attached to the wall. The towing capacity is 300-1000 kg.

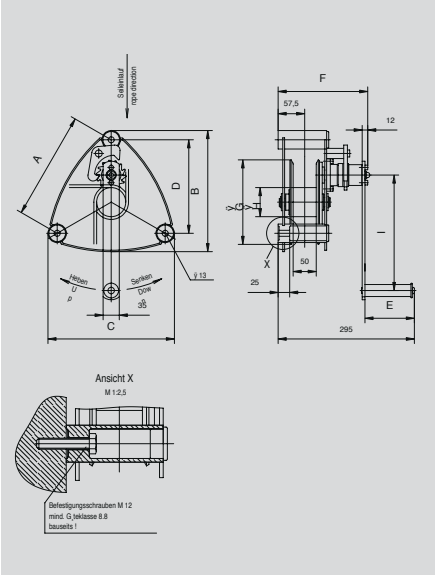
- Light weight
- Rope outlet possible in all directions
- Corrosion-resistant, since all parts are galvanized
- Extremely flat design
- Pressure brakes prevent unwanted sinking of the load

Folding crank

Vario crank

Optional Extra:

- Vario crank lever with Adjustable Arm
- Folding crank, with detachable handle
- Rope with hooks



Tensile 1. rope pos. [kg]	Tensile l. upper rope pos. [kg]	Trwg. DIN 15020	Drum -Ø [mm]	Drum-width [mm]	Rope-Ø [mm]	Rope t.o. 1. pos. [m]	Rope t.o. upper pos. [m]	Lift per winch stroke [mm]	Needed Crank force [daN]	Weight [kg]	Dimensions [mm] a	b	c	d	e	f	g	h	l	Order-no.	Price/pc w/o rope €
300	130	1Em	63	50	5	1,3	28	57	13	10	234	262	274	203	107	194	183	63	200	AL.0300.00	228,00
500	230	1Em	63	50	6	1	20	55	17	10	234	262	274	203	107	194	183	63	250	AL.0500.00	288,00
750	270	1Em	63	50	7	1	26	45	17	16	306	337	357	265	107	194	255	63,5	250	AL.0750.00	336,00
1000	360	1Em	63	50	7	1	26	45	18	16	306	337	357	265	107	194	255	63,5	320	AL.1000.00	375,00

Recommended Wire rope: DIN 3060 FE-SZ-1770 ZNK Spa

Console winch in Aluminum

Ideal for areas that are exposed to severe corrosion

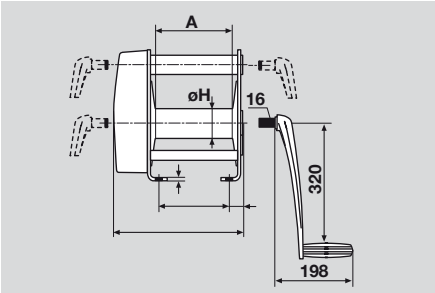
GA.0500...

GA.0200...

GA.0800...

The console winch, thanks to its sea proof aluminum, is best suited for the construction of cars and ships. It is simple and safe to handle, the friction shaft bearings ensure a reliable long-term function.The SIP console winch have removable stirrups that can be attached on both sides.

- 2 speeds (in the embodiments 500 kg and 800 kg)
- Large rope capacity
- Aluminum construction



Tensile l. 1. rope pos. [kg]	Tensile l. upper rope pos. [kg]	Trwg. DIN 15020	Drum -Ø [mm]	Drum-width [mm]	Rope-Ø [mm]	Rope t.o. 1. pos.[m]	Rope t.o. upper pos. [m]	Lift per winch stroke[mm]	Needed crank force [daN]	Weight [kg]	Order-no.	Price/piece w/o rope €
200	110	1Em	50	120	4	3,5	40	195	19	6	GA.0200.00	331,00
500	200	1Em	60	120	6	4,2	50	60/400*	12	14	GA.0500.00	504,00
800	350	1Em	70	200	7	5,3	78	36/280*	18	16	GA.0800.00	690,00

* load overdrive

Wire Rope Flap Block

Premium Lightweight Product

With hook

With shackle

Guide roller

- Forged, heat-treated alloy steel hook
- Swivel pieces, hook bearing and shackle out of forged Steel
- Hook and shackle version with exchan geable roller diameters of 114 mm to 356 mm
- Can be equipped with bronze sleeve bearings or ball bearings
- Opening feature permits inserting the rope while the block hangs on the lifting equipment
- Blocks with hooks and shackles are exclusively equipped with a bolt retaining spring that prevents bolts from getting lost
- Nipple for pressure lubrication
- Wire rope rollers in sizes 76 mm to 254 mm are suited for two rope strengths
- For fixed duration
- Version from 114 mm roll diameter with an RFID-Chips

Info

Replacement rollers and safety latches are available on request.

Roller-Ø	Bearing	Wire rope-Ø	Capacity	Version with hook			Version with shackle			Version with only guide roller		
[mm]	code	[mm]*	[t]	weight [kg]	Order-No.	Price €	weight [kg]	Order-No.	Price €	weight [kg]	Order-No.	Price €
*76,0	BB	8-10	2	-	076.AA.10.H	-	1,90	076.AA.10.S	147,00	-	-	-
**76,0	BB	8-10	2	2,04	076.BB.10.H	162,00	1,81	076.BB.10.S	159,00	1,22	076.BB.10.U	116,50
**114	BB	10-13	4	5,31	114.BB.13.H	278,50	5,44	114.BB.13.S	324,00	2,99	114.BB.13.U	189,00
152	BB	16-19	8	12,2	152.BB.19.H	453,50	12,6	152.BB.19.S	561,50	6,80	152.BB.19.U	313,00
152	RB	16-19	8	12,2	152.RB.19.H	555,00	12,6	152.RB.19.S	692,50	6,80	152.RB.19.U	383,50
203	BB	16-19	8	15,0	203.BB.19.H	561,50	15,4	203.BB.19.S	688,00	9,53	203.BB.19.U	381,00
203	RB	16-19	8	15,0	203.RB.19.H	645,00	15,4	203.RB.19.S	775,50	9,53	203.RB.19.U	490,50
254	BB	16-19	8	18,6	254.BB.19.H	742,00	19,1	254.BB.19.S	896,50	13,2	254.BB.19.U	559,50
254	RB	16-19	8	18,6	254.RB.19.H	843,50	19,1	254.RB.19.S	925,50	13,2	254.RB.19.U	602,50
305	BB	16	8	21,8	305.BB.16.H	951,50	22,2	305.BB.16.S	948,00	16,3	305.BB.16.U	863,00
305	RB	16	8	21,8	305.RB.16.H	951,50	22,2	305.RB.16.S	948,00	16,3	305.RB.16.U	863,00
305	BB	19	8	21,8	305.BB.19.H	1.139,00	22,2	305.BB.19.S	1.029,00	16,3	305.BB.19.U	944,00
305	RB	19	8	21,8	305.RB.19.H	1.139,00	22,2	305.RB.19.S	987,00	16,3	305.RB.19.U	944,00

BB = Bronze sleeve bearing, RB = Ball bearing

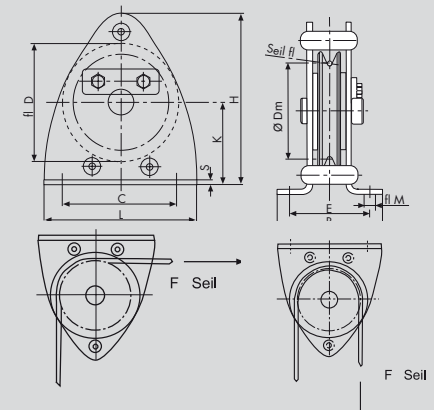
* Use with other wire diameters possible
Info: The breaking load is 400% of the capacity.
a** Only deliverable with bronze bearings. 76 and 114 mm with self-lubricating bronze sleeve bearing.

Steel rope pulley chambers

Smooth rope deflector with mounting option

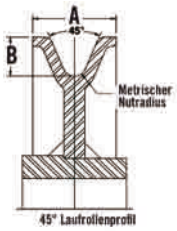
With a clean turned, rope fitting groove for manual or mechanical operation.
All pulleys are equipped with a sealed grease filled bearing housing.

D Ø [mm]	Rope Ø [mm]	Dm Ø [mm]	TrwGr [FEM]	Rope pull str. 90° [kg]	Rope pull str. 180° [kg]	KULA	l [mm]	c [mm]	h [mm]	b [mm]	e [mm]	s [mm]	k [mm]	M/M1 Ø [mm]	Order-no.	Price/ piece €
90	3-4	80	2 m	700	500	6004ZZ	120	90	134	85	65	4	65	9/9	DSR.BB.004	65,00
145	5	125	4 m	1100	800	6205ZZ	200	160	224	125	88	6	110	11,5/13	DSR.B0.005	117,00
90	5-6	78	1 Dm	700	500	6004ZZ	120	90	134	85	62	6	65	9/9	DSR.B0.056	81,00
145	6	125	2 m	1100	800	6205ZZ	200	160	224	125	88	6	110	11,5/13	DSR.B0.006	117,00
145	7	126	1 Am	1100	800	6306ZZ	200	160	224	125	88	6	110	11,5/13	DSR.B0.007	117,00
185	8	160	2 m	2300	1630	6306ZZ	245	195	273	138	106	8	135	13,5/15	DSR.B0.008	161,00
185	9	162	1 Am	2300	1630	6306ZZ	245	195	273	138	106	8	135	13,5/15	DSR.B0.009	161,00
270	9-12	246	2 m	2500	1800	6208ZZ	360	290	407	191	138	10	202	18/20	DSR.B0.012	331,00
400	13-16	368	3 m	5000	3800	6310ZZ	530	430	612	302	212	15	310	26/30	DSR.B0.016	847,00
400	18	364	2 m	5000	3800	6310ZZ	530	430	612	302	212	15	310	26/30	DSR.B0.018	1.106,00
490	20	450	3 m	8000	6000	6313ZZ	650	580	694	313	220	16	340	34/40	DSR.B0.020	1.423,00



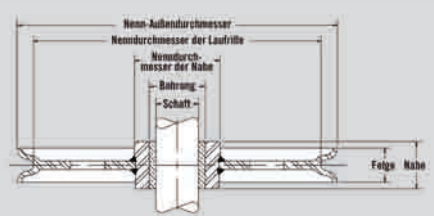
Hoists

Wire Rope Roller Metrical McKissick® Roller Forged Rope Roller



Select the combination of external dimensions of your rope roller and the size of the rope guide. In order to make the selection of your appropriate

McKissick® Roller Forged™ standard roller easier, we have simplified our product offers. The grooves and edges of the flanks are formed in several working steps by compressing and roller forging. The uniform shape of the roller-forged groove extends the life of the wire rope. The groove is flame-hardened to a min. of 325 HB at a wire-contact area of 140°.



Info

Ask us about the digital rope roller configurator.

Explanation of the table: The red cells show the available standard combinations of the dimension of the rope roller and the size of the rope guide.

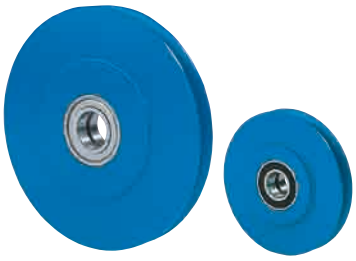
Rope-Ø	Size [mm]		Nutdiam. [mm]		Outer size wire rope roller [mm]									
[mm]	A	B	mind.	max.	300	350	400	450	500	550	600	650	700	800
11	40	19.5	5.38	6.05	■									
12	40	20.5	6.36	6.60	■									
13	40	19.5	6.89	7.15	■									
14	40	21	7.42	7.70	■									
15	40	21	7.95	8.25	■									
16	45	25	8.48	8.80	■									
17	45	25	9.01	9.35	■									
15	45	25	7.95	8.25		■								
16	45	24	8.48	8.80		■								
17	45	24	9.01	9.35		■								
15	45	26	7.95	8.25			■							
16	45	25	8.48	8.80			■							
17	50	28	9.01	9.35			■							
18	50	27	9.54	9.90			■							
19	55	28.5	10.07	10.45			■							
20	55	25.5	10.60	11.00			■							
21	60	34	11.13	11.55			■							
22	60	33	11.66	12.10			■							
23	60	33	12.19	12.65			■							
19	55	31	10.07	10.45				■						
20	55	30	10.60	11.00				■						
21	55	30	11.13	11.55				■						
21	60	34	11.13	11.55					■					
22	60	33	11.66	12.10					■					

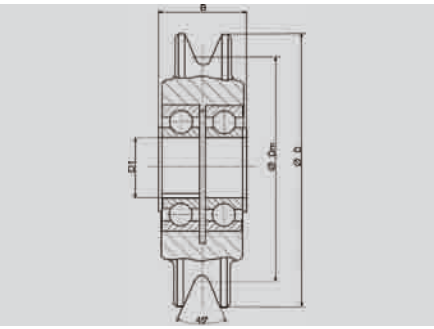
Rope-Ø	Size [mm]		Nutdiam. [mm]		Outer size wire rope roller [mm]									
[mm]	A	B	mind.	max.	300	350	400	450	500	550	600	650	700	800
23	60	33	12.19	12.65					■					
23	65	37	12.19	12.65						■				
24	65	36	12.72	13.20						■				
25	65	36	13.25	13.75						■				
26	70	39	13.78	14.30						■				
27	70	39	14.31	14.85						■				
23	65	37	12.19	12.65							■			
24	65	36	12.72	13.20							■			
25	65	36	13.25	13.75							■			
26	70	39	13.78	14.30							■			
27	75	43	14.31	14.85							■			
28	75	42	14.84	15.40							■			
29	75	42	15.37	15.95							■			
28	80	47	14.84	15.40								■		
29	80	46	15.37	15.95								■		
30	80	45	15.90	16.50								■		
32	80	45	16.96	17.60								■		
30	90	50	15.90	16.50									■	
32	90	48	16.96	17.60									■	
34	90	48	18.02	18.70									■	
34	100	56	18.02	18.70										■
36	100	54	19.08	19.80										■
38	100	54	20.14	20.90										■

Wire Rope Sheave with groove

With a clean turned, rope fitting groove.
All pulleys are equipped with grease filled bearing housing.

D Ø [mm]	Rope-Ø [mm]	Dm Ø [mm]	TrwGr [FEM]	Rope pull. str. with 90° redirection [kg]	Rope pull. str. with 180° redirection [kg]	KULA	d1 [mm]	b [mm]	Order-no.	Price/piece €
80	4	66	1 Bm	700	500	6004ZZ	20	28	**DSR.0A.004**	**20,00**
145	5	125	4 m	1100	800	6205ZZ	25	34	**DSR.00.005**	**39,00**
90	5-6	78	1 Dm	700	500	6004ZZ	20	28	**DSR.00.056**	**29,00**
145	6	125	2 m	1100	800	6205ZZ	25	34	**DSR.00.006**	**45,00**
145	7	126	1 Am	1100	800	6205ZZ	25	34	**DSR.00.007**	**48,00**
185	8	160	2 m	2300	1630	6306ZZ	30	42	**DSR.00.008**	**80,00**
185	9	162	1 Am	2300	1630	6306ZZ	30	42	**DSR.00.009**	**92,00**
270	10	245	3 m	2500	1800	6208ZZ	40	41	**DSR.00.010**	**162,00**
270	11	248	3 m	2500	1800	6208ZZ	40	41	**DSR.00.011**	**162,00**
270	12	246	2 m	2500	1800	6208ZZ	40	41	**DSR.00.012**	**162,00**
270	13	244	1 Am	2500	1800	6208ZZ	40	41	**DSR.00.013**	**166,00**
400	16	368	3 m	5000	3800	6310ZZ	50	61	**DSR.00.016**	**419,00**
400	18	364	2 m	5000	3800	6310ZZ	50	61	**DSR.00.018**	**419,00**
490	20	450	3 m	8000	6000	6313ZZ	65	72	**DSR.00.020**	**515,00**





Steel winch

Standard execution

The steel winches according to DIN 7355 posses a lifting housing, the teeth kegs are slopped.
With a self-locking security crank (Siku) or pressure roller crank (DSK) the load is held securely at any height.
Folding handle.For working in confined areas, also available with safety the safety crank ratchet (Raku).

- Mass production, therefore low prices
- Parts according to DIN standard of high quality
- Short delivery times
- All parts are quickly and easily interchangeable

Lift. force [t]	Height [mm]	Lift. h. [mm]	Claw height in deep position [mm]	Weight [kg]	Order-no. with Siku	Price €	Order-no. with DSK	Price €	Order-no. with Raku	Price €
1,5	725	350	65	13	SW.ST.015.S	292,00	SW.ST.015.D	336,00	SW.SV.015.R	336,00
3,0	725	350	70	20	SW.ST.030.S	332,00	SW.ST.030.D	376,00	SW.SV.030.R	376,00
5,0	725	350	75	27	SW.ST.050.S	391,00	SW.ST.050.D	435,00	SW.SV.050.R	435,00
7,5	725	350	75	29	SW.ST.075.S	488,00	SW.ST.075.D	–	SW.SV.075.R	531,00
10,0	800	400	80	42	SW.ST.100.S	612,00	SW.ST.100.D	–	SW.SV.100.R	660,00

Shortened version

Due to the low height range, the range of possible applications is significantly expanded.
Available with Siku, raku or DSK. Folding handle.

Lift. force [t]	Height [mm]	Lift. h. [mm]	Claw height in deep position [mm]	Weight [kg]	Order-no. with Siku	Price €	Order-no. with DSK	Price €	Order-no. with Raku	Price €
1,5	550	250	75	11	SW.VK.015.S	292,00	SW.VK.015.D	336,00	SW.VK.015.R	336,00
3,0	570	275	75	18	SW.VK.030.S	332,00	SW.VK.030.D	376,00	SW.VK.030.R	376,00
5,0	600	300	80	24	SW.VK.050.S	391,00	SW.VK.050.D	435,00	SW.VK.050.R	435,00
7,5	625	300	80	26	SW.VK.075.S	487,00	SW.VK.075.D	531,00	SW.VK.075.R	531,00
10,0	650	300	90	38	SW.VK.100.S	612,00	SW.VK.100.S	612,00	SW.VK.100.R	660,00

Adjustable version

With lifting frame according to DIN 7355th The adjustable claw can be set for different to stages. Full use of space, even without the base construction of the winch is guaranteed. Available with Siku, raku or DSK. Folding handle.

Lift. force [t]	Height [mm]	Lift. h. [mm]	Claw height in deep position [mm]	Weight [kg]	Order-no. with Siku	Price €	Order-no. with DSK	Price €	Order-no. with Raku	Price €
1,5	725	350	50	19	SW.VS.015.S	393,00	SW.VS.015.D	437,00	SW.VS.015.R	437,00
3,0	725	350	55	26	SW.VS.030.S	421,00	SW.VS.030.D	465,00	SW.VS.030.R	465,00
5,0	725	350	65	33	SW.VS.050.S	518,00	SW.VS.050.D	562,00	SW.VS.050.R	562,00
10,0	800	400	70	51	SW.VS.100.S	747,00	SW.VS.100.D	797,00	SW.VS.100.R	797,00

Gear rack

Developed from DIN winches.
Available with Siku, Raku or DSK. Folding handle. Suitable for pulling and pressure!

Lift. force [t]	height [mm]	Lift. h. [mm]	Claw h. i.d.p.[mm]	Weight [kg]	Order-no. with Siku	Price €	Order-no. with DSK	Price €	Order-no. with Raku	Price €	Price € 50 mm add. lift
1,5	500	785	25	11	SW.ZS.515.S	315,00	SW.ZS.515.D	361,00	SW.ZS.515.R	361,00	13,30
1,5	700	985	25	12	SW.ZS.715.S	332,00	SW.ZS.715.D	378,00	SW.ZS.715.R	378,00	13,30
1,5	900	1185	25	13	SW.ZS.915.S	351,00	SW.ZS.915.D	397,00	SW.ZS.915.R	397,00	13,30
3,0	500	900	25	19	SW.ZS.530.S	415,00	SW.ZS.530.D	461,00	SW.ZS.530.R	461,00	17,70
3,0	700	1100	25	21	SW.ZS.730.S	437,00	SW.ZS.730.D	483,00	SW.ZS.730.R	483,00	17,70
3,0	900	1300	25	23	SW.ZS.930.S	460,00	SW.ZS.930.D	506,00	SW.ZS.930.R	506,00	17,70
5,0	700	1200	25	28	SW.ZS.750.S	542,00	SW.ZS.750.D	588,00	SW.ZS.750.R	588,00	25,40
10,0	700	1300	50	55	SW.ZS.100.S	841,00	SW.ZS.100.D	890,00	SW.ZS.100.R	890,00	29,80

Construction hoisting rope

Spiral Birotex Braided Rope

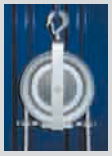
DIN 83 307, diameter: 16 mm Breaking strength: 1900 kp Color: White with blue spots

Length [m]	Order-no.	Price/VE €
10 m	SF.BS.0010	30,50
15 m	SF.BS.0015	42,50
20 m	SF.BS.0020	55,40
25 m	SF.BS.0025	67,00
30 m	SF.BS.0030	80,00
40 m	SF.BS.0040	105,00
50 m	SF.BS.0050	130,00
75 m	SF.BS.0075	194,00
100 m	SF.BS.0100	290,00

Surcharge

Info

Order with: The professional pulley, sturdy design, with safety load hooks and guiding pulleys, precision ball bearing housing.



Load capacity: 150 kg

Order-no.	Price/piece €
SR.250.000	115,00

Pulley

Pulley hoist with with rope

Ready to use pulley hoist pavers, with adjustable hooks, 2 globes, galvanized with three parallel steel rollers, complete with rope made spiral braded BIROTEX rope (PP high tenacity multifilament), low torsion.

Rope-Ø [mm]	Roll-Ø [mm]	Length [m]	Allowed hook l. [kg]	Roll strength [mm]	Order-no.	Price/VE €
8	50	20	200	12	SF.FZ.20.08	108,00
10	60	25	250	12	SF.FZ.25.10	136,00
12	80	30	350	16	SF.FZ.35.12	222,00
16	100	40	500	20	SF.FZ.50.16	410,00

Surcharge

Hoist Height = length divided by 7

Small pulley

EReliable pulley complete with 6 m Atlantic braided rope, 6 mm, fully assembled.
Block equipped with additional clamp lock.
System breaking strength: 900 daN.
Ratio 1:2, lift height 1.50 meters.

VE	Order-no.	Price/VE €
1	SF.57.74.10	74,20

Surcharge

Spare parts for hoists

Rope-Ø [mm]	Rope minimal breaking str. [daN]	Coil [m]	Order-no.	Price/VE €
8	500	20	SF.FS.0008	25,50
10	800	25	SF.FS.0010	40,20
12	1100	30	SF.FS.0012	52,00
14	1500	35	SF.FS.0014	80,00
16	1900	40	SF.FS.0016	121,50

Info

Spare parts also available. Talk to us!

Karabiner Hook

Alloy Safety karabiner hook

With screw on safety

Break l. [daN]	Color	Order-no.	Price/piece €
2200	Red	SF.5370.14	14,20

Surcharge

PSA approved, mouth opening 23 mm.

Light metal carabiner hooks according to DIN 5290

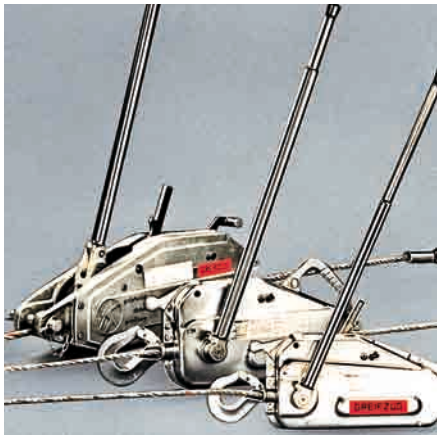
With screw top

L [mm]	Br. load [daN]	Mouth op.[mm]	Eye w. [mm]	Order-no.	Price/ pc. €
136	2200	22	21	SF.5370.07	13,60
136	2200	22	21	SF.5370.08	12,40

Surcharge

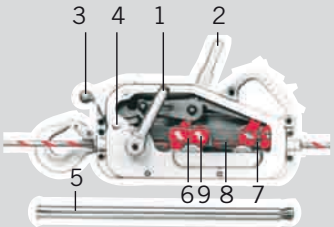
Multipurpose hand-operated multi-purpose hoists

Versatility installed!



Hoisting, lifting, lowering, stretching with hand-operated multi-purpose hoists
The hand-operated Multipurpose can be used anywhere. So, you get smooth, multidirectional, millimeter precise results on any site. The pull length is only limited by the length of rope used.

- Safety factor of 5
- Long service life through conservation of the rope
- Approved by the Professional Association
- Approved for passenger transport (Professional Series)

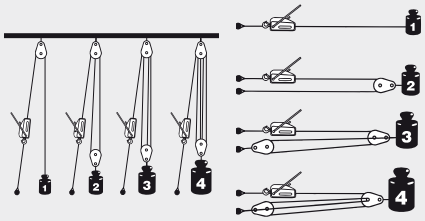


1 feed lever
2 Winding lever
3 Gear lever
4 Button
5 Lever tube
6 + 7 Clamp grip pairs
8 Clinch winch rope
9 Clamp axis

Safety
In operation, a pair of clamping jaws clutch the rope. So the load is held secure at all times. The overload security device reliably protects the device from damage
Two handed operation for opening the clamping mechanism. The Professional Series has been certified for passenger transport.
Order example: Include rope length!
GS 0115 50
Rope with 1600 kg pulling strength. rope length 50 m

Info

To make more of the pulling power!



Info

Longer rope life due to lower pressure

Multipurpose Professional
includes winch and rope
Small basic equipment: with winch, rope and tip and attached hooks on the hand reel

Nom. load [kg]	Grip. pull. rope [m]	Rope-Ø [mm]	Weight [kg]	Order-no.	Price/piece €
800	20	8	17	GP.0080.20	688,50
1600	20	11,5	34	GP.0160.20	1.023,00
3200	10	16	46	GP.0320.10	1.549,00

Meter goods
Multipurpose pulling for professionals
Ropes of any length available
(Without reel)

Nom. load [kg]	Order-no.	Price per lin. m. €
800	GS.0080.00	3,15
1600	GS.0115.00	4,62
3200	GS.0160.00	7,98

Order example: Include rope length!GS 0115 30
Rope with 1600 kg pulling strength. rope length 30 m

Multipurpose pulling accessories for professionals

Additional tips and hooks

Nom. load [kg]	Order-no.	Price/piece €
800	GZ.0080.00	19,20
1600	GZ.0115.00	25,10
3200	GZ.0160.00	33,30

Surcharge

Additional lever winch lever

Nom. load [kg]	Order-no.	Price/piece €
800	GH.0080.0P	29,40
1600	GH.0160.0P	48,65
3200	GH.0320.0P	48,65

Additional hoist grip box

Nom. load [kg]	Order-no.	Price/piece €
800	GB.0080.00	90,10
1600	GB.0160.00	128,00
3200	GB.0320.00	160,00

Additional shear pin

Nom. load [kg]	Order-no.	Price/piece €
800	GA.0080.AP	0,37
1600	GA.0160.AP	0,37
3200	GA.0320.AP	1,00

Economy Multipurpose Unit

The feather weight of the multi-purpose hoisters

Multipurpose Economy
includes winch and rope
Small basic equipment: with winch tube, rope and tip
Cork handles on reel

Nom. load [kg]	Grip. pull. rope [m]	Rope-Ø [mm]	Weight [kg]	Order-no.	Price/pc Stück €
800	20	8	14,5	GE.0080.20	515,00
1600	20	11,5	28,0	GE.0160.20	696,00
3200	10	16	39,5	GE.0320.20	1.040,00

Meter goods
for Multipurpose Economy
Ropes of any length available (without reel)

Nom. load [kg]	Order-no.	Price per lin. m. €
800	GS.0080.00	3,15
1600	GS.0115.00	4,62
3200	GS.0160.00	7,98

Order example: Include rope length!GS 0115 30
Rope with 1600 kg pulling strength. rope length 30 m

Accessories for multipurpose pulling Economy

Additional tips and hooks

Nom. load [kg]	Order-no.	Price/pc €
800	GZ.0080.00	19,20
1600	GZ.0115.00	25,10
3200	GZ.0160.00	33,30

Additional lever winch lever

Nom. load [kg]	Order-no.	Price/pc €
800	GH.0080.0P	29,40
1600	GH.0160.0P	48,65
3200	GH.0320.0P	48,65

Additional hoist grip box

Nom. load [kg]	Order-no.	Price/pc €
800	GB.0080.00	90,10
1600	GB.0160.00	128,00
3200	GB.0320.00	160,00

Additional shear pin

Nom. load [kg]	Order-no.	Price/pc €
800	GA.0080.0P	0,53
1600	GA.0160.0P	0,37
3200	GA.0320.0P	2,26

jockey mini cable hoist

Ideal for assembly and service work

jockey® A5

jockey® J5

The mini-cable jockey is a practical tool for lifting, pulling, tensioning and holding loads. Unlimited cable length in every site and direction. A small, handy tool - ideal for installation and service companies.

The self-supporting draw mechanism is of high-quality steel components and has an impact resistant cast housing. At the maximum load of 500 kg (jockey offers the unit a 3-fold safety factor.

Basic equipment A5: jockey device with lever tube, 10 m rope, 4.5 mm cable diameter , 2 slings (1 m and 2 m long), rope diameter 4.5 mm
Basic equipment j5: jockey device with lever tube, 10 m rope, 6.5 mm cable diameter , 2 slings (both 2 m long), rope diameter 6.5 mm

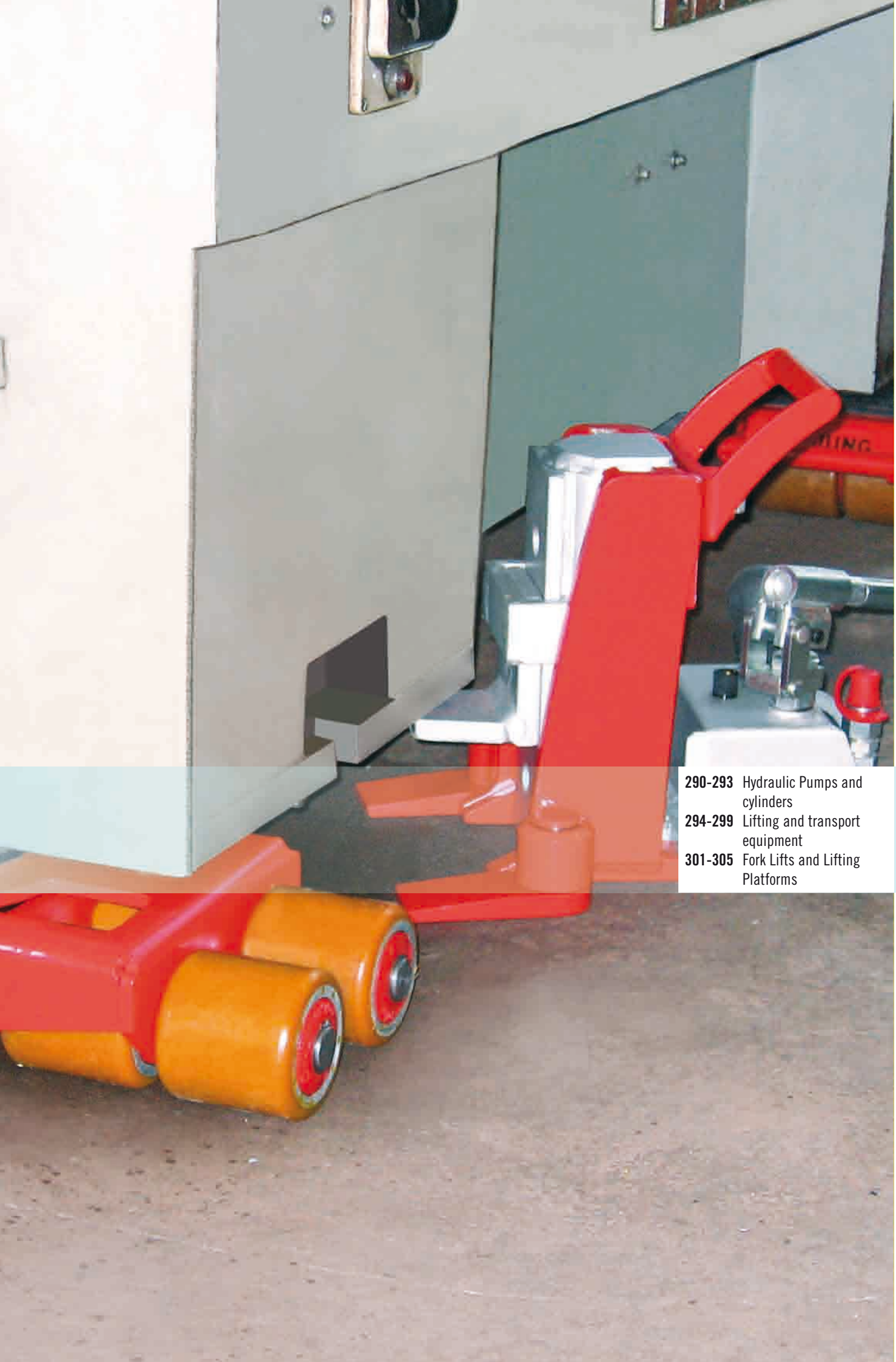
- Easy to handle for industrial and trade use
- Compact and lightweight design
- Accessories upon request

Label	Load bearing capacity [kg]	Rope feed per Double lift [mm]	Rope-Ø [mm]	Dimensions [mm]	Weight [kg]	Order-no.	Price/pc. €
jockey® A5	300	15	4,5	320 x 190 x 30	3,9	GR.5649.20	279,50
jockey® J5	500	15	6,5	370 x 215 x 55	8,1	GR.5479.20	396,50

Surcharge

Basic equipment jockey® A5

HYDRAULICS



290-293 Hydraulic Pumps and cylinders
294-299 Lifting and transport equipment
301-305 Fork Lifts and Lifting Platforms

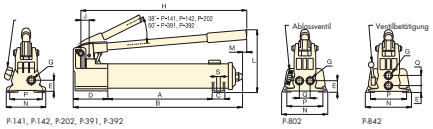
Hand pump

High performance with low weight

From bottom to top: P142, P392, P842, P802

- Lightweight and compact design
- Nylon tank an nylon coated aluminum housing for maximum corrosion protection
- Thanks to the two stage operation, 78% less pump strokes is achieved compared with single-stage pump operation
- Built-in, 4-way valve on model P-842 for use with double acting cylinders
- Large tank capacity to power a wide range of cylinders and tools
- Built-in safety valve to prevent overload

You may find selection tables for cylinders and speed diagrams in the main catalogue's E323e yellow pages.



Pump type	Usable oil volumes [cm³]	Max. compression [bar] 1. tier	2. tier	Output per stroke [cm³] 1. tier	2. tier	Max. lever force [kg]	Weight [kg]	Order-no.	Price €
2-stufig	327	13	700	3,62	0,90	35,4	2,0	EP.142.000	308,00
2-stufig	901	13	700	3,62	0,90	28,6	3,4	EP.202.000*	375,00
2-stufig	901	13	700	11,26	2,47	42,2	4,1	EP.392.000	414,00
2-stufig	2540	27	700	39,33	2,47	43,1	8,2	EP.802.000	762,00
2-stufig	2540	27	700	39,33	2,47	43,1	10,0	EP.842.000	1.362,00
1-stufig	327	N/Z	700	N/Z	0,90	32,7	2,0	EP.141.000*	272,00
1-stufig	901	N/Z	700	N/Z	2,47	38,6	4,1	EP.391.000*	326,00

Steel hand pump

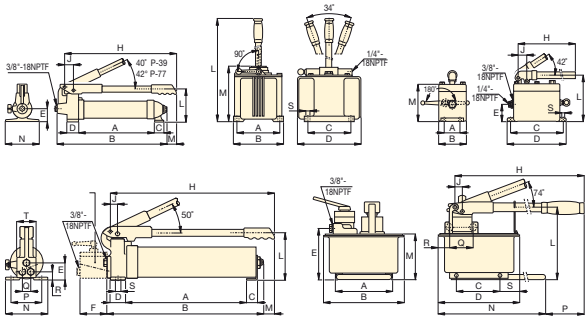
More power comes with Quality

Many uses in testing, maintenance, aswell as by pulling and stretching

- Two-stage operation to relieve the operator (except P-39)
- P-84 and P-464 with 4-way valve for use with double acting cylinders
- All other models have an external outlet valve for use with single acting cylinders
- Inbuilt safety valve and overload protection
- Large tank capacitiy to power a variety of cylinders or tools

From top to bottom:
P-462, P-84, P-801, P-77, P-80, P-39

Pump type	Usable oil volumes [cm³]	Max. compres.** bar 1. tier	2. tier	Output per stroke [cm³] 1. tier	2. tier	Max. lever force [kg]	Order-no.	Price €
1-tier	655		700		2,62	50	EP.39.0000	301,00
2-tier	770	14	700	16,00	2,41	43	EP.77.0000	463,00
2-tier	2200	25	700	16,22	2,46	47	EP.80.0000	588,00
2-tier	4080	25	700	16,22	2,46	47	EP.801.000	784,00
2-tier	2200	25	700	16,22	2,46	47	EP.84.0000	928,00
2-tier	7423	14	700	126,20	4,75	49	EP.462.000	1.393,00
2-tier	7423	14	700	126,20	4,75	49	EP.464.000	1.709,00



Single-action cylinder 700 bar

Wear-resistant cylinders that are easy to mount

From left to right: RC-506, RC-2510, RC-154, RC-10010, RC-55, RC-1010

- Golden-ring version, absorbs eccentric presures without causing any wear the cylinder parts
- Chrome-plated steel piston protects against rust and delanination of gliding surfaces
- Piston return spring allows for rapid piston retraction.
- All models stove enameled for increased corrosion resistance
- The external thread on the cylinder head, piston rod interior thread, aswell as the fastening thread for the cylinder base, allow for an easy installation

Cylinder type in t [kN]	Lift [mm]	Effective piston area [cm²]	Oil volumes [cm³]	Height retracted [mm]	Weight [kg]	Order-no.	Price/ piece €
5 (45)	16	6,5	10	41	1,0	RC.0050.00**	237,00
5 (45)	25	6,5	16	110	1,0	RC.0051.00	268,00
5 (45)	76	6,5	50	165	1,5	RC.0053.00	298,00
5 (45)	127	6,5	83	215	1,9	RC.0055.00*	331,00
5 (45)	177	6,5	115	273	2,4	RC.0057.00	366,00
5 (45)	232	6,5	151	323	2,8	RC.0059.00	407,00
10 (101)	26	14,5	38	89	1,8	RC.0101.00	281,00
10 (101)	54	14,5	78	121	2,3	RC.0102.00*	311,00
10 (101)	105	14,5	152	171	3,3	RC.0104.00*	345,00
10 (101)	156	14,5	226	247	4,4	RC.0106.00*	382,00
10 (101)	203	14,5	294	298	5,4	RC.0108.00	424,00
10 (101)	257	14,5	373	349	6,4	RC.1010.00*	471,00
10 (101)	304	14,5	441	400	6,8	RC.1012.00	524,00
10 (101)	356	14,5	516	450	8,2	RC.1014.00	580,00
15 (142)	25	20,3	51	124	3,3	RC.0151.00	388,00
15 (142)	51	20,3	104	149	4,1	RC.0152.00	431,00
15 (142)	101	20,3	205	200	5,0	RC.0154.00*	478,00
15 (142)	152	20,3	308	271	6,8	RC.0156.00*	530,00
15 (142)	203	20,3	411	322	8,2	RC.0158.00	589,00
15 (142)	254	20,3	516	373	9,5	RC.1510.00	652,00
15 (142)	305	20,3	619	423	10,9	RC.1512.00	725,00
15 (142)	356	20,3	723	474	11,8	RC.1514.00	804,00
25 (232)	26	33,2	86	139	5,9	RC.0251.00	463,00
25 (232)	50	33,2	166	165	6,4	RC.0252.00*	514,00
25 (232)	102	33,2	339	215	8,2	RC.0254.00*	570,00
25 (232)	158	33,2	525	273	10,0	RC.0256.00*	632,00
25 (232)	210	33,2	697	323	12,2	RC.0258.00	701,00
25 (232)	261	33,2	867	374	14,1	RC.2510.00	779,00
25 (232)	311	33,2	1033	425	16,3	RC.2512.00	864,00
25 (232)	362	33,2	1202	476	17,7	RC.2514.00	959,00
30 (295)	209	42,1	880	387	18,1	RC.0308.00	1.187,00
50 (498)	51	71,2	362	176	15,0	RC.0502.00	959,00
50 (498)	101	71,2	719	227	19,1	RC.0504.00	1.065,00
50 (498)	159	71,2	1131	282	23,1	RC.0506.00*	1.182,00
50 (498)	337	71,2	2399	460	37,6	RC.5013.00	1.571,00
75 (718)	156	102,6	1601	285	29,5	RC.0756.00	2.006,00
75 (718)	333	102,6	3417	492	59,0	RC.7513.00	2.666,00

* Available as a set
** RC-50-cylinders have a fixed thrust pad and no outer thread.

The industry prescribed standard

Pressure Pads
All cylinders are equipped with replaceable, hardened and grooved thrust pads

Connectors
All models are delivered with a CR-400 attachment, for connecting HC series hoses.

Pressure Gage Manometer
The window to the soul of your hydraulics. Avoid overloading your hydraulic equipment, contact us!

Short Stroke Cylinder RSM/RCS

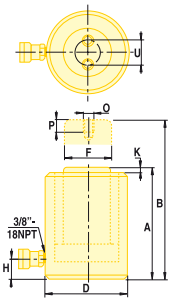
The maximum strength/ height ratio

- Pistons in heavily chromed quality steel
- Compact, flat design for use where other cylinders are too large
- Grooved piston ends make thrust pads unnecessary
- All models with stove enamel

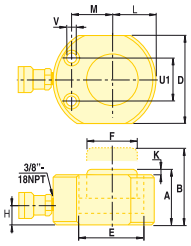
Cylinder type t [kN]	Lift [mm]	Height retracted [mm]	Zylinder outer-Ø [mm]	Oil volume [cm³]	Order-no.	Price/ piece €
5 (45)	6	32	58 x 41	4	RSM.050.00*	231,00
10 (101)	12	43	82 x 55	18	RSM.100.00	299,00
20 (201)	11	51	101 x 76	32	RSM.200.00	388,00
30 (295)	13	58	117 x 95	55	RSM.300.00	504,00
45 (435)	16	66	140 x 114	99	RSM.500.00	655,00
75 (718)	16	79	165 x 139	164	RSM.750.00	942,00
90 (887)	16	85	178 x 153	203	RSM.1000.0	1.225,00
150 (1386)	16	100	215 x 190	317	RSM.1500.0	1.592,00
10 (101)	38	88	69	55	RCS.101.00	304,00
20 (201)	45	98	92	129	RCS.201.00	395,00
30 (295)	62	117	101	261	RCS.302.00	514,00
45 (435)	60	122	127	373	RCS.502.00	667,00
90 (887)	57	141	165	722	RCS.1002.0	953,00

* Equipped with the AR-400 connectors

RCS-Series



RSM-Series

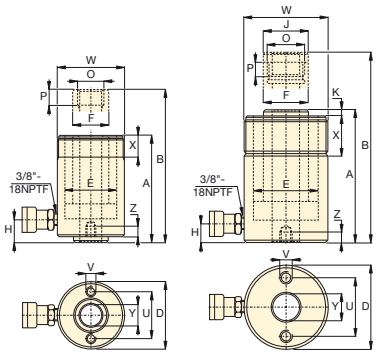


Hollow Cylinders RCH

Ideal for pressure and pulling tasks

- The hollow cylinder version allows the use of the cylinder for both applying pressure and pulling
- The nickel plated center tube in models over 20 t, gives them a longer life time
- Stove enamel finish for increased corrosion resistance
- Collar threads on the cylinder head for easy mounting.
- RCH-120 is equipped with AR-630 clutch sleeve and Oil Connector thread 1 / 4 „NPTF
- RCH-121 and RCH-1211 are deivered with the FZ-1630 reducer and AR-630 clutch sleeve, all other models come with the CR-400 clutch sleeve.

Cylin-der type t [kN]	Lift [mm]	Outer-Ø D [mm]	Height A retracted [mm]	Center hole Y [mm]	Oil volume [cm³]	Order-no.	Price €/ piece
13 (125)	8	69	55	19,6	14	RCH.120.00	371,00
13 (125)	42	69	120	19,6	75	RCH.121.00	482,00
13 (125)	42	69	120	19,6	75	RCH.121.10	482,00
13 (125)	76	69	184	19,6	136	RCH.123.00	626,00
20 (215)	49	98	162	26,9	150	RCH.202.00	727,00
20 (215)	155	98	306	26,9	476	RCH.206.00	1.016,00
30 (326)	64	114	178	33,3	298	RCH.302.00	779,00
30 (326)	155	114	330	33,3	722	RCH.306.00	1.181,00
60 (576)	76	159	247	53,8	626	RCH.603.00	1.460,00
60 (576)	153	159	323	53,8	1259	RCH.606.00	1.985,00
95 (931)	76	212	254	79,0	1011	RCH.100.30	3.205,00



Hydraulic Accessories

High-pressure hydraulic hoses

From top to bottom: HA7206B, HC-7206, H-7206

- For high high pressure, with a safety factor of 4:1
- Max. allowed operating pressure 700 bar
- Four layer design, including two robust wire mesh inserts
- Polyurethane outer layer to withstand the wear caused by friction
- Low volumetric expansion under pressure to improve system effectiveness
- Armed with a tightly fitting rubber strain relief to ensure for long life and durability

To complement your system, you should use only Enerpac hydraulic hoses.

Hose connection		Length [m]	Weight [kg]	Order-no	Price €
3/8"NPT	CH 604	0,90	0,8	HC.7203.00	83,00
3/8"NPT	CH 604	1,80	1,0	HC.7206.00	97,00
3/8"NPT	CH 604	3,00	1,5	HC.7210.00	121,00
3/8"NPT	CH 604	6,10	2,9	HC.7220.00	169,00
3/8"NPT	3/8"NPT	0,90	0,7	HO.7203.00	59,00
3/8"NPT	3/8"NPT	1,80	0,9	HO.7206.00	73,00
3/8"NPT	3/8"NPT	3,00	1,4	HO.7210.00	97,00
3/8"NPT	3/8"NPT	6,10	2,8	HO.7220.00	145,00

WARNING!
- Max. 700 bar never exceed operating pressure
- Never touch hoses under pressure hoses

Pressure and Pressure Gage

- GF-Series pressure gauges: Pressure and Force Gauges with double scale displays in bar and kN
- GF-Series Pressure Gauges: All delicate pressure parts have been glycenire coated and sealed in order to guarantee a long long life
- Excellent readability: outer pressure gauge diameter, 100 mm
- The gauge's stainless steel housing provides a very good corrossion resistance

Usable for cylinders	Pressure [bar]	Force [kN]	Scale division	Connect. thread NPTF	Needed manometer spacer	Order-no.	Price €
Alle Zylinder	0-700	-	10 bar; 100 psi	1/2 Zoll	GA1, GA2	HY.GP.010.S	138,00
Alle 5-t-Zylinder	0-700	0-45	10 bar; 0,5 kN	1/2 Zoll	GA1, GA2	HY.GF.005.B	138,00
Alle 10-t-Zylinder	0-700	0-100	10 bar; 1,0 kN	1/2 Zoll	GA1, GA2	HY.GF.010.B	138,00
Alle 20-, 30- und 50-t-Zyl.	0-700	0-232/300/500	10 bar; 5,0 kN	1/4 Zoll	GA3	HY.GF.835.B	138,00

Pressure gauge spacer

Connection NPTF	Connector NPTF	Sleeve NPTF	Length [mm]	Order-no.	Price €
1/2 Zoll	3/8 Zoll	3/8 Zoll	71	HY.MM.GA.01	48,00
1/2 Zoll	3/8 Zoll	3/8 Zoll	155	HY.MM.GA.02	48,00
1/4 Zoll	3/8 Zoll	3/8 Zoll	133	HY.MM.GA.03	48,00

Hydraulics oil

Cont. [l]		Type	Order-no.	Price €
1	Use only Enerpac hydraulic fluid	HF.95.X	HF.95.01.00	18,40
5	using a different fluid than Enerpac	HF.95.X	HF.95.05.00	67,00
60	Hydraulic Fluid annuls the guarantee!	HF.95.X	HF.95.60.00	543,00

Viscosity Index	100 min.
Viscosity at 98°C (210°F)	42/45 S.U.S
Viscosity at 38°C (100°F)	
Viscosity at -18°C (0°F)	
API gravity	31,0/33,0
Flash point	200°C (400°F)
Melting point	-31°C (-25°F)
Aniline point	98°C (210°F)
Parafinbasis color	Blue

Lifting gear

Lift heavy weights safely

The innovative sliding blocks, each of which are mobile in their housing, reduce the friction tremendously.
In every Industry sector there is considerably more space allocated to weight shifting than than for any machinery.
Benefit of this is a less FÜHRUNG and a higher efficiency
Low maintenance costs by removable and replaceable pump unit and sliding shoes.
Enxtremely ight weight with a high performance thanks to high quality materials and innovative design.
Optimal load acess through the swivelling joint.
Constant stability, even in the elevated position (see Figure 2).

Fig. 1

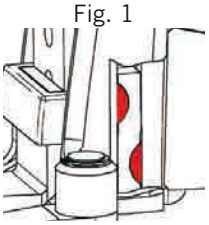


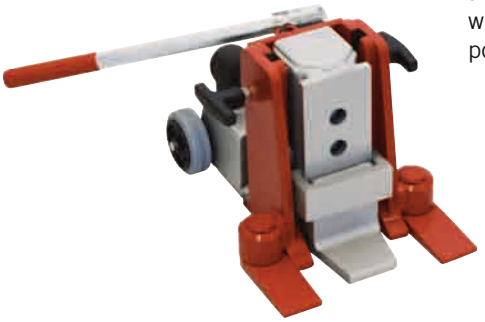
Fig. 2

Info

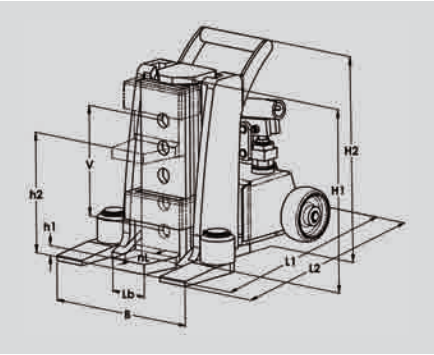
On request you can get this hoist also for 30 t or 50 t.

load [kg]	lifting heig. [mm]	Lowest extension h. with joint h1 [mm]	Highest extension h. w. joint h1+V [mm]	Adjustab. of the joint V [mm]	Ext. heig. of head plate H1 [mm]	Joint width lead edge Lb [mm]	Usable joint dep. nL [mm]	L. of feet pivoted to the front [mm]	L. of feet pivoted to the side [mm]	Dimens. B x H [mm]	Cylinder volumes [cm³]	Weight [kg]	Order-no.	Price/ piece €
6000	140	12	157	6 x 29	245	50	50	326	311	233 x 280	176	23	HH.0050.0N	829,00
10000	150	15	180	5 x 41	275	60	55	346	330	247 x 310	300	29	HH.0100.0N	1.190,00
10000	108	15	138	4 x 41	235	60	55	346	330	247 x 235	210	26	HH.010K.0N	1.289,00
15000	175	20	205	5 x 46	310	70	66	415	401	300 x 310	495	48	HH.0150.0N	1.739,00
20000	190	20	225	5 x 51	340	80	66	425	405	322 x 340	731	60	HH.0200.0N	2.260,00

G-Serie



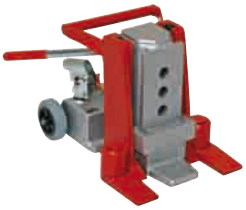
JH 10 G plus short
with two side mounted handles for positioning, standard handle upgradeable



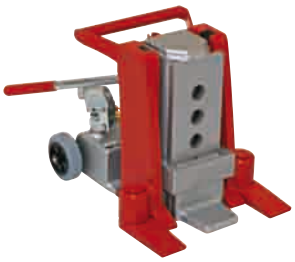
JH 5 G plus

JH 10 G plus

JH 10 G plus short



JH 15 G plus



JH 20 G plus

Hoisting set

The mobile lifting set for the road

The SIP lifting set is very compact and lightweight.
It is therefore ideal for use one the go.

- 180° rotatable pan, with or without lifiting the feet
- High load capacity with low weight
- The punp is separated from the hoister, and so can be used in the tightest conditions
- Allows you to work in the horizontal direction

Load max. [kg]	Lowest ext. height with joint [mm]	Ext. height w. head plate [mm]	Lift. height with joint [mm]	Dimensions L x B x H [mm]	Weight [kg]	Order-no.	Price/piece €
Complete, 2 hoisters * Complete with pump and 2 hoses one of 2 m, and one of 3 m							
2 x 5000	15	350	245	-	-	HS.2050.15	1.796,00
2 x 10000	20	370	260	-	-	HS.2100.20	1.991,00
2 x 10000	20	265	288	-	-	HS.2102.20	2.176,00
Individual components, lifting device*							
5000	15	350	245	170 x 145 x 350	10	HG.0050.15	540,00
10000	20	370	260	205 x 200 x 370	19	HG.0100.20	615,00
10000	20	265	288	205 x 200 x 265	17	HG.0102.20	720,00

24 h Delivery

* ges. gesch. Gebr. M No. G 93 12 940.8

High pressure hoses

Operating pres. max. [bar]	Dim. [mm]	Drip. free clutch number	Order-no.	Price/ piece €
700	2000	2	HD.2000.02	180,00
700	3000	2	HD.3000.02	205,00
700	4000	2	HD.4000.02	230,00
700	5000	2	HD.5000.02	255,00

Central pump

Work-press [bar]	No. of connect-	Dimens. L x B x H [mm]	Hose-length [mm]	Weight [kg]	Usable for Unit upto max load [kg]	Tank-volumen [l]	Order-No.	Price/ piece €
520	2	848 x 210* x 169	variabel	14,6	2 x 20000	2,1/2,0	ZP.0520.25	???

* wide foot plate

Info

When loads are to be raised 2 lifting devices on the same side, we recomment the Extreme Pump Type ZP.0520.25.

JKB Rotating Carriage

- Low dead weight and higher load capacity at the same time
- Rotatable by 360 thanks to the ball bearing casters
- Height according to SIP Transport carriages on page 251
- The connecting rod (accessory) can easily be clamped onto the handle above the eccentric disk (only JKB 1) without tools
- Unrivalled: Due to the small width of the steering rollers JKB 3 to JKB 5, the shaft(JKB3-5) the steering resistance is reduced to a minimal
- The trolleys JKB 3-5 can be attached with standard lashing straps onto the load
- In addition, on the carriages JKB 4-5 central holes (30 mm) have been included to allow the fixing of the transported goods.

JKB 1 K JKB 3 K JKB 4 K JKB 6 K JKB 7,5 K

The sets consist of three individual cartridges

Type	Transp. weight [t]	Load [kg]	Numb. of rolls [Stück]	Dimensions of rolls Ø x L [mm]	Inst. height [mm]	Seating per cartr. Ø [mm]	Dimensions cartridges L x B [mm]	Weight JUWAmid [kg]	Order-no.	Price/ piece €
JKB 1,5 K	1,5	1500	6	85 x 43	110	150	465 x 490	20	JKB.01.KAS	640,00
JKB 1,5 Set	3	3000	2 x 6	85 x 43	110	150	465 x 490	40	JKB.01.SET	1.255,00
JKB 3 K	3	3000	8	85 x 43	110	250	575 x 460	30	JKB.03.KAS	960,00
JKB 3 Set	6	6000	2 x 8	85 x 43	110	250	575 x 460	60	JKB.03.SET	1.885,00
JKB 4 K	4	4000	12	85 x 43	110	250	690 x 475	43	JKB.04.KAS	1.095,00
JKB 4 Set	8	8000	2 x 12	85 x 43	110	250	690 x 475	86	JKB.04.SET	2.145,00
JKB 6 K	6	6000	16	85 x 43	110	250	690 x 525	44	JKB.06.KAS	1.230,00
JKB 6 Set	12	12000	2 x 16	85 x 43	110	250	690 x 525	88	JKB.06.SET	2.410,00
JKB 7,5 K	7,5	7500	20	85 x 43	110	250	910 x 660	63,5	JKB.07.KAS	1.420,00
JKB 7,5 Set	15	15000	2 x 20	85 x 43	110	250	910 x 660	127	JKB.07.SET	2.780,00

Info

You may find matching trolley carriages 277 Handlebars and connecting rods for the JBK set are available as accessories.

Ask your SIP partner!

Transport system Transport weight capacity up to 120 tons

Adjustable and steerable transport systems

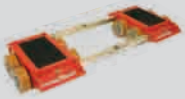
JLB 40 H

JFB 40 H

Unparalleled high capacity for sich small carriages.
Pivot mounted TRACKS to provide uniform pressure of all wheels the ground.
All carriages ready to use: The steering is shipped with the ball bearing turntable and shaft, the kit consists of two cartridges with connecting rods.

Advantages of the „giant“ roll with JUWAthan®plus coating:

With s split roller; steering becomes remarkedly easier and reduces friction forces when cornering dramatically.
The strongly reduced friction created by driving also has a positive effect even on the rear axle.
The basis of JUWAthan Plus is an ongoing coating evolvement based on the foundation of many years.
A layer of a special compound of polyurethane based is applied o an aluminum core.
The coating thickness has been optimized so that it improved roll resistance by more than 30%.
Also a weight reduction of almost 35% per roll could be achieved through the new construction.

Max. load [kg]	15.000	22.500	30.000	40.000	60.000
Front chassis	JLB 15 G	JLB 22 G	JLB 30 G	JLB 40 H	JLB 60 H
Rear chassis	JFB 15 G	JFB 22 G	JFB 30 G	JFB 40 H	JFB 60 H
					

Type	Max. load [kg]	Numb. of rolls [Stück]	Dimen. of the rolls Ø x l [mm]	Install. height [mm]	Load surface per cartr. E x F [mm]	Dimensions cartridge L2 x B2 [mm]	Connection rod with joint length [mm]	Cartr. adjustab. G-H [mm]	Load surface turn.plate Ø C [mm]	Dimensions steering L1 x B1 [mm]	Length steer. rod with pull. eye [mm]	Weight JUWAthan plus [kg]	Order-no.	Price/ piece €
JLB 15 G	15000	16	140 x 59	180					215	565 x 741	1230	96	09.150.140	2.470,00
JFB 15 G	15000	16	140 x 59	180	220 x 200	460 x 285	2 x 1540	475–1300				88	10.150.140	1.755,00
JLB 22 G	22500	24	140 x 59	180					215	565 x 981	1450	129	09.225.140	3.290,00
JFB 22 G	22500	24	140 x 59	180	220 x 200	460 x 528	2 x 1540	530–1300				113	10.225.140	2.190,00
JLB 30 G	30000	32	140 x 59	180					250	750 x 1550	1590	312	09.301.140	4.430,00
JFB 30 G	30000	32	140 x 59	180	220 x 200	460 x 528	2 x 1540	530–1300				126	10.301.140	3.050,00
JLB 40 H	40000	8	200 x 170	230					250	650 x 1060	1590	320	09.350.140	3.955,00
JFB 40 H	40000	8	200 x 170	230	395 x 260	740 x 395	2 x 1540	585–1155				289	10.350.140	3.125,00
JLB 60 H	60000	8/8	200 x 170/85	230					250	650 x 1400	1590	450	09.600.140	6.860,00
JFB 60 H	60000	8/8	200 x 170/85	230	395 x 260	740 x 580	2 x 1540	700–2800				410	10.600.140	5.200,00
JLB 80H	80000	16	200 x 170	240					250	820 x 1900	1590	723	09.800.140	7.806,00
JFB 80 H	80000	16	200 x 170	240	400 x 260	750 x 820	2 x 3000	1630 – 3380				565	10.800.140	5.880,00
JFB 120 H	120000	24	200 x 170	240	440 x 300	960 x 830	2 x 3000	1630 – 3380				815	10.912.140	9.635,00

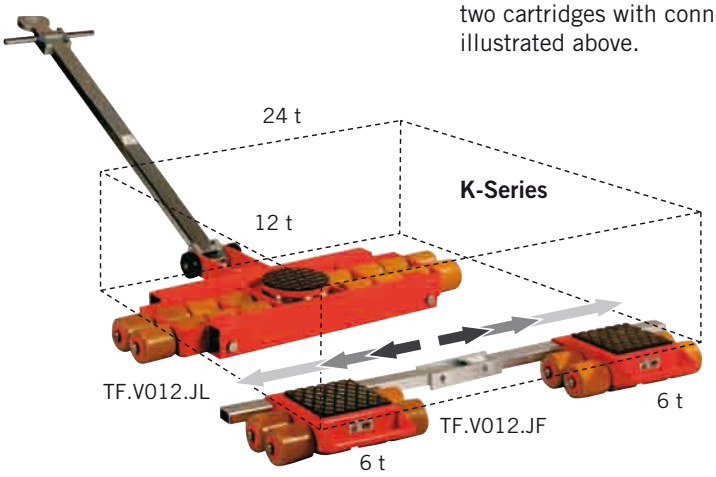
Info

For the steering system of the H series, power steering is available on request.

Carriages We make you mobile!

K series Carriages, Adjustable and driveable! Transport up to 28 tons

All carriages ready to use: The steering is shipped with the ball bearing turntable and shaft, the kit consists of two cartridges with connecting rods. As illustrated above.

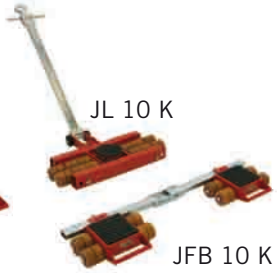


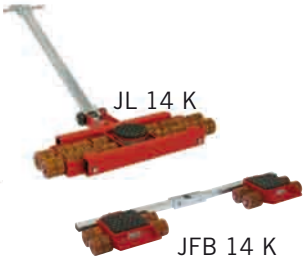
- Galvanized axles and retaining rings for improved corrosion protection.
- Standard equipped with optimized roll surface quality.
- Easy load balancing through improved construction

K-Series Professional

- Galvanized axles and retaining rings for improved corrosion protection.
- With a divided roller; steering becomes remarkedly improved and reduces friction forces when cornering. The strongly reduced friction created by driving also has a positive effect even on the rear axle.
- Higher load capacity with the same dimensions as the K-series.

K-Series Professional





Info

Transport systems with higher load capacities are available upon request!

Adjustable and steerable Transport Carriage systems with aluminum and JUWAthan plus Coating

Type	Max. load [kg]	Num. of rolls Rollen	Dimen. of the rolls Ø x L [mm]	Inst. heig. [mm]	Load surface p. cartr. [mm]	Dimen. cartridge [mm]	Conn. rod w. joint [mm]	Cartridge adjust. from - to [mm]	Load surface turn. pl. [mm]	Dimen. steering L x B [mm]	Length steer. rod with pull. eye [mm]	Execution	Weight JUWAthan plus [kg]	Order-no.	Price piece €
K-Series															
JLB 3 K	3000	4	85 x 85	110					150	225 x 280	990	Steering rod w/o pull. eye	12	TF.V003.JL	297,00
JFB 3 K	3000	4	85 x 85	110	120 x 80	190 x 125	1000	125-880				Connecting rod w/o joint	11	TF.V003.JF	254,00
JLB 6 K	6000	8	85 x 85	110					150	445 x 590	1120	Steering rod w pull. eye	33	TF.V006.JL	730,00
JFB 6 K	6000	8	85 x 85	110	175 x 170	325 x 200	1230	400-1030				Connecting rod with joint	25	TF.V006.JF	510,00
JL 9 K	9000	12	85 x 85	110					170	580 x 820	1120	Steering rod w pull. eye	54	TF.V009.JL	965,00
JFB 9 K	9000	12	85 x 85	110	175 x 170	325 x 390	1230	400-1030				Connecting rod with joint	32	TF.V009.JF	695,00
JL 12 K	12000	16	85 x 85	110					170	580 x 1000	1120	Steering rod w pull. eye	64	TF.V012.JL	1.140,00
JFB 12 K	12000	16	85 x 85	110	175 x 170	325 x 390	1230	400-1030				Connecting rod with joint	35	TF.V012.JF	795,00
K-Series Professional															
JLB 7 K	7000	8	85 x 85	110					150	445 x 590	1120	Steering rod w/o pull. eye	36	TF.PR07.JL	840,00
JFB 7 K	7000	8	85 x 85	110	175 x 170	325 x 200	1230	400 - 1030				Connecting rod w/o joint	27	TF.PR07.JF	625,00
JL 10 K	10000	12	85 x 85	110					170	580 x 820	1120	Steering rod w/o pull. eye	56	TF.PR10.JL	1.110,00
JFB 10 K	10000	12	85 x 85	110	175 x 170	325 x 390	1230	400 - 1030				Connecting rod w/o joint	35	TF.PR10.JF	830,00
JL 14 K	14000	16	85 x 85	110					170	580 x 1000	1120	Steering rod w/o pull. eye	68	TF.PR14.JL	1.330,00
JFB 14 K	14000	16	85 x 85	110	175 x 170	325 x 390	1230	400 - 1030				Connecting rod w/o joint	39	TF.PR14.JF	995,00

Tandem-Transport Trolley K-Series Professional

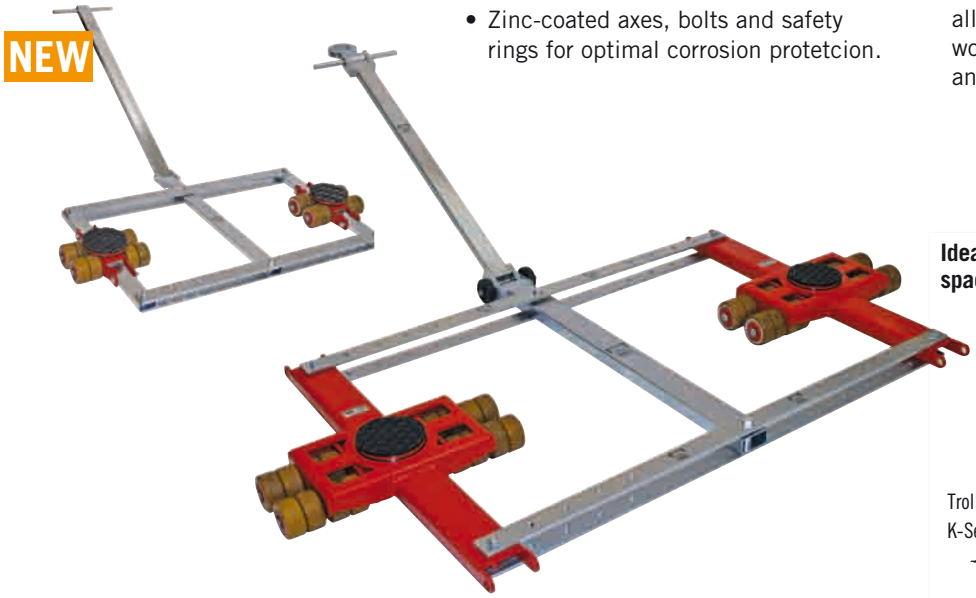
Optimal Handling of Large Loads

The transport trolley K-Series is ready for use: The delivery includes 2 swivel units, 2 shafts and 1 track and connecting rod.

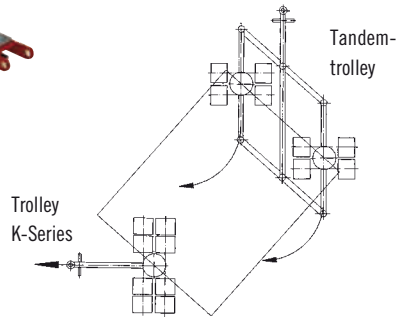
The main advantages:

- These tandem transport trolleys are particularly suitable for use in the absence of midpoint supporting load points.
- Zinc-coated axes, bolts and safety rings for optimal corrosion protetcion.
- With the split roller the steering movements are made easier and reduce frictional forces during extreme cornering even at the trailing axle.
- Dual use: can also be used individually. Without accessories, the steering works can be used simultaneously with an individual half-load.

NEW



Ideal for use in tight corners in small spaces:

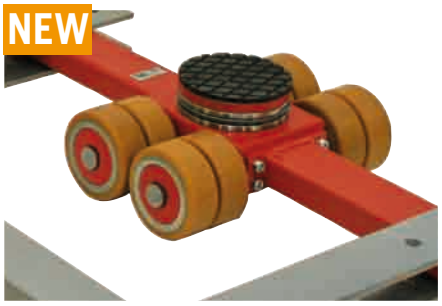


Type	WLL [kg]	Amount double Rolls	Dimensions of the rolls Ø x L [mm]	Insert. height [mm]	Support surface/ rotary disc [mm]	Dimensions per steering system [mm]	Width of steering link/ connecting rod [mm]	T steering adjustable from - to [mm]	Adjusta-bility [mm]	Dimensions total L x B [mm]	Length steering rod with pullinng eye [mm]	Weight [kg]	Order-No.	Price/ piece €
Tandem Transport rolley K-Series Professional														
JTLB 6 KP	6000	8	85 x 85	110	150	600 x 280	1000	560-960	5x	760 x 1240	990	37	TF.TTF06.P	785,00
JTFB 14 KP	14000	16	85 x 85	110	150	1000 x 590	1400	660-1340	5x	1070 x 1580	1120	104	TF.TTF14.P	21.690,00

Trolley G-Series

The trolley in this series has, through larger roller diameters, optimal running characteristics on uneven transport routes.

NEW



Talk to us about this product.
We are happy to help you.

Twist lock/"Weld-on Cone"

Twist lock attachment for steering and trolleys in the K series or as a complete trolley, including a twist lock system. This way you can safely transport containers. Containers with a low installation height can be moved.

NEW

Talk to us about this product.
We are happy to help you.

Driven Chassis

For transport weights up to 15 tons, towing capacity 30 tons, height 180 mm, it can be rotated 180 °, no separate pulling unit required

- Very short setup time, connect air hose and start driving
- Low-maintenance drive
- No power supply required
- Can be combined with the transport trolley of the G-Series

NEW

Do you still have questions about this product? Please contact us for details.

WH Hydraulic Jack

Compact and flexible

In workshops, the WH Premium vehicle jack proves its formidable powers. Up to 50 tons can be lifted almost effortlesly through easy pumping.
The large footprint of the device provides the necessary stability. The pressure valve assures a tactful lowering of the device and a pressure relief valve protects against overloading.
The additional adjustable spindle cancels vibrations.

With its robust construction and hard chrome plated piston rod, the WH premium proves itself to be a durable lifting element.

Lifting load (kg)	Smallest height (mm)	Biggest height (mm)	Hydraulic jack (mm)	Spindle adjustment (mm)	Weight (kg)	Order-no.	Price / piece €
2000	181	345	116	48	2,9	WHP.02000	16,80
3000	194	372	118	60	3,6	WHP.03000	19,60
5000	216	413	127	70	4,8	WHP.05000	25,20
8000	230	457	147	80	6,3	WHP.08000	29,40
10000	230	460	150	80	6,8	WHP.10000	33,60
12000	230	465	155	80	8,0	WHP.12000	40,60
15000	230	460	150	80	8,9	WHP.15000	49,00
20000	242	452	150	60	11,5	WHP.20000	63,00
32000	285	465	180	-	23,7	WHP.32000	180,60
50000	300	480	180	-	34,0	WHP.50000	222,60

Machine lifts

With lifting claw, carrying capacity from 5 to 25 t

Hydraulic jacks with lifting claw machines for professional use. They are used especially where there is very little space under the load, where traditional jacks cannot get to due to their height.

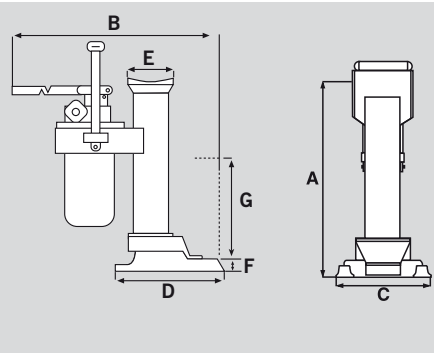
The machine jack is designed for lifting heavy loads. It is easy to carry thanks to the generous handle. Both the head of the machine as well as the lifting claw can be used for lifting the load.

Workmanship and fittings

- Very low lifting position thanks to flat lifting claw
- Can be used upright and sideways
- Built-in safety valve to prevent overload
- Stable support footing for high stability
- Foot 360 ° rotatable
- Lift the load with the lifting claw or head
- With sensitive adjustable lowering valve

Info

More lifting devices can be found on pages 294-295.



Type	Load-b. cap. [t]	Lift/ G [mm]	Lift fr.foot mind/max [mm]	Lift fr.head min/max [mm]	Dimensions A	B	C x D [mm]	E	F	Force fr. lev. [daN]	Weight [kg]	Order-no.	Price/ piece €
H 5	5	205	25/230	368/573	368	740	140 x 213	76 x 76	25	380	25	HM.H.05.000	378,50
H 10	10	230	30/360	420/650	420	745	170 x 205	91 x 91	30	400	35	HM.H.10.000	463,00
H 25	25	215	58/273	505/720	505	1305	210 x 420	155 x 155	58	400	109	HM.H.25.000	1.698,00

Surcharge

MADE IN GERMANY

Lifting pillow "air cushions", the true power packs

SIP lifting cushions lift up to 67.7 t

Working with millimeter precise high-power
The SIP lifting cushion allows you to work on uneven angles with the highest power and accuracy.
They are suitable for pressing, lifting, splitting, columns, supporting.
Whether as an accident and emergency asset, whether for lifting and adjusting heavy machinery or as a modern tool for modern mining methods in the quarry, the SIP lifting cushions are an essential, flexible helper for all applications.

With little pressure make mighty power
The SIP lifting cushion roll out, with only 8 bar operating pressure has up to 67.7 tonnes of lifting capacity. It works quietly, smoothly and continuously. Because of the low application height of only 25 mm, they offer maximum flexibility.
A maximum of 2 cushions can easily be stacked on top of one another, thus doubling the lifting height.

Extensive list of accessories
For easy and secure application, an extensive range of accessories available, for example, various control devices as well as adapters for different air sources.

Info

Possible sources of air: compressed air bottle 200/300 bar,
Static compressed air systems, construction compressors.
Lorry tire inflation, lorry brake system.

SIP Lifting cushions 8 bar, steel cord reinforced

Lift. force m. [kg]	Lift. h. max. [mm]	Size [cm]	Loading height [cm]	Nom. cont. [l]	Air need at 8 bar [l]	Weight [kg]	Order-no.	Price/ piece €
9.600	203	37 x 37	2,5	9,2	82,8	5,0	VE.V100.00	429,00
12.000	200	32 x 52	2,5	10,7	96,3	6,0	VE.V120.00	519,00
17.700	270	47 x 52	2,5	21,7	195,3	8,5	VE.V180.00	659,00
19.400	280	48 x 58	2,5	24,9	224,1	8,7	VE.V200.00	759,00
24.000	306	52 x 62	2,5	32,9	296,1	12,0	VE.V240.00	799,00
24.000	201	31 x 102	2,5	23,5	211,5	11,5	VE.V24L.00	849,00
31.400	370	65 x 69	2,5	57,5	517,5	17,0	VE.V310.00	1.069,00
35.800	310	43 x 115	2,5	38,8	349,4	15,8	VE.V35L.00	1.299,00
39.600	402	78 x 69	2,5	75,0	675,0	20,0	VE.V400.00	1.285,00
49.300	455	82 x 82	2,8	100,0	900,0	26,0	VE.V480.00	1.699,00
54.400	478	86 x 86	2,8	124,2	1.117,8	25,5	VE.V540.00	1.749,00
67.700	520	95 x 95	2,8	161,9	1.457,1	38,5	VE.V680.00	2.099,00

Surcharge Prices without hoses and connectors

Control and air supply accessories

Model	Order-No.	Price/piece €
Single Control organ 8 bar, Fitting	VE.ES.FI.08	145,00
Double Control organ 8 bar,Totmann	VE.DS.TO.08	499,00
Filling Hose, 5 m, yellow	VE.FS.GE.05	53,00
Filling Hose 5 m, red	VE.FS.RO.05	53,00
Filling Hose,10 m, yellow	VE.FS.GE.10	73,00
Filling Hose, 10 m, red	VE.FS.RO.10	73,00
Air Filling Hose, 10 m, mit Absp.	VE.LS.10.AS	91,00
Tyre inflating device –Adaptor	VE.RF.AA.00	23,00
Compressor transition	VE.US.BK.00	18,00
Static compresser air source	VE.DLN.OF.0	7,00

Pallet truck Premium

Standard version - optional also with brake function

Premium with brake

Standard version:
Extremely durable and easy to handle the fork lift hand wagon Premium SP 25-115 with its high quality has a 2.5 t capacity. Epoxy coating and a control component that can be rotated 210° to the right and left, make this truck a product where the price/ performance ratio is unbeatable.

Version with brake:
Sure to come to a stop is the Premium with its aluminum rim, high-performance built-in brakes. With progressive steering. The harder the brake lever mounted on the tiller head is pulled, the stronger the braking performance. Steering wheels made of rubber and tandem rollers from polyurethane ensure, in combination with the driving and parking brake, for a secure stop on ramps and slopes.

Load [kg]	Steer. wh.	Fork wheels	Fork length	Load. w. [mm]	Bore [mm]	Complete length[mm]	Weight [kg]	Order-no.	Price/ piece €
2500	Rubber	Tandem, polyurethane	1150	540	220	1535	75	GH.25.1150	269,00
with driving and parking brake									
2500	Rubber	Tandem, polyurethane	1150	540	220	1535	75	GH.25.115B	378,00

	With short fork	With long fork	Premium for low special palettes	For heavy loads	Premium stainless steel
Other constructions:					
Lifting load [kg]	2500	2000	1500	3500	2000
Fork height min. [mm]			51		
Steering wheels	Rubber	Polyurethane	Polyurethane	Polyurethane	Nylon
Fork wheels	Tandem, Polyurethane	Tandem, Polyurethane	Tandem, Nylon	Tandem, Polyurethane	Tandem, Nylon
Fork lenth [mm]	800	2000	1150	2000	1150
Loading width [mm]	540	540	540	540	540
Bore [mm]	220	220	220	220	220
Weight [kg]	66	128	71	300	75
Order-no.	GH.25.0800	GH.20.2000	GH.15.1150	GH.35.2000	GH.20.115.E
Price €	293,00	571,00	378,00	999,00	1.574,00

Other versions on request

***NEW:** The hydraulic unit is equipped with a stainless steel pump cylinder

Special design with integrated scale

The intelligent weighing module illustrates net weight as well as individual piece we number on the display.
The premium picks up to 2t with its steel made chassis.
Tandem fork wheels and steering wheels made of polyurethane reduce the load point and ensure optimal use on uneven floors.

- High Precision ± 0.1%
- Sum function, even with adding more weights
- Low power consumption with automatic sleep mode
- High quality contrast display
- Function keys with click pulse
- High operating and reliability, tested to IP65 standard
- Optional printer available

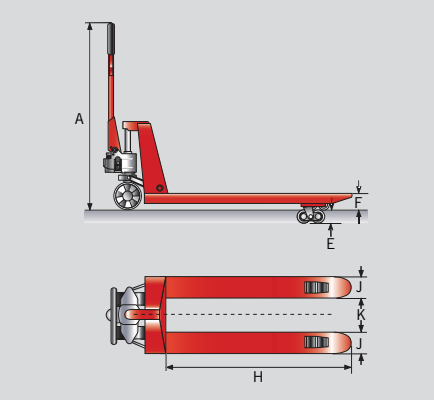
Lifting load [kg]	Lifting height [mm]	Forks lowered[mm]	Loading width [mm]	Fork length [mm]	Complete length [mm]	Complete length [mm]	Height [mm]	Weight [kg]	Order-no.	Price/ piece €
2000	120	85	572	1150	1580	572	1200	149	GH.20.115.W	1.199,00

Weitere Ausführungen auf Anfrage

Premium With Quick Hub System

If it has to go fast, the Premium Hub Wagon with quick lift is the device of your choice. For loads up to 200 kg, it reaches, with only six drawbar pumps, a fork height t of 200 mm, a pallet can be lifted and moved with two pumps.

From 200 kg on, the quick lift shuts off automatically and lifting is as usual. The trolley comes standard with steering wheels that are made of rubber and tandem fork rollers out of polyurethane.



Hub capacity [kg]	Fork height F [mm]	Stroke E [mm]	Steering wheels [mm]	Fork rollers tandem [mm]	Fork width J [mm]	Fork width K [mm]	Drawbar height A [mm]	Drawbar lenght H [mm]	Weight [kg]	Order-No.	Price / Piece €
2500	85	115	200 x 50	80 x 70	160	220	1200	1150	75	GH.SH.1150	289,00

Further versions on request

PFL Platform lift for loads up to 400 kg

Practical and versatile to use. On the robust platform goods up to 400 kg are lifted by the hydraulic foot pump and folding pedal to a height of 1200 mm and 1500 mm. The lowering speed is controlled by a hand wheel a passed through a hydraulic valve, justifying recoil accordingly.

Info

When ordering please take into account the distance across the lift truck!

Lift. load [kg]	Platf. height max./min. [mm]	Platform LxB [mm]	Compl. width [mm]	Compl. height [mm]	Compl. length [mm]	Number of lifting motions	Weight [kg]	Order-no.	Price/ piece €
400	1200/85	650x576	590	1330	1037	48	76	PFL.400.12	508,00
400	1500/85	650x576	590	1725	1037	62	79	PFL.400.15	600,00

Further versions on request

HS Elevating Pallet Truck

Hand hydraulic

Flexible to use, the HS Premium offers support with the loading and unloading of lorries and delivers a pallet elevation range of 1600 mm in height.
Sensitive lowering allows the convenient one-hand grip. The optimized wheel base and hardened axles offer a comfortable ride and safe operation with a total of loads of up to 1000 kg.

Lift. load [kg]	Lift. height [mm]	Forks lower [mm]	Load. width [mm]	Fork length [mm]	Complete length [mm]	Complete width [mm]	Height [mm]	Lift per lever stroke on full load [mm]	Weight [kg]	Order-no.	Price/ piece €
1000	1600	85	550	1150	1630	680	1980	17	220	HHS.1016.M	1.125,00

Further versions on request

EGV Eco Electrical Elevating Pallet Truck

Lifting and elevating your loads electrically.
Two powerful 12 V/120 Ah semi-traction batteries provide long work cycles with loads up to 1200 kg. Ideal for use in tight spaces and is easily steered and maneuvered, with 1600 mm or 2900 mm lift height. External charger is included. With best price-performance-ratio.

Info

When ordering please take into account the distance across the lift truck!

Lift. load [kg]	Lift height [mm]	Fork length [mm]	Fork car. width [mm]	Complete width [mm]	Complete length [mm]	Complete height [mm]	Turn. radius [mm]	Oper. width [mm]	Engine perf. lifting/driv. [kW]	Weight w. battery [kg]	Order-no.	Price/ piece €
1200	1600	1150	570	890	1831	1976	1470	2040	2,2/1,2	660	EST.E.1216	4.475,00
1200	2900	1150	570	890	1831	3265	1470	2040	2,2/1,2	750	EST.E.1229	5.420,00

Further versions on request

EHS Semi Electric Lifting, manually drive

Whenever there is frequent changing of working heights, electro hydraulic lifting and lowering means a tremendous amount of time saving.
With the EHS Premium truck there are three heights at your disposal: 1600 mm, 2500 mm and for really high demands 3000 mm. Dynamic and confident transportation of loads of up to 1 to.

The ergonomic tiller and tires made of nylon make it easier to manually transport your goods.
You can get a fine feel through the electronic lift and sink gears. Through the electronic steering, a tactful raise and lower feel is achieved.
Quality steel and optimized wheelbase, provide exceptional stability and security.
The EHS Premium comes with a 12 V/150 Ah rechargeable battery and equipped an integrated charger.

Lift. load [kg]	Lift. heig. [mm]	Fork leng. [mm]	Fork car. width [mm]	Complete wid. [mm]	Complete leng. [mm]	height ext. ren [mm]	Turn. radius [mm]	Oper. width [mm]	Engine perf. lifting[kW]	Weight w. battery [kg]	Order-no.	Price/ piece €
1000	1600	1100	570	762	1720	1980	1280	2175	1,5	410	EST.S.1016	2.285,00
1000	2500	1100	570	762	1720	3070	1280	2145	1,5	475	EST.S.1025	2.480,00
1000	3000	1100	570	762	1720	3570	1280	2145	1,5	495	EST.S.1030	2.720,00

Further versions on request

EHW Eco Electrical Elevating Pallet Truck

Concentrated power in a surprisingly compact chassis. With a the total width of only 700 mm, the Eco 15 is ideal for use in tight spaces and is easily steered and maneuvered even with loads of up to 1.5 tons. Two powerful 12 V / 80 Ah semi-traction batteries provide long work cycles. Built-in charger. Low-maintenance 600-watt motor. Equipped with a 800 watt pump motor the Eco 15 is a real bundle of energy.

Lift. load [kg]	Lift [mm]	Fork length [mm]	Fork car. width [mm]	Complete width [mm]	Complete length [mm]	Turn. radius [mm]	Oper. width [mm]	Engine perf. lifting/driv. [kW]	Weight w. battery [kg]	Order-no.	Price/ piece €
1500	120	1150	520	700	1590	1480	1944	0,8/0,6	286	EHW.ECO.15	3.655,00

Further versions on request

Scissor lifts For manual lifting and driving

With the scissors lift truck loads are easily transported and elevated to the required height by an hydraulic foot pump. The lowering speed is set with an adjustable hydraulic valve. Choose from various Platform heights up to 1300 mm and adjust the premium to your personal needs.

Lifting load[kg]	Platform height max./min. [mm]	Platform L x B [mm]	Complete width [mm]	Complete length[mm]	Weight [kg]	Order-no.	Price/ piece €
150	720/220	700 x 450	450	908	46	SH.150.220	298,00
300	880/285	850 x 500	500	1093	77	SH.300.285	345,00
500	880/285	850 x 500	500	1093	81	SH.500.285	369,00
750	1000/420	1000 x 510	600	1330	125	SH.750.420	478,00
350	1300/355	910 x 500	500	1140	105	SH.350.355	468,00

Further versions on request

SHW-M Manual Scissor Hub Wagon

NEU

Hand-hydraulic

With the Premium SHW Scissor Hub Wagon you easily lift and move loads up to 1000 kg. The scissors offer a secure hold at 800 mm in height and make the Scissor Hub Wagon a practical lifting platform and an indispensable tool for your workshop.

Lift. load [kg]	Lift. height [mm]	Forks lower [mm]	Load. width [mm]	Fork length [mm]	Complete length [mm]	Compl. width [mm]	Compl. height [mm]	Lift per lever stroke on full load [mm]	Lift per lever stroke on full load [mm]	Weight [kg]	Order-no.	Price/ piece €
1000	800	85	540	1170	1586	540	1225	12	31	125	SHW.1010.M	576,00

Further versions on request

SHW-E Electrical Scissor Hub Wagon

NEU

Electrical lift,
includes battery and charger

Electric to the top - down manually. With a keystroke, it operates safe lifting of your loads with a 12V/65 Ah battery and 800 watt motor. The automatic side stabilizers give extra support. With a one hand lowering lever you can lower the Electric Scissor Hub Wagon comfortably to the necessary working heights. Specially designed for short duty cycles and moderate use, the electric scissor hub wagon provides a movable lifting unit to assist in the workplace and is an economic solution. Equipped with an integrated charger 12V/8 Ah.

Lift. load [kg]	Lift. height [mm]	Forks lower [mm]	Load. width [mm]	Fork length [mm]	Complete length [mm]	Compl. width [mm]	Compl. height [mm]	Lift per lever stroke on full load [mm]	Lift per lever stroke on full load [mm]	Weight [kg]	Order-no.	Price/ piece €
1000	800	85	540	1170	1586	540	1225	-	-	169	SHW.1010.E	1.915,00

Further versions on request

HTE Hydraulic lift table

Very economical price-performance ratio. With the choice of so many different lift categories and countless platform sizes, the tables passes all tests of needs. The high safety standard and the robust design ensure efficiency and ergonomics in the workplace.

Lift.load [kg]	Lift.h. [mm]	Platform LxB [mm]	Height [mm]	Engine perf. [kW]	Lift.time [sec.]	Order-no.	Price/ piece €
500	820	1350x800	180	0,8	12	HH.05.13.08	2.307,00
500	820	1500x1000	180	0,8	12	HH.05.15.10	2.517,00
1000	820	1200x800	180	0,8	18	HH.10.12.08	2.119,00
1000	1300	2000x1000	230	0,8	33	HH.10.20.13	3.533,00
1500	820	1350x800	230	0,8	24	HH.15.13.08	2.947,00
2000	820	1350x800	230	0,8	42	HH.20.13.08	3.099,00

Further versions on request

HTF-U U-hydraulic lift table

Good for handling of standard pallets. Benefit from the extremely low height, combined with the platform opening, which allows a comfortable in and out drive without a ramp.

Different lifting capacities and lift heights fits the product to the individual application of each job.

Lift. load [kg]	Lift. heig. [mm]	Height [mm]	Platform LxB [mm]	Lifting time [sec.]	Engine perf. [kW]	Engine voltage [V]	Engine frequen. [Hz]	Steering voltage [V]	Weight [kg]	Order-no.	Price/ piece €
1000	800	80	1500x1100	18	0,8	400	50	24	270	UH.10.15.11	3.233,00
1500	800	100	1500x1300	36	0,8	400	50	24	310	UH.15.15.13	5.534,00

Further versions on request

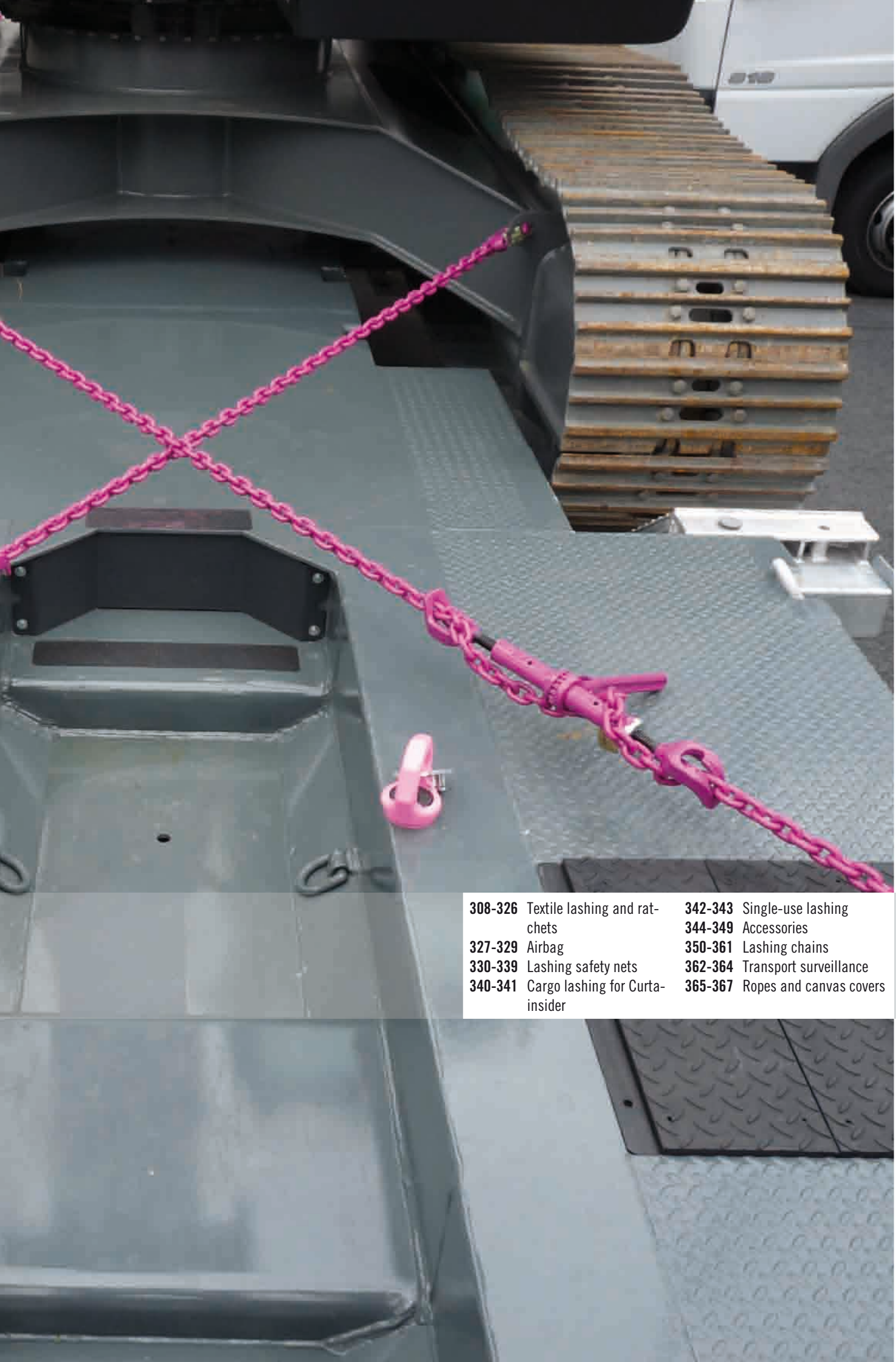
HTF-G Hydraulic Flat Scissor elevating table

The low profile flat scissored lift area ready to be used without any additional costs like to drill out the shaft or other installation works. The ramp (not included in the price, available upon request) allows the direct placement of pallets, boxes or containers by the truck onto the table.
The tables are supplied with a free standing hydraulic unit.

Lift. load [kg]	Lift. heig. [mm]	Height [mm]	Platform LxB [mm]	Engine perf. [kW]	Engine voltage [V]	Engine frequen. [Hz]	Steering voltage [V]	Weight [kg]	Order-no.	Price/ piece €
1000	800	80	1500x800	0,8	400	50	24	290	HF.10.15.08	3.447,00
1000	970	80	1610x800	0,8	400	50	24	290	HF.10.16.08	3.788,00
1500	800	80	1500x800	0,8	400	50	24	340	HF.15.15.08	4.759,00
1500	970	80	1610x800	0,8	400	50	24	340	HF.15.16.08	5.289,00

Further versions on request

Cargo Lashing



308-326 Textile lashing and ratchets
327-329 Airbag
330-339 Lashing safety nets
340-341 Cargo lashing for Curta-insider
342-343 Single-use lashing
344-349 Accessories
350-361 Lashing chains
362-364 Transport surveillance
365-367 Ropes and canvas covers

Things worth knowing about lashing belts

1. Legal basis

Change in the calculation on account of the new EN 12195 -1 / display of the current situation (as of 01-2011).

The European Institute for Standards, CEN, in recent years has made significant changes to EN-12195 - Part 1: „Calculation of lashing forces“. These changes affect the calculations of the field of cargo lashing, lashing down, direct lashing and securing by means of blockage.

In the meantime, the tenth draft European standard has been adopted and submitted to the German Institute for Standardization DIN. The standard is being discussed very critically within DIN and other involved organizations and among German specialists and experts. It is argued that the safety measures required by the norm are no longer sufficient to ensure road safety. For this reason, the DIN has prefaced the norm with clear references to the existing German regulations. Thus, the situation may arise that in Germany, the load must comply with than those of the rest of the CEN States. At this stage it is not known DIN will decide leading to great legal uncertainty with respect to the newly drafted standard.

The possibilities
Germany will raise the standard with a prefaced circulation of the norm showing a marked difference in the calculation of the safety forces. Thus there will be a unique norm for Germany. This means that in cross-border long-distance freight delivery this may lead to the new method of calculation and differences in legislation.

The changes
The new EN 12195 Part 1 (as of 2010) „Calculation of securing forces“ applies to the interpretation of the various security procedures for cargo lashing for land, maritime and transportation by road vehicles, including their transportation on ships or by rail and/or a combination of these types of traffic. It does not apply to vehicles with a gross weight of up to 3,500 kg. In the context of its redrafting, there will be major changes mainly in the following sub-areas:

1. The friction coefficient μ is changed:
Former: sliding friction coefficient μD and the adhesive friction μS as an informative annex (recommendation).
Future: Assumed friction coefficient μ as a normative annex (mandatory).
2. The rolling factor for unstable loads
The side rolling factor 0.2 is replaced by the side tilt value of 0.1.
3. The coefficient K (K-factor of 1.5)
The K-factor as the factor taking into account the loss of pre-stressing force due to friction between the lashing and cargo will be eliminated.
4. Safety factor
So far: non-existent
Future: 1.1 in lateral cargo lashing (c = 0.5), making for an increase of 10% cargo lashing. 1, 25 for cargo lashing in the direction of driving (c = 0, 8); meaning an increased 25% in cargo lashing.
5. Conversion factor
Now: non-existent
Future: 0.75, which means something like conversion to the former sliding friction coefficients. Example: μ = 0.4 corresponds to μD = 0.3.conversion factor

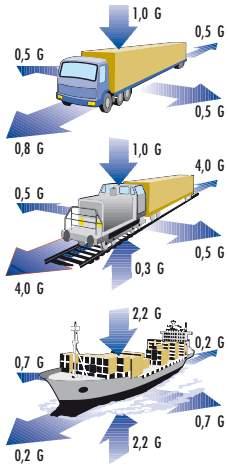
The effects
Less lashing, more complicated ways of calculation, difficult practical application and possible deterioration of road safety.

2. Basic rules

The cargo lashing already begins with the choice of transport and transport routes. To be considered are: load distribution, load capacity of the cargo area, stakes and side walls as well as the various forces during transport via ship, train or truck.

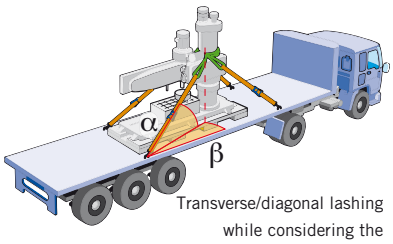
Mass forces of loads during transport

Note: Without shunting procedure in vertical and backward direction 1,0 G



3. Determining the securing forces

Basically we consider two methods of securing: The positive and non positive lock.
During transverse or diagonal lashing (positive cargo lock) the lashing equipment serves to hold the cargo in position.



Transverse/diagonal lashing while considering the present angles

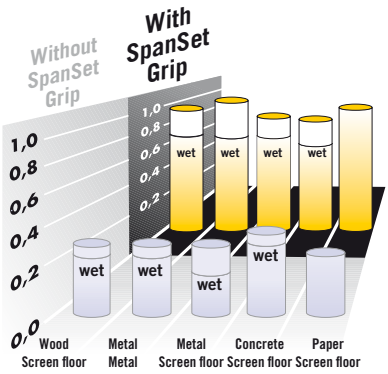
The lashing belts have to be equally tensed without a lot of transmission of force. The lashing points on the truck and on the cargo have to be able to accommodate the appearing forces.

Cargo lashing with positive locks also means e.g. the support of the cargo against the front and side walls or against the stakes. Although a basic requirement in all cases is that the support can accommodate the necessary forces. The allowed pulling force is calculated with the following formula:

$$LC = \frac{G \times (0{,}8 - \mu)}{n_W\,(\mu \times \sin\alpha + \cos\alpha \times \cos\beta)}$$

LC = Lashing Capacity
G = Load weight
0,8 = Speed-up factor in direction of traffic
n_w = Number of lashing belts in direction of traffic
μ = Friction

In the case of crossed/diagonal lashing the aperture angles α and β are to be taken into account. Ideally, the aperture angle α is between 0-60° and the inclination angle β in the longitudinal direction between 20° and 45°. To secure the load from slipping and falling, in addition to lashing down (fixed Cargo lashing) lashing is used for applying the pre-stressing force. Depending on the necessary pre-stress force the number of lashings to be used is determined. In addition, the friction during the lashing down is of great importance. The friction is the result of the material pairing of the load, whereas the pre-stressing force is applied by clamping the load.

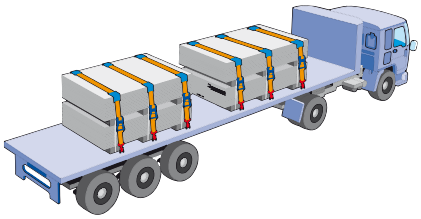


The calculation of the pre-stressing force (FV) is carried out using a simplified formula (without angles): e.g. necessary pre-stress force in the strapping at 6 tons of cargo weight using FE mats (no angles).

$$F_v = G \frac{(0{,}8 - \mu)}{\mu}$$

F_v = Vorspannkraft
G = Gewichtskraft
0,8 = Beschleunigungsfaktor in Fahrtrichtung
μ = Gleitreibbeiwert

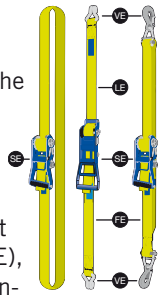
$$F_v = 6.000 \times \frac{(0{,}8 - 0{,}6)}{0{,}6} = 2.000 \text{ daN}$$



Non-positive cargo lashing

4. Installation and maintenance of textile lashing belts

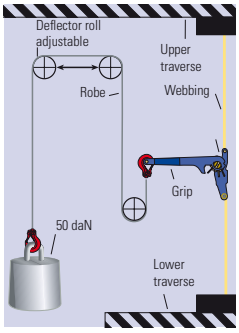
There is a differentiation between single-piece and two-piece lashing belts. The one-piece lashing belt is used to strap the cargo and therefore does not need fastening elements. The two-piece lashing belt consists of a fixed end (FE), fastener, strap and tensioning element and the unfixed end, strap and fastener.



Attention: Securing equipment such as soft wire, cordage or rangy chains are not allowed for cargo lashing!
Fix and lose end are to be labelled identically which contains all technical indicators as per norm EN 12195-2.

Norm EN 1195-2 dictates a mandatory STF (Standard Tension Force) label on the lashing belts. **Only lashing belts with**

these indicators on the label may be used for lashing down. Next to this the term allowed tension force was replaced by Lashing Capacity (LC). The LC describes the allowed resilience of lashing belts and is a mandatory indication on all labels of lashing belts Europe wide. The STF is determined by use through manual force of 50 daN and has to have a min. of 10 % LC yet may not reach more than 50% LC. Furthermore the norm dictates a strength test of the tensioning lever and a variable tension test of the tensioning elements and belt strap clamps.



Determining the STF as per DIN EN norm

Lashing belts made from Polyester can be used in a environment of temperatures from -40°C up to +120°C and can be used in acidic or basic environments considering the expected time of exposure and concentration of such.

Textile lashing belts should be protected by cut-resistant hoses or edge protectors if the cargo features sharp edges. On the contrary a friction protection hose is sufficient to transport cargo with rough surfaces.

Use edge protectors and protective hoses!

Testing and maintenance of lashing belts
Lashing belts have to be tested by an expert at least once per year. Depending on the application conditions such testing might have to be more frequent.

Maintenance may only be performed by the manufacturer or a person instructed by such. Lashing belts whose manufacturer, LC and material grade are not determinable any more are deemed to be unfit for maintenance.

Info

The large cargo lashings poster in DIN A 1 is available on request from your SIP partners. Give us a call!

Info

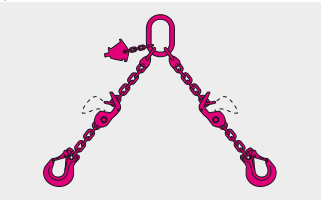
The SpanSet lashing force controller provides a reliable aid in the determination of lashing forces.

All you need to know about container lashing with SIP

Container traverses
For 20-feet and 40-feet containers see page 160

Secure lock
Container locks and seals, page 362

ICE-sling chain
2-stringed with multi-shortening clutch, from page 58 on



VIP-sling chain
2-stringed with multi-shortening clutch, page 63 ff.

VIP-container hooks
Fit to ISO-container corners

Shock surveillance
Transport monitoring outside the container, see page 362

Shocklog RD 298
Electronic recording of force through transport with exact event information and time stamp inside the container

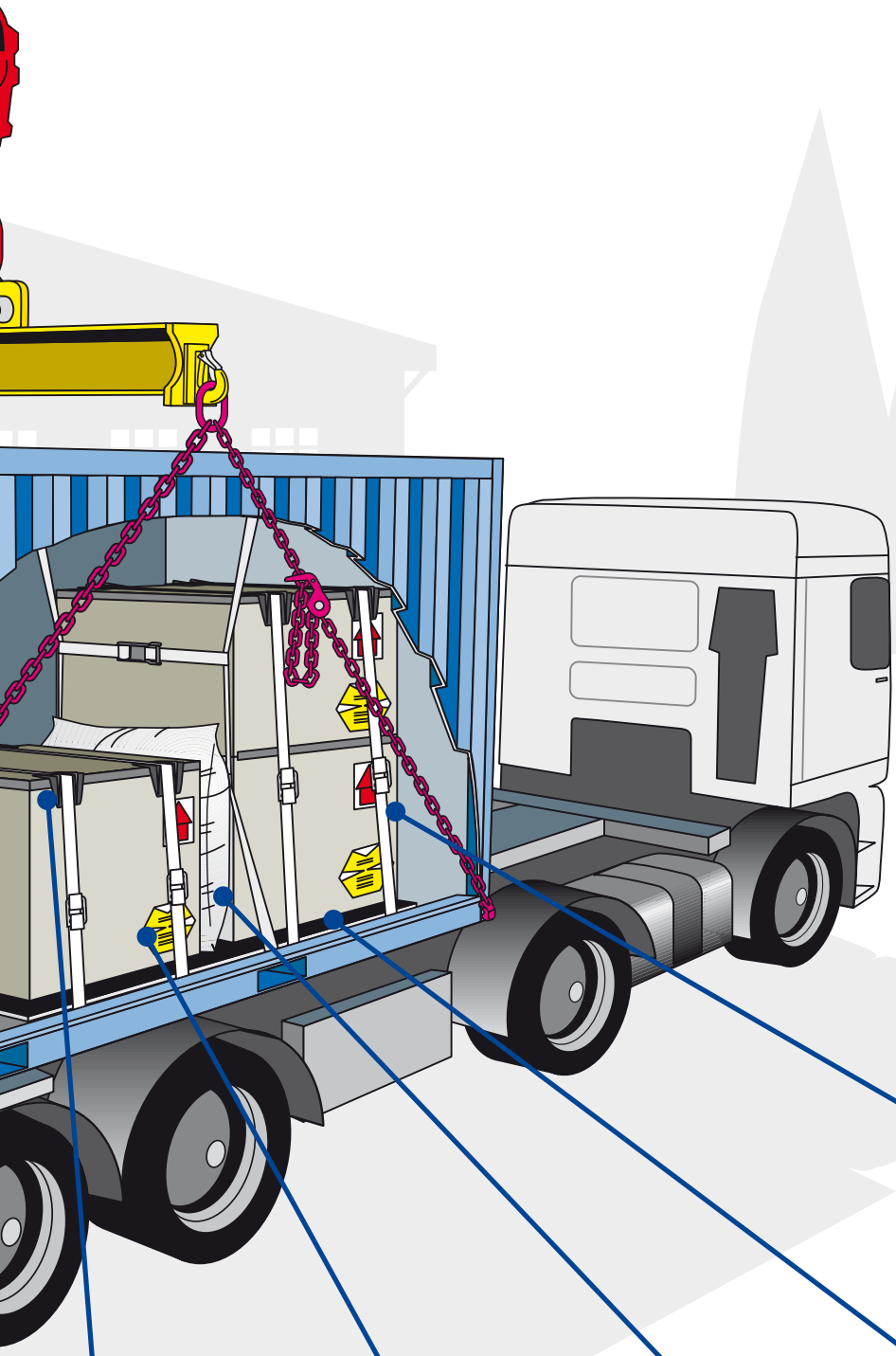
Lashing safety nets
For high load capacity and easy handling, see starting from page 330

Increased safety during Container transport

SIP provides you with an all-round safety for container transport.

Next to the products for container movement we can offer many products for the all-round secure lashing inside the container.

Furthermore we can train you for the right handling of such safety products. You will find our seminar programme on pages 14-19.



Lashing belts
Single- or multiple-use from page 342

Edge protection
Take care of your loads. from page 364.

Transport surveillance
Simple and effective method for the monitoring for the compliance of mandatory handling directions during transport and storage directly on the product

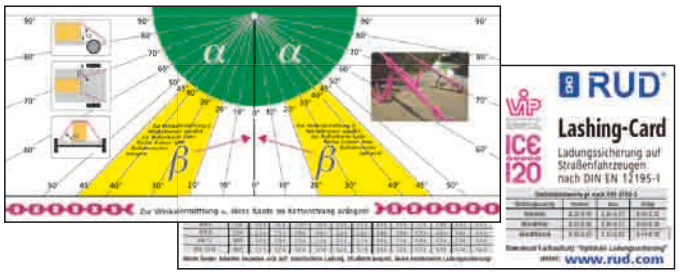
Airbag - AIRflex
Close your safety gaps, see starting from page 327

Anti-slip mat clamping set grip
Only 2 mm for a optimum cargo securing, see starting from page 344

Questions about cargo lashing?

It is our pleasure to assist you!

RUD-Lashing-Card



The RUD-Lashing-Card for the measuring of lashing angles and determining a necessary lashing chain. Convenient assistance for drivers and persons in charge.

Label	Order-no.	Price/Piece €
RUD-Lashing-Card	RD.LASH.00	7,10

Software-CD

The RUD-CD-ROM
For the designer and user, the CD-ROM has been expanded to include all the latest news about ICE, VIP and stop points program. The original features, such as stop-points selection, calculation of load security measures and chain slings has been extensively improved and *with your next order updated.

Now, corresponding tension elements and shortening components for the calculation of hanging options can be considered. In addition to the usual construction templates also the latest 3D drawing data, operating instructions and declarations of conformity can be accessed.

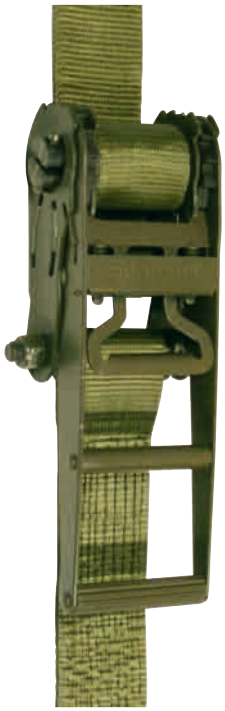
Description	Order-Nr.	Price/piece €
Software-CD	RD.LASH.00	free*

*with your next order

Special essay

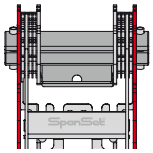
RUD-special essay "Optimal cargo securing with VIP and ICE-lashing chains"
To read and as a foundation for internal or external trainings as well as for instruction.

25-t-heavy-duty-ABS with ABS-System



- Max. permissible lashing force of 25,000 daN - can even for the heaviest loads, such as tanks
- Low weight in comparison with chain solutions
- Construction of hardened mLaterial with reinforced rims
- Optionally, also available with TFI (Tension Force Indicator)
- Ratchet straps according to DIN EN 12195-2

Reinforced Rim

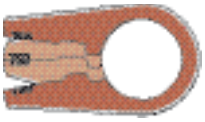


These high performance ratchets are reinforced with double web so that the weight spreads on three points instead of just two.
This results in an enormous load capacity and stability

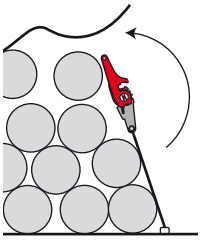
"Anti-Belt-Slip" process

This allows you full control in release. The ABS system makes it possible to release the clamp load in small steps. This gives you the opportunity to avoid risk of tipping the load, which turns to the belt to keep the vehicle straight. This helps prevent damage and accidents.

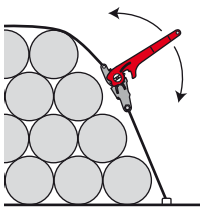
Tension Force Indicator (TFI)



The standard TFI offers itself in heavy loads lashing as a safety element against unintentional over tightening, this means optimal tension in relation to breaking point (LC).



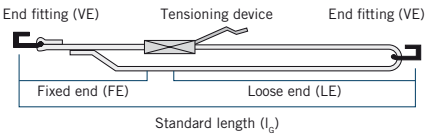
without ABS



with ABS

Hooks	LC [daN]	LC [daN]	Band width [mm]	Standard length IG [m]	Fixed end FE [m]	Weight for IG [kg]	Order-no.	Price/ piece €
25 t, two-piece, dressed								
A	12500	25000	75	4,00	0,7	16,5	SL.25.40.SH	510,00
B	12500	25000	75	6,00	0,7	17,5	SL.25.60.SH	541,50

Surcharge Other lengths on request



A Safety hook

20-t-heavy load-ABS with double slide control

Secure quickly even the heaviest loads

- Ideal for diagonally lashing vehicles and machinery
- Custom Printing possible
- By doubling the strap layers, a lashing capacity of 20.000 daN is guarantee
- Ratchet straps according to DIN EN 12195-2

SpanSet's heavy duty ratchets are a real powerhouse. They make light work of small and large jobs:

More tension power, Less muscle power
The patented dual slider also tightens in the intermediate phase, meaning by that the ,'half teeth''. This way you achieve a higher tension strength in small steps - and that saves you energy.

Lightweight
They are called heavy-duty ratchets, but are significantly lighter than other comparable means of lashing.
Compared to chains or wire steel rope means, they are much lighter and are therefore much easier to handle.

Self-locking ratchet lever
For maximum safety when lashing, we developed the self locking ratchet lever. After lashing, pull the built in settings slider to close the ratchet.
At the same time, the slider engages into the safety position and blocks out the chance of accidentally opening the ratchet, also while in operation mode.

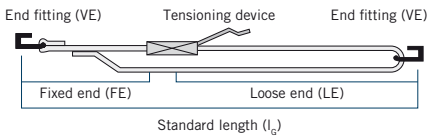
Info
Available with RFID transponders EPIS.

Hooks	LC [daN]	LC [daN]	Webbing width [mm]	Webbing thickness [mm]	Standard length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
20 t, two-piece, dressed								
A	10000	20000	75	4,2	4,00	0,70	SL.20.40.TS	292,50
B	10000	20000	75	4,2	4,00	0,70	SL.20.40.SH	393,00

Surcharge

Other lengths on request

two-piece



A Triangle

B Triangle hook

10-t-ABS-Ratchet with the ABS system

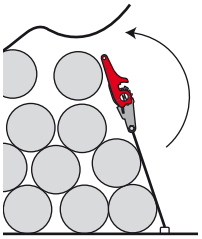
Safely transport heavy loads

- The combination of a double pleated lashing, high strength hooks and an ABS ratchet allows for an approved lashing strength of up to 10,000 daN
- Ideal for lashing vehicles and machines across the diagonal
- Custom logo weaving or printing available
- Ratchet straps according to DIN EN 12195-2

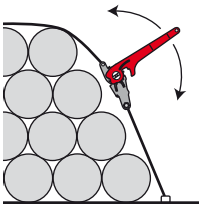
Best quality for peace of mind
It is specially important to have a controlled and safe load, for lifting heavy loads such as construction equipment or precast concrete. The loads should not just be fixed on. There is a lot more involved to have a safe and secure environment from beginning to end.

That's why we pride ourselves in putting the highest quality components in every single piece of our heavy duty ratchets From the impact-resistant epoxy resin coating of the ratchet to the extreme load pressure lashing with integrated edge protection.

Anti Slip Belt procedure
This way, you also have full control when releasing. The ABS system allows you to release the load tension in small steps. So you also have the possibility to reposition loads that are tilting or in danger of tippling with the fork lift. That helps to prevent damages and accidents.



without ABS



with ABS

Info

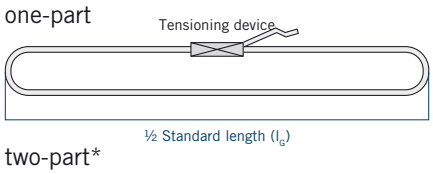
Available with RFID transponders EPIS.

Information about our cargo security seminars can be found on pages 10-13.

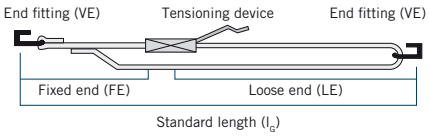
Hook	LC [daN]	LC [daN]	Webbing width [mm]	Standard length lG [m]	Fixed end [m]	Order-no. two-part, uncoated	Price/ piece €
C	5000	10000	50	4,00	0,50	AB.10.TSS.U	133,90
D	5000	10000	50	4,00	0,50	AB.10.LSS.U	184,00
						two-piece/coated	
C	5000	10000	50	4,00	0,50	AB.10.TSS.B	136,30
D	5000	10000	50	4,00	0,50	AB.10.LSS.B	186,40

Surcharge Other length on request!

one-part



two-part*

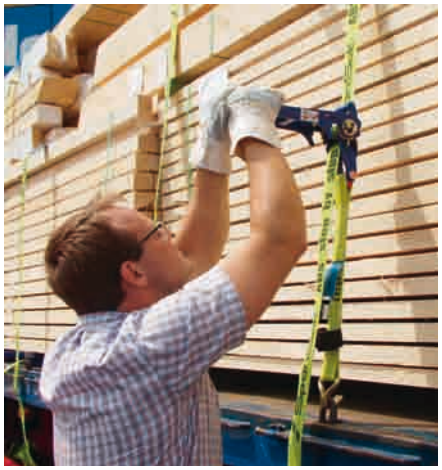


A Combi linkers

B Granite hook

ErgoABS 5t Lashing capacity in strapping: 5 t

Soft tensioning, secure efficiently, controlled release

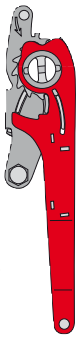


4/5 t ErgoABS-pull ratchet

- Serial production with pre-load tension display TFI, and therefore max. reachable and readable direct pre-load tension of 750 daN
- Step wise release of pre-load tension enables controlled release
- Self-securing ratchet lever
- Ratchet lashing belt according to DIN EN 12195-2

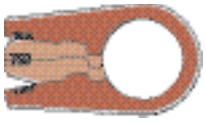
For the securing of heavy loads in everyday life you won't only need belts which you can rely on. You will need a solution which makes your work easier and the control and safety quicker and easier. Our pulling ratchets are the perfect support for you.

Longer lever, back-friendly tensioning



You can reach even high pre-load tensioning with the extended lever with using only little muscle power. Due to the fact that pulling ratchets always pull down instead of up they are more back-friendly already. With the extra long lever they fit ergonomic needs even better.

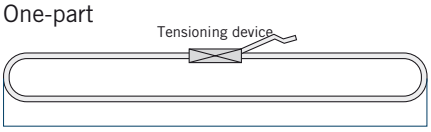
Tension Force Indicator



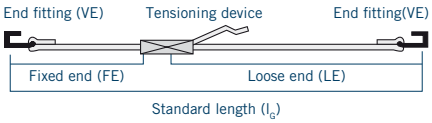
NEW

With the patented TFI you can easily and quickly account for the applied pre-tension force in the system. If the jaws of the TFI are fully closed it indicates the max. pre-load tension force of 750 daN. Interim values are also readable. It cannot get any easier. And now the TFI-adapter is available for the lose end.

One-part



Two-part



Hooks	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webbing width [mm]	Stand. length lG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
5 t, one-part, uncoated									
none			5000		50	8,00		ER.5.P100.U	77,90
5 t, two-part, uncoated									
A	2500	5000		500	50	8,00	0,50	ER.5.1253.U	84,40
B	2500	5000		500	50	8,00	0,50	ER.5.1201.U	81,90
C	2500	5000		500	50	8,00	0,50	ER.5.1215.U	86,60
D	2500	5000		500	50	8,00	0,50	ER.5.1204.U	81,20
5 t, one-part, coated									
none			5000		50	8,00		ER.5.P100.B	82,90
5 t, two-part, coated									
A	2500	5000		500	50	8,00	0,50	ER.5.1253.B	93,70
B	2500	5000		500	50	8,00	0,50	ER.5.1201.B	91,20
C	2500	5000		500	50	8,00	0,50	ER.5.1215.B	96,00
D	2500	5000		500	50	8,00	0,50	ER.5.1204.B	90,50
Available optional with TFI on the loose end.								E.TFI.00.LE	12,90

Surcharge Other lengths on request!

A Triangle hook

NEW *

B Tie-down (hooks)

C Snap links

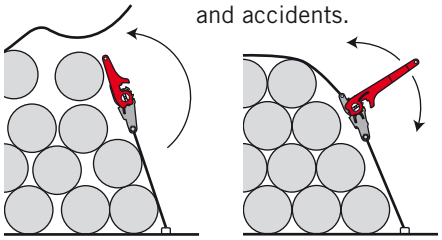
D Claw hooks

* retrofittable with TFI

ErgoABS 4t Lashing Capacity at strapping: 4 t

Integrated edge protection
The clamping set belts are known for their low extensibility of max. 4%. Through the additional wear-proof web-edge they are not easily worn out even with rougher loads. With this you have a strong partner for securing cargo at your side.

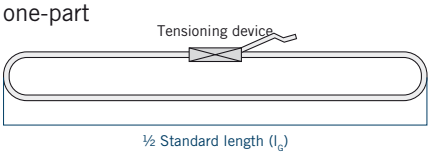
„Anti-Belt-Slip"-Operation
The ratchet is opened, the tension is released suddenly, the cargo is getting out of control: If you have witnessed something like this you are aware of the importance of ABS. Because you will also have total control during the release process. The ABS-system enables you to release the pre-load tension in small steps. This provides you with the possibility to lift up cargo which is at a risk of tipping and is leaning into the belt, with a fork lift. This helps to prevent damages and accidents.



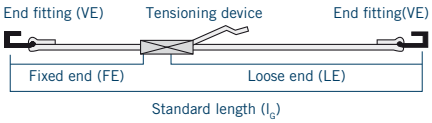
Safety label on every belt strap
In order for you to check at any time if the ratchet lashing belt fits to the cargo which has to be secured, every belt comes with a tear-resistant and patented safety label. Without this label the belt's use has to be discontinued. Our top products even have an additional protection foil for it.

The pulling ratchets combine the highest safety standards with the economy and efficiency of well designed solutions. They will make your day a lot easier and let you work faster and therefore more profitable.

one-part



two-part



Hooks	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
4 t, one-part, uncoated									
keine			4000		50	8,00		ER.4.P100.U	69,50
4 t, two-part, uncoated									
A	2000	4000		500	50	8,00	0,50	ER.4.1253.U	76,90
B	2000	4000		500	50	8,00	0,50	ER.4.1201.U	74,60
C	2000	4000		500	50	8,00	0,50	ER.4.1215.U	79,30
D	2000	4000		500	50	8,00	0,50	ER.4.1204.U	73,80
4 t, one-part, coated									
none			4000		50	8,00		ER.4.P100.B	74,80
4 t, two-part, coated									
A	2000	4000		500	50	8,00	0,50	ER.4.1253.B	85,00
B	2000	4000		500	50	8,00	0,50	ER.4.1201.B	82,60
C	2000	4000		500	50	8,00	0,50	ER.4.1215.B	87,40
D	2000	4000		500	50	8,00	0,50	ER.4.1204.B	81,90
Available optional with TFI on the lose end.								E.TFI.00.LE	12,90

Surcharge Other lengths on request

A Triangle hook

NEW *

B Tie down (hooks)

C Snap links

D Claw hooks

* retrofittable with TFI

ABS 5 t pressure ratchet with ABS function

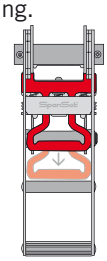
Lashing Capacity in the latch: 5 t

4/5 t ABS pressure ratchet

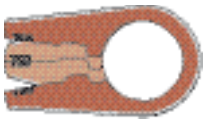
- Optionally, also available with TFI (Tension Force Indicator)
- Custom logo weaving or printing available
- Ratchet straps according to DIN EN 12195-2

When heavy loads are involved, no compromises must be made with the cargo lashing. Robust pressure ratchets from SpanSet offer you in every context the correct solution for cargo lashing.

Self-locking ratchet handle
For maximum safety.
The self-locking ratchet handle ensures that the ratchet cannot jump out again afterwards. So you also have large prestressed forces under control



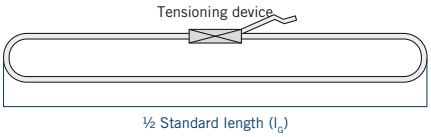
Optionally also with Tension Force Indicator



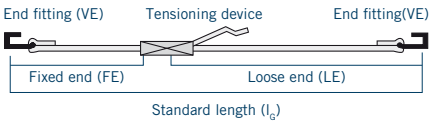
For the optimal employment of your lashing straps with maximum performance of the TFI. It is optionally available at each abs spanning element. This initial tension measuring indicator makes it easier for you to measure and prove the initial tension strength. Because the two cheeks of the TFI close with stretching and indicate thereby the value of the initial tension strength. ➜

NEW

one-part



two-part



A Triangle hook *

NEW

B Tie down (hook)

C snap links

D claw hooks

Hooks	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
5 t, one-part, uncoated									
none			5000		50	8,00		AB.5.P100.U	42,40
5 t, two-part, uncoated									
A	2500	5000		450	50	8,00	0,50	AB.5.1253.U	55,20
B	2500	5000		450	50	8,00	0,50	AB.5.1201.U	50,70
C	2500	5000		450	50	8,00	0,50	AB.5.1215.U	57,60
D	2500	5000		450	50	8,00	0,50	AB.5.1204.U	50,30
5 t, one-part, coated									
none			5000		50	8,00		AB.5.P100.B	50,80
5 t, two-part, coated									
A	2500	5000		450	50	8,00	0,50	AB.5.1253.B	65,60
B	2500	5000		450	50	8,00	0,50	AB.5.1201.B	61,20
C	2500	5000		450	50	8,00	0,50	AB.5.1215.B	68,10
D	2500	5000		450	50	8,00	0,50	AB.5.1204.B	60,70
Optional equipment for TFI on the fixed end								E.TFI.FE.00	7,35
Optional equipment for the fixed end with TFI and TFI on the loose end								E.TFI.FE.LE	20,30

Surcharge

Order example: AB.5.1204.U + E TFI FE LE,
ABS-ratchet, 5 tons, two parts, uncoated, claw hooks, fitted with TFI on fixed and loose ends

* retrofittable with TFI

ABS 4 t pressure ratchet with ABS function

Lashing Capacity in the latch: 4 t

Pressure lever best operation
With our pressure ratchets you don't expend any of your own energy. The patented, two piece dual action slider of the ABS ratchet allows you to tense the load in small steps, the ratchet also engages in the intermediate steps.

Controlled release through the "Anti-Belt-Slip" process
When releasing the loads securing straps, the tension can suddenly give way and tilt the load, and even bring it to a slide. This is prevented with the ABS system. The ABS ratchet releases the tension pressure in small steps. So you also have the possibility to reposition loads that are tilting or in danger of tippling with the fork lift. That helps to prevent damages and accidents.

Highest quality in Ratchet and webbing
Its worth securing heavy loads.
One cannot go about making compromises in quality. Therefore, we offer top quality in straps (4% stretch). Ratchets, (epoxy fibre coated) and linking elements.

The ABS pressure ratchets are designed for use in everyday load transport.
Your wear-resistant edges offers you good protection against abrasion damage.
This effect can be heightened by an abrasion protective coat. At an extra cost
Optional equipment for TFI on the fixed end. Optional equipment for the fixed end with TFI and TFI on the loose end.

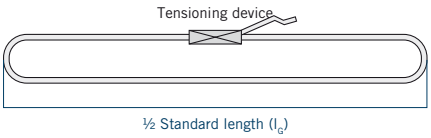
Hooks	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
4 t, one-part, uncoated									
none			4000		50	8,00		AB.4.P100.U	40,75
4t, two-part, uncoated									
A	2000	4000		450	50	8,00	0,50	AB.4.1253.U	53,15
B	2000	4000		450	50	8,00	0,50	AB.4.1201.U	48,95
C	2000	4000		450	50	8,00	0,50	AB.4.1215.U	55,70
D	2000	4000		450	50	8,00	0,50	AB.4.1204.U	48,50
4 t, one-part, coated									
none			4000		50	8,00		AB.4.P100.B	48,60
4 t, two-part, coated									
A	2000	4000		450	50	8,00	0,50	AB.4.1253.B	63,20
B	2000	4000		450	50	8,00	0,50	AB.4.1201.B	58,80
C	2000	4000		450	50	8,00	0,50	AB.4.1215.B	65,60
D	2000	4000		450	50	8,00	0,50	AB.4.1204.B	58,30
Optional equipment for TFI on the fixed end								E.TFI.FE.00	7,35
Optional equipment for the fixed end with TFI and TFI on the loose end								E.TFI.FE.LE	20,30

Surcharge

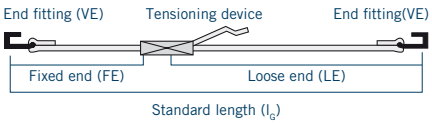
Order example: AB.4.1201.B + E.TFI.FE.LE ABS-ratchet, 5 tons, two parts, uncoated, claw hooks, fitted with TFI on fixed and loose ends

* retrofittable with TFI

one-part



two-part



A Triangle hook

NEW *

B Tie down (hook)

C snap links

D claw hooks

2.000/35 Pressure ratchet for 2 t

Sturdy, with wide grasp

- Ratchet with a robust epoxy resin coating
- Extra wide ratchet handle
- Ratchet straps according to DIN EN 12195-2
- Custom Printing possible

Hooks	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webbing width [mm]	Stand. length IG [m]	Order-no.	Price/ piece €
2 t, one-part, dressed								
none			2000		35	4,00	1804.P1.00	28,20
2 t, two-part, dressed								
A	1000	2000		440	35	4,00	1804.P2.09	38,50
B	1000	2000		440	35	4,00	1804.P2.11	39,20
C	1000	2000		440	35	4,00	1804.P2.06	39,20
D	1000	2000		440	35	4,00	1804.P2.33	40,75

A Snap links

B Tie down(hook)

C Claw hook

D Loop

1.000/25 Pressure ratchet für 1 t

Sturdy, with wide grasp

- Ratchet with a robust epoxy resin coating
- Extra wide ratchet handle
- Webbing
- Ratchet straps according to DIN EN 12195-2
- Custom Printing possible

Hooks	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webb. width [mm]	Stand. length IG [m]	Order-no.	Price/ piece €
1 t, one-part, dressed								
none			1000		25	4,00	1802.P1.00	15,95
1 t, two-part, dressed								
A	500	1000		210	25	4,00	1802.P2.06	24,95
B	500	1000		210	25	4,00	1802.P2.14	21,10
C	500	1000		210	25	4,00	1802.P2.12	21,20
D	500	1000		210	25	4,00	1802.P2.09	24,40

Surcharge

A Claw hook

B Hole triangle

C Tie down (hook)

D Snap links

Jobreport Load Security from Experts

Via the W. Massong KG Spedition and Goods Long Haul

Founded in 1940, Massong looks back on a long tradition. Today, the Spedition is active with a total of approximately 400 employees and about 130 vehicles and 100 fixed-chartering trucks at six locations in Germany, the Czech Republic and Hungary. In addition to the transportation business (land, air and sea), also warehouse management and transportation-related services are offered. From steel products to food products, the Massong W. KG covers a wide range of industries with its portfolio.

The Task

A shipment of 72 steel rollers (round billet) with a single weight of about 360 kg, a diameter of 210 mm and a roller length of 130 cm was registered. The packaging of the steel rollers was not provided by the shipper and it was therefore necessary to transport the consignment „loosely“. The loading was done by means of a magnetic crane. As the targeted weight was a theoretical weight, the shipment was divided for precautionary reasons between two vehicles. This should prevent a potential overloading of the vehicle.

The Solution

A 27 mm thick screen press plate was set as an additional end wall from the inside before the actual end wall of the semi-trailer so that in the event of an emergency stop, the relatively localized stress would be more evenly distributed to the front wall. Each of the two vehicles had been loaded with 36 steel rollers, each with four pieces next to each other and in nine lengths in the driving direction. The round billets were laid, while taking into account the tipping hazard, on 80x100x2400mm squared timbers and protected with anti-slip mats in the size of 8x100x2400mm. Contrary to the safeguard principle of 50% of the loads own weight to protect it from lateral slipping, due to the loads rolling property, 100% of the loads own weight was used to secure it against possible lateral rolling.

As can be seen in the pictures, the loop lashing technique was used. For security reasons, the round billets were also wedged laterally. To ensure constant contact with the load during transport, EURO pallets were placed on top of the billet and with lashing straps – although only at a relatively shallow angle – lashed down. Thus, the principle of „holding down“ the load was fulfilled. The implementation of securing the load proved to be relatively simple, but very time consuming and exhausting for the drivers. Both loads arrived without problems at the receiver. Except for the short wood wedges, all load securing equipment was reusable. The advantage for the client lay in the fact that he didn't need to provide packaging, which in addition, he would have needed to dispose of after the completion of the transport. Also, the discharge by means of a magnetic crane could be done very quickly.

Info

The following SIP-products were used per vehicle:
36 lashing straps with J-hook and Ergo-pull ratchet
36 anti-slip mats
18 edge protectors
In addition, the following was used:
A screen press plate as an additional front wall
18 squared timbers
36 short edge timbers
9 EURO-pallets

10-t-Spannfix-lashing

- Yellow chromed ratchet
- Abrasion resistant lashing
- Quality Tested

A Tie down (hook)

B Triangle

C Snap links

Hooks	LC [daN]	LC [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
10 t, two-part, dressed							
A	5000	10000	75	4,00	0,7	ZG.1000.SH	131,50
B	5000	10000	75	4,00	0,7	ZG.1000.TA	156,50
C	5000	10000	75	4,00	0,7	ZG.1000.KB	210,50

01035

Ergo tension ratchet for 5 t

- Optionally with tension display TFI (Tension Force Indicator), so higher clamp load stresses can be achieved and monitored
- Ratchet straps according to DIN EN 12195-2
- Custom Printing possible

A Tie down (hook)

B snap links

C Claw hook

Hook	LC [daN]	LC [daN]	STF [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
5 t, two-part, dressed								
A	2500	5000	500	50	8,00	0,50	ER.0500.SH	22,05
B	2500	5000	500	50	8,00	0,50	ER.0500.KB	55,65
C	2500	5000	500	50	8,00	0,50	ER.0500.KH	46,65
Optional equipment for TFI on the fixed end							E.TFI.FE.00	7,35
Optional for the fixed end with TFI and TFI on the loose end							E.TFI.FE.LE	20,30

5-t-Spannfix-lashing

NEW

- Yellow chromed ratchet
- Abrasion resistant lashing
- Quality Tested

A Tie down (hook)

B Snap links

C Claw hook

Hook	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Webb. width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
5 t, one-part, dressed									
none			5000		50	8,00		ZG.0500.00	20,40
5 t, two-part, dressed									
A	2500	5000		350	50	8,00	0,50	ZG.0500.SH	13,45
B	2500	5000		350	50	8,00	0,50	ZG.0500.KB	30,90
C	2500	5000		350	50	8,00	0,50	ZG.0500.KH	24,05
with TFI 500									
A	2500	5000		500	50	8,00	0,50	ZG.0505.SH	16,60
B	2500	5000		500	50	8,00	0,50	ZG.0505.KB	34,05
C	2500	5000		500	50	8,00	0,50	ZG.0505.KH	27,20

Surcharge

08022

4-t-Spannfix-lashing

NEW

- Yellow chromed ratchet
- Abrasion resistant lashing
- Quality Tested

Hook	LC	LC	LC	STF	Webb. width	Stand. length IG	Fixed end FE	Order-no.	Price/ piece
	[daN]	[daN]	[daN]	[daN]	[mm]	[m]	[m]		€
4 t, one-part, dressed									
None			4000		50	8,00		ZG.0400.00	18,60
4 t, two-part, dressed									
A	2000	4000		350	50	8,00	0,50	ZG.0400.SH	13,25
B	2000	4000		350	50	8,00	0,50	ZG.0400.KB	23,55
C	2000	4000		350	50	8,00	0,50	ZG.0400.KH	21,95
mit TFI 500									
A	2000	4000		500	50	8,00	0,50	ZG.0405.SH	16,40
B	2000	4000		500	50	8,00	0,50	ZG.0405.KB	26,70
C	2000	4000		500	50	8,00	0,50	ZG.0405.KH	25,05

A Tie down (hook)

B Snap links

C Claw hook

08024

2-t-Spannfix-lashing

- Yellow chromed ratchet
- Abrasion resistant lashing
- Quality Tested

Hook	LC	LC	LC	STF	Webb. width	Stand. length IG	Fixed end FE	Order-no.	Price/ piece
	[daN]	[daN]	[daN]	[daN]	[mm]	[m]	[m]		€
2 t, one-part, dressed									
None			2000		35	4,00		ZG.0200.00	14,50
2 t, two-part, dressed									
A	1000	2000		260	35	4,00	0,30	ZG.0200.SH	20,80
B	1000	2000		260	35	4,00	0,30	ZG.0200.KH	21,15
C	1000	2000		260	35	4,00	0,30	ZG.0200.KB	21,15

A Tie down (hook)

B Claw hook

C Snap links

08016

1-t-Spannfix-lashing

- Yellow chromed ratchet
- Abrasion resistant lashing
- Quality Tested

Hook	LC	LC	LC	STF	Webbing width	Stand. length IG	Fixed end FE	Order-no.	Price/ piece
	[daN]	[daN]	[daN]	[daN]	[mm]	[m]	[m]		€
1 t, one-part, dressed									
None			1000		50	4,00		ZG.0100.00	15,25
1 t, two-part, dressed									
A	500	1000		210	50	4,00	0,30	ZG.0100.SH	23,55
B	500	1000		210	50	4,00	0,30	ZG.0100.KH	23,55
C	500	1000		210	50	4,00	0,30	ZG.0100.KB	24,80

Surcharge

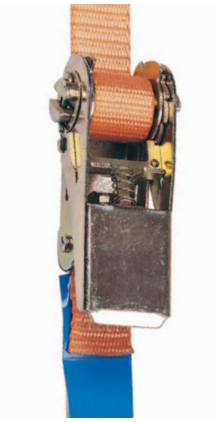
A Tie down (hook)

B Claw hook

C Snap links

07070

500-kg-Spannfix-lashing



- Abrasion resistant lashing
- Quality Tested

Hooks	LC [daN]	LC [daN]	LC [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
0,5 t, one-part, dressed								
keine			800	25	4,00		ZG.0050.00	6,72
0,5 t, two-part, dressed								
A	400	800		25	4,00	0,30	ZG.0050.SH	9,60
B	400	800		25	4,00	0,30	ZG.0050.SP	10,20
C	400	800		25	4,00	0,30	ZG.0050.KB	11,55

A S-Hook

B Tie down (hook)

C Snap links

07068

500-kg-cambuckle strap

- Abrasion resistant lashing
- Quality Tested

Hooks	LC [daN]	LC [daN]	LC [daN]	Webb. width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
0,5 t, one-part, dressed								
None			500	35	4,00		KS.0050.00	13,55
0,5 t, two-part, dressed								
A	250	500		35	4,00	0,30	KS.0050.SP	24,15
B	250	500		35	4,00	0,30	KS.0050.KB	23,65
C	250	500		35	4,00	0,30	KS.0050.KH	24,15

A Tie down (hook)

B Snap links

C Claw hook

07068

250-kg-cambuckle strap

- Abrasion resistant lashing
- Quality Tested

Hooks	LC [daN]	LC [daN]	LC [daN]	Webbing width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
0,25 t, one-part, dressed								
None			250	25	4,00		KS.0025.00	4,73
0,25 t, two-part, dressed								
A	125	250		25	4,00	0,30	KS.0025.KH	9,60
B	125	250		25	4,00	0,30	KS.0025.SH	7,67
C	125	250		25	4,00	0,30	KS.0025.SL	8,72

Surcharge

A Claw hook

B S-Hook

C Loop

01021

CarFix Load Security according to VDI 2700

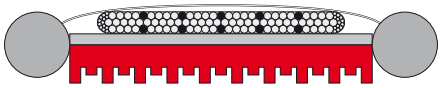
Meets the new VDI-Guidelines for Transporting Vehicles

Positioning of the strap-controllers

CarFix is the proven SpanSet system to secure passenger cars and light commercial vehicles on car carriers that fully complies with the VDI guideline 2700, page 8 and the special strap-controller sets the standard for the new perforated sheet metal hook.

You get the SpanSet CarFix in variants of 35 mm and 50 mm strap width, a lashing capacity of 1,500 or 2,000 daN. Either with the conventional J-hook or the 35 mm version with 1500 daN LC in straight pull with the innovative perforated sheet metal hook.

Special about the new perforated sheet metal hook: This is manufactured as a robust cast steel component and is protected with a resistant coating against weather influences. The new type of fixation in the elongated hole rails of the transport vehicles has two decisive advantages: The perforated plate is no longer point burdened but distributed on the surface area. Thus, an CarFix-Belt-Lashing-Systems complete up-bending and bending of the perforated sheet metal hole and hook is avoided and now a fixation by longitudinally and transversely installed perforated sheet metals is possible – here, the previous systems reach their limits. Another feature of the SpanSet CarFix Systems is the strap- controller.

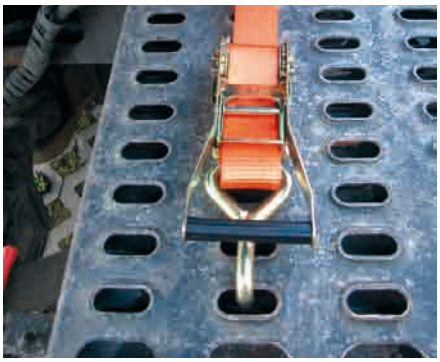


Another feature of the SpanSet CarFix Systems is the strap-controller.

The distinctive profile on the underside of the strap-controller is responsible for a very good hold on the tires and is therefore particularly position stable, because the inner strap can glide perfectly by tensioning.

The Carfix system has a particularly low belt stretching (≤ 4%) and is therefore particularly suitable for vehicle transport. Individual belt marking with printing or weaving-in is of course possible.

CarFix with perforated sheet metal hook



CarFix 50 mm with J-hook

CarFix-Belt-Lashing-Systems complete

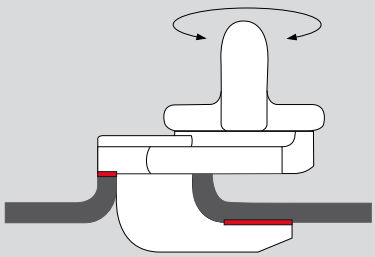
Belt width [mm]	Length [mm]	Weight [kg]	Strength [kg]	Order-No.	Price €
35	2.500	2,44	1.500	CF.35.2500	on request
35	2.270	2,19	1.500	CF.35.2270	62,10
50	2.500	3,16	2.000	CF.50.2500	41,65

* The new version with perforated metal hooks is available from the summer 2011 on!

Carfix-Gurt-Controller separate

Belt width [mm]	Length [mm]	Order-No.	Price €
35	750	CF.35.0750	10,15
50	750	CF.50.0750	10,90

Surcharge



The new perforated metal hook

Inner lashing system for bag superstructure

Load safety cannot end behind solid panels

Often, a problem is to secure palletized or similarly packaged goods in side an enclosed vehicle.
The SpanSet Interior lashing system allows for individual load safety to your box loads
Select the best solution from the components, lashing rail, lashing strap and locking rod.

Lashing with clamp lock

for 50 mm strap, LC 500 daN

Clamp Lock Lashing str. 01154, 2-parts	End fittings	Order-no.	Price € NL 4 m	Price € NL 6 m
with long hole end fitting 01262		SS.54.00.62	39,10	43,90
with long hole end fitting 01265		SS.54.00.65	30,60	35,50
with round hole end fitting 01267		SS.54.00.67	37,25	42,15

Order example: specify length when ordering SS.54.04.65 length 4 m

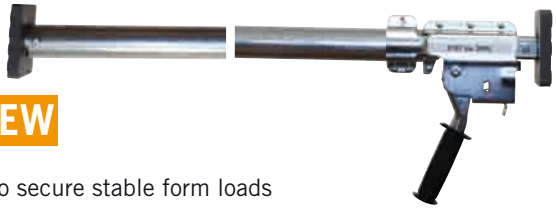
Ratchet with lashing

for 50 mm strap, LC 500 daN

Ratchet lashing 01803, 2-parts	End fittings	Order-No.	Price € NL 4 m	Price € NL 6 m
with long hole end fitting 01262		SS.18.00.62	42,80	47,40
with long hole end fitting 01265		SS.18.00.65	34,80	39,40
with round hole end fitting 01267		SS.18.00.67	41,10	45,70

Order example: specify length when ordering SS.54.04.65 length 4 m

Clamping Bar



NEW

- To secure stable form loads

Application area [mm]	Round pipe Ø [mm]	Weight [kg]	Permitted capacity [daN]	Order-No.	Price/ piece €
2200 - 2800	42	4,0	100	SB.038753	35,50

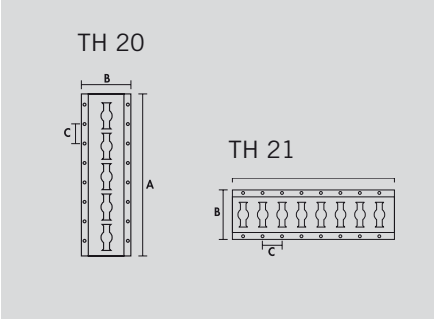
Adjustable locking bar with ratchet

- Round steel

Application area [mm]	End-fitting-Ø [mm]	Outer-Ø [mm]	Weight [kg]	Permitted capacity [daN]	Order-No.	Price/ piece €
2000 - 2555	25	44,5	7,4	250	SS.FE.1029	69,30

Lashing Tracks

Lashing rails are galvanized. Suitable for lock bar and all linking elements of the lashing belt



A [mm]	B [mm]	C [mm]	D [mm]	Plate thickn. [mm]	Screw hole-Ø [mm]	Weight [kg]	Order-no.	Price/ piece €
240	86	100	12	2,5	4,5	5,0	SS.TH.20.00	27,90
305	132	51	12	2,5	5,0	7,5	SS.TH.21.00	41,60

Surcharge

Parting Wall Lock for Curtainsider

NEW

- To secure stable form loads

Application area [mm]	Dimension (H x B) [mm]	Weight [kg]	Permitted capacity- [daN]	Order-No.	Price/ piece €
2400-2700	125 x 30	10,2	200	ZV.038.754	84,90

Info

You many find more information on box stacking safety measures on the following pages.

AirflexPoly the reusable dunnage bag AirflexPoly

Close gaps in your security

- Perfect cargo attitude control by large-scale, interlocking filling of gaps
- The extremely robust, coated PP strap fabric guarantees use without additional subsurface protection
- Saving time by easy and secure valve technology
- Reusable many times because of the unique multi-way valve

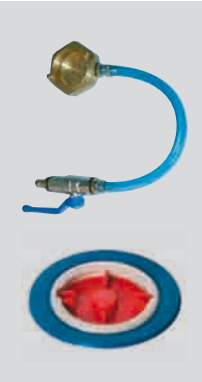
Generally applicable in lorry, train, and sea transporting
The UV-resistant AirflexPoly dunnage bags provide general cargo lashing by easy and rational handling and optimised shock and vibration absorption.

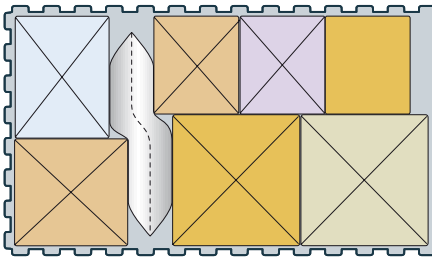
They are designed for filling pressures between 0.08 and 0.2 bar and thus will effectively prevent shifting of the cargo even where competitive products are already bound to failure. Thus they are also suitable for transports across climate zones.

Even angled use is possible without additional subsurface protection.

Easy to handle – often to apply!
The practical combination of AirflexPoly dunnage bags with various filling adapters may increase their efficiency: Choose between one-time or multiple use.
The unique multi-way valve is especially beneficial, because of its optimised handling: The secure bayonet adapter fitting and the extra-large air opening increase their efficiency in filling and emptying.

On request: AirflexPoly 3D
The ideal solution for filling large cargo gaps is AirflexPoly 3D, completely filling gaps up to 80 cm, where conventional lashing equipment systems require much additional effort. On request.





Filling adapter

One-way Adapter

Multi-way Adapter

Filling adapter	Valve	Order-no.	Price/ Piece €
One way	Pressure	EW.ADAPTE	89,90
Multi way	Pressure	MW.ADAPTE	152,80

Surcharge

AirflexPoly

Multi-way dunnage bag MW, four-ply

Two robust outer layer made of PP strap fabric and two inner layers made of PE tubular film serving as air chambers, including Multi-way valve.

Dimensions [mm]	Cargo gap [mm]	Filling pr. [bar]	Bursting pr.* [bar]	Unit per pal./ Weight [kg]	Order-no.	Price/piece €
1000 x 1200	250	0,2	0,4/ 0,8	150 / 241	MW.10.12.PP	30,20
1000 x 2100	250	0,2	0,4/ 0,8	100 / 280	MW.10.21.PP	34,20
1200 x 1800	300	0,2	0,4/ 0,8	80 / 235	MW.12.18.PP	35,30
1200 x 2400	300	0,2	0,4/ 0,8	50 / 201	MW.12.24.PP	39,70
1500 x 2400	350	0,2	0,4/ 0,8	50 / 245	MW.15.24.PP	46,40
1800 x 2400	400	0,2	0,4/ 0,8	40 / 238	MW.18.24.PP	54,20
2000 x 2400	400	0,2	0,4/ 0,8	40 / 261	MW.20.24.PP	63,60

*Bursting pressure: with(out) back pressure

Other dimensions on request

One-way dunnage bag PE, mono-ply PE film

The dunnage bag consists of one layer of PE film. Also for lashing in crates and boxes. Suitable for one-way use wherever there are no sharp edges. **Do not use unprotected at sharp edges!**

Dimensions [mm]	Cargo gap [mm]	Filling pr. [bar]	Bursting pr.* [bar]	Unit per pal./ Weight [kg]	Order-no.	Price/piece €
600 x 1000	150	0,08	0,4/ 0,8	500 / 205	2K.06.10.PE	5,50
900 x 1200	200	0,08	0,4/ 0,8	400 / 285	2K.09.12.PE	8,10
900 x 2100	200	0,08	0,4/ 0,8	250 / 310	2K.09.21.PE	10,30
1200 x 1800	300	0,08	0,4/ 0,8	250 / 350	2K.12.18.PE	11,20
1500 x 2400	300	0,08	0,4/ 0,8	180 / 390	2K.15.24.PE	17,10
1800 x 2400	400	0,08	0,4/ 0,8	150 / 416	2K.18.24.PE	19,90

*Bursting pressure: with(out) back pressure

Other dimensions on request

One-way dunnage bag PP, dual-ply

Coated outer PP strap fabric and flexible inner-tube valve. Also deliverable with multi-way valve. Replace X by M when specifying orders.

Dimensions [mm]	Cargo gap [mm]	Filling pr. [bar]	Bursting pr.* [bar]	Unit per pal./ Weight [kg]	Order-no.	Price/piece €
600 x 1000	150	0,2	0,4/ 0,8	400 / 170	2X.06.10.PP	9,50
1000 x 1200	250	0,2	0,4/ 0,8	300 / 242	2X.10.12.PP	10,10
1000 x 2100	250	0,2	0,4/ 0,8	200 / 278	2X.10.21.PP	13,90
1200 x 1800	300	0,2	0,4/ 0,8	200 / 285	2X.12.18.PP	15,60
1500 x 2400	300	0,2	0,4/ 0,8	150 / 350	2X.15.24.PP	21,60
1800 x 2400	400	0,2	0,4/ 0,8	130 / 365	2X.18.24.PP	24,70

Surcharge

*Bursting pressure: with(out) back pressure

Other dimensions on request

Hose reel hose reel for compressed air and water

The automatic SIP hose reel includes a hose, serving to convey air or water. This way you establish order at your working site, do not spend time on long-winded winding and effectively protect your hose against damage.

Result: spring-actuated SIP hose reels make your job easier and turn working sites safer and more efficient.

- Closed hose drum made of resistant plastic
- Several recoil lock positions
- Pivotable mounting bracket
- Integrated wall mounting
- PVC hose and stopper included

Thread [Zoll]	Nominal width [DN]	Working pressure max. [bar]	Hose length [m]	Order-no.	Price/piece €
1/4	6	12	10	S.L705102	125,00
1/4	6	20	15	S.L701152	193,00
3/8	9	20	15	S.L701153	207,00
1/2	12	20	15	S.L705154	221,00
1/2	12	10	20	S.G701204*	159,00

* only suitable for water. Compatible to any common garden watering devices! Multifunctional nozzle included.

AirflexPaper Dunnage bag made of power paper

Close load gaps effectively

- Optimised lashing equipment – generally usable
- Perfect cargo attitude control by large-scale, interlocking filling of gaps
- High resilience by using extremely stable power paper
- Use dunnage bag quickly and effectively

Generally usable in lorry box bodies, train or sea transporting
General cheap cargo lashing providing easy and efficient handling as well as optimized shock and vibration absorption. The dunnage bags fill present cargo gaps and are designed for max. 0.6 bar. This way they efficiently prevent shifting or tilting of the cargo. Expensive cargo damage will thus be avoided.

What is an AirflexPaper dunnage bag?
The AirflexPaper dunnage bag consists of an air-tight inner film made of polyethylene to which is added the valve. Th inner film is coated with one or several layers of power paper. If AirflexPaper is implemented between cargo using the proper dimension and at the proper place, it will interlock to fill the cargo gap and this way protect the cargo against shifting.

Quick and safe for maximum security
The filling of an AirflexPaper dunnage bag consumes very little time.

Dunnage bag made of power paper, 2-layered with PE inner cover

Dimensions [mm]	Cargo gap [mm]	Filling pr. [bar]	Bursting pr. [bar]	Unit per palette/ Weight [kg]	Order-no.	Price/piece €*
900 x 1200	400	0,2	0,6	250/230	STP.2.120P	8,60
900 x 1500	400	0,2	0,6	250/325	STP.2.150P	9,50
900 x 1800	400	0,2	0,6	200/265	STP.2.180P	10,20
900 x 2100	400	0,2	0,6	175/275	STP.2.210P	10,90

Dunnage bag made of power paper, 4-layered with PE inner cover

Dimensions [mm]	Cargo gap [mm]	Filling pr. [bar]	Bursting pr. [bar]	Unit per palette/ Weight [kg]	Order-no.	Price/piece €*
900 x 1200	400	0,4	1,2	175/255	STP.4.120P	12,30
900 x 1500	400	0,4	1,2	150/260	STP.4.150P	13,80
900 x 1800	400	0,4	1,2	150/315	STP.4.180P	15,20
900 x 2100	400	0,4	1,2	125/310	STP.4.210P	16,80

Dunnage bag made of power paper, 6-layered with PE inner cover

Dimensions [mm]	Cargo gap [mm]	Filling pr. [bar]	Bursting pr. [bar]	Unit per palette/ Weight [kg]	Order-no.	Price/piece €*
900 x 1200	400	0,6	1,8	150/275	STP.6.120P	16,90
900 x 1500	400	0,6	1,8	150/275	STP.6.150P	19,20
900 x 1800	400	0,6	1,8	125/315	STP.6.180P	21,50
900 x 2100	400	0,6	1,8	100/325	STP.6.210P	24,00

* if ordering one unit of packaging

Filling adapter

Manometer	Order-no.	Price/piece €
without	SP.FP.000.0	52,30
with	SP.FP.000.M	588,50

Surcharge

Covering nets for cars and flatbed lorries

Everything stays in its place

Combi car for service and repair tasks need to transport a lot of goods - from the heavy tool box to various spare parts. And the service man had up now neither had the time or facility to store every single part safely.
Our tried and tested car nets provide an ingenious way for the fast load securing any chosen piece.

Component 1: An anti-slip mat, with this the load will not be able to slip
Component 2: A close-knit polyester net, hanged from the security latches, ties to secure over the load.
The net is hung and quickly and easily secured with 2 ratchets .
A perfect load security according to VDI.

Also for flatbed vehicles:
Component 1: An anti-slip mat.
Component 2: A close-knit polyester net, suspended from the anchor points.
The net is tightened with 2 ratchets!
A perfect load security according to VDI.

Info

You may find more information about the RH-mat, on pages 344-345!

Info

Here is a price example for a VW Passat Variant 2012:

Net	RH-Mat
125,00 €	50,00 €

For your car net request, we need the following information

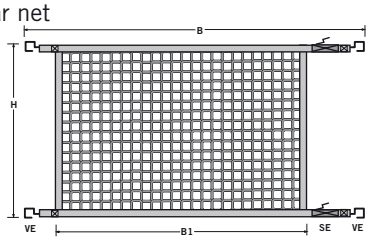
Height H [cm]	Width B [cm]	Car type Manufacturer, model year	Span element (SE)	Number of fastening elements (VE)	RH-Matt

Copy page, add dimensions and equipment and fax it to your SIP Provider.
You will receive a free quote.

Beispiel:

80	148	VW-Passat 2012	2	4	1

Car net



For your flatbed net request, we need the following information:

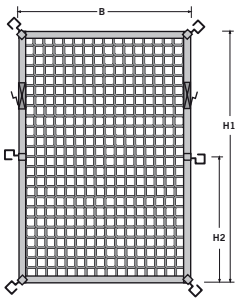
Height H1 [cm]	Height H2 [cm]	Width B [cm]	Car type manufacturer, model year	Tensioning device (SE)	Number of end fittings (VE)	RH-mat

Copy page, add dimensions and equipment and fax it to your SIP Provider.
You will receive a free quote.

Beispiel:

210	160	105	Mercedes Sprinter 2012	2	6	1

Platform truck



PaXafe Knotted covering nets with the DEKRA Certification

With the PE net for flexible load securing

Version with clamp locks

The PaXafe cargo nets offer security that you can rely on.
They are therefore DEKRA-certified and provided with a sewn on label.
The robust-PaXafe cargo nets are available in different sizes and designed for loads up to 2000 daN.

Whether for your station wagon, a trailer, flatbed vehicle or container, with the PaXafe net you can travel safely.

- Materials: braided polyethylene
- Knotted mesh width; 45 mm
- Border edging: 8 mm
- Color: green
- Thickness: 2.5 mm
- Operating temperature range: from -85 ° C to +90 ° C
- According to EN 12195 and VDI 2700
- DEKRA certified as a load safety net marked with the appropriate label
- Each packed in foil bag with insert

DEKRA Automobil GmbH DEKRA

ZERTIFIKAT

313 / 11068 YF 1804194559

Hiermit bestätigt die DEKRA Automobil GmbH die

SPAN-SET GmbH&Co.KG
in D-52526 Übach-Palenberg

die Übereinstimmung der SPAN-SET - Gurtnetzkonfi-
guration vom Typ 131-1434-A4 und 112-1434-A8
mit den durch geforderten Anforderungen und Regeln der
Technik zur Ladegutsicherung, gemäß dem DEKRA-
Zusatzanforderungsgrad II, den Richtlinien VDI 2700
und 2700 Blatt 3, der Norm DIN EN 12195-1
und der DAIMLER CHRYSLER Richtlinie
DCX - RL 9.3 Anlage TRANSPORTER

Dimensions [mm]	Order-no.	Price €
incl. 4 cumbuckle straps		
1300 x 1600	LN.1316.04	24,60
Design without cumbuckle straps		
1500 x 2200	LN.1522.00	18,70
1500 x 2700	LN.1527.00	19,90
2500 x 3500	LN.2535.00	43,40
3500 x 5000	LN.3550.00	85,70
3500 x 6000	LN.3560.00	88,00

Surcharge

MADE IN EUROPE

Container covering net High-strength container covering nets

Cover your load!

Load securing for professionals
Easily mounted load securing for lorries, tipper troughs, containers, and trailers.

The knotted SIP polyethylene nets excel in high stability and durability. The net material does not absorb water.

Nets of quality made in Germany. Knotted nets excel in high mesh strength and ideal behaviour under strain.

DEKRA zertifiziert 201125456

Info

Do you desire other materials, yarn counts, mesh width or dimensions?

We fashion according to your requirements.

Pleas contact us!

Container covering nets for high strain

- For high strain and easy handling
- Yarn count 3 mm
- Mesh width 45 mm
- Color green

Dimensions [m]	Yarn count [mm]	Order-no.	Price/piece €
2,2 x 1,5	45	CN.30.22.15	16,75*
2,5 x 1,5	45	CN.30.25.15	19,25*
2,7 x 1,5	45	CN.30.27.15	19,90*
2,5 x 3,0	45	CN.30.25.30	30,00*
3,5 x 2,5	45	CN.30.35.25	38,92
4,5 x 2,5	45	CN.30.45.35	41,00
5,0 x 3,5	45	CN.30.50.35	51,00
6,0 x 3,5	45	CN.30.60.35	58,87
7,0 x 3,5	45	CN.30.70.35	66,65
8,0 x 3,5	45	CN.30.80.35	75,00
2,0 x 3,0	45	CN.30.20.30	29,55
4,0 x 3,0	45	CN.30.40.30	39,40
5,0 x 3,0	45	CN.30.50.30	43,10

Surcharge

Container covering nets for small-scale loads

- For small-scale loads
- Yarn count 1.4 mm
- Mesh width 30 mm
- Colour black

Dimensions [m]	Yarn count [mm]	Order-no.	Price/piece €
2,2 x 1,5	30	CN.14.22.15	17,10*
2,7 x 1,5	30	CN.14.27.15	19,85*
3,5 x 2,5	30	CN.14.35.25	35,50
4,5 x 2,5	30	CN.14.45.25	38,75
5,0 x 3,5	30	CN.14.50.35	46,50
6,0 x 3,5	30	CN.14.60.35	56,40
7,0 x 3,5	30	CN.14.70.35	61,20
8,0 x 3,5	30	CN.14.80.35	69,70

Surcharge

Container covering nets for small-scale loads

- For small-scale loads
- Yarn count 2 mm
- Mesh width 30 mm
- Colour green

Dimensions [m]	Yarn count [mm]	Order-no.	Price/piece €
2,3 x 1,4	30	CN.20.23.14	18,50
2,8 x 1,6	30	CN.20.28.16	21,60
3,3 x 1,8	30	CN.20.33.18	24,80
2,5 x 3,5	30	CN.20.25.35	37,00
2,5 x 4,5	30	CN.20.25.45	40,80
2,0 x 3,5	30	CN.20.20.35	30,00
2,2 x 4,4	30	CN.20.22.44	35,10

Surcharge

* Minimum purchase 5 items, individual prices on request

Packnet webbing security

Individually tailored to your needs

Goods such as parcels and packages inside the lorry are secured by the SpanSet PACKNET.
PACKNET prevents shifting of cargo, without squeezing or damaging the load with tight lashings.

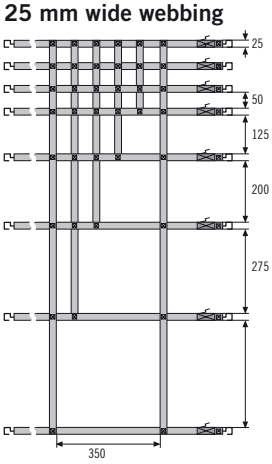
Security to measure
PACKNET Security Nets, are anchored by the end fittings on one side to one of the holes on the rail and and the other side is anchored with alternative clamping elements

And in between lies a whole range of variations in individual box bodies and cargo goods.
Allow SpasnSet to cater to your ideal combination needs of net width, belt width, mesh width, fasteners and clamping elements.

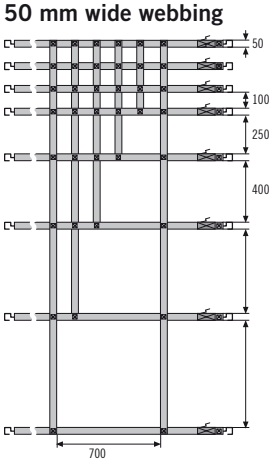
Info
Other band widths, fasteners, clamping elements? Contact your SIP Provider.

Info
You may find more cargo nets on page 334-339. Or talk to your partner SIP.

25 mm wide webbing



50 mm wide webbing



For your flatbed safety net request, we need the following information

Tensioning device (SE)	End fittings (VE)	Width B [cm]	Height H [cm]	Lashing width [mm]	Mesh width (Mid. lashing) Mw1 [cm]	Mesh width (Mid. lashing) Mw2 [cm]	Number SE	Number VE

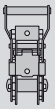
Copy page, add dimensions and equipment and fax it to your SIP Provider.
You will receive a free quote.

Example:

01154	01267	237	205	50	26	26	3	6

Info
You may find more cargo lashing on following pages. Or talk to your partner SIP.

Alternative clamping and connecting elements for 25/50 mm webbing

End fittings (VE)	01244	01262	01265	01266	01267	01203
Tensioning device (SE)	01802/P Ratchet 	01803/ P Ratchet	01154 Clamp lock	01155 Clamp lock	01147 Lever spanner	

PaXafe Net Construction Kit DIN EN 12195-2, VDI 2700 Bl. 3.3

BG-Tested Load Security Nets for Cars and Station Wagons

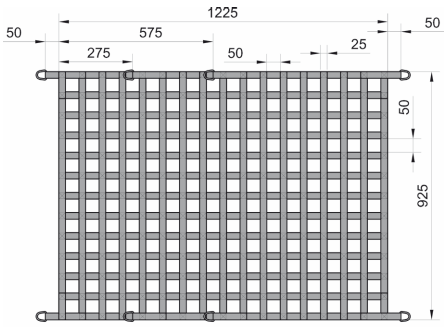
The PaXafe load security nets offer security that you can rely on. They are BG-certified and come with a sewn-in identification label.

The robust PaXafe load security nets for cars and station wagons are designed for loads up to 800 daN LC. With the PaXafe nets you form load units and achieve a form load security. You get the Paxafe nets for cars and station wagons in two sizes and two mesh widths.

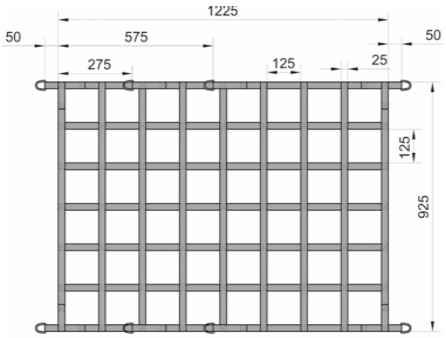
- Material: 25mm sewn strap
- Mesh width: 50/125 mm
- Colour: black
- The complete set includes 4 quick tensioners that allow for quick and easy attachment of the net
- Application temperature range:from -40°C to +100°C
- BG-certified as a load security net and marked with an appropriate label
- DIN EN 12195-2, VDI 2700 Bl. 3.3

Net	Strap width [mm]	Mesh width [mm]	Mesh	Strap color	Outer dimension [mm]	Attachment point	LC total [daN]	LC Attachment point [daN]	Order-Nr.	Price €
PKW 1	25	50	16x12	schwarz	1225x925	8 triangles	800	400	PK.043.089	346,50
Set incl. 4x Quick Tensioner 1,00m										
PKW 2	25	125	8x6	schwarz	1225x925	8 triangles	800	400	PK.043.090	178,50
Set incl. 4x Quick Tensioner 1,00m										
PKW 3	25	50	26x12	schwarz	1975x925	12 triangles	800	400	PK.043.091	493,50
Set incl. 4x Quick Tensioner 1,00m										
PKW 4	25	125	13x6	schwarz	1975x925	12 triangles	800	400	PK.043.092	231,00
Set incl. 4x Quick Tensioner 1,00m										

Car 1 Net



Car 2 Net

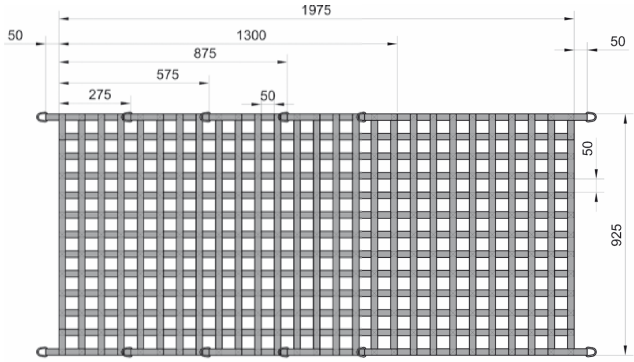


Quick Tensioner KBH/SPH

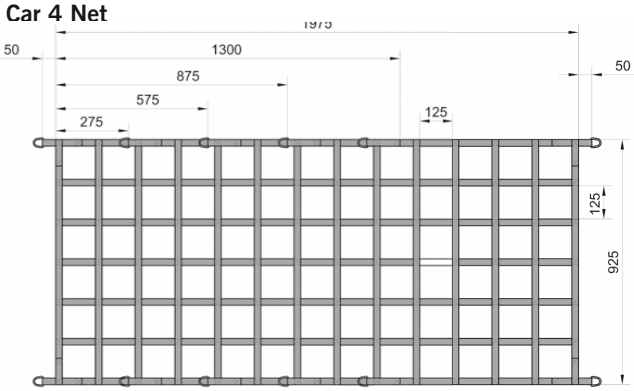
- Quick tensioner with clamping lock 01152 for car-net
- On the vehicle side with snap hooks
- Net side with J-hook

Type	Length [m]	Color	LC [daN]	Order-No.	Price €
1152	1	black	750	CL.043.108	13,20

Car 3 Net



Car 4 Net



PaXafe Net Construction Kit DIN EN 12195-2, VDI 2700 Bl. 3.3

BG-Tested Cargo Security Net for Box Cars

Today small packages, tomorrow engine blocks, the day after grid box pallets - box cars are extremely flexible when it comes to the type of cargo.

Add their manoeuvrability to it and the result is a highly dynamic use of your load. Therefore, depending on the need to secure the cargo, you need the appropriate load securing equipment. We offer the perfect solution: BG-tested PaXafe cargo security nets for box cars.

- Material: 25mm sewn strap
- Mesh width: 200 mm
- Colour: orange
- The complete set includes a blocking rod, 4 quick tensioners that allow for quick and easy attachment of the net
- Application temperature range: from -40°C to +100°C
- BG-certified as a cargo security net and marked with an appropriate label
- DIN EN 12195-2, VDI 2700 Bl. 3.3

Net	Strap width [mm]	Mesh width [mm]	Mesh	Strap color	Outer dimension [mm]	Attachment point	LC TOTAL [daN]	LC Attachment point [daN]	Order-Nr.	Price €
Net 1	25	200	9x5	orange	2050x1150	10 triangles	800	400	**KN.043.093**	**355,50**

Net 1 includes 4 quick tensioners and a blocking rod

The large surface safety net of strap webbing is designed for various loads. The associated blocking rod creates an independent end wall to form load security in the drive direction. The net offers a total of twelve fix points and it can be used vertically or horizontally. Thus, a flexible and highly efficient lashing is possible.

Info

Do you need nets with different dimensions? Talk to us about it!

Blocking Rod

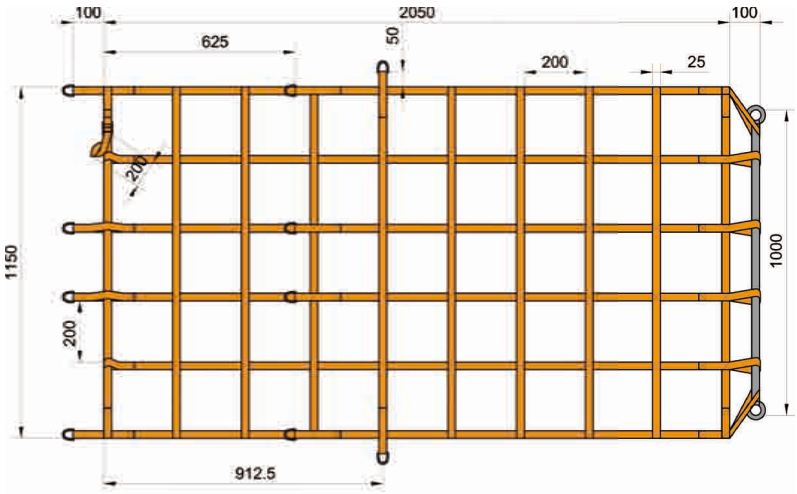
- Material: galvanized steel
- Ring nut GK 8

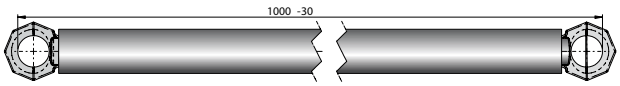
Length [m]	Dimens. [mm]	Attachment	Order-Nr.	Price €
1	1000 x 35	2 Ring nuts	**D043365X**	**122,00**

Quick Tensioner KBH/SPH

- Quick tensioner clamping lock 01149 for PaXafe-nets
- On the vehicle side with snap hooks
- On the net side with J-hook

Type	Length [m]	LC [daN]	Order-Nr.	Price €
1149	2	750	**CL.043.107**	**21,70**





PaXafe Net Construction Kit DIN EN 12195-2, VDI 2700 Bl. 3.3

BG-Tested Cargo Security Nets for CEP and Platform Trucks

- Material: 25 mm sewn strap
- Mesh width: 200 mm
- Colour: orange
- The complete set includes a blocking rod, 4 quick tensioners that allow for quick and easy attachment of the net
- Application temperature range: from -40°C to +100°C
- BG-certified as a cargo security net and marked with an appropriate label
- DIN EN 12195-2, VDI 2700 Bl. 3.3

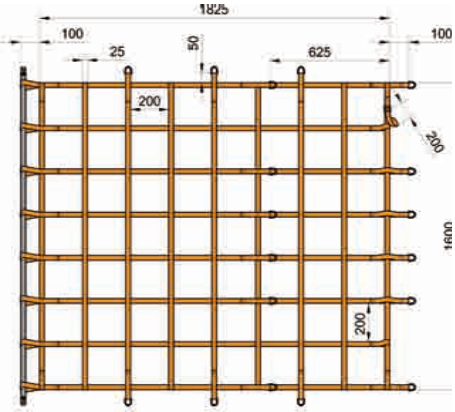
Courier, express and parcel services (CEP) have no time to lose. The delivery of the packages has priority, deadlines must be met. So that it is not to the detriment of the load security, the SpanSet PaXafe nets for CEP vehicles have been developed. A BG-tested cargo security net that can be used for both separating the loading areas and for the lashing of large, bulky loads.

Flexibility, if diversity is given
the loads for CEP vehicles are always different in size and not predictable. The load securing equipment must therefore be flexible enough to ensure that small-scale packages are as secure as large-sized pallets or cargo.

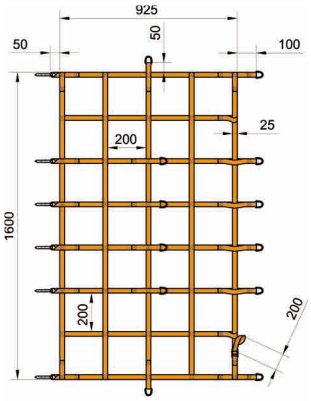
Info

The basic and expansion nets for CEP vehicles can be freely combined with each other.

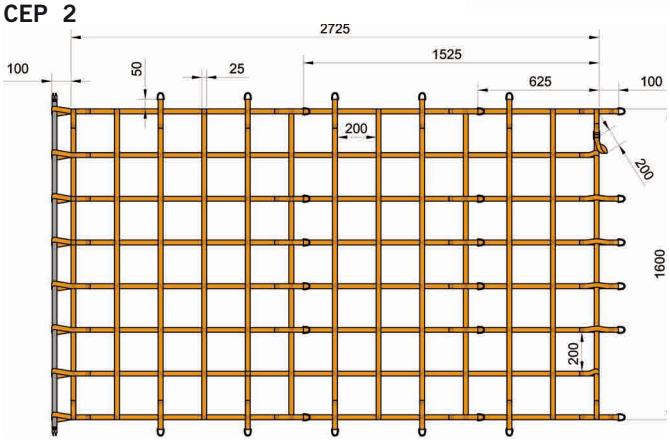
CEP 1



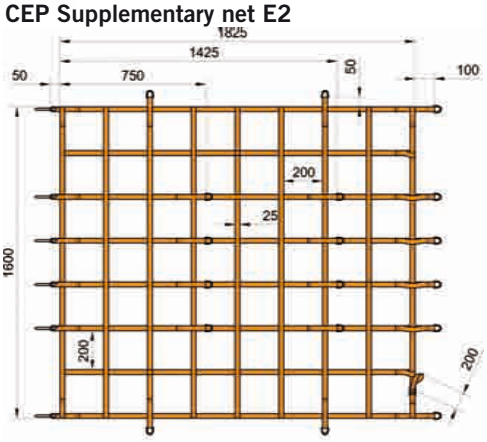
CEP Supplementary net E1



CEP 2



CEP Supplementary net E2



The Blocking Rod as an Additional End Wall

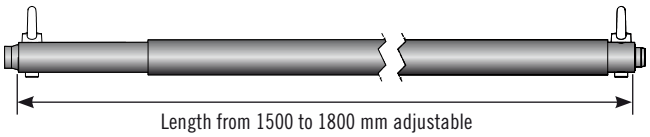
The PaXafe CEP nets include light, stable, telescoping blocking rods to produce even more stability. In practice, the blocking rod has shown that the form connection allows secure storage even with larger gaps. PaXafe CEP nets are available for several vehicle types that are commonly used in the courier service.

The size is variable
The basic net can be accurately completed by a supplementary net and both create then a load form securing unit. For this, the PaXafe nets are provided with triangles that allow an adaptation to the load volume. Additionally, you can attach the supplementary nets E1 and E2 to the basic nets CEP 1 and CEP 2. With this you are flexible with load security every day as it demands from you.

Force or form closure
The PaXafe nets are suitable for both, form fitting and combined load security. With the robust blocking rod you create an additional front wall and with the quick tensioners you add a lashing capacity of up to 800 daN to the PaXafe net.

Net	Strap width [mm]	Mesh width [mm]	Mesh	Strap color	Outer dimensions [mm]	Attachment point	LC total [daN]	LC Attachment point[daN]	Order-Nr.	Price €
KEP 1*	25	200	8x7	orange	1825x1600	18 triangles	800	500	**KP.043.094**	**446,04**
Set incl. 4x Quick tensioner 1149 + rod + 2 adapter strap										
KEP 2*	25	200	12x7	orange	2725x1600	28 triangles	800	500	**KP.043.095**	**498,60**
Set incl. 4x Quick tensioner 1149 + rod + 2 adapter strap										
KEP E1*	25	200	4x7	orange	925x1600	12 triangles, 6 snap hooks	800	500	**KP.043.096**	**169,30**
Set incl. 2x Quick tensioner 1149										
KEP E2*	25	200	8x7	orange	1825x1600	18 triangles, 6 snap hooks	800	500	**KP.043.097**	**232,30**
Set incl. 2x Quick tensioner 1149										

*Supplementary sets can be combined with both basic nets



Length from 1500 to 1800 mm adjustable

Detailed round hole and stick combinations

Accessories/Spare Parts

Type	Length [cm]	Order-No.	Prise €
Vario-TS telescopic rod*	150-180 (adjustable)	**TS.043.368**	**167,00**
Adapter strap for PaXafe Vario-Telescopic rod	14	**AG.043.440**	**7,10**

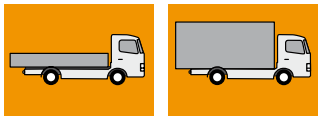
*Universally suitable for 19 and 24 mm round hole rails and common rail sticks

Info

You can also get the individual nets without the blocking rod and quick tensioner. Please contact us for details.

PaXafe Net Construction Kit DIN EN 12195-2, VDI 2700 Bl. 3.3

BG-Tested Cargo Security Nets for Trucks

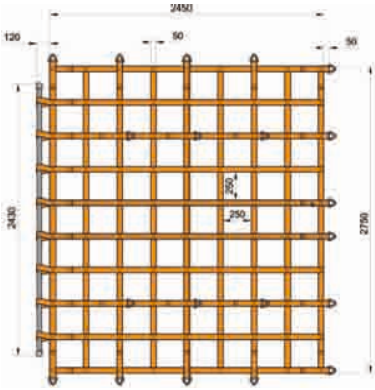


- Material: 50 mm sewn strap
- Mesh width: 250 mm
- Colour: orange
- Complete set includes Blocking rod and quick tensioner, allowing quick and easy attachment of the network
- Application temperature range: from -40°C to +100°C
- BG-certified as a cargo security net and marked with an appropriate label
- DIN EN 12195-2, VDI 2700 Bl. 3.3

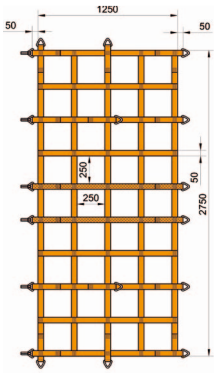
Info

Optimize your load security through the use of anti-slip mats, see catalogue pages 344-345, or edge protection products, see catalogue pages 346-347. Or contact us about it!

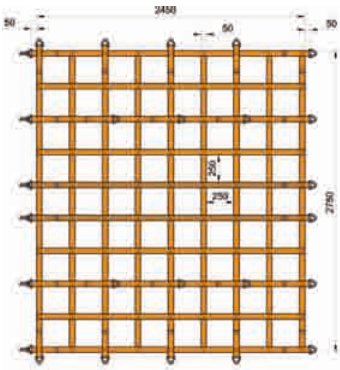
Basic Net Truck 1



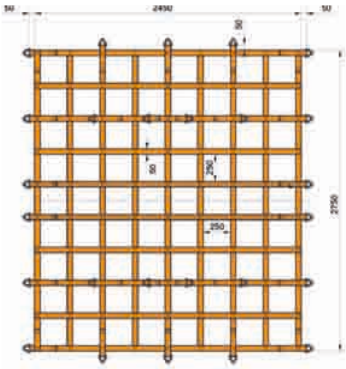
Expansion Net Truck E1.1



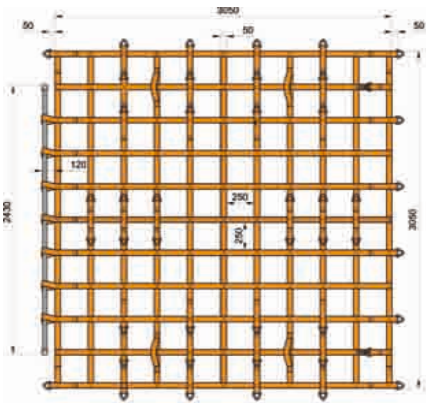
Expansion Net Truck E1.2



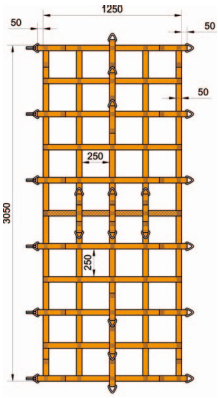
Basic Net Truck 3



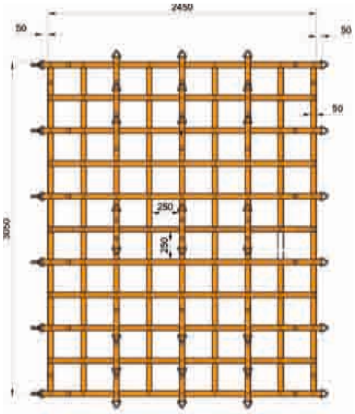
Basic Net Truck 2

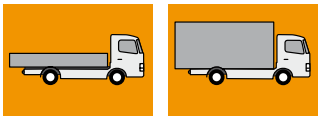


Expansion Net Truck E2.1



Expansion Net Truck E2.2





Universal load s ecuring
The PaXafe truck nets are universal load securing means by which divided and pallet loads can be secured. The Paxafe truck nets have a lashing capacity LC of 3000 daN. Each attachment point on the net can take up a lashing capacity of up to 1600 daN. The PaXafe nets are suitable as a form shaped and combined strength load restraint. With the corresponding blocking rods a form shape can easily and quickly be made, even if loaded with distance from the end wall.

The quick tensioning straps of the truck nets are 50 mm robust ratchet lashing straps of 2 m length and threaded in a unloseable unit.

Info

You can also get the individual nets without the blocking rod and quick tensioner. Please contact us for details.

Flexible adaptation
The PaXafe Nets are in length universally adaptable. Here, the various expansion nets in different lengths can be combined with the respective basic nets. This is easily done with snap hooks that are hooked into the triangles on the basic nets, thereby the net surface can be increased by 50% or 100%.

BG-tested
SpanSet introduces with the new PaXafe Net Construction Kit a complete net program that provides for flexible and optimal load security of bulky cargo goods for station wagons to large trucks. With the new PaXafe Nets you receive tested security, because all nets are tested and certified by the BG.

A clear label
All PaXafe Nets are provided with an informative label. It is made of extremely durable tarpaulin material that is printed with the necessary information and sewn in so it can't be lost.

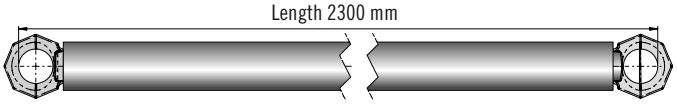
Type	Strap width [mm]	Mesh width [mm]	Mesh	Strap color	Outer dimension [mm]	Attachment point	LC total [daN]	LC Attachment point [daN]	Order-Nr.	Price €
LKW 1	50	250	8x9	orange	2450x2750	20 triangles	3000	1600	**LN.043.098**	**648,40**
Basic net, set incl. 6 lashingstraps 2,00m + blocking rod 2,30m										
LKW E1.1	50	250	4x9	orange	1250x2750	12 triangles, 6 snap hooks	3000	1600	**LN.043.099**	**279,30**
Expansion net, set incl. 2 lashing straps 2,00m suited for the truck net 1 and truck 3										
LKW E1.2	50	250	8x9	orange	2450x2750	20 triangles, 6 snap hooks	3000	1600	**LN.043.100**	**453,60**
Expansion net, set incl. 4 lashing straps 2,00m suited for the truck net 1 and truck 3										
LKW 2	50	250	10x10	orange	3050x3050	44 triangles	3000	1600	**LN.043.101**	**897,00**
Basic net. Set incl. 8 lashing straps 2,00m blocking rod 2,30m										
LKW E2.1	50	250	4x10	orange	1250x3050	18 triangles, 6 snap hooks	3000	1600	**LN.043.102**	**321,30**
Expansion net, set incl. 2 lashing straps 2,00 m suited for the truck net 2										
LKW E2.2	50	250	8x10	orange	2450x3050	30 triangles, 6 snap hooks	3000	1600	**LN.043.103**	**527,10**
Expansion net, set incl. 4 lashing straps 2,00 m suited for the truck net 2										
LKW 3	50	250	8x9	orange	2450x2750	28 triangles	3000	1600	**LN.043.425**	**512,40**
Basic net, set incl. 6 lashing straps 2,00 m, with triangles all around										

Blocking Rod

For truck nets
- Material galvanized steel
- Ring nut S48

Length [m]	Dimensions [mm]	Attachment	Order-Nr.	Price €
2,30	2300x45	2 ring nuts	**OS.043.366**	**157,00**

Length 2300 mm



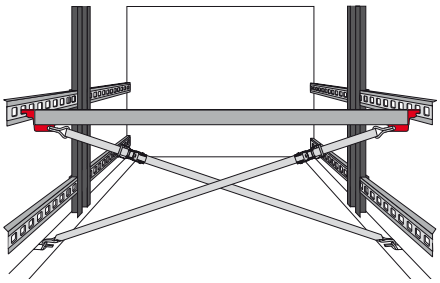
Lashing Strap SFH/SPH

Ratchet lashing strap for cargo security truck net
- On the vehicle side snap hooks
- On the net side J-hooks
- Threaded

Type	Length [m]	FE [m]	LC [daN]	Order-Nr.	Price €
1807 LC2000	2	0,32	2000	**Z4.043.108**	**29,40**

TruXafe Cargo security for Curtainsider

Safe transport according to § 22 TruXafe regulations



Since 2006, more stringent rules for securing loads have been applied.
Now you need load securing equipment that you can rely on 100 %.

TruXafe our new modular system.
Duly secure TruXafe is your quick and economical solution when it comes to compliance with § 22 and the VDI-Ri. 2700 ff.
Due to this, the vehicle owner, manager as well as the person that loads the vehicle are put in a position of higher responsibility. The structural stability of the Curtainsider is set in the DIN EN 12642 (Jan. 2007). With this, load security is not ensured yet, you have to lash these complete packages with TruXafe.

Maximum efficiency
Practical, light weight and rugged - these features characterize all TruXafe system components.
These include aluminum slats, locking beams and straps.

With these three components, you have state of the art securing equipment for every occasion, drums, big bags, drinks, octo cabins and even toilet paper thanks to the reinforced interlocking structure

Certified by DEKRA.
With TruXafe you can be sure to meet all road and traffic regulations.
This is guaranteed by tests that have been performed under real conditions by DEKRA. And the subsequent certification.

Economic transport solutions
Those who have already made acquaintance with unreliable and costly cargo security, will appreciate TruXafe not only as a requirement from the law but also as an economic transportation solution.

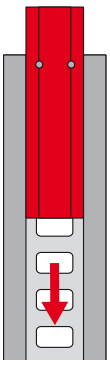
The system components can be put together quickly, can be installed easily and will last for years under harsh everyday transporting conditions.

Security for people and property
Since TruXafe increases the structural strength of curtainsiders, you can expect an improvement in the handling characteristics of your vehicles, this will also increase the security. Also, reduce maintenance costs for sliding roofs and rear door portals.

TruXafe is certified by DEKRA
- Pallets, drums, big bags
- Tissue paper - soft rolls
- Drinks on euro pallets
- Building types
- Interchangeable container pallets 800 x 1200 - 1000 x 1200
- Crates, barrels 30 l + 50 l
- Corrugated IBC octabin on CP3
- Pallets 600x800 - 1200x800
- Bags on industrial pallets CP1, CP2, CP3, CP7

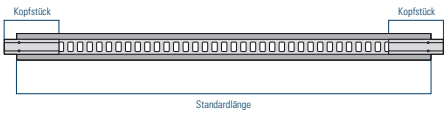
High strength insert slats

Stabilize sidewalls: This means for that theTruXafe slats have up to four times more load capacity than conventional slats. It can be a 400 daN point load and a 800 daN uniformly distributed load. Furthermore, the robust aluminum slats only weigh 11.7 kg for easy handling. And thanks to the adjustable, screw-top pieces (which are inserted into the stake pockets), is also adaptable to your required length.



Stand. length [mm]	Height [mm]	Deepth [mm]	Weight [kg]	Point load [daN]	Area load [daN]	Length head piece [mm]	Order-no.	Price €
3.050	175	35	11,7	400	800	275	SP.TX.1000	176,50

Surcharge

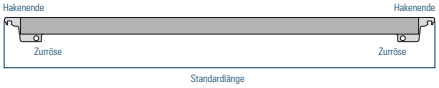


TruXafe Certified by DEKRA

TruXafe locking bars as reinforcement

In addition to the slats, give your cargo an extra hold with the locking bar. They hold up to a 2,500 daN load. The nearly 12 kg bars are simply attached by the hook-ends into the pitched holes of the slats. In order to ensure the transfer of stability to the slats on two sides of the vehicle.

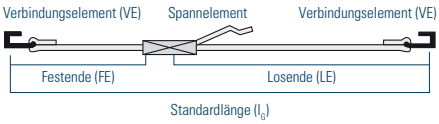
- Quickly installed
- Secures load weights of up to 2 tons per 1 m length
- Meets all requirements of the § 22 StVO traffic regulations and of the VDI-Ri. 2700ff.



Stand. length [mm]	Height [mm]	Deepth [mm]	Weight [kg]	Area load last [daN]	order-no.	Price €
2.540	127	80	11,8	2.500	SP.TX.2000	264,50

TruXafe Diagonal Lashing

The last step in optimizing your cargo security is achieved with the TruXafe-diagonal straps. They are really simple to attach: the top end goes to the standard hook-eyelet of the locking bar and the bottom to the lashing point or the loading bed edges. Stretched out diagonally, guide the side loaders into the vehicles flooring and thus relive stress from the side panel inserts.



A Tie down

B Claw hook

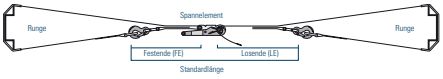
Stand. length* IG [m]	Weight for IG [kg]	End-fittings (VE)**	LC [daN]	Standard length FE [m]	Webbing width b [mm]	VE	Order-no.	Preis €
3,5	1,8	A	1.500	0,3	35	2	SP.TX.3000	39,10
3,5	1,5	A+B	1.500	0,3	35	2	SP.TX.30.AB	39,10
3,5	3,4	A	2.500	0,5	50	2	SP.TX.30.50	41,10
3,5	3,5	A+B	2.500	0,5	50	2	SP.TX.35.AB	41,10
3,5	3,1	A+A	2.000	0,25	45	2	SP.TX.35.AA*	55,70

*clamp lock-Diagonal Lashing

TruXafe Pro

Some new vehicles, tested according to DIN EN 12642 Code XL, the stiffness is often not enough in order to support the loads from tipping. For these cases, there is the TruXafe Pro. This special lashing wraps around two stanchions opposite each other and can be clamped together.

The effect: the lateral forces imparted on a stake are diverted to the opposite stake.



Stand. length complete [mm]	LC [daN]	Weight complete [kg]	Width lash [mm]	Order-no.	Price €
4.200	2.500	5,0	50	SP.TX.4000	42,95

Surcharge

* Special lengths on request
** Dimensions and details of fastening elements under www.spanset.de

EasyLashtex Woven Lashing Belt

Braided Lashing Belt

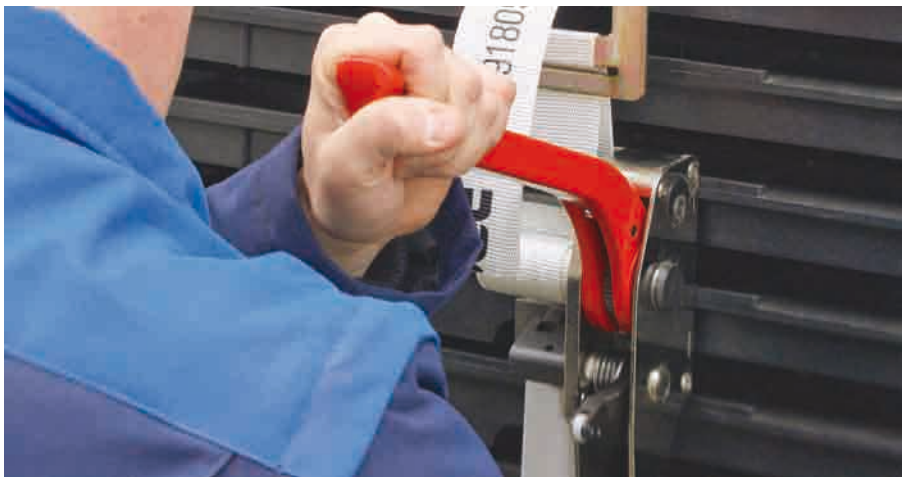
- High resistance, low weight, ideal alternative to steel bands
- Easy to handle
- Proved quality, in accordance to the rail law BN 918 090
- The imprint of the systems loading strength helps to prevent application error
- Designed for worldwide use by container ship and rail
- Minimal risk of injury
- Protects delicate goods
- Corrosion and weather proof
- Reusable lashing belt

Type	Webbing thick-ness [mm]	Webbing-str. [daN]	With buckle	VE [sack]	Running length per roll/sack [m]	Weight perroll/ sack [kg]	Order-no.	Price €
EL 25 MBL	25	1100	B8, 80005, 1422	1	400	10,5	EL.25.1100	157,70
EL 35 MBL	35	3000	BF 10, 80009	1	300	21,5	EL.35.3000	223,40
EL 40 MBL	40	5000	01436	1	200	20,2	EL.40.5000	262,50
EL 49 MBL*	49	1900	01950, 80010	1	300	12,0	EL.49.1900	233,00
EL 49 MBL*	49	4800	80010, 1421	1	200	18,9	EL.49.4800	268,60

* Bandfestigkeit beachten!

Belt tensioner mechanic belt tensioner

Tensioning and cutting in one device



To achieve the necessary pre-stressing forces, you need a reliable belt tensioner. With ratchet straps these clamping elements are integrated - therefore they are too valuable for export. In the Easy-Lash the belt tensioner system remains in place and only the straps go on the trip. A one-time investment that quickly pays for itself.

Depending on the design of our band clamps they are suitable for belt widths of up to 25, 40 or 50 mm.

Design	for max. webbing width [mm]	Dimensions [mm]	Weight [kg]	Integrated cutting unit	Order-No.	Prise €
manual tensioner	50	320 × 185 x 105	2,6	Yes	EL.00.01.52	1.327,00
manual tensioner	40	330 x 180 x 95	2,5	Yes	EL.01.55.80	921,00
manual tensioner	25	320 x 185 x 105	1,5	Yes	EL.01.55.25	501,50

Surcharge

EasyLash Buckles

Safety on long turns

B8

1422*

BF 10

80009

01436

01950

80010

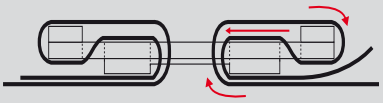
1421*

Type closing buckle	Buckle for strap	Webb.-str. [daN]	Webb. width [mm]	Surface	VE [pack]	Weight per VE [kg]	Order-no.	Price €
B8	EL 25 MBL	1100	25	galvanized	500	18,0	EL.00.B8.00	350,00
80005	EL 25 MBL	1100	25	Chromed	300	16,2	EL.8005.00	330,00
1422*	EL 25 MBL	1100	25	Powder Coated	200	6,0	EL.1422.00	???
BF 10	EL 35 MBL	3000	35	phosphate	125	11,2	EL.BF.10.00	???
80009	EL 35 MBL	3000	35	Chromed	100	10,5	EL.BC.14.00	???
01436	EL 40 MBL	5000	40	Chromed	40	11,2	EL.1436.00	152,00
01950	EL 49 MBL	1900	49	Powder Coated	50	1,2	EL.1950.00	185,00
80010	EL 49 MBL	1900/4800	49	Chromed	100	18,0	EL.BC.15.00	210,00
1421*	EL 49 MBL	4800	49	Chromed	100	23,0	EL.1421.00	380,00

* Strap buckle

Info

Example of webbing through the buckle:



Info

Optimize the cargo lashing by using non-slip mats, see catalogue pages 344-345, or edge protection products, see catalogue pages 346-347. Or contact us for details!

Pallet nail for any EasyLash-straps

With this handy tool securing loads on pallets is considerably accelerated. You attach the safety strap to the tip of the needle, then you can guide the needle and band underneath the pallets.

You do not loose any more time with the straps, that you must patiently slide under and search for beneath the pallets.

Label	Suitable for	Order-no.	Price €
Pallet nail	all EasyLash straps	EL.01.55.83	33,25

Surcharge

Grip the Anti Slip Mat

Only 2 mm for an optimized Cargo Lashing

- Perfect addition for lashings
- Reusable
- Friction coefficient μ> 0.6 *
- High resistance against fuels
- High reliability even under mechanical stress
- Individual measurements through cutting,
- Easy to use
- SpanSet Grip complies with the VDI guidelines

* Our defined material pairings. We gladly examine other combinations for you. Please contact us for details.

When the load starts to slip, the load securing has failed. Slipping loads are difficult to stop, uncontrollable and destructive. The anti-slip mats from SpanSet reduce this source of danger significantly - with little effort.

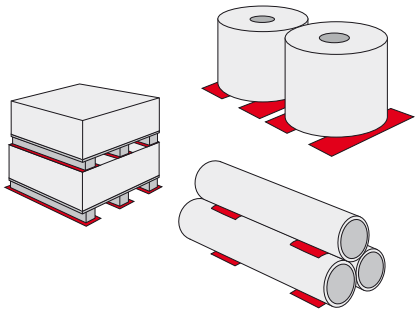
Increased coefficient sliding friction
With the SpanSet Grip anti-slip mat you increase - depending on the material combination of cargo and vehicle floor - sliding friction. So, you prevent the load from slipping. It was tested and certified by TUV Rheinland. We are happy to examine other material combinations for you when the order volume makes this research economical.

The right material
High-density rubber with a closed surface structure - makes the effectiveness of our anti-slip mat. So, there is no „ball bearing“ effect that rubber parts break free of the granule mats that then slide between the load and mat, reducing the coefficient friction.

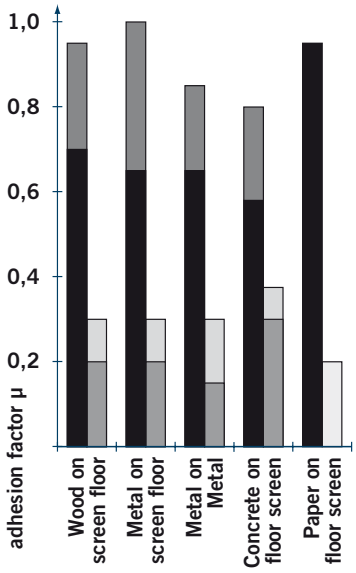
Efficient Load
Less risks of slipping means for you: Just under-lay and clearly use less load securing means when lashing the load. You load much more efficiently and save a lot of time and money. Especially since SpanSet Grip can be reused repeatedly.

Thin mat, high effectiveness
The only 2 mm thick mats have an optimal effect against slipping in almost all transport cases. For particularly heavy loads, we offer the SpanSet Grip also in 9.5mm thickness. Thus, the mat lets nothing slip in spite of strong compression.

Only as much as necessary
The anti-slip mat is so efficient because it only lies where the contact between the cargo and loading surface must be interrupted. For pallets, two narrow strips are enough, for a engine block one mat under the part that touches the loading surface is enough. So, sometimes small strips are enough to secure the entire cargo from sliding around. That‘s why you get the SpanSet Grip Mats not only in standard sizes, but on request cut to special formats.



Friction values on the example of the 9.5-mm design



The coefficients of sliding friction of the SpanSet Grip were tested for the most common material pairs and certified by the TUV Rheinland.

- on wet surface with SpanSet Grip
- on dry surface with SpanSet Grip
- on wet surface without SpanSet Grip
- on dry surface without SpanSet Grip

Grip Anit-slip Mat according to VDI 2700 ff

Very Economical Multi-use

For load securing through force the following applies: The higher the friction between the load and loading area the less lashings straps you need. Without the use of anti-slip mats, an economic securing with lashing is usually not possible.

Therefore, we have developed with SpanSet Grip an anti-slip mat that allows you to increase the critical coefficient friction μ by a proven 0.6 for different friction combinations. Even a coefficient friction of 1.0 is possible with the 2-mm mat - at a surface pressure of 1-20t/mm², or at 10-40t/mm² with the 9.5-mm mat. These values have been tested and certified.

Upon request you will receive a copy of the certification. Have this or the instructions manual on hand and you can prove at any time that your load is loaded properly according to the VDI 2700ff guidelines on page 15.

The SpanSet Grip proves itself to be the ideal complement by lashing. The anti-slip mat is impervious to operating materials and easy to clean. And although it is relatively thin and light, you can rely on its lasting load capacity, high strength and reusability.

SpanSet Grip-S

The high strength premium anti-slip mat has excellent strength and friction properties. It has a slightly textured surface. With a strength of 5 N/mm² and a Shore hardness in the range of 80°, it makes it very difficult to tear it apart and it is therefore extremely wear resistant. Also in the area of compressive strength, 500 t/m², and the coefficient frictions, depending on the material combination and boundary condition by μ 0.8 to 1.2, the SpanSet Grip-S sets the standards. Especially for securing paper rolls, the Spanset Grip-S comes with an imprint of the friction value properties that is ideal for proving the correct load security at road checks. SpanSet Grip-S can be used several times.

SpanSet Grip-C NEW

The SpanSet Grip-C is the most affordable anti-slip mat for securing the load. It has coefficient frictions of μ > 0.6 and more for the most common material combinations on wet and dry surfaces. It is extremely robust so that it can also be used multiple times.
The indentation behaviour is according to VDI 2700, page 15 and can easily accommodate heavy weights in the Grip size C.

Info

Do you need other non-slip materials? Ask us about them!

SpanSet Grip-S – Cuts

Description	Strength [mm]	Format [mm]	Weight [kg]	Order-No.	Price/Piece €
RH-200x200x2/S	2,0	200 x 200	0,09	RH.S2.0200	???
RH-5000x266x2/S	2,0	5.000 x 266	2,97	RH.S2.0500	???
RH-200x200x9/S	9,5	200 x 200	0,41	RH.S9.0200	???
RH-5000x266x9/S	9,5	5.000 x 266	13,74	RH.S9.5000	74,50

NEW

SpanSet Grip-S – Cut with imprint, ideal for the paper industry

RH-20000x150x2/SP	2,0	20.000 x 150	6,70	RH.P2.2000	???

NEW

SpanSet Grip-C – Cuts

Description	Strength [mm]	Format [mm]	Weight [kg]	Order-No.	Price/Piece €
RH-200x200x2/C	2,0	200 x 200	0,12	RH.C2.0200	0,65
RH-5000x250x2/C	2,0	5.000 x 250	3,75	RH.C2.0500	???
RH-200x200x9/C	9,5	200 x 200	0,54	RH.C9.0200	2,45
RH-5000x250x9/C	9,5	5.000 x 250	17,25	RH.C9.5000	68,80

Surcharge

For your request for SpanSet Grip with rolled ware, we need the following information:

☐ Grip S ☐ Grip C

Material strength 2 mm	
Width (max. 1067 mm)	
Length (running m, rolled ware)	

Material strength 9,5 mm	
Width (max. 1245 mm)	
Length (running m, rolled ware)	

Copy the page, enter the dimensions and fax it to us. You will receive your free quote immediately.

KaSiPlus Edge Angle for Paper Rolls Transport

Ideal Protection for the Delicate Paper Roll Edge

The delicate paper roll edge is well protected by a fillet of the KaSiPlus. The strap guide that displaced the inside edges deflection provides additional relief to the edge and the surface pressure is distributed over a larger contact area. Robust, reinforced by web construction, stackable and storage space-saving. Ideal for securing vertical and horizontal paper rolls. New to the assortment are the fitting accessories of KaSiPlus, consisting of a telescopic rod to position the KaSiPlus on the load and a rack for the space saving storage of the edge protector.

Label	Lash width max. [mm]	Dimensions [mm]	Weight [kg]	Order-No.	Price/P. €
Edge protection angle KaSiPlus	55	200 x 150 x 145	0,278	KW.001632	3,70
KaSiPlus Telescopic rod			0,359	KW.TS.40.00	19,50
KaSiPlus Positioner for telescopic pole NEW			0,010	KW.PO.40.00	0,95
KaSiPlus Rack		465 x 220 x 210	0,900	KW.RK.40.00	35,70

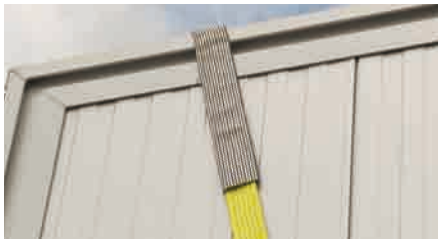
UWI UWI for straight loads

Extremely economical edge angle for straight line loading

- Extremely economical edge angle for straight line loading
- Large surface of securing strengths transfers, that wears down the loading edge
- Smooth, polished deflectors or the lashings, enhances the pulling strength transfer power
- Ideal for straight loads

Label	Strap width max. [mm]	L x B x H [mm]	Weight [kg]	Order-No.	Price/Piece €
Edge protection profile UWI	50	145 x 135 x 90	0,142	UWI.000.SP	2,65

sliP sliP slide protection



The protection hose slip - slide protection - provides the use of a high-performance fiber that is extremely tear resistant. On the braided sliding skids, the lashings slides over the loading edge without any wear and tear.

- Extremely rip and abrasion resistant
- Easy to handle

Label	Length [mm]	Max. lash width max. [mm]	Order-no.	Price/piece €
sliP-protection hose, double woven runners	500	50	SL.SLIP.50	5,15

SF-LSP Protection hose

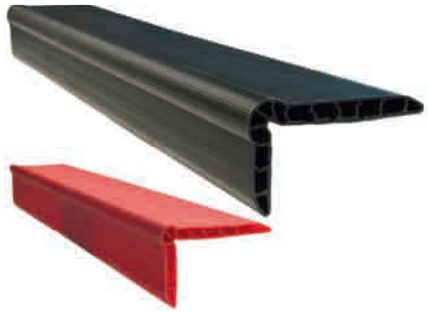
- Roll 5 m

Label	VE	Usable lash width max. [mm]	Order-no.	Price lin. m €	Price/ VE €
SF-LSP Protection hose	5 m roll	25	SF.LSP.025	22,25	110,50
SF-LSP Protection hose	5 m roll	35	SF.LSP.035	22,45	111,50
SF-LSP Protection hose	5 m roll	50	SF.LSP.050	25,10	124,50
SF-LSP Protection hose	5 m roll	75	SF.LSP.075	34,00	170,00
blank			SF.LSP.ZUS	1,37	

Surcharge

LaWi long angle edged profiles

So that the load tightens up into a packet



Extremely tough edge profiles thanks to the inner honey combe structure.The PE (Polyethylen) long edge and is very strong, and if there is a gap between two loads, it can even act as a bridge. Also suitable for delicate cargoes such as roof tiles, timber slats, palletised drums etc.. The inner groove in the edge angle protects the loads edges, rounded off protect the lashing and heightens the pre load tension due to an improved tension transfer.

- Eeasy to use on large loading bays, edging does not fall off
- Suitable for all lashing widths
- Can be shortened
- LaWi Type 1637 with strap guide

Type	Optimal suitable for ratchets	Length* [mm]	Height x width [mm]	Inner laying area [mm]	Weight** ca. [kg]	Color	Order-no.	Price/piece €
LaWi 1636	Ergo ABS, ABS, Ergo	800	210 x 120	180 x 90	2,0	black	LKW.36.080	21,45
LaWi 1636	Ergo ABS, ABS, Ergo	1200	210 x 120	180 x 90	3,0	black	LKW.36.120	32,15
LaWi 1636	Ergo ABS, ABS, Ergo	2400	210 x 120	180 x 90	6,0	black	LKW.36.240	64,30
LaWi 1637	Spannfix 5-/4-/2-/1-t	800	140 x 100	120 x 80	1,1	red	LKW.37.080	11,05
LaWi 1637	Spannfix 5-/4-/2-/1-t	1200	140 x 100	120 x 80	1,63	red	LKW.37.120	16,60
LaWi 1637	Spannfix 5-/4-/2-/1-t	2400	140 x 100	120 x 80	3,25	red	LKW.37.240	33,20
strap guide VE 4							LKW.GF.000	2,50

* note ± 20 mm tolerance! ** Please note weight tolerances of 20%!

EasyRoll Lashing roller achieves an order

With the easy roll lashing roller, you can organizes your lashing equipment. That makes room, and you have the lashing roller ready rolled up for the next use. With an easy to install base plate, Easy-Roll has its own spot in the vehicle and the detachable lashing reel is ready to use at any time.

- Saves times and saves material
- Always available
- Suitable for all belt widths

Band width [mm]	Order-no.	Price €
25-75	EASY.ROLL	15,95

VMA 1000 meter bias

Lashing tensioning easy, quick and accurately achieved

Meter to determine the tension in the lashings. All you have to do is enter the band length, all the rest happens automatically. Even a child can operate it. This also contributes to the low weight of 1.7 kg.

- High Accuracy
- Illuminated display
- Lashing tensioners in daN in large numbers
- Strap thickness is measured automatically
- Low battery voltage is displayed

Max. Band tension [daN]	Max. Band width [mm]	Max. Band thickness [mm]	Dimensions mm [L x B x H]	Accuracy [daN]	Weight [kg]	Order-no.	Price/piece €
1000	55	4,5	220 x 115 x 95	± 20	1,7	VMA.01000	1.790,00

Surcharge

Rubber sling

Tightening and easy adjusting of nets and tarpaulins
- Strength 4 mm
- Core made of best latex
- Stretch of ca. 110 %, with fixed plastic hook
- Unit of packaging: 50 items

Length [cm]	Unit	Order-no.	Price/piece €	Price/Unit €
20	50	SF.199362	0,94	47,00
30	50	SF.199363	1,06	53,00
40	50	SF.199356	1,16	58,00
50	50	SF.199357	1,26	63,00
60	50	SF.199358	1,36	68,00
70	50	SF.199359	1,48	74,00
80	50	SF.199360	1,58	79,00

Rubber Tethers With stainless steel hook

Extra strong
Quick tethering with 8 mm rubber tethers
- Tether stretchable by 110 %
- Envelope made of abrasion-resistant birolene (polyester)
- Complete and ready for use

Length[cm]	Unit	Order-no.	Price/piece €	Price/Unit €
50	10	SF.GS.0050	5,30	53,00
100	10	SF.GS.0100	5,50	55,00
200	10	SF.GS.0200	6,95	69,50
500	10	SF.GS.0500	11,50	115,00

Stainless steel hooks

For rubber tethers
- Stainless steel hooks for fashioning your own rubber tethers
- Unit of packaging: 100 items

Label	Unit	Order-no.	Price/piece €	Price/Unit €
Stainless steel hook for 6 mm robe	100	SF.0006.SH	0,88	88,00
Stainless steel hook for 8 mm robe	100	SF.0008.SH	1,14	114,00
Stainless steel hook for 10mm robe	100	SF.0010.SH	1,50	150,00

Lashing leash

Ideal for container nets, tarps and tarpaulins
- Rubber cords – by the roll, ca. 110 % stretchable
- Braid made of abrasion-resistant textile fiber, white with red-blue dots
- Edition: 100/200 m per coil

Ø [mm]	Spool width [m]	Order-no.	Price/100m €
4	200	SF.ZL.04.10	46,00
6	200	SF.ZL.06.10	90,60
8	150	SF.ZL.08.10	197,00
10	80	SF.ZL.10.10	231,60
12	100	SF.ZL.12.10	293,40

Tong

VE	Order-no.	Price/piece €
1	SF.199802	56,70

Stainless steel clips

Best suited for individual fashion of rubber cords

Rope-Ø [mm]	VE	Order-no	Price/piece €	Price/Un. €
4	100	SF.199.804	0,29	29,00
6	100	SF.199.806	0,30	30,00
8	100	SF.199.808	0,32	32,00
10	100	SF.199.810	0,42	42,00

Surcharge

Dyneema PUR-PU 12 Specially coated Dyneema

As resilient as wire rope and up to 14 times lighter

- 14 times lighter than wire rope at equal breaking load
- Mono-coloured 12 plaid
- Protective coating PU
- Low weight
- Stronger than wire rope
- Excellent splicing and processing
- Stretching of ca. 1.3 % prestretched under 1/3 strain
- Coils 100/200 m
- Approved for gliders

Strength [mm]	Breaking strength [daN]	Order-no.	Price/100m €
3	620	SF.167.503	132,00
4	1200	SF.167.504	161,20
5	2300	SF.167.505	335,60
6	2700	SF.167.506	408,00
8	5000	SF.167.508	593,00
10	8500	SF.167.510	968,00
12	11500	SF.167.512	1.397,00
14	15500	SF.167.514	1.778,00
16	20500	SF.167.516	2.778,00
18	26500	SF.167.518	3.600,00
20	31200	SF.167.520	4.720,00
22	37750	SF.167.522	5.132,00
24	44000	SF.167.524	5.506,00

Label	Oder-no.	Price €
with thimble	SF.10.11.KA	10,80
with hand eye	SF.10.11.HA	10,80

Surcharge

Info

Just splice yourself or ask us to fashion according to your requirements. Stitched eye connections are possible, too.

The rigging can easily be spliced:

1. Stick through
2. Stick back again
3. Carry the rest into the rope again

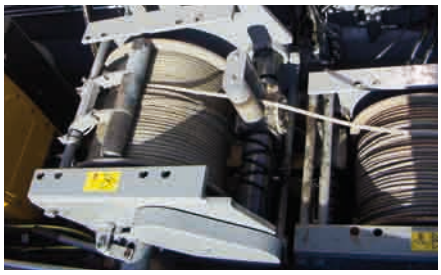
Apply takling and stitch through

Minimum order value for products on this page € 50.00.

1 2 3

Special assembly of the ropes - equipment from Seilflechter

The Seilflechter coated Dyneema-ropes find many uses in special applications such as for gliders, where the winch wire ropes are removed and replaced with our 12-PU Dyneema ropes. Thus, the glider can be pulled higher since the towing weight is lower. If the rope breaks, it is also possible to simply splice the rope back together again.

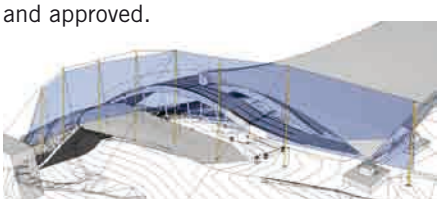


The Seilflechter-Dyneema-winch ropes are up to 14 times lighter than wire ropes - with the same breaking load.

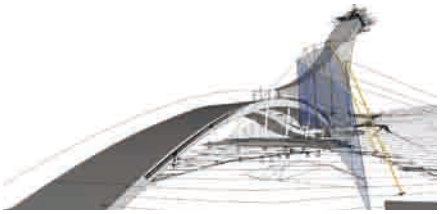
Gliders launch with special Seilflechter Dyneema ropes to reach a higher altitude up to 1500 meters.

Ideal pull line for tree care. It is used as a lowering loop additionally in order to secure trees during felling or lowering.

The Seilflechter project customer, the Olympic Ski Jump in Innsbruck. Holding ropes made of Dyneema ropes, tested and approved.



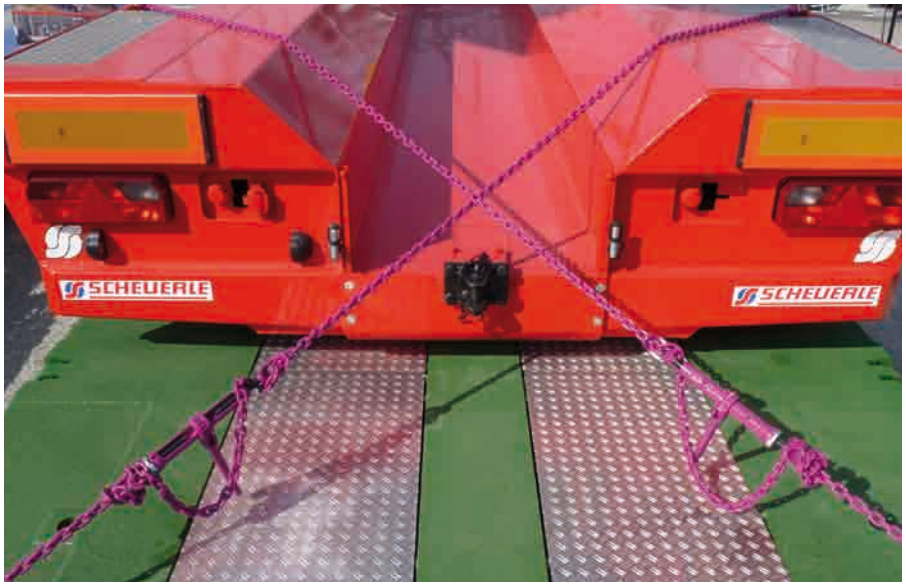
Our customers‘ projects are also technically accompanied by Seilflechter.



Here, for example. The Olympic Ski Jump in Garmisch - creating of wind nets.

Lashing Chains In ICE- and VIP-Quality

Lightyears ahead



Attention!
Since 2001 the rules for lashing chains are in effect as per Norm EN 12195-3 All RUD-parts are exceeding the minimum requirements. ICE-lashing chains have up to 60% more lashing force.

VIP- and ICE-chains differ in their colour coding:

VIP-lashing chain =

ICE-lashing chain =

Info

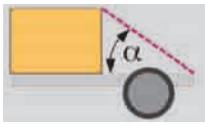
If the indicated lashing angles are changed significantly, additional lashing measurements are to be taken (e.g. chains with higher thickness, low lashing chains, wooden separators and/or wedges, friction increasing materials).

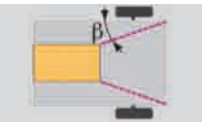
Work machine forks may have contact with the flatbed pit. Engage gears and parking brake.

Diagonal and low lashing: Which lashing chain is appropriate for my cargo?

Diagonal lashing:

Lashing c. indic. are valid f 2-ICE and 10-VIP	LC lash. str. [daN]	Max. Cargo weight in kg (Horiz. angle β: 20-45° and use of 2 lashing chains with and ag. the dir. of travel) α: 0-30° Vertical angle						α: 30-60° Vertical angle					
		μ=0,1	μ=0,2	μ=0,3	μ=0,4	μ=0,5	μ=0,6	μ=0,1	μ=0,2	μ=0,3	μ=0,4	μ=0,5	μ=0,6
VIP-VSK 6	3000	5200	7000	8700	10900	14500	21900	3800	5300	7500	10700	16000	26700
ICE-VSK 8	6000	10500	14000	17400	21800	29100	43900	7600	10700	15000	21400	32000	53400
ICE-VSK 10	10000	17500	23400	29000	36400	48600	73100	12800	17900	25000	35600	53400	89000
ICE-VSK 13	16000	28000	37500	46400	58200	77800	117000	20500	28600	40000	57100	85500	142400
VIP-VSK 16	20000	35000	46900	58100	72800	97300	146300	25600	35800	50000	71300	106900	178000



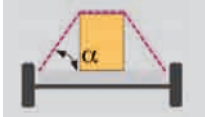


Low lashing

Lashing c. indic. are valid f 2-ICE and 10-VIP	STF [daN]	Necessary amount of RUD-lashing chains for loop lashing (Amount of lashing chains = Factor from table x cargo weight in t) α: 60-90° Vertical angle						α: 30-60° Vertical angle					
		μ=0,1	μ=0,2	μ=0,3	μ=0,4	μ=0,5	μ=0,6	μ=0,1	μ=0,2	μ=0,3	μ=0,4	μ=0,5	μ=0,6
VSK 6	1500	3,6 x	1,6 x	0,9 x	0,6 x	0,4 x	0,2 x	6,3 x	2,7 x	1,5 x	0,9 x	0,6 x	0,3 x
ICE-VSK-8/10/13	2800	2,0 x	0,9 x	0,5 x	0,3 x	0,2 x	0,1 x	3,4 x	1,5 x	0,8 x	0,5 x	0,3 x	0,2 x
VSK 16	3600	1,5 x	0,7 x	0,4 x	0,3 x	0,2 x	0,1 x	2,6 x	1,2 x	0,7 x	0,4 x	0,3 x	0,2 x

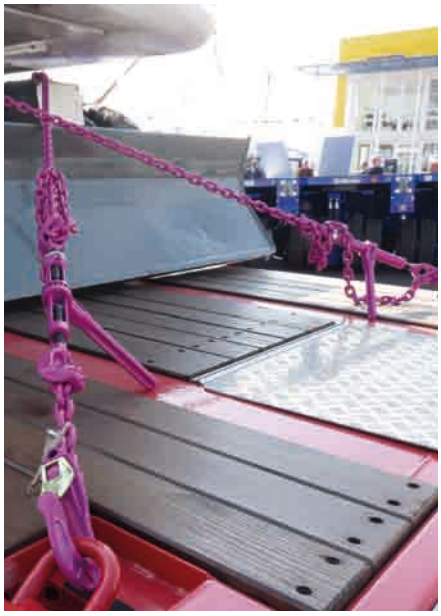
Table values according to stable cargo, road transport, no combined cargo lashing.

Sliding friction μ as per VDI 2700-2			
Material pairing	dry	wet	greasy
Wood/Wood	0,20-0,50	0,20-0,25	0,05-0,15
Metal/Wood	0,20-0,50	0,20-0,25	0,02-0,10
Metal/Metal	0,10-0,25	0,10-0,20	0,01-0,10



ICE-Lashing chain

Move securely with innovation: ICE-lashing chain - Lightyears ahead



The (R)evolution in cargo lashing
RUD is presents the grade 12 chain generation. RUD is the first manufacturer being able to produce steel chains and their related parts in grade 12 quality. RUD is therefore the first manufacturer which has received approval (seal) through the according German professional association (Prüf- und Zertifizierungsstelle des Fachausschusses „Metall und Oberflächenbehandlung“ bei der Berufsgenossenschaft Metall Nord Süd) for a higher than 10 grade. This is documented with a printed certification seal on every ICE-chain and related parts.

D 1
12

Further technological features such as:
- Breaking elongation and ductility
- Ductility at low temperatures
- Crack durability
- Fatigue and wear resistance were significantly improved compared to GK 8

The ICE-Star-Hook with FEM weight optimised design is up to 25% lighter compared to GK-8-hooks of chains next in size even though it has a bigger hook aperture.

The RUD was nominated in the category „Safety“ at the ESTA Award 2011 with its completely new designed ratchet tensioner called CURT (Chain Universal Ratchet Tensioner) and ranked among the top four companies in Europe. In the category „Safety“, ESTA distinguishes annually security-oriented businesses that provide specific products that have application solutions and methods for the safe operation of cranes and transport vehicles.

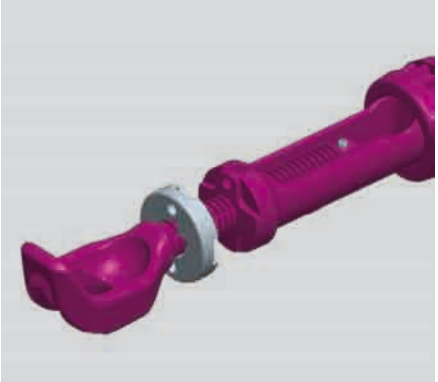
A special highlight is the ICE CURT ratchet tensioner. It has a magnetically adhering locking coupling as a loosening or possible theft security.

Info

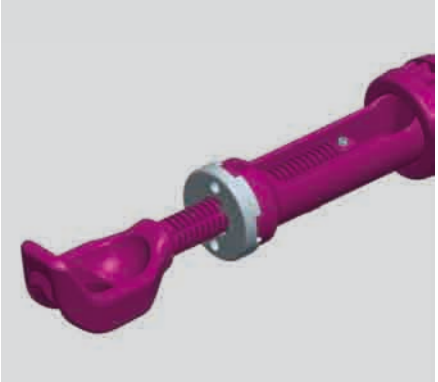
Advancement in nominal thickness and lashing capacity

Due to the enormously high stability of the patented ICE-material it was possible to advance the continuous nominal thickness compared to grade 8 for the first time. An ICE-chain therefore replaces grade 8 chains of the next bigger nominal thickness. A 12-ICE-lashing chain has up to 60% more lashing capacity compared to a 8 grade chain with the same nominal thickness.

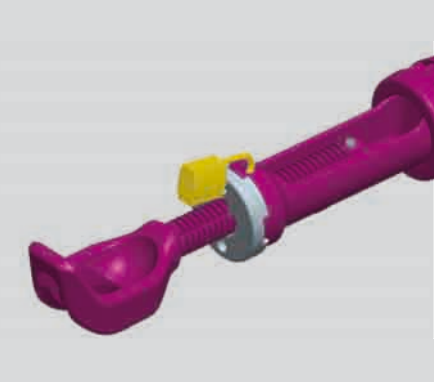
ICE lashing chains offer the user considerable weight savings, improved ergonomics, faster attachment and increased safety.



Locking joint open



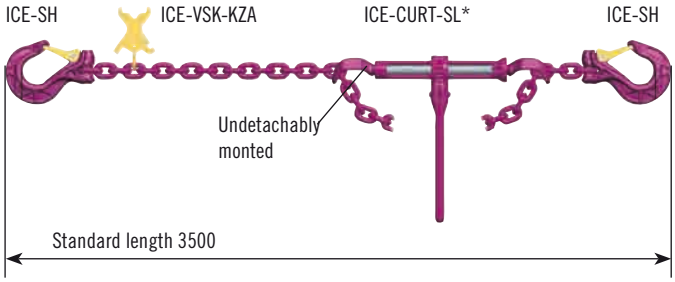
Locking joint closed



Locking joint with anti-theft device

ICE-Lashing Chain with ICE-CURT-Tension Elements

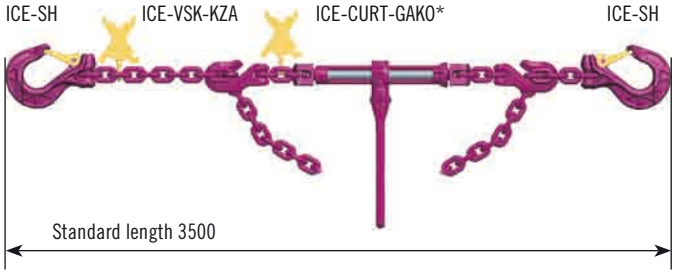
The Innovation for Lashing Chains



* The tension element is moveable on the chain strand.

Chain Ø [mm]	Description	Lashing capacity LC [daN]	Tensionlock Type	Tensionlock Standard tension force STF [daN]	L min. [mm]	Weight [kg/p.]	Order-No.	Price/Piece €
6	ICE-VSK-6-CURT-SL	3.600	ICE-CURT-6-SL				ICEC.06.SL	in preparation
8	ICE-VSK-8-CURT-SL	6.000	ICE-CURT-8-SL	2800	817	12,6	ICEC.08.SL	378,80
10	ICE-VSK-10-CURT-SL	10.000	ICE-CURT-10-SL	2800	935	18,1	ICEC.10.SL	463,20

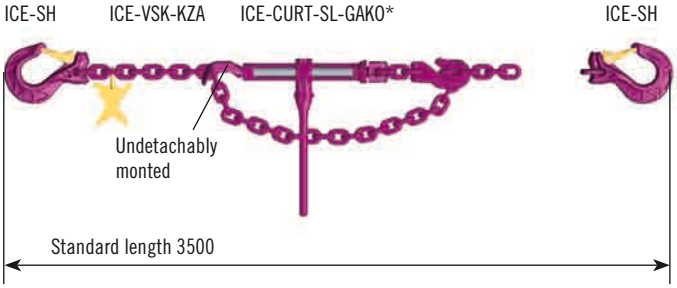
Surcharge



* The tension element is moveable on the chain strand and can be separated from it

Chain Ø [mm]	Description	Lashing capacity LC [daN]	Tensionlock Type	Tensionlock Standard tension force STF STF [daN]	L min. [mm]	Weight [kg/p.]	Order-No.	Price/Piece €
6	ICE-VSK-6-CURT-IVH	3.600	ICE-CURT-6-GAKO				ICEC.06.GA	in preparation
8	ICE-VSK-8-CURT-IVH	6.000	ICE-CURT-8-GAKO	2800	1040	13,2	ICEC.08.GA	459,70
10	ICE-VSK-10-CURT-IVH	10.000	ICE-CURT-10-GAKO	2800	1208	20,1	ICEC.10.GA	551,30
13	ICE-VSK-13-CURT-IVH	16.000	ICE-CURT-13-GAKO	2800	1600	35,5	ICEC.13.GA	in preparation
16	ICE-VSK-16-CURT-IVH	25.000	ICE-CURT-16-GAKO				ICEC.16.GA	in preparation

Surcharge



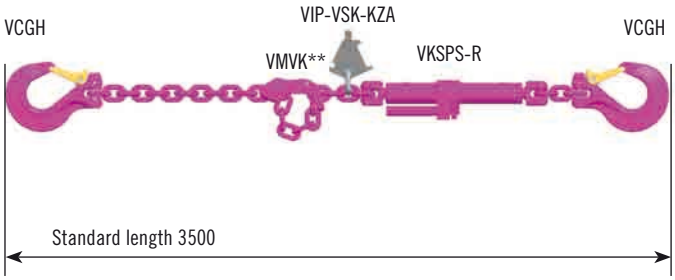
* The tension element is moveable on the chain strand

Chain Ø [mm]	Description	Lashing capacity LC [daN]	Tensionlock Type	Tensionlock Standard tension force STF [daN]	L min. [mm]	Weight [kg/p.]	Order-No.	Price/Piece €
6	ICE-VSK-6-CURT-SL-IVH	3.600	ICE-CURT-6-SL-GAKO				ICEC.06.SG	in preparation
8	ICE-VSK-8-CURT-SL-IVH	6.000	ICE-CURT-8-SL-GAKO	2800	956	12,9	ICEC.08.SG	399,00
10	ICE-VSK-10-CURT-SL-IVH	10.000	ICE-CURT-10-SL-GAKO	2800	1105	19,1	ICEC.10.SG	474,40

Surcharge

VIP-Lashing Chain With the VIP-Tension Elements 10-VIP

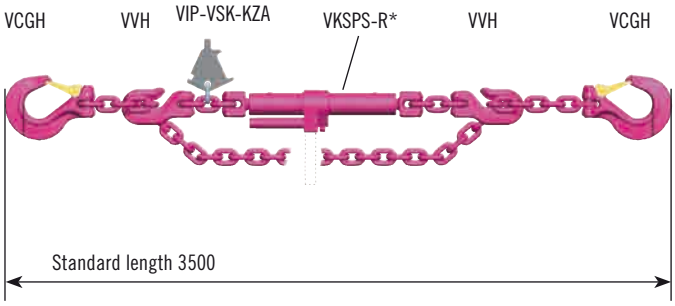
Flexible Load Security



** If the VMVK is not permanently installed, a shortening of the chain strand at any position is possible since the claw is also moveable on the chain!

Chain Ø [mm]	Description	Lashing capacity LC [daN]	Tensionlock Type	Tensionlock Standard tension force STF [daN]	L min. [mm]	Weight [kg/p.]	Order-No.	Price/Piece €
6	VIP-VSK-6-VKSPS-VMVK	3.000	VKSPS-6	1500	610	4,3	VMVK.06.15	310,50
6	VIP-VSK-6-VKSPS-R-VMVK	3.000	VKSPS-8	1500	610	4,5	VMVK.06.18	381,50

Surcharge Sizes 6, 8, 10, 13 and 16 see ICE-lashing program page 352.



* The tension element is moveable on the chain strand and can be separated from it.

Chain Ø [mm]	Description	Lashing capacity LC [daN]	Tensionlock Type	Tensionlock Standard tension forceSTF [daN]	L min. [mm]	Weight [kg/p.]	Order-No.	Price/Piece €
16	VIP-VSK-16-VKSPS-VVH	20.000	VKSPS-16	3600	1740	47,2	VMVK.16.30	938,50
16	VIP-VSK-16-VKSPS-R-VVH	20.000	VKSPS-16	3600	1740	47,2	VMVK.16.42	1.013,00

Surcharge Sizes 6, 8, 10, 13 and 16 see ICE-lashing program page 352.

Identification Pendant 10-VIP and 12-ICE

Identification pendants are provided with an integrated and patented chain gauge. Therefore, the inspection of the chains becomes child's play.

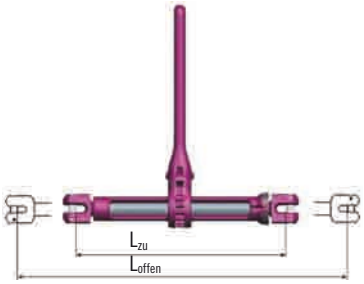
Class	Chain Ø [mm]	Chain type	Order-No.	Price/piece €
VIP	6	VIP-VSK-6	VIP.Z.06.KA	5,90
VIP	16	VIP-VSK-16	VIP.Z.16.KA	9,60
ICE	6	ICE-VSK-6	ICE.Z.06.KA	8,10
ICE	8	ICE-VSK-8	ICE.Z.08.KA	8,60
ICE	10	ICE-VSK-10	ICE.Z.10.KA	9,50
ICE	13	ICE-VSK-13	ICE.Z.13.KA	11,50
ICE	16	ICE-VSK-16	ICE.Z.16.KA	12,80

Surcharge

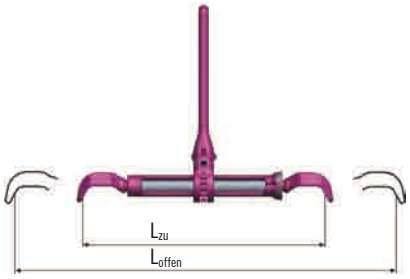
ICE-CURT Ratchet Tensioner

Light, robust, inexpensive

ICE-CURT-GAKO
with fork head connection



ICE-CURT-SL
with shortening connection



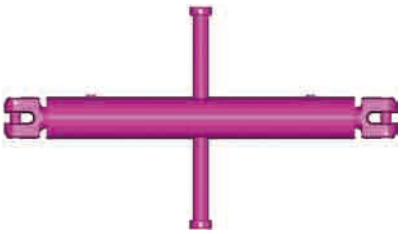
Exceeds the requirements of the EN 12195-3. It is prepared against theft with a padlock (type 85/40HB ABUS), easy to clean and to lubricate, innovative forged form - light and robust. Patent registered, innovative, practical loosening security. Made in Germany. Easy handling - even with gloves.

Chain Ø [mm]	Description	Lashing capacity LC [daN]	L open [mm]	L closed [mm]	Stroke [mm]	Standard tension force STF [daN]	Weight [kg/p.]	Order-No.	Price/piece €
6	ICE-CURT-6-SL	3600						I.C06.SL.00	in preparation
6	ICE-CURT-6-GAKO	3600						I.C06.GA.00	in preparation
6	ICE-CURT-6-SL-GAKO	3600						I.C06.SL.GA	in preparation
8	ICE-CURT-8-SL	6000	623	453	170	2800	4,5	I.C08.SL.00	201,00
8	ICE-CURT-8-GAKO	6000	520	350	170	2800	3,9	I.C08.GA.00	185,50
8	ICE-CURT-8-SL-GAKO	6000	575	405	170	2800	4,7	I.C08.SL.GA	193,00
10	ICE-CURT-10-SL	10.000	671	501	170	2800	5,2	I.C10.SL.00	216,50
10	ICE-CURT-10-GAKO	10.000	532	362	170	2800	4,3	I.C10.GA.00	208,50
10	ICE-CURT-10-SL-GAKO	10.000	605	435	170	2800	4,8	I.C10.SL.GA	212,50
13	ICE-CURT-13-GAKO	16.000	830	530	300	2800	7,6	I.C13.GA.00	in preparation
16	ICE-CURT-16-GAKO	25.000						I.C16.GA.00	in preparation

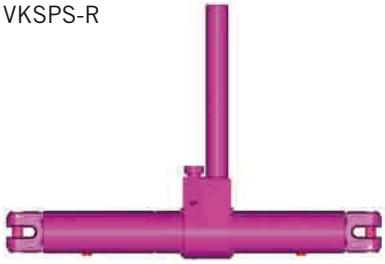
Surcharge

VKSPS VIP-Ratchet Tensioner

VKSPS



VKSPS-R



Chain Ø [mm]	Description	Lashing capacity LC [daN]	L open [mm]	L closed [mm]	Stroke [mm]	Standard tension force STF [daN]	Weight [kg/p.]	Order-No.	Price/piece €
6	VKSPS-6	3000	323	204	120	1500	0,9	VKS.PS.006	130,50
6	VKSPS-R-6	3000	323	204	120	1500	0,95	VKS.PS.0R6	212,00
16	VKSPS-16	20.000	807	507	300	3600	8,8	VKS.PS.016	314,50
16	VKSPS-R-16	20.000	807	507	300	3600	9,3	VKS.PS.R16	404,50

Surcharge

Sizes 8,10 and 13 see ICE-CURT Ratchet Tensioner

Lashing chain for pits Container lashing chains for skip lorries

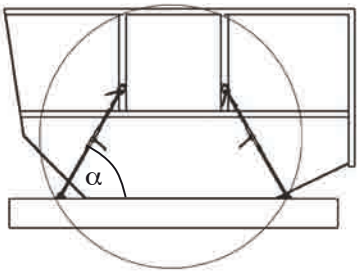
More safety with ICE- or VIP-Lashing chain for pits

Pit-container lashing only by low lashing, e.g. Y-lashing is not sufficient: **Danger!!!** Due to ice, oil/grease, clay or dirt even friction increasing mats will still have a low friction coefficient of approx. μ = 0,1.

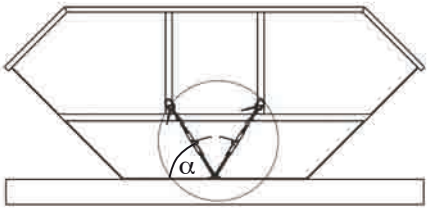
The only secure way is the diagonal lashing such as V-X or trapeze lashing with a tight connection on the lashing point and the hanger suspension trunnion. This means that each lashing chain has to have a spanner nut. A longer period of tension is absolutely secure still. The lower the vertical angle is the higher container weights can be transported - or a thinner chain can be chosen.
The side lock has to be via fixed stop.

Requisite:
The vehicle has to have lashing-conform lashing points. Ask your SIP-partner or vehicle manufacturer. RUD-container lashing chains make a quick, easy and shape enclosing lashing of the containers in- and in reverse direction of travel possible. The multi-claw or the shortening hook shorten the part of chain without reduction in lashing force. All parts are conform as per EN 12195-3.

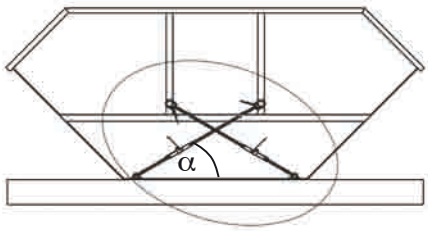
...like this:



Trapeze lashing



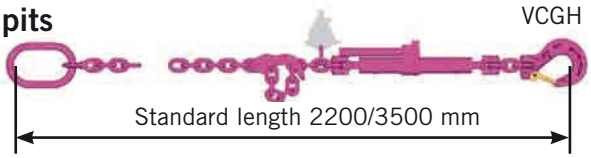
V-Lashing



X-Lashing

VIP-Lashing chain for pits

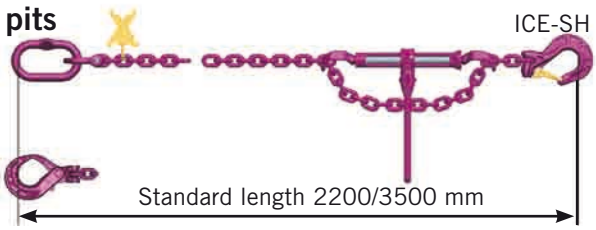
with Ø 6/8 -> VA-1



ICE-Lashing chain for pits

with Ø 8/10 -> IB-1

alternative:
with Ø 8 -> IAGH-8



VIP-Lashing chain for pits with grade 10-VIP

Class	VIP-chain-Ø [mm]	Lashing capacity [daN]	Max. pit weight [t] 2 lashing chains per dir. μ = 0,1, Vertical angle α ≤ 30° [t]	≤ 45° [t]	≤ 60° [t]	VIP-lashing c. with put thr. locking handle Order-no.	Price/Piece complete l. 2200 mm €	VIP-lashing c.with put thr.locking h. Order-no.	Price/Piece complete l. 3500 mm €	VIP-lashing chain with ratchet Order-no.	Price/Piece complete l. 2200 mm €	VIP-lashing chain with ratchet Order-no.	Price/Piece complete l. 3500 mm €
VIP	6	3.000	8	6,7	5,1	VSM.R.06.22	319,30	VSM.R.06.35	333,80	VSM.K.06.22	242,40	VSM.K.06.35	???
ICE	8	6.000	16	13,5	10,2	ICE.MK1.08	373,00	ICE.MK2.08	371,00				
ICE	10	10.000	26,6	22,6	17	ICE.MK1.10	435,00	ICE.MK2.10	467,00				

Surcharge

More configurations (GAKO-SL) analogous to page 352 (ICE-Lashing Chain) are possible.

Jobreport Load Security from Experts

Reiling Logistik GmbH & Co. KG.

The company was founded with headquarters in Marienfeld (NRW) in 1999 by Christian Reiling. Professional Logistics currently employs 41 workers and has a fleet of 33 vehicles for different needs to fall back on. Transport of bulk goods of all kinds, glass collections in the local area as well as special transportation of construction and harvesting machines are among the daily tasks that Reiling performs for his clients across Europe. Since 01.01.2012, Christian Reiling Transportation and Disposal became the Reiling Logistik GmbH & Co. KG.

The Tasks

In the field of special transportation of agricultural machinery for the wholesale company CLAAS Harsewinkel, for which Reiling is the main freight forwarder since June 2009, a competent partner was sought in terms of load securing. The task of the SIP partner was to recommend suitable lashing equipment, for example, for combine harvesters, forage harvesters, tractors and trailers.

The Solution

After detailed discussions, the SIP partner recommended using the RUD VIP chains with the associated RUD VLBS load blocks that have been in use since June 2009. Since 2011, the RUD-ICE chain with semi-open ratchet was added to the load security concept.

The Reiling Logistik GmbH & Co. KG is, with this "clean solution" of maintenance and easy to clean concept, very satisfied.

The following SIP products were used:

- RUD VIP-Chains
- RUD VLBS Load blocks
- RUD-ICE-Chains with half open ratchet

„With the RUD-VIP or RUD-ICE lashing chain, we are on the newest technical level for load security and it gives us and our customers a safe feeling when transporting their precious load safely from site to site."

Andreas Fechner, Reiling Logistics GmbH & Co. KG

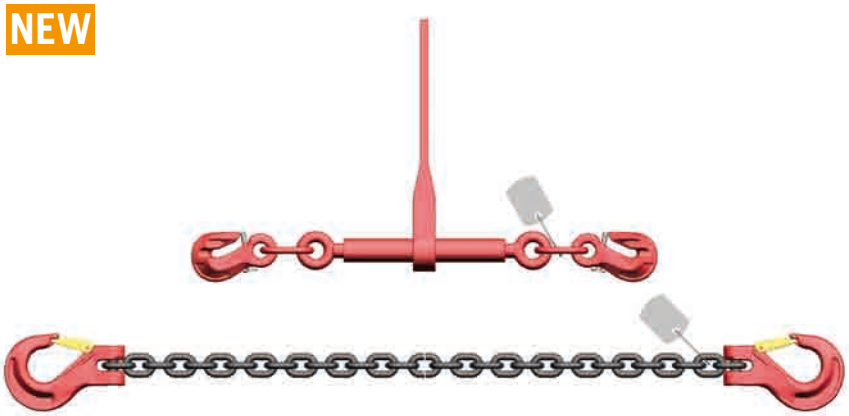
Lashing Chain GK 8 With Ratchet Tensioner

NEW

GK8, 1-piece, with shortening claw

Nominal Size [mm]	LC Lashing capacity [daN]	Standard tension force STF [daN]	Length [mm]	Weight [kg]	Order-No.	Price / Piece €
8	4.000	1.900	3.500	9,8	ZK.08.1T.08	120,00
10	6.300	1.900	3.500	13,9	ZK.08.1T.10	142,00
13	10.000	3.000	3.500	22,7	ZK.08.1T.13	240,00

NEW



- Lashing chain per DIN EN 12195-3
- 2- piece design, with a loose ratchet tensioner with a shortening hook and 3.5 m long chain and safety hook
- With preventive dislodging
- With shortening hook and safety
- Other lengths on request

GK8, 2-pieces, with shortening

Nominal Size [mm]	LC Lashing capacity [daN]	Standard tension force STF [daN]	Length [mm]	Weight [kg]	Order-No.	Price / Piece €
8	4.000	1.900	3.500	10,2	ZK.08.2T.08	95,00
10	6.300	1.900	3.500	14,4	ZK.08.2T.10	119,00
13	10.000	3.000	3.500	24,3	ZK.08.2T.13	175,00

Lashing Points With Clear Specification of the Lashing Strength

LPW, weldable

- Lashing strength is increased by 50%
- Marked with lashing strength
- Internal spring for noise dampening
- Optimized 90°- load support

Description	Lashing capacity LC [daN]	Weight [kg]	Order-No	Price / Piece €
LPW-U 3000	3000	0,35	LPW.U.0030	18,65
LPW-U 5000	5000	0,5	LPW.U.0050	19,65
LPW-U 8000	8000	0,8	LPW.U.0080	22,45
LPW-U 13400	13400	1,9	LPW.U.0134	47,70
LPW-U 20000	20000	2,9	LPW.U.0200	64,30
LPW 32000	32000	6,8	LPW.0.0320	116,00

Weldable

LRBS-FIX, weldable

- The RUD-lashing point can be welded easily and quickly
- High dynamic and static strength
- Optimal force transmission through 2-point attachment
- Loadable on all sides
- Foldable - therefore no trip over
- Welding block 100% crack tested
- No complicated setting of the weld blocks to the ring flap necessary
- Weld blocks and ring flap are, through a special radial clamping spring, firmly attached
- Ring flap stays in position
- Easy to paint
- No rusting for welded parts through circumferential HY-welding seam
- Overall length and width remained equal compared to the LRBS

Description	Lashing capacity LC [daN]	Weight [kg]	Order-No	Price / Piece €
LRBS-FIX-8000	8000	0,93	LRBS.F.080	31,15
LRBS-FIX-13400	13400	2,2	LRBS.F.134	54,90
LRBS-FIX-20000	20000	3,7	LRBS.F.200	89,60
LRBS-32000	32000	6,6	LRBS.F.320	121,20

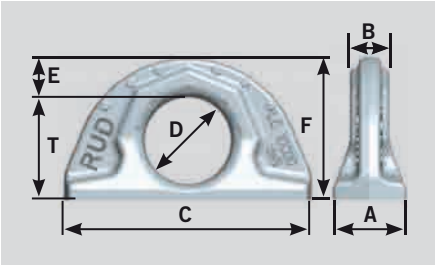
Surcharge Weldable

Lashing Points With Clear Specification of the Lashing Strength

Lashing-ABA (L-ABA), weldable

NEW

- Loadable on all sides in all directions
- 4-times safety factor against breakage
- Tempered body, thereby more wear resistant
- Patented wear marks on the inside and outside
- Circumferential fillet weld
- The surface is phosphatized

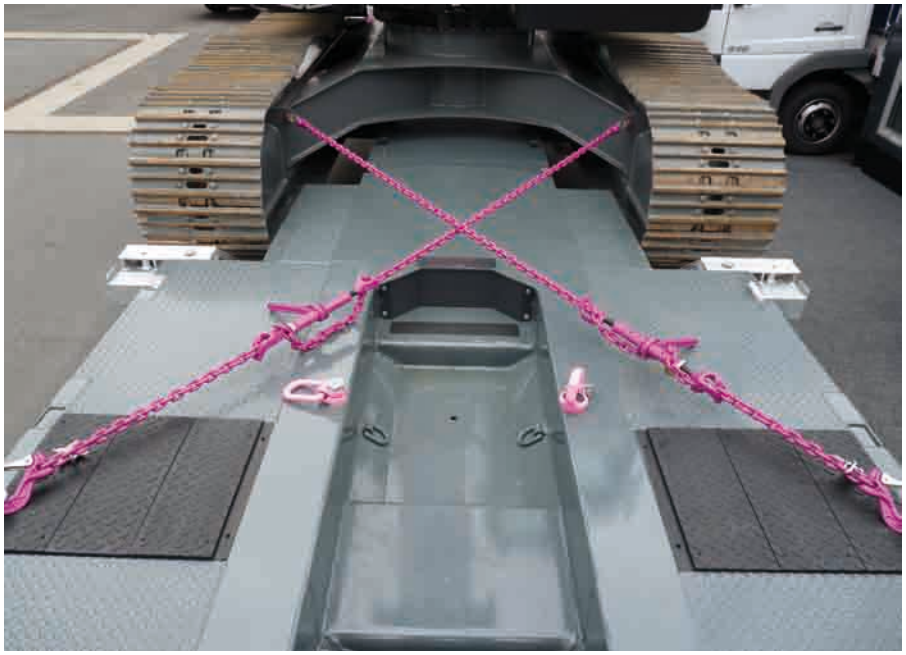


Type	Lashing Cap. LC [daN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	Welding seamthickness / filled weld	Weight [kg/p.]	Order-No.	Price €
L-ABA 10.000 daN	10000	51	27	172	60	27,5	99	71,5	7	2,3	LABA.1000	on request
L-ABA 20.000 daN	20000	70	38	228	80	35	130	95	8	5,3	LABA.2000	on request

Weldable

VRS Starpoint Ring Screw with Integrated Key Sheet

Adjusting to the Pulling Direction Made Easy



RUD stop points can also be used as lashing points. The RUD stop points are identified with their capacity (t). Due to the different safety factors by lifting and lashing, a RUD stop point that is exclusively used as a lashing point can be burdened twice as much. Lashing strength (LC) = 2x capacity (WLL). RUD lashing points with LC specification are marked with their permissible lashing strength in daN.

Description	Identification	Capacity lifting [t]	Lashing capacity LC [daN]	Order-No.	Price / Piece €
VRS M16	1,5 t	1,5	3.000	VR.SF.0150	36,40
VRS M20	2,3 t	2,3	4.600	VR.SF.0230	48,15
VRS M24	3,2 t	3,2	6.400	VR.SF.0320	64,10
VRS M30	4,5 t	4,5	9.000	VR.SF.0450	100,00
VRS M36	7 t	7	14.000	VR.SF.0700	135,00
VRS M42	9 t	9	18.000	VR.SF.0900	189,00
VRS M48	12t	12	24.000	VR.SF.1200	232,50

Surcharge Screwable

VLBG Rotating Stop Point of VIP-Quality

The RUD-Load Block “Thread” is Adjustable in the Force Direction, 360° Rotatable!

The RUD stop point can also be used as a lashing point. It is marked with the carrying capacity (t). Due to the different safety factors by lifting and lashing, a RUD stop point that is exclusively used as a lashing point can be burdened twice as much: Lashing strength (LC) = 2x capacity (WLL)

	Description	Identification	Capacity lifting [t]	Lashing capacity LC [daN]	Order-No.	Price / Piece €
	VLBG M16	1,5	1,5	3.000	VL.BG.16.01	55,80
	VLBG M20	2,5	2,5	5.000	VL.BG.20.02	63,90
	VLBG M24	4	4	8.000	VL.BG.24.04	68,60
	VLBG M30	5	5	10.000	VL.BG.30.05	124,50
	VLBG M36	8	8	16.000	VL.BG.36.08	245,50
	VLBG M42	10	10	20.000	VL.BG.42.10	270,40
Surcharge	Screwable					

VIP-Ring Trestle Thread

The RUD stop point can also be used as a lashing point. It is marked with the carrying capacity (t). Due to the different safety factors by lifting and lashing, a RUD stop point that is exclusively used as a lashing point can be burdened twice as much: Lashing strength (LC) = 2x capacity (WLL)

Description	Identification	Capacity lifting [t]	Allowable by lashing strength LC [daN]	Order-No.	Price / Piece €
VRBG 3 t	3	3	6.000	VRB.G.03.22	51,80
VRBG 10 t	10	10	20.000	VRB.G.10.22	142,50

Screwable

SMILEY BI Stop and Lashing Point

- Absolute innovative form
- Forged in one piece
- Silent - no rattling of the eyes
- Galvanized finish
- Body and screws 100% - crack tested
- Easy mounting with 3 screws M12, Fk.10.9
- Lifting capacity in WLL [t]
- Allowable lashing capacity for lashing in LC [daN]
- 4- times safety factor when lifting and lashing
- The form is patent registered

Description	Lashing capacity LC [daN]	WLL [kg]	Order-No. without screw M12x40 10.9	Price €	Order-No. with screw M12x40 10.9	Price €
SMILEY-BI	3000	3000	SMILE.BI.0	???	SMILE.BI.S	57,40

Screwable

SMILEY RoRo Lashing Point

- Lashing and securing equipment on road vehicles for sea transportation on Ro / Ro ships.
- Lashing point forged in one piece, silent
- 100 % - crack tested
- In accordance with DIN EN 29367-2 strength properties with a test load = 120 kN and a breaking strength = 200 kN
- Easy mounting with 3 screws M12, Fk. 10.9
- Galvanized finish
- Shapely design, load compatible design
- Lightweight
- Fits all standard lashing means
- The force application point on the bracket was chosen so that the force direction is on the group of screws. Advantage: minimizing the screw load, using a smaller screw size

Description	Lashing capacity LC [daN]	Order-No. without screw	Preis €	Order-No. with screw M12x40 10.9	Preis €
SMILEY	6000	SMILE.RO.0	???	SMILE.RO.S	27,65

Surcharge Screwable

Shock indicator for heavy cargo

MAG 2000

Order-no.	Price/piece €
MAG.2000.0	42,00

The MAG 2000 is designed for transport and storage monitoring of extremely heavy-weighted shock-sensitive products such as containers, railway carriages, printing machines, lorries or industrial facilities. High precision, easy use, resetting and a broad range of 0.5 to 25 g turn the MAG 2000 into a universally applicable instrument in transport monitoring. The MAG 2000 is based on a magnetic detecting system. In case of impact, the orange indicator magnet shifts into the visible area and thus indicates the impact direction.

The MAG may only be reset using a special key, it is thus reusable. The cheap MAG 2000 is equipped with a self-adhesive back side as well as pre-drilled mounting holes. Additional mounts for mounting the MAG 2000 are available on request.

MAG 2000 IDT – edition including day/time indicator

Order-no.	Price/piece €
MAG.2000.D	53,00

A new and modified edition of the available reusable indicator MAG 2000 will from now on be released: It is the electronic reusable indicator MAG 2000 Impact Date/Timer. The MAG 2000 IDT may be manufactured for g values from 0.5 g to 25 g, producible in steps of 0.5 g. Other than the indication of an impact event, from now on there may also be traced date and time when the indicator was triggered. Please specify g-value in your order.

Navalock Container Lock

Order-no.	Price/piece €
NAVALOCK	83,85

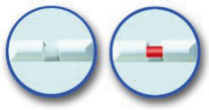
Safe sealing of container cargo. Two connected steel bails connected with a registered container seal prevent unintentional opening. Destruction of the Navalock, p. e. by implementation of a crowbar, a bolt cutter or ice spray, is rendered impossible due to applying special iron compounds and material strength. The container may only be opened by removal and replacement of the registered seal. This can be verified at each interface by comparing the seal number with the transport documents.

BSX 2010 Container seal / Bolt lead

VE	Order-no.	Price/pu €
10/25	CB.BSX.201	1,25

- Galvanised ABC and plastic-coated steel
- Bolt nominal length of 32 mm x 9.5 mm bolt diameter
- Lock diameter 20 mm
- Tractive force 1.400 kg
- Seal eyelet diameter 10.25 mm
- Implementation: manual
- 6-digit number on bolt and seal body, seal register and manufacturer logo
- Customer logo on request, if more than 5000 items ordered
- Operational temperature: -60 °C to +80 °C
- Warranty: 3 years
- Remove with bolt cutter
- Package weight 19 kg
- Colour: yellow, other colours on request
- Certification: C-TPAT Compliance with ISO/PAS 17712 (US customs approval)

Shockwatch Shock indicators for shock-sensitive products



Shockwatch
not activated/activated

Color	Dimensions 8-edges [mm]	Accelleration [g/ms]	Unit	Order-no.	Price/unit
grau	97 x 97	15/50	50	S.WATC.017	167,50
gelb	97 x 97	25/50	50	S.WATC.025	167,50
violett	97 x 97	37/50	50	S.WATC.037	167,50
rot	97 x 97	50/50	50	S.WATC.050	167,50
orange	97 x 97	75/50	50	S.WATC.070	167,50
grün	97 x 97	100/50	50	S.WATC.100	167,50

The core of the Shockwatch Label is a precision glass tube, partially filled with a red liquid. Exceeding a defined shock force threshold surmounts the liquid's surface tension, resulting in colouring the whole indicator red.

Various tube diameters define the indicator's sensitivity and thus allow you adaption to various weights and sensitivities of your products. Individual series numbers and warning labels for shipping goods and delivery documents prove gapless and tamper-free transport monitoring.

Shocklog-Data Logger Electronic Transport Monitoring

The Shocklog models 298, 248 and 208 are the latest generation of Shockwatch data logger to detect critical events during transport, storage or during use of delicate products. Shock, vibration and environmental influences such as temperature, humidity and air pressure can cause considerable damage. The determination of certain values and the potential discovery of the culprits are the first promising measures to reduce transport damages and the related costs. By combining optional add-on modules such as the Tilt & Roll-Sensor or the eTRAK-Module, the inclination angle of a ship during transport or GPS and GPRS-coordinates can be identified at the time of a critical event. A comprehensive Windows-based software offers the users the ability to set the individual desired limits on the Shocklog devices. When exceeding the preset parameters, data will be stored with the actual occurring values in conjunction with the date and time. Reading and storing the data later allows the user to perform a detailed evaluation and analysis of the transport and provides the basis for identifying weaknesses during transportation and their elimination.

Item	Order-No.	Price/Set €
Shocklog 298 Starterset	S.LOG.298.S	2.650,00
Shocklog 248 Starterset	S.LOG.248.S	1.960,00
Shocklog 208 Starterset	S.LOG.208.S	975,00

ShockLog 298 records the date and time of up to 870 shock events, including a graphic waveform, their time slots as well as summary data.

ShockLog 248 records the date and time for up to 15 shock events, including a graphic waveform and 128 events with numerical shock values, their time slots as well as summary data.

ShockLog 208 stores the permanent occurring shock loads for the creation of a transport profile.

Tiltwatch XTR / Plus Tilt Indicator for erect transport

Tiltwatch XTR

Tiltwatch Plus

Tiltwatch monitors easily, immediately visibly and irreversibly whether your product is getting transported and stored as erect as required.
The indicator field will turn red if the product at risk of tipping is tilted by more than 83°. Continuous series numbers on the Tiltwatch and warning labels for shipping goods and delivery documents prevent tampering.

Non-sensitive against humidity, temperature, and other ambient conditions. The self-adhesive back of Tiltwatch and additional drilling holes for nails or bolts allow for permanent mounting at the packaging.
Tiltwatch Plus has been designed for products that may face damage even if exposed to low tilting angles. The display indicates tilting angles from 30° to 80° in steps of 10. Scope of delivery includes a warning label to define the highest admissible tilting angle.

Item	Dimensions [mm]	VE	Order-No.	Price/pu €
Tiltwatch XTR Indicator	75 x 60 x 5	100	T.WATCH.KI	156,00
Tiltwatch Plus Tilt Indicator	120 x 120 x 5	50	T.WATCH.PL	127,50

3M Temperature logger TL30

for temperature-sensitive cargo

- Reliable and reusable up to one year
- User-friendly operation and full PC software package
- Ultimate flexibility by user programming

If you or your customers would like to know what temperatures your cargo was exposed to during transport, this little multifunctional device will yield all required data:

- Reliable and precise recording of up to 12,000 time and temperature stamps
- Inexpensive alternative to reusable data loggers which require obligatory recalibrations
- High-performance battery, short-circuit-proof, including battery charge display, lasting up to 12 months (irreplacable)
- LED flash display for visual indication of exceeding programmed temperature thresholds
- Conforming to EN 12830 for transport and storage of cooled or frozen food

Scope of delivery:

- 3M Temperature Logger TL20
- PC software
- USB connection cable
- Food-safe plastic bag for use if TL20 should get in contact with food

Temperature range and measuring accuracy	Storage possibilities of data points	Frequency of data recording	Automatical starting delay	Manual starting delay	Duration of control	Protection from spray water	Dimensions [mm]	Weight [g]	Order-no.	Price/piece €
-40 °C bis +70 °C (+/- 0,5 °C)	50.000	alle 1–120 Min.	0–168 h	0–240 Min.	1–360 days	NEMA 3R	70 x 44 x 11	28	T.LOG.TL30	44,80*
										*ab 5 St. 32,50 €
Accessory: USB Cable									T.LOG.USBK	6,50
Accessory: German Software									T.LOG.SOFT	for free

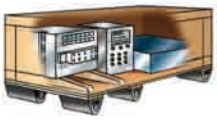
Skid-Mate Pneumatic Suspension for Shock-Sensitive Cargo

Skid-Mate in combination with spacer

Skid-Mate are pneumatically suspended attenuators made of recycled plastic. Skid-Mate damper feet replace common pallet feet and thus provide reliable shock absorption. Mount using M8 roundhead or hexagon bolts, corresponding in length to spacer thickness (25 mm) plus thickness of the wooden bars. A fitting thread is already applied into the Skid-Mate. Larger amounts on request.

Absorption [kg]	Color	VE	Order-no.	Price/piece €
10-16	beige	96	SK.MATE.BE	2,75
14-23	grün	96	SK.MATE.GR	2,90
20-36	gelb	96	SK.MATE.GE	3,67
32-57	blau	96	SK.MATE.BL	4,29
61-102	orange	96	SK.MATE.OR	4,90
Spacer	schwarz	96	SK.MATE.SP	1,05

Skid-Safe Attenuators for Higher Loads

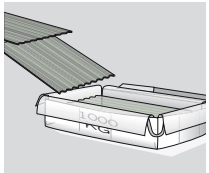


Skid-Safe attenuators are made of vulcanised rubber and represent inexpensive padding for heavy products. The mounting is easily accomplished using an assembly plate and bolts. Makings for higher loads on request. Larger amounts on request.

Absorption [kg]	Design [mm]	Order-no.	Price/piece €
140-180	200	SK.SAFE.18	23,72
180-220	250	SK.SAFE.20	27,38
220-260	300	SK.SAFE.26	31,42
260-300	350	SK.SAFE.30	35,24

BigBags Store and transport bulk material

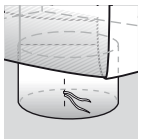
Asbestos disposal by bag!

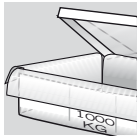


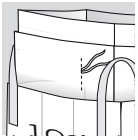
We supply the bulk bag "Kiel" which was specifically designed for asbestos disposal. The bulk bag is dust-safe, providing a practically low height, and it is suitable for final dumping.

The SIP BigBags are perfectly suitable for space-saving transport and economic storage of gravel, sand, paving stones and the disposal of asbestos. Safe transport is guaranteed by the stable woven polypropylene bands, coated against moisture absorption.

Special designs any time!
Whether inherently stable or antistatic or UN-certified for dangerous goods – we produce for you the BigBag you may work best with – also with regard to production design. Contact us, we will fashion a sample for you.







Info

The proper BigBag traverse you will find on page 177.

If purchasing several pallets of 120 pieces each, please request a separate offer!

Design	Load bearing cap. [kg]	Design	Safety factor	Loop count	Loop dimen. [mm]	Dim.- [mm]	Order-no.	Unit 20 pc Price/Unit €	Unit 40 pc Price/Unit €	Unit 60 pc Price/Unit €	Unit 120 pc Price/Unit €
	1250	Filling apron, closed base, uncoated, woven fabric, Document bag.	5 : 1	4	40 x 250	910 x 910 x 1100	SS.000K.00 Art. Köln	8,69 Single price	8,06 Single price	7,55 Single price	7,07 Single price
	1250	Filling apron, Outlet connector 350 x 500 mm, coated, woven fabric, Document bag.	5 : 1	4	40 x 250	910 x 910 x 1100	SS.000E.00 Art. Essen	12,13 Single price	11,30 Single price	10,58 Single price	9,30 Single price
	1250	Filling apron, closed base, coated, woven fabric, Document bag, Asbestos name.	5 : 1	4	40 x 250	900 x 900 x 1100	SS.000D.00 Art. Dortmund	10,28 Single price	9,60 Single price	9,00 Single price	7,70 Single price
	1500	Closed bottom uncoated, Woven fabric, Document bag.	5 : 1	4	40 x 250	900 x 900 x 900	SS.000S.00 Art. Steinfurt	8,68 Single price	8,06 Single price	7,55 Single price	6,07 Single price
	1500	Peripheral skirt and lid, Base closed, coated, Woven fabric, document bag, Asbestos name.	5 : 1	4	40 x 250	2600 x 1250 x 300	SS.260K.00 Art. Kiel 260	13,89 Single price	12,95 Single price	12,13 Single price	11,03 Single price
	1500	Peripheral skirt and lid, Base closed, coated, Woven fabric, document bag, Asbestos name.	5 : 1	4	40 x 250	3200 x 1250 x 330	SS.360K.00 Art. Kiel 320	16,37 Single price	15,21 Single price	14,39 Single price	12,52 Single price

Order example: SS.000K.60 enter quantity! SIP-BigBag Type Köln Indication of quantity 60 items

Surcharge

MADE IN GERMANY

Adhesive Super Repair Tape

Seals, repairs, and protects almost any material. The UV-resistant Tape prevents fading, retaining stretching characteristics in heat and cold. Optimal sealing of tarpaulins, sails, plastic, metal, or clothing. May also be successfully used for repair of domed roofs following damage by hail.

Label	U	Size [cm]	Order-no.	Price/ piece €
Super Repair Tape	1	7,5 x 50	SF.970452	20,60

Universal Grid for Troughs, Containers, Lorries, Dumps

Info

Contact us for scaffold nets and scaffold tarpaulins!

Size [m]	Order-no.	Price/piece €
5 x 3,5	CN.1.05.035	169,80
7 x 3,5	CN.1.07.035	237,95

Surcharge

Size [m]	Order-no.	Price/piece €
up to 10	CN.2.00.000	kein Wert!
up to 10	CN.1.00.000	9,75

Order example: CN.1.08.065 specify size in order, above 10 m2 length 8 m x width 6.5 m

Universal-Polyester-Tarpulins

Stable tarpaulin in heavy version, making you resist wind and weather. The tarpaulin is reinforced, seamed and equipped with eyes, equidistant every 100 cm. Weight: 630 g/m2.

Color: blue. Special colours and sizes available on request!
All dimensions are cut size!

Info

The inexpensive alternative: polyethy¬lene tarpaulin, ca. 150g/m², available in various sizes.

Size [m]	Order-no.	Price/piece €
3 x 4	UP.0304.SL	89,60
3 x 5	UP.0305.SL	112,00
3 x 6	UP.0306.SL	134,40
4 x 6	UP.0406.SL	178,90
4 x 8	UP.0408.SL	238,90
6 x 8	UP.0608.SL	357,80
8 x 10	UP.0810.SL	596,30
8 x 12	UP.0812.SL	715,50

Surcharge

„Scheff"-Tarpulins

Very suitable for boat and winter coverage. Reinforced with inlaid straps and eyes, equidistant every 100 cm, brass eyes. Colour: white/translucent, UV-resistant. Weight: ca. 250 g/m².
All dimensions are cut size!

Size [m]	PU	Order-no.	Price/piece€
4 x 6	5	PS.0406.00	40,95
6 x 8	3	PS.0608.00	81,95
6 x 10	2	PS.0610.00	102,40
6 x 12	1	PS.0612.00	138,30
8 x 10	1	PS.0810.00	153,60
8 x 12	1	PS.0812.00	178,60
10 x 12	1	PS.1012.00	204,80

Surcharge

Polyband Rectangular Tarpaulin

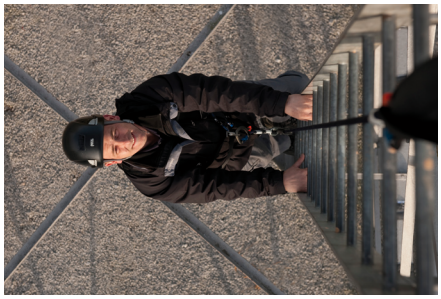
Ca. 180 g/m². Made of low pressure polyethylene, double-sided coating. UV-resistant, very high tear resistance, up to ca. 110 kp. Good transparency, aluminum eyes all around, equidistant every 100 cm. Color: white/translucent, Weight: ca. 180 g/m².
All dimensions are cut size!

Size [m]	VE	Order-no.	Price/piece €
2 x 3	20	RE.0203.PB	9,60
3 x 4	10	RE.0304.PB	12,20
3 x 6	7	RE.0306.PB	18,30
4 x 6	5	RE.0406.PB	24,40
4 x 8	4	RE.0408.PB	32,50
6 x 8	3	RE.0608.PB	48,90
6 x 10	2	RE.0610.PB	60,80
8 x 10	1	RE.0810.PB	81,10
8 x 12	1	RE.0812.PB	97,40
10 x 12	1	RE.1012.PB	121,60
10 x 15	1	RE.1015.PB	151,95

Surcharge

Info

Minor damages and tears you may repair by applying Super Repair Tape, see page 337.



Falling Protection

370-376 Fall-Arrest Harnesses
376-384 Fall-Arrest Harness + Connection Means
385, 389 Attachment device
386-388 Rescue systems
390 Safety nets
391 Accessories

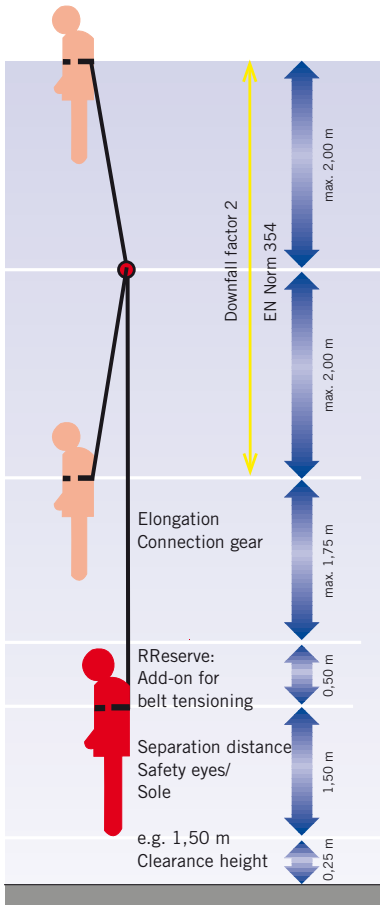
Things worth knowing about personal security equipment for the prevention of falling

1. Legal basis

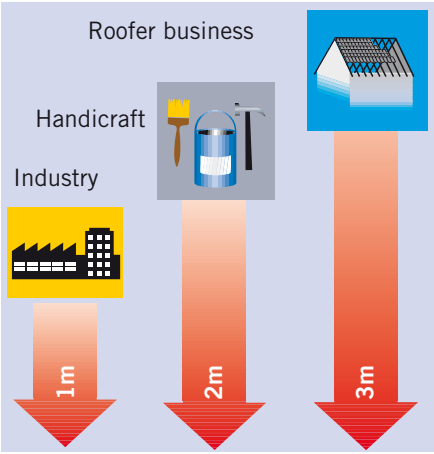
For EU-member states the directives EG-RL 89/391/EWG and EG-RL 89/656/EWG apply. In Germany general directives BGV A 1, BGV C 22, BGR 198 and BGR 199 apply additionally.
Personal security equipment for the prevention of falling are to be used if risks cannot be collectively prevented or restricted by fences, scaffolds and security nets. For activities which include the risk of falling a medical qualification has to be obtained during check-up (G 41).

2. Risk evaluation and area of application

During the choice and application of personal security equipment for activities the local circumstances and especially the risks to be evaluated have to be taken into consideration.

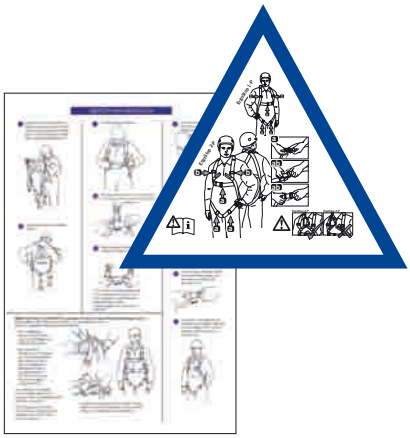


Rules for the evaluation of risks:
Please note that the use of collective or personal safety equipment for the prevention of falling is mandatory at: 1 m height in the industrial domain, from 2 m on in the handicraft domain and from 3 m on in the roofer business domain.



3. Personal security equipment for the prevention of falling

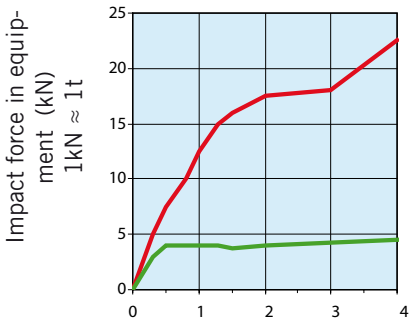
3.1. User manual



Each system or part of the equipment has to have a manual included according to EN 365 in the language of the origin of sale (country specific).
The manual for the clamping set safety harnesses is undetachably sewed into the back part.

3.2. Strap fall attenuators

The human body's resilience for falling into a rope is limited. Therefore only safety lanyards with fall absorption may be used. The fall of a person with 100 kg body weight from a height of 4 m will translate into roughly 22 kN (approx. 2,2 tons!) which might result in fatal injuries. Fall attenuator lanyards reduce this impact to a tolerable max. of 6 kN (approx. 600 kg).



Falling height in m
without strap fall attenuator
with strap fall attenuator

4. Testing and maintenance

4.1. Test

A visual examination to determine the proper status of the personal safety equipment for the prevention of falling as well as a functional test has to be performed before each use. The personal safety equipment for the prevention of falling has to be tested by an expert at least once per year. More frequent tests of the PSE can become necessary. Those depend on the operating conditions and the operational conditions. The expert testing has to be carefully documented. Parts and systems of the personal safety equipment for the prevention of falling which have prevented a fall are to be discontinued from use and to be checked by an expert or an authorised repair shop immediately. Damaged parts of the personal safety equipment for the prevention of falling, e.g. lanyards, height safety equipment, belt straps or connection elements must not be used. Prevent any risk!

4.2. EPIS 2.NET Professional Increases the Work Safety!

Products for fall protection must be inspected regularly according to BGR. The EPIS 2.NET Professional simplifies the work in all phases. You save time and cost and gain more security by automating all processes related to the inspection, from the acquisition and management of products to the complete documentation.

The advantages of EPIS

- Greater efficiency through rapid reading of the products to be inspected and issuing inspection certificates
- More flexibility by merging product identification and - management into one device
- Increased data security with complete documentation of inspections, repairs, etc.
- Better inspection routine by automatic planning and documentation of maintenance and service intervals

4.3. Replacement state of wear

The time frame of use depends on the application circumstances. Belts, strips and ropes made from artificial fibres are subject to constant ageing dependent on UV-radiation, environmental and climate conditions in particular. It is advisable to replace safety harnesses after 6-8 years and lanyards (straps, ropes) after 4-6 years of normal use. 10 years (latest) after it has been manufactured the product's use has to be discontinued no matter if it has been used or not. The manufacturer's segregation indications have to be followed.

4.4. Storage and care

Textile parts of the personal security equipment are to be stored hanging freely in dry, clean and light proof rooms.

5. Seminar program / Training

This brief information for the personal safety equipment for the prevention of falling provides you with interesting details. You don't get to be an expert by this though. We can can take care of that detail. Our practical seminars in the clamping set safety training center are lead by proven experts.

SpanSet seminars offer you:

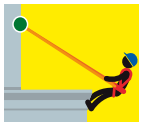
- Direct actionable practical knowledge
- Current know how (rules, laws, standards, etc.)
- Experienced experts as lecturers
- Specific application examples
- Practical exercises and demonstration
- Useful aids for your daily work
- Detailed documentation
- Intensive counselling and support
- Individual content on request

Categories for activities with PSA

Restraint systems

Limited mobility - The person is secured in a way that he/she cannot reach a building edge or areas which pose hazards of falling from a safe anchor point.

Rope harness/working area positioning



During the working area positioning the user is working in a free hanging position and is secured through a length adjustable lanyard. If the danger of falling is present an additional fall-catching system has to be used.

Fall-Catching systems

This category is the only one which tolerates a possible fall. The user is secured through a safety harness with a suitable strap fall attenuator or fall protection equipment in a way that catches the him in a controlled way should a fall occur.

Fall-Arrest Harnesses

Why Fall-Arrest Harnesses from SpanSet?

With the development of the products, SpanSet follows two major principles: First, we observe that a product complies with the European guidelines and on the other hand that it is suitable for its purposes and meets the demands of everyday life. These two goals can be very different, for example our products TITAN Connecting Means and our ATLAS Fall-Arrest Harness for bigger body sizes. Both designs meet the corresponding standards, but have additional features that are tailored to the specific needs of the worker. SpanSet Fall-Arrest Harnesses are designed for the worker and their work. According to our design criteria, the fall- arrest harness must be made of materials that adapt to the body of the worker and thus and comfort. The fall-arrest apply and adapt. In the event of an emergency - they should place tighout stretching or offer him maximal free movement harnesses should be easy to of a fall in the actual case intercept the user at the right deforming excessively.

Info

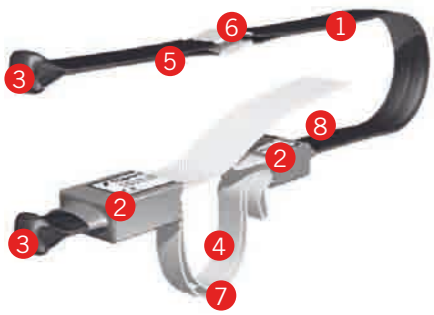
SpanSet Products are delivered with:

- **Understandable instructions**
- **Serial number**
- **Individual certification and inspection report**
- **Hand-outs with essential information**

1. High-tensile yet smooth polyester fabric
2. Zinc coated eyes and buckles or stainless steel depending on the model provide a high corrosion resistance and easy adjustment
3. Additional enhancements at points with increased friction wear
4. Clear, norm conforming labelling with additional wear protection cover on tracking code label
5. Application manual with illustrations
6. Colours of the seam construction diagram are clearly visible which enable easy visual inspection
7. Belt adjuster for securing the loose ends
8. Equipment with RFID tags to manage with EPIS

Tough, durable and inexpensive

Connecting Means



1. High-strength polyester fabric
2. Clear identification of the model, year manufactured, testing standards and the individual Serial number for traceability
3. Extra reinforcements in areas with greater exposure due to abrasion
4. Integrated fall shock absorber
5. Complete coating to increase durability and strength, high UV resistance
6. Innovative design with colour changes caused by excessive wear wherein the full fall protection of the user is yet guaranteed
7. Double protection of the integrated fall shock absorber
8. EPIS

Info

Wide range of connections and designs. Lightweight and inexpensive. All connectors according to EN 355.

1-X 1-Point Fall-Arrest Harness according to EN 361

Optimal Fit through Plastic Rib

NEW

This harness is a further development of the known ErgoStop harnesses. In this new design the backtriangle has been omitted. The fit is sustained by a built-in plastic rib. The product label has been enhanced to include an area for our individual identification. Another important advantage is the non-rotatable attachment point in the back area.

Type	Order-No.	Price/Piece €
Fall-Arrest Harness 1-X Standard	D.038.977.1	59,20

Surcharge

2-X 2-Point Fall-Arrest Harness according to EN 361

With corrosion-resistant steel fittings

The 2-X fall-arrest harness is lightweight and made of high quality ribbons and corrosion-resistant fittings made of steel and offers the highest wearing comfort. The fall-arrest harness is equipped with a stable design and a non-rotating triangle in the back area. The manual is in pictogram displayed on the label and thus ensures a simple application of the harness. The front and rear eyelets make the fall-arrest harness ideal for use in confined spaces and in the fall hazard areas. For the harness diverse accessories are available. For scaffold workers it can, for example, be equipped with wear protection for the shoulder area.

Type	Order-No.	Price/Piece €
Fall-Arrest Harness 2-X Standard	D.038.060.1	88,20

Surcharge

Excel 2-X 2-Point Fall-Arrest Harness according to EN 361

The EXCEL 2-X is a premium fall-arrest harness. For users who require additional components and expect more comfort. The padded shoulder and back area provides an ideal pressure distribution. With the click-closures and the padding provided fit, applying the harness is simple and fast. The front and rear eyelets make thefall-arrest harness ideal for use in restricted work areas as well as a fall protection means.

Type	Description	Standard	Order-No.	Price / Ppece €
Fall-Arrest Harness Excel 2-x	Fall-Arrest Harness black, padded	EN 361	D.027.105.1	130,50

Surcharge

Atlas 2-Point Fall-Arrest Harness according to EN 361

The solution for tall persons

The ATLAS Fall-Arrest Harness was designed for users of up to 140 kg body weight. The European standard currently only tests for weights of up to max. 100 kg. The ATLAS Fall-Arrest Harness corresponds to the current standards and is tested at 100 kg and even at 140 kg. This high performance harness has advanced setting options for stronger users. The front and rear eyelets make the fall- arrest harness ideal for use in restricted work areas, as well as a fall protection means. Users of the ATLAS Harness should make sure that the rest of the accessories for higher body weight is provided. SpanSet offers for this a complete range of products - such as the connection fasteners. We'll gladly advise you.

Type	Length [m]	Order-No.	Price / piece €
Atlas-harness		PSA.ATLAS	99,30
ATLAS-G 2034	2,0	PSA.TITAN	112,50
ATLASD-G 2034	2,0	PSA.TITA1	160,00

Surcharge

ATLAS-Connection Means (EN 355)
With the Atlas-Connection Means you have for the Atlas Fall-Arrest Harness the matching connection means at hand, including fall shock absorber and snap hook with a total length of 2.0 m and tested up to 140 kg.

Fall-Arrest Harness 2-X Fall-Arrest Vest according to EN 361

Perfect safety in combination with the fall-arrest harness

The SpanSet Fall-Arrest vests are full-body fall-arrest harnesses and vests in one! With the integrated fall-arrest harness you can adjust the leg The waterproof and breathable warning vest can easily be opened to allow a visual inspection of the fall-arrest harness.

The highly visible full body fall-arrest vest with fall-arrest eyes and reflecting stripes is equipped with each one front and one rear fall-arrest eye. Thanks to the Multifit System, an enlargement up to size XL is possible. Next to the quick-release buckle, the vest has two belly pockets and two side pockets.

Size universal	Order-No.	Price / piece €
Multifit	D.037.637.0	202,00

Surcharge

ErgoPlus Wind Fall-Arrest Harness according to EN 361

NEW

The ErgoPlus Wind is a fall-arrest harness that is extra classy. Through soft padding and a comfortable fit on-going work with this fall-arrest harness is no problem. To prevent sweating all the padding and the back triangle is made of soft mesh. The outer sides of the back padding and the integrated seat loop are provided with an abrasion-resistant slip-protection tube. This fall-arrest harness is designed for the harshest conditions, such as developed in the wind industry and also tested according to AS/NZ 1891.1 2007.

Description	Order-No.	Price / piece €
ErgoPlus Wind	EP.WIND.00	486,50

Surcharge

Clima Fall-Arrest Harness according to EN 361, EN 358 + EN

Optimal for line construction, fire, police and rescue workers

This fall-arrest harness is a combination of a seat and fall-arrest harness. With its padded leg loops and the central fall-arrest point, it is ideal for rope secured work. The ergonomically padded waist harness with side stops is ideal for the use of a work place positioning rope during climbing. Additional loops and buckles allow for the attachment of tools and other equipment. Through the fall-arrest points on the chest and the back, the CLIMA can be used as a fall-arrest harness as well as work place positioning harness.

Type	Description	Standards	Weight [kg]	Order-No.	Price / piece €
Clima	Safety harness black, padded	EN 361, EN 358, EN 813	2,0	PSA.CLIMA	309,00

Connection Means according to EN 354/355

- Sharp edge tested
- Very robust design
- Standard equipped with an RFID transponder-foil (see page 10/11)

Info

We provide tailor-made special solutions! Talk to us!

Rigid Connection Means (EN 355)

- Connection means with fall shock absorber
- Length 2,0 m

Description	Length [m]	Carabiner Userside	Carabiner Stop side	Order-No.	Price / piece €
TP-G 2024	2,0	Screw carabiner ML 2	Pipe hook carabiner 5/1439	D.013.213.1	75,80
TP-G 2023	2,0	Screw carabiner ML 2	Twistlock carabiner 5/3043	D.013.211.1	100,50
TP-G 2022	2,0	Screw carabiner ML 2	Screw carabiner ML 2	D.013.200.1	73,90

Stretchable Connection Means (EN 355)

- Connection means with fall shock absorber
- Reduced risk of tripping
- Up to max. 2,0 m stretchable

Description	Length [m]	Carabiner Userside	Carabiner Stop side	Order-No.	Price / piece €
TPE-G 2024	2,0	Screw carabiner ML 2	Pipe hook carabiner 5/1439	D.020.848.1	128,60
TPE-G 2034	2,0	Twist lock carabiner 5/3043	Pipe hook carabiner 5/1439	D.019.244.1	115,20

Adjustable Connection Means (EN 355)

- Variable adjustable length, millimetre accuracy for every application
- Connection means with fall shock absorber

Description	Length [m]	Carabiner Userside	Carabiner Stop side	Order-No.	Price / piece €
TPA-G 2033	1,2 - 1,8	Twist lock carabiner 5/3043	Twistlock carabiner 5/3043	D.013.218.1	135,80
TPA-G 2034	1,3 - 2,0	Twist lock carabiner 5/3043	Pipe hook carabiner 5/1439	D.038.821.1	101,20

Surcharge

Connection Means

Rigid Y-Connection Means (EN 355)

NEW

- Connection means with fall shock absorber
- Standard equipped with RFID transponder foil

Description	Length [m]	Carabiner Userside	Carabiner Stop side	Order-No.	Price / piece €
TPD-G 1534	1,5	Twist lock carabiner 5/3043	Pipe hook carabiner 5/1439	D.013.220.1	150,00
TPD-G 2034	2,0	Twist lock carabiner 5/3043	Pipe hook carabiner 5/1439	D.016.768.1	125,70

Stretchable Y-Connection Means (EN 355)

NEW

- Stretchable connection means with fall shock absorber
- Stretchable up to 2,0 m
- Standard equipped with RFID transponder foil

Description	Length [m]	Carabiner Userside	Carabiner Stop side	Order-No.	Price / piece €
TPDE-G 2024	1,5	Screw carabiner ML 2	Pipe hook carabiner 5/1439	D.029.400.1	148,90
TPDE-G 2034	2,0	Twist lock carabiner 5/3043	Pipe hook carabiner 5/1439	D.032.874.1	100,10

Fall-Arrester TPD C2 according to EN 355

With the TPD C2 you can secure yourself to almost any construction. The Y-connection means has 3 aluminium twist lock carabiners. On the suspension side two long straps with steel rings and carabiners form two large loops. The loop area also has a protective tube. There is no joint beneath – control of the belt is not necessary.

Description	Length [m]	Order-No.	Price / piece €
TPD C2	1,0 - 1,4	D.013.226.1	228,50

TP 3L 252 with three loops according to EN 355 - Extremely Versatile

The strap of the TP 3L 252 is equipped with self-securing twist lock carabiners on both sides. Three reinforced straps are sewn into the strap. You can change the length of the connection means simply by attaching a carabiner. This provides you with a total of seven connecting lengths with a maximum length of 2 meters. The connection means can be wrapped around larger constructions or fastened directly to a suspension point.

Description	Length [m]	Order-No.	Price / piece €
TP 3L-252	0,55 - 1,9	D.013.127.1	152,50

Y-Sling with wire core according to EN 1891

SEILFLECHTER

Equipped with shock absorbers (according to DIN EN 355) and carabiner type FS51 (according to DIN EN 362), jaw width 19 mm. At the end of the wires are standard hook clamps Type FS90 (according to DIN EN 362), mouth width 59 mm. or equipped with optional FS51. Total length of the connection means is 2,0 m.

Description	Length [m]	Order-No.	Price / piece €
Y-Sling	2,0	SF.116.009	146,00

Surcharge

Safety Rope WPLANY 2M according to EN 358

For Hands-Free Work

The usual method for workplace positioning is the positioning of the safety rope. It was designed to keep the user in the correct position together with the body harness fastener. This safety rope is easy to adjust to a maximum length of 2 meters. It is surrounded by a strap which protects the rope from abrasion and impact damage. On one side the system has a screw carabiner and a twist lock carabiner for rapid securing.

Description	Length w/o karabiner [m]	Max.length [m]	Weight [kg]	Order-no.	Price/piece €
Halteseil WPLANY 2M	0,6	1,9	1,0	PSA.52629	170,50

Surcharge

Safety rope RARL 329 according to EN 358

For Cherry Pickers

The RARL 329 is designed as a pure safety rope. It protects you against falling down from the edge of a platform or cherry picker. Here it is important to adjust the length as short as possible but as long as required. The 12 mm core mantle cable allows for lengths of about 0.9 m to 1.4 m. It is equipped with a screw lock snap-hook and a twist lock snap-hook made of steel.

Description	Length w/o carabiner [m]	Max.length [m]	Weight [kg]	Order-no.	Price/piece €
Halteseil für Hubsteiger	0,9	1,4	1,0	D.013.215.1	71,00

Surcharge

ErgoLine HSL Horizontal Harness according to EN 795

Mobile Safety

When working at a height you often need to change location and you have to re-attach your safety system repeatedly. HSL makes this easy: You stretch the horizontal harness between two suspension points. With the Ergo tensioning ratchet you create pre-tension. The loose end of the harness you can then store in the transportation bag – one less risk of stumbling. You gain freedom of movement along the entire length of the safety strap.

Description	Length [m]	Weight [kg]	System stability [kN]	Endconnector	Order-No.	Price / piece €
HSL Horizontal harness SK	20	5,50	30	2 safety carabiner	ER.LINE.K3	259,00
HSL Horizontal harness DW	20	5,73	30	2 Swivel carabiner	ER.LINE.F3	382,00
HSL Horizontal harness SL	20	5,15	30	2 Loops	ER.LINE.03	191,50

Surcharge

EFA and Clima Fall-Arresters and Climbing Protection Equipment

According to EN 353-2

EFA 15

Clima VL

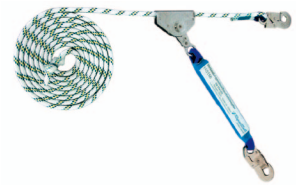
EFA 15 m (EN 353-2)
The traveling fall arrester EFA is composed of core mantle rope, shuttle, and lashing sling. At the upper end of the rope, there is a robust twist lock snap-hook made of steel, with which you lash yourself directly. Also, a lashing sling – made compliant to DIN EN 795 – is added to the EFA. An aluminum twist lock snap-hook locks you to the shuttle. In case of a fall, the shuttle clamps the rope quickly but not jerkily.

Clima VL (EN 353-2)
This non-fixed anti-fall rope is designed for locations such as ladders, masts or cranes in high-lift pallet storage. The suspension line can be positioned using the suspension sling and tensed with a rope clamp. The fall-arrester device has a short connection rope and can be attached permanently to the suspension rope or the harness of the user. The system comes in a sling bag for simple transportation and storage.

Description	Max. length [m]	Weight [kg]	Order-No.	Price / piece €
Travelln g fall arrester	15	2,5	D.013.229.1	???
Clima Vertical Line 15	15	2,5	D.037.806.1	316,00
Clima Vertical Line 20	20	2,9	D.037.809.2	327,00

Surcharge

StopLine Traveling Fall Arrester



The StopLine fall arresters are used for vertical securing, enabling both-handed work. The robust core mantle cable has a diameter of 12 mm. The rope shortener is made of stainless steel and yields high safety in operation as well as absolute freedom from maintenance. The traveling parameters of the rope shortener on the core mantle cable are best even under extreme conditions.

Type	Rope length [m]	Weight [kg]	Connection elem. jaw opening [mm]	Order-no.	Price/piece €
StopLine-10	10	1,5	20	MABF.KM10	162,00
StopLine-15	15	2,0	20	MABF.KM15	189,00

Surcharge

Info
Do you need traveling fall arresters with ropes in non-standard lengths? No problem. Talk to us!

Clima WPL Horizontal Safety Rope

NEW

The CLIMA safety rope is used where the length of a standard connection means does not suffice. The mounting can be connected anywhere along the rope to limit the fall area. The mounting can be attached directly or with the help of a connector to the harness. The safety line is designed in such a way to carry the weight of the user and can be used therefore as part of a restraint system.

Type	Order-Nr.	Price / piece €
Clima WPL 10 m	WPL.172.36	192,00

Surcharge Other lengths on request

Fall-Arresters according to EN 360

Safe working in cramped locations!

Info

If you need non-standard versions or personal consultation, call your SIP partner! We like to consult you!

Info

We will gladly carry out regular checks on fall-arresters. Contact us!

HöSi-Device Mini (EN 360)

NEW

A particular light fall-arrester with a strap made of robust synthetic material. On account of the low weight the HPB series offers good handling and has many uses.

Typ	Length [m]	Weight [kg]	Order-Nr.	Price / piece €
HWB2	2,0	0,8	HS.MINI.01	155,00

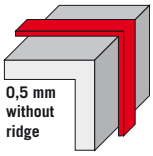
Surcharge

HöSi-Device Compact (EN 360)

The casing of the compact series is made of highly resistant synthetic material and is particularly small and light. It is easy to transport and flexible in use. The wire rope has been coated with zinc to prevent corrosion. Even at lower working heights you are always protected on account of the minimal fall distance. SpanSet Fall-Arresters are suitable for all assembly, maintenance and cleaning work at heights.

Typ	Length [m]	Weight [kg]	Order-Nr.	Price / piece €
HWPS.005	4,5	2,1	IK.HPS.005	370,00
HWPS.006	6	2,5	IK.HPS.006	379,00
HWPS.012	12	5,4	IK.HPS.012	581,00

Surcharge



- Tested for sharp edges
- Suitable for horizontal use

HöSi-Device Profi (EN 360)

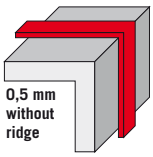
The professional series – for all work at heights under difficult conditions. A robust aluminium cast casing protects the brake system, which needs little maintenance. The rope is made for zinc-coated steel – together they make the Profi series long lasting and weather resistant.

Typ	Length [m]	Weight [kg]	Order-Nr.	Price / piece €
HWS.012	12	5,4	IK.HES.012	608,00
HWS.018	18	6,9	IK.HES.018	648,00
HWS.024	24	8,4	IK.HES.024	912,00

Surcharge

Other lengths on request!

Example of order: IK.HES.018 Fall- arrester, Type Profi with 18 m stainless steel wire rope



- Sharp edges tested
- Suitable for horizontal

Anchor Devices according to EN 795

Tripod DBA 252
The DB-A tripod is a mobile safety device: compact to transport and easy to set up. The anchor can be secured by carabiners or suitable deflection rollers. The tripod is for working heights of 1,55 m – 2,52 m. and has a load capacity of 250 kg. Tested and approved by DIN EN 795 and CE 0321.

Model	Order-No. Tripod	Price / Piece €
DBA.252	IK.DBA.252	1.136,00

Technical data

Height:
minimum: A: 1,55 m B: 1,32 m
maximal: A: 2,52 m B: 2,29 m

Weight:
13 kg

Load:
2 person or 250 kg

Fastener for Height Safety-Device (HöSi)

Support for Height Safety device

Deflection roller

With this mounting you can secure your load or lifting device simply and quickly to the tripod. The deflection roller guarantees secure and permanent rope guidance.

Model	Order-No.	Price / P. €
Fastener for HöSi-device 24 m	IK.DBH.011	109,50
Fastener for HöSi-device 30 m	IK.DBH.012	109,50
Deflection device	IK.DBU.076	67,40

Fall-Arresters according to EN 1496 + EN 300

HöSi-device with rescue device (EN 1496 + EN 360)

With the Profi HRA you can secure people, retrieve injured persons upwards or downwards. The device has a hand crank mounted on the robust casing. The device is completely sealed so no parts are subject to wear and tear. Tested and approved by DIN EN 1496 and DIN EN 360, CE 0321.

Model	Rope length [m]	Weight [kg]	Order-No.	Price / P. €
HRA.009	9,5	7,0	IK.HRA.009	883,50
HRA.015	15	9,5	IK.HRA.015	1.069,00
HRA.024	24	15,9	IK.HRA.024	1.221,00
HRA.030	30	23,0	IK.HRA.030	1.481,00

Suitable support for tripod:
IK.DBH.001, see above

Info

Combi device: Securing and possible saving in one device!

Mounting

Winch, EN 292

With this you can deliver material safely to your location. Our winch is compatible with the tripod and all SpanSet Fall-Arresters. It is made of robust corrosion protected steel and approved for a maximum weight of 250 kg. Tested and approved by DIN EN 292.

Model	Rope length [m]	Weight [kg]	Order-No.	Price / P. €
LWD.020	20	7,0	IK.LWD.020	621,00

Support for winch

Modell	Order-No. mounting	Price/piece €
DBH.002	IK.DBH.002	109,50

Surcharge

Anchoring Slings according to EN 795

BMS Anchoring Sling (EN 795)

The new BMS sling has created a new dimension in anchoring slings. It is the first round sling on the market that in spite of its robustness with a capacity of 70 kN is both light and compact. Mounting the carabiner is made easy thanks to the rope-like construction.

Length of use L1 [m]	System strength [kN]	Order-No.	Price/ piece €
1,0	70	HSL.100.70	on request
1,5	70	HSL.150.70	on request
2,0	70	HSL.200.70	on request

RVS Lashing sling (EN 795)

The SpanSet lashing sling flexibly replaces lacking lashing points for attaching the lanyards of your personal safety equipment. If lashed around a stable building element (steel beam, scaffold), the lashing sling is working as a safe lashing point.

Length of use L1 [m]	System strength [kN]	Order-No.	Price/ piece €
1,0	33	RVS.100.25	13,30
2,0	33	RVS.200.25	18,75
3,0	33	RVS.300.25	24,30

BAS Lashing sling (EN 795)

It happens all the time. There is no suitable anchoring point for the carabiners. With the SpanSet BAS Anchoring Sling this is not a problem. They can be attached almost anywhere, e.g. on scaffolding, beams and supports.

- Sharp edges Tested

Length of use L1 [m]	System strength [kN]	Order-No.	Price/ piece €
0,6	25	BAS.060.25	5,03
0,9	25	BAS.090.25	5,44
1,2	25	BAS.120.25	5,68

ASV Edge protector

The edge protector reliably prevents the lashing strap from abrasion. Absolutely indispensable in rough conditions.

Strap width [mm]	Length [m]	Order-no.	Price/ piece €
25	0,4	ASV.040.25	18,55
25	0,6	ASV.060.25	27,00
25	1,0	ASV.100.25	44,75

SEILFLECHTER

Hooks Hooks and connection gear according to EN 362

Pipe Hook
CE Certified, FS 90 PSA
Self-Locking and Self-Securing by One-Handed Use.

Min. br. load [daN]	Jaw open. [mm]	VE	Order-no.	Price/VE €
2200	59	1	SF.537010	35,30

LLM Nordwand Lanyards
LM PSA, HMS Hook
Self-Locking and Self-Securing

Min. br. load [daN]	Jaw open. [mm]	VE	Order-no.	Price/VE €
2200	24	1	SF.537017	14,20

Snap-hook
LM PSA, Blue, HMS Hook, with Screw Lock

Min. br. load [daN]	Jaw open. [mm]	VE	Order-no.	Price/VE €
2200	26	1	SF.537011	13,40

LM Nordwand Lanyards
Red, PSA-F, with SV with Screw Lock

Min. br. load [daN]	Jaw open. [mm]	VE	Order-no.	Price/VE €
Surcharge		1	SF.537014	14,20

Innovation when working at heights

Safe work on scaffolding

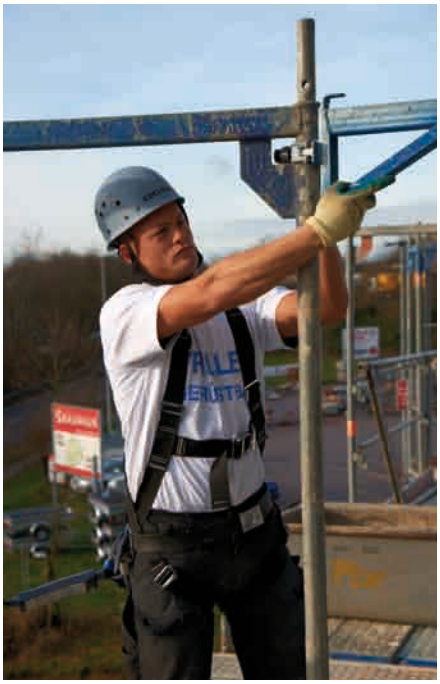
Working on scaffolding creates specific requirements for personal safety against the risk of falling (PSA gA). The user must wear a harness when assembling and dismantling scaffolding. Connection means with shock absorbers should not exceed 2 m. according to EN 355 to reduce the fall distance. Usually the maximum length of scaffolding is usually more than 3 m. The user cannot erect the scaffolding using the usual PGA gA.

SpanSet offers a new development in this context. In close co-operation with independent testing institutes and the trade association we have developed a complete tested set especially for scaffolding consisting of a harness with extended back and connection means with shock absorbers. This provides a working area of some 2,0 m. The safety standards typical of SpanSet are extremely high in this product as well.

The scaffolding set consists of various standard components, which the user can combine as the job requires. He has the choice of 4 body harnesses, 4 extensions with three carabiners and a total of 5 connection means variants. Each of these components can be replaced at any time so the user can always react to various situations on site and remain flexible.

In the case of most equipment sold for scaffolding the set loses its approval on account of using different connection means. If someone falls the user has no guarantee from the manufacturer. By adjusting the standard products to the required conditions in scaffolding he can make use of the usual SpanSet products. He is not compelled to purchase special scaffolding products but can select freely from all the different combinations.

By connecting the extension using carabiners the user can replace these individually or remove them when they are not required. The body harness and connection means are standard equipped with SpanSet transponder technology. You can find further information on pages 10 and 11.



Combinations of Various PSA elements

Safe work on scaffolding

You are looking for the optimal combination for scaffolding? You can put together your own personal protection equipment yourself from our large range of components. We would be pleased to make you an offer.

Body Harness

1-X
D.038.977.1

Page 373

2-X
D.038.060.1

Page 373

Excel 2-x
D.027.105.1

Page 374

Atlas
PSA.ATLAS

Page 374

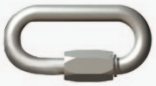
+

Carabiners

Screw carabiner DZ09

D.038.977

Screw carabiner NZ09



D.038.977

Twist lock carabiner 5/3043

D.039.616

More carabiners on request

+

Extension

0,5 m

D.043.311

0,75 m

D.043.823

0,5 m + 0,75 m

D.044.047

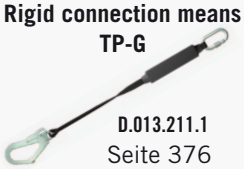
elastic 0,75 m

D.043.532

+

Connection Means

Rigid connection means TP-G



D.013.211.1
Seite 376

Stretchable connection means TPE-G

D.020.848.1
Page 376

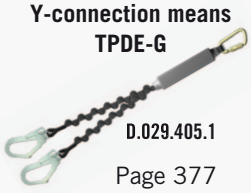
Adjustable connection means TPA-G

D.020.848.1
Page 376

Y-connection means TPD-G

D.013.220.1
Page 377

Y-connection means TPDE-G



D.029.405.1
Page 377

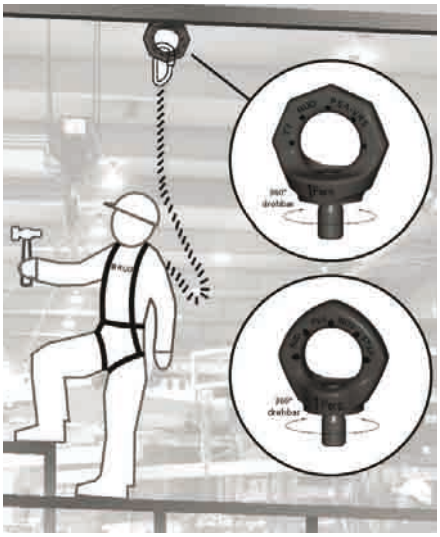
Info

Cannot find the product? Contact us!

Attachment device for PSA

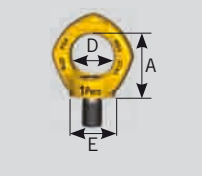
Certified Attachment device for personal protection

The PSA-stop devices PSA VRS (STAR POINT) and PSA-INOX-STAR are not anchor points in the conventional sense. Upon assembly, they serve as attachment points to mount the personal protective equipment (PPE) to.
These attachment points can also be permanently attached to a structural means for personal protection equipment additions
The PSA-VRS (STAR POINT) is not intended for long term use outdoors, in these cases we recommend the PSA-INOX-STAR
Components comply with the EC guidelines for Personal Protective Equipment (89/686/EEC) They bear visible sign of both the EC sign and the amount of people it may carry (for example, 1 or 2 people)
As a test basis, DIN 795, DIN 50 308 and OSHA 1926,502 apply. The test strength at 22.2 kN / person thus exceed the European standard.
The RUD stop devices PSA -VRS-and PSA-INOX-STAR are certified by the competent professional association (BG Bau).



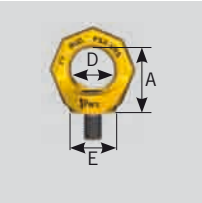
PSA Inox-Star

Label	Type	Load bearing cap. [Number of pers.]	Thread length [mm]	Dimensions [mm] A	D	E	Order-no.	Price/piece €
PSA-INOX-STAR	M12	1	18	42	30	30	IS.12.7097	55,60
PSA-INOX-STAR	M12	1	50	42	30	30	IS.12.7820	68,50
PSA-INOX-STAR	M16	2	24	49	35	35	IS.16.6757	65,20
PSA-INOX-STAR	M20	2	30	57	40	43	IS.20.3057	88,40



PSA-STARPOINT-VRS

Label	Type	Load bearing cap. [Number of pers.]	Thread length [mm]	Dimensions [mm] A	D	E	Order-no.	Price/piece €
PSA-STARPOINT VRS	M12	1	18	42	30	30	IS.12.7100	32,60
PSA-STARPOINT VRS	M12	1	18 - 150	42	30	30	IS.12.0400	on request
PSA-STARPOINT VRS	1/2“ - 13 UNC	1	3/4“	1 5/8“	1 3/16“	1 3/16“	IS.13.7103	32,60
PSA-STARPOINT VRS	M16	2	24	49	35	35	IS.16.7854	38,30
PSA-STARPOINT-VRS	M20	2	30	57	40	43	IS.20.2222	49,35



Surcharge | Screwable

SafetySet PSA-Sets

Security at the highest level

Always at hand for use, protected against weather, sealed in lockable metal box to prevent unauthorized use or in a practical backpack; this is the form of the SpanSet SafetySet - your all-inclusive package!
We offer 4 different sets. All sets include the safety harness 2-X with extra flexible attachment point on the front and guided fall arrester on a flexible anchor including shock absorber and the very robust core rope, 10 or 15 meters in length.
In addition, in set 2 and set 4 there is a useful stop loop 2.0 m in length included.

PSA-SET-R2

PSA-SET-G2

Equipment / Set	Set 1	Set 2	Set 3	Set 4
Type	PSA-SET-G1	PSA-SET-G2	PSA-SET-R1	PSA-SET-R2
Metal suitcase	✔	✔		
Backpack			✔	✔
ErgoStop 2PL	✔	✔	✔	✔
with energy absorber	✔	✔	✔	✔
Safety harness with 12 mm braided rope, including energy absorber				
10 m Length	✔		✔	
15 m Length		✔		✔
Fastening sling 2m		✔		✔
Weight ca. [kg]	7,0	7,8	4,1	4,9
Order-no.	PSA.SET.G1	PSA.SET.G2	PSA.SET.R1	PSA.SET.R2
Price/piece €	290,00	325,00	285,00	320,00

Fastening sling

Running safety gear

SafetySet E PSA-Set

The cost efficient alternative

The affordable Fall Safety Set E offers maximum security at a reasonable price. The set includes the best ErgoStop 2PL harness, the guided fall arrester with the energy absorber, all housed in a practical and robust metal case.

Delivery:
Metal case, ErgoStop 2PL harness, traveling harness with shock pack, nylon rope, 10 m

Type	Weight [kg]	Order-no.	Price/piece €
Set E	10	PSA.SET.E.0	240,00
Surcharge	*SUPERPRICE*		

When Rescue is Needed!

Choose the correct rescue and recovery solutions for your workers.

1. Injured person
What we know:
- You are hanging at an anchor point.
- You are wearing an all-body harness.
- You are in danger as you are exposed to the effects caused by suspension.
- While the injured person is still suspended simple first aid measures are not possible.

2. Rescue team
What is required:
- You must ensure your own safety.
- You must remain calm and operate effectively.
- You must have frequent practical experience in rescue techniques.
- You should calm the injured person.

3. Equipment
What is required:
- You must transport the injured person to a safe location with a minimum of risk to the injured person and the rescue team.
- Equipment must be easy to operate.
- The equipment required for the task must be onsite and available.

First aid
For immediate rescue operations on site. It is ideal for short-term action or for companies which require an independent solution for working at heights. It requires the training of staff and the commitment of colleagues.

Emergency teams
Intensively trained staff chosen for the specific purpose of rescue operations on site. This requires the commitment of the staff and constant reassessment of changing tasks. Such an option can be extremely expensive but be worthwhile for larger locations as the team is in a position to cover many differing tasks.

Rescue services
Professional staff with professional equipment for different situations and constantly updated know-how and do-how. However, this is not suitable for first aid as travel time and reaction time apply and the readiness is not in the hands of your company. Please bear in mind that professional rescue services can only do what they know and what they have learned. Do not depend on this but speak to the responsible rescue service on site and clarify if it can fulfil your requirements.

Rescue Program –

Why your SpanSet can help to find a solution

If you use a fall-arrest safety for work or work positioning techniques, you must consider an eventual rescue. Rescuing someone in a body harness concerns every worker whether at a height of 2 m or 200 m. Those who work in extreme environments, place great importance to these aspects. It involves apparently harmless areas although the latter seldom become an issue. Unconsciousness or fatal injury can occur to a suspended victim even if not injured after the fall. This is caused by reduced blood circulation, the unusual body position or the pressure of the body harness.

If the worker can move and relieve the pressure points the side effects can be reduced significantly. In the case of being unconscious the side effects continue uncontrolled and rescue is the only option.
The speed at which such conditions impact upon a victim varies immensely. In any case it is imperative to have an effective solution for rapid rescue.
There are various approaches to rescue operations: First aid, emergency teams and rescue teams. The rescue equipment also differs greatly in its use and training requirements, characteristics and means of deployment. In deciding the correct usage all factors must be taken into consideration, e.g. the location, the type of deployment of the equipment, the capabilities of the user etc. The GOTCHA™ Rescue Range was developed for simple, ready-made solutions for a wide variety of uses.

Gotcha Basic Kit according to EN 1496

Rescue Device

The Gotcha Basic contains block and tackle, which can be hung up anywhere using the round sling. The suspension point may be above or below your location. Take no risks: You must not climb down to the person to be rescued. Instead use the light and stable telescopic pole made from carbon fibre. You insert the special snap lock "Frog" into the eye on the safety sling of the person to be rescued. In this way you can carry out the rescue operation alone. You then rescue the person either by hoisting up or lowering. Also people that hang in a climbing ladder system can be rescued in this way. The Gotcha system has ropes in a variety of lengths allowing for effective rescuing from up to 60 m (high suspension point).

Name	Rappelling length [m]	Order-No.	Price €
Gotcha 50	50	GOT.KT.050	1.121,00
Gotcha 100	100	GOT.KT.100	1.308,00
Gotcha 200	200	GOT.KT.200	1.683,00

Surcharge

Gotcha Shark Kit according to EN 341

Rappelling Rescue Device

With the Gotcha Shark Kit you are excellently equipped for the most difficult situations. Even in angled constructions you can secure the Shark with the suspension slings without a problem. You hook yourself onto the Rope Ride and descend to the person to be rescued. The Rope Ride controls the rappelling speed and stops automatically when used wrongly. This provides you with additional safety during a difficult rescue operation. When you reach the injured party, secure him to the Rope Rider. Then you break his suspension with the bladeless wire cutter without risk of further injury. This enables a controlled, slow descent.

Name	Rappelling length [m]	Order-No.	Price €
Gotcha Shark 66	66	G.SHAR.066	1.170,00
Gotcha Shark 100	100	G.SHAR.100	1.296,00
Gotcha Shark 150	150	G.SHAR.150	1.477,00

Surcharge

Gotcha CRD Kit according to EN 1496 + EN 341

Rappelling Rescue Device

NEW

The CRD rappelling device has an integrated special motor and a hand crank. You can raise injured people without other help, e.g. from the cab of a crane. During the rappelling operation the centrifugal governor of the CRD ("Constant Rate Descender") ensures automatically a constant defined descent speed. You can rescue individuals from a height of 400 m. In the case of an evacuation several people can use the CRD in rapid succession. As the device is designed for a maximum load of 250 kg, in an emergency two people can be rescued at the same time.

Name	Rappelling length [m]	Order-No.	Price €
Gotcha CRD	100	G.CRD.0100	1.629,00

Surcharge

Aluminum gantry crane As a lifeline

Light, flexible, mobile

The aluminum gantry crane is serves as a mobile lifeline and high safety device for work, such as in manholes and pumping stations.

This special gantry crane can be easily dismantled, can be easily transported in a vehicle and installed by two people. The aluminum gantry crane has several functions in one.

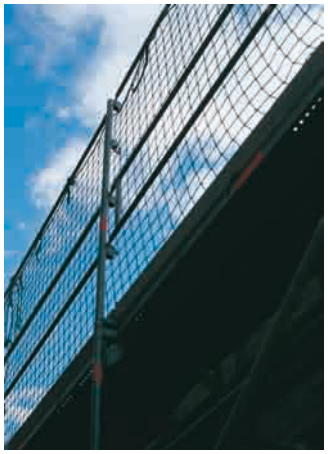
On one hand it ensures the worker thanks to the high security device. On the other hand, a load can be lifted with a hoist and lowered.

Through the use of the trolley, the load (eg pump) be driven on the main beam. On request and against payment, the delivery includes test report from an independent crane expert to use the crane as a lifeline for people.

Please state in your question the proposed environment and details so that we can provide you with a customized offer.
For more information, please go to the Crane Technic on page 230-231.

Lateral net protection / safety nets Holding back is your strength

Side nets and safety nets with the BauBG approval



Knotted side protection and safety nets made of high strength polypropylene - tested and approved by the BauBG.

- Durable
- High mesh stability
- Optimal stretch behavior
- Small volume for efficient assembly

Lateral safety nets, 100mm

- Thread thickness 4,5 mm
- Mesh width 100 mm
- Color green

Version Shutters	Dimensions [m]	Order-no.	Price/piece €
without	5,0 x 1,5	SN.100.05.1	26,40*
without	5,0 x 2,0	SN.100.05.2	31,95*
without	10,0 x 1,5	SN.100.10.1	47,95
without	10,0 x 2,0	SN.100.10.2	63,93
With Quick Strap Locks	5,0 x 1,5	SN.10G.05.1	35,90*
With Quick Strap Locks	5,0 x 2,0	SN.10G.05.2	42,20*
With Quick Strap Locks	10,0 x 1,5	SN.10G.10.1	66,76
With Quick Strap Locks	10,0 x 2,0	SN.10G.10.2	83,24

* Minimum purchase 3 items, individual prices on request

Safety nets, 100 mm

- Thread thickness 4,5 mm
- Mesh width 100 mm
- Color black, green, blue

Dimensions [m]	Order-no.	Price/piece €
5,0 x 10,0	AN.10.05.10	168,92
6,0 x 10,0	AN.10.06.10	202,73
7,5 x 15,0	AN.10.07.15	393,12
8,0 x 25,5	AN.10.08.25	689,88
10,0 x 10,0	AN.10.10.10	338,19
10,0 x 25,0	AN.10.10.25	845,48
12,5 x 20,5	AN.10.12.20	866,63
12,5 x 25,5	AN.10.12.25	1.078,00

Laying net 20 mm mesh width

- Thread thickness 1,4 mm
- Color white

Dimensions [m]	Order-no.	Price/piece €
5,0 x 10,0	AN.02.05.10	180,77
6,0 x 10,0	AN.02.06.10	216,92
7,5 x 15,0	AN.02.07.15	406,74
8,0 x 25,5	AN.02.08.25	737,54
10,0 x 10,0	AN.02.10.10	361,54
10,0 x 25,0	AN.02.10.25	903,85
12,5 x 20,5	AN.02.12.20	926,45
12,5 x 25,5	AN.02.12.25	1.152,40

Curtainsiders (ventilated)	Price
Polyethylene woven fabric of about 100 g/m²	on request

Surcharge

Special equipment for nets

Versions	Order-no.	Price/€
Thimbles on safety net	AN.KAUS.00	4,09

	Possible for	Surcharge
Flame retardant acc. to DIN 4102 B1	Side nets Safety nets Laying nets	on request

Info

Matching ropes on page 259

GRABBA Bag according to DIN EN 1492-1

NEW

There are many lifting bags on the market but the SpanSet Grabba Lifting Bags are the only ones that are approved for lifting loads. The Grabba bags are certified according to DIN EN 1492-1. They can also be used as accessories for your personal safety and as stop means.

Model	Load capacity [kg]	Storage space [l]	Order-no.	Price/ piece €
small	75	40	GB.036.487	169,00
medium	125	60	GB.041.649	222,00
large	250	200	GB.036.488	277,50

Surcharge

Helm according to EN 397

NEW

This helmet is tested according to EN 397 and available in white. A host of accessories are also available (visor, noise protection, etc.). Contact us to talk about your needs!

Order-no.	Price €
HE.041.758	90,30

Surcharge

MT 3 Gloves

NEW

The gloves are made from artificial leather with reinforced fingertips and palm areas. It has three open fingers to allow optimal work e.g. carabiners. The moulded form ensures maximum movement and the adjustable Velcro fastener ensures a smooth fit.

Size	Order-no.	Price €
M	MT3.422.92	19,95
L	MT3.422.93	19,95

Surcharge

Parking Point Anchorage point

NEW

You can hang unused connection means to the fall-arrest harness with this anchorage point. When 80 kg is exceeded the Parking Point comes loose.

Name	Order-no.	Price €
Parking Point	PP.022.901	3,10

Surcharge

Beam clamp

NEW

The beam clamp as a stop means for securing to double T beams, tested according to EN 795 and ANSI Z359.1.

Bezeichnung	Order-no.	Price €
Parking Point	D.041.648.1	221,50

Surcharge

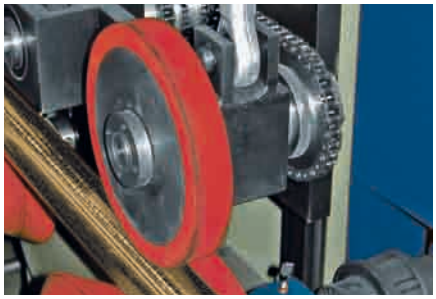
Trauma Straps Suspension Loop & Suspension Relief Straps

NEW

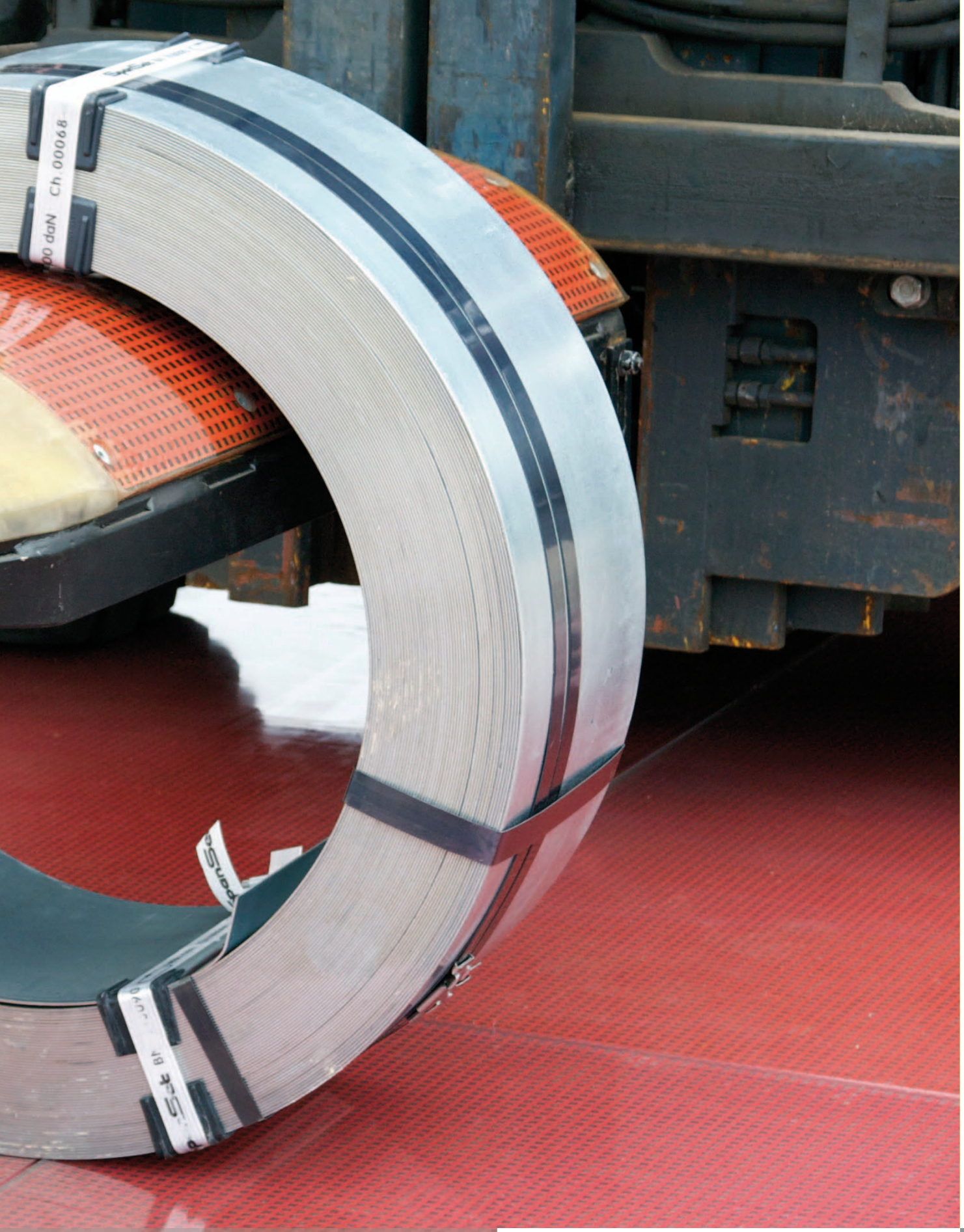
To reduce the trauma of being suspended SpanSet offers a small but handy accessory for the Gotcha Kit Suspension Loop and Suspension Relief Straps. These can be used together with one of the rescue kits. They can help someone who has fallen but still conscious to position himself standing in the strap and delay trauma.

Name	Order-no.	Price €
Suspension Loop	SU.0156.11	89,90
Suspension Relief Straps	SU.0373.04	29,90

Surcharge



Special Products



394-399 Impact, Noise and Surface Protection
400-402 Prong Sleeves
403 Bump protection
404-405 Coilhandling
406-407 Chains, Springs
408-412 Ropes and Lashings
413-416 Stainless steel cable and accessories

Secutex Impact Protection SPL

The comprehensive protection for constructions, machines und persons

secutex is an excellent polyurethane elastomer with a particularly favorable combination of physical and chemical properties:

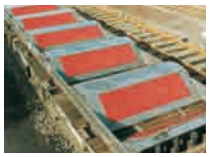
High structural strength
secutex, offers an extreme tensile strength, above other chemical products. Thus, the secutex material can be stretched to 500% of the original length without breaking.

Special elasticity
secutex compared to conventional rubber, offers much higher elasticity. Even under extreme temperature fluctuations ...secutex remains elastic.

Extreme wear and tear resistance
secutex is durable. In the abrasion resistance test, secutex was better than some metals.

Examples of the use of impact protection

Impact protection SPL-HP


Impact protection for safe transport

Prong protection

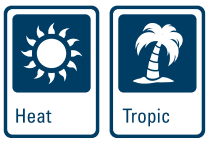
Coil storing

Barrel/Wheels

Collision protection

The new Double for special cases

secutex Tropic and secutex Heat



secutex webbing and secutex protection tubes have been used for many years throughout the industry for carefully lifting loads with sharp edges. Therefore, the well known secutex coating, may not be optimaly designed for particular environments.

secutex-Tropic
Cut Resistant in exotic operating environments. secutex lifting belts and secutex protection hoses have gained worldwide expansion and distribution.
The use of secutex products in countries with subtropical climate, even after a relatively short period of use, showed a shift in the material composition.

The high humidity in combination with high temperature and strong sun rays, decomposed the polyurethane (hydrolyse), it becomes fragile and brittle.

The newly developed material secutex Tropic has significantly improved with respect to hydrolysis and can therefore be easily used even in countries with subtropical climate.

The mechanical strength values are slightly lower than secutexPlus, the coating can be used on all known secutex products.

secutex-Heat even with heat, one layer better.
Precisely warm construction pieces should be hoisted carfully, the surface is softer and often unprotected.

At higher temperatures however, the well known secutex material becomes softer and less resistant, the permissible operating temperature for secutexPlus is therefore limited to 80 ° C.

secutex Heat is the new elastomer material, suitable for operating temperatures up to 140 ° Cmax. For operation in combination with textile slings the maximum. The operating temperature of the supporting webbing and lashings must be noted, we will be happy to advise you regarding these. At temperature the material hardness ammounts 75 ° Shore A, at normal room temperature, the coating is slightly harder.
secutex Heat is not transparent and is colored in the warning color orange.

Possible types of mounting

Normal attachment by screws or nails

Normal attachment by rivets

Attachment of the impact protection element by slots with steel tape or screw clamps

Attachment of the impact protection element with secutex special glue

Weld attached perforated plate.

SPL-F secutex flat-impact protection with perforated insert

You can have a little bump here and there

secutex flat impact protection is a highly wear-resistant polyurethane elastomer, 75 ° -80 ° Shore A, with a molded perforated shet insert.
The special benefit of this combination is that it serves as a reinforcement of the elastic secutex material, therefore it can not expand in the longitudinal or transverse direction. It can easily be fixed on by screws, rivets or nails.

- Very noise absorbing - reduction of sound reverberations
- Highly slip-resistant - preventing the load from slipping off
- Extremely wear and tear resistant - longer life

Info

Available upon request in the following types: Heat, Tropic

Info

Also with steel sheet equipement in stainles steel. Available for implementation in the food and chemical industry. Speak to your SIP partners!

More secutex impact protection models: Speak to us!

Th. [mm]	Width [mm]	Order-no.	Price € lin. m	Th. [mm]	Width [mm]	Order-no.	Price € lin. m	Th. [mm]	Width [mm]	Order-no.	Price € lin. m	Th. [mm]	Width [mm]	Order-no.	Price € lin. m
10	50	LF.10.050.0	38,25	15	50	LF.15.050.0	45,55	20	50	LF.20.050.0	52,80	30	50	LF.30.050.0	67,30
10	70	LF.10.070.0	45,90	15	70	LF.15.070.0	56,10	20	70	LF.20.070.0	66,20	30	70	LF.30.070.0	86,60
10	100	LF.10.100.0	57,40	15	100	LF.15.100.0	71,90	20	100	LF.20.100.0	86,40	30	100	LF.30.100.0	115,50
10	120	LF.10.120.0	65,00	15	120	LF.15.120.0	82,40	20	120	LF.20.120.0	99,90	30	120	LF.30.120.0	134,50
10	150	LF.10.150.0	76,50	15	150	LF.15.150.0	98,30	20	150	LF.20.150.0	120,00	30	150	LF.30.150.0	163,50
10	200	LF.10.200.0	95,60	15	200	LF.15.200.0	124,50	20	200	LF.20.200.0	153,50	30	200	LF.30.200.0	211,50

(Standard length 3 m and shorter dimensions plus Cutting costs € 6.35 per cut)

SP-F Flat, without perforated sheet insert

- Very noise absorbing - reduction of sound reverberations
- Highly slip-resistant - preventing the load from slipping off
- Extremely wear and tear resistant - longer life

Info

Available upon request in the following types: Heat, Tropic

Info

Available for you on request, is flat impact protection with an extra thick perforated plate for particularly stressful application.

Th. [mm]	Width [mm]	Order-no.	Price € lin. m	Th. [mm]	Width [mm]	Order-no.	Price € lin. m	Th. [mm]	Width [mm]	Order-no.	Price € lin. m	Th. [mm]	Width [mm]	Order-no.	Price € lin. m
10	50	LO.10.050.0	24,15	15	50	LO.15.050.0	31,40	20	50	LO.20.050.0	38,65	30	50	LO.30.050.0	53,20
10	70	LO.10.070.0	31,10	15	70	LO.15.070.0	41,25	20	70	LO.20.070.0	51,40	30	70	LO.30.070.0	71,70
10	100	LO.10.100.0	41,45	15	100	LO.15.100.0	56,00	20	100	LO.20.100.0	70,50	30	100	LO.30.100.0	99,60
10	120	LO.10.120.0	48,40	15	120	LO.15.120.0	65,80	20	120	LO.20.120.0	83,30	30	120	LO.30.120.0	127,50
10	150	LO.10.150.0	58,80	15	150	LO.15.150.0	80,60	20	150	LO.20.150.0	102,50	30	150	LO.30.150.0	146,00
10	200	LO.10.200.0	76,10	15	200	LO.15.200.0	105,00	20	200	LO.20.200.0	134,00	30	200	LO.30.200.0	192,50

(Standard length 5 m, shorter dimensions plus Cutting costs € 6.35 per cut.)

Surcharge

Order example: LO.20.100.3 specify length when ordering: secutex impact protection flat SP-F
Thickness 20 mm, width 100 mm, length 3 m

SPL-F-Soft Noise protection soft

secutex soft impact guard is a modern composite material, which is constructed through a combination of several materials: On the top secutex Polyurethane, Shore A hardness of 75-80, with extreme wear and tear resistance.
As an intermediate layer secutex PUR polyurethane foam with a lot higher elasticity.
For ideal mounting secutex grill insert screws, rivets and nails.

- Very strong dampening - prevents damage to parts on impact
- Strongly gentel - prevents material damage to sensitive components
- Extremely wear resistant - long life

Optional:
Power Flex surface for improved elasticity.
secutex PU foam blkue or yello is even softer than secutex PUR foam green (but it is also less robust).
Please send samples!
Foam thicknesses: 5, 10, 20 mm (5 mm in not deliverable in yellow!)

Thickn. [mm]	Width [mm]	Order-no.	Price € lin. m
15	50	FS.15.050.0	56,60
15	70	FS.15.070.0	70,20
15	100	FS.15.100.0	90,70
15	120	FS.15.120.0	104,50
15	150	FS.15.150.0	125,00
15	200	FS.15.200.0	159,00

Thickn. [mm]	Width [mm]	Order-no.	Price € lin. m
20	50	FS.20.050.0	64,80
20	70	FS.20.070.0	81,30
20	100	FS.20.100.0	106,00
20	120	FS.20.120.0	122,50
20	150	FS.20.150.0	147,50
20	200	FS.20.200.0	188,50

Thickn. [mm]	Width [mm]	Order-no.	Price € lin. m
30	50	FS.30.050.0	85,80
30	70	FS.30.070.0	110,50
30	100	FS.30.100.0	147,50
30	120	FS.30.120.0	172,00
30	150	FS.30.150.0	209,00
30	200	FS.30.200.0	270,50

(Standard length 3 m and shorter dimensions plus cutting costs € 6.35 per cut.)

Order example: L0.20.100.3 specify length when ordering: secutex impact protection flat SP-FB thickness 30 mm, width 150 mm

SPL-HP Hollow profile

SPL-HP is a highly wear-resistant polyurethane elastomer with a perforated insert

- Very strong dampening - prevents damage to parts on impact
- Very Spund Absorbing. Vastly reduces sound reverberations
- Extremely wear resistant - long life

Info

Available upon request in the following types: Heat, Tropic

Hole-Ø [mm]	Numb.	Width [mm]	Thickn. [mm]	Order-no.	Price € lin. m
20	1	30	40	HP.01.02.00	45,70
30	1	40	50	HP.01.03.00	58,50
40	1	50	60	HP.01.04.00	71,20
50	1	60	70	HP.01.05.00	84,50
20	2	60	40	HP.02.02.00	80,30
30	2	80	50	HP.02.03.00	105,50
40	2	100	60	HP.02.04.00	131,00
50	2	120	70	HP.02.05.00	159,00

Hole-Ø [mm]	Numb.	Width [mm]	Thickn. [mm]	Order-no.	Price € lin. m
20	3	90	40	HP.03.02.00	115,00
30	3	120	50	HP.03.03.00	152,00
40	3	150	60	HP.03.04.00	191,00
50	3	180	70	HP.03.05.00	233,50
20	4	120	40	HP.04.02.00	149,50
30	4	160	50	HP.04.03.00	199,00
40	4	200	60	HP.04.04.00	251,50
50	4	240	70	HP.04.05.00	308,50

Hole-Ø [mm]	Numb.	Width [mm]	Thickn. [mm]	Order-no.	Price € lin. m
20	5	150	40	HP.05.02.00	184,00
30	5	200	50	HP.05.03.00	245,50
40	5	250	60	HP.05.04.00	311,50
50	5	300	70	HP.05.05.00	382,50

Standard length 3 m and shorter dimensions plus € 6.35 Extra cost per piece

Surcharge

Order example: specify length when ordering: HP.05.04.00 secutex impact protection flat SP-F hole count 5, width 40 mm

secutex-SoftPad with flexible dumping layer

Soft on the inside and robust on the outside

Bolt threads can be built in

- Just weld on the workpiece (pipe, beam, sheet metal)
- Expensive, repeatable drilling is unnecessary
- No holes with secutex impact protection material
- Completely flat impact protection surfaces

More and more parts with delicate surfaces are being transported from the production site straight to the location of instalation

contact is made to the delicate surfaces of the load through the flexible damping system of the secutex soft pads.
secutex soft pads are completely sealed, moisture or oil can be easily wiped off and do not penetrate into the profile.

Optional, is a perforated sheet metal arming that can be introduced, the secutex SoftPad can then easily be welded

secutex-floor panels

Store carefully or use for anti slip

When solid equipement such as turn tables are not available, large machine parts and coils are operated with a lifting strap fitted with secutex safety tube.
At this setting the lower edge of the load „rolls“ on the floor. secutex floor tiles are absolutely non-slip (approximately 0.5 on dry surfaces). Width max. 1.000 mm and max. 3 m. The side edges are reinforced with flat iron, the frame is characterized by a broad optical Warning notice.

Optional:
- Surface structures (profiling, etc.)
- secutex Heat for higher temperatures
- secuEX with antistatic properties
- secutex Techno with low surface friction

Length [mm]	Order-no.	Width [mm] 400 Price €	500 Price €	600 Price €	700 Price €	800 Price €	900 Price €	1000 Price €	je 100 Price €
400	BP.0400.XX	196,50	240,50	284,00	327,50	371,00	414,50	458,50	43,60
500	BP.0500.XX	240,50	295,00	349,50	404,00	459,00	513,50	568,00	54,60
600	BP.0600.XX	284,00	349,50	415,00	480,50	546,50	612,00	677,50	65,60
700	BP.0700.XX	327,50	404,00	481,00	557,50	634,00	711,00	787,50	76,60
800	BP.0800.XX	371,00	459,00	546,50	634,00	721,50	809,00	896,50	87,50
900	BP.0900.XX	415,00	513,00	611,50	709,50	808,00	906,00	1.004,00	98,20
1000	BP.1000.XX	458,50	568,00	677,00	786,50	896,00	1.005,00 €	1.115,00	109,50

Surcharge

Order example: specify width when ordering: BP.0400.05, secutex floor panel, length 400 mm, width 500 mm, thickness 30 mm

secutex-Techno Technical fittings from secutex

Most of the technical fittings today are manufactured from technical plastics. These materials are supplied in sheets or rods, and then worked by either being turned or machined.
secutex technology is characterized by it‘s hardness (70 Shore D) and stiffness over a wide temperature range.
With secutex Techno, the required fittings can easily and inexpensively be manufacured in simple molds.
If required, the mounting holes can be directly keyed into the assemble pieces, like this, they can be monuted directly
Optionally, an armourn can be introduced from perforated sheet metal.
secutex Techno can thus no longer stretch under pressure and remains even after constant use constantly in form.

Optional:
- Desired surface structures, such as pyramids, diamond shaped, etc.
- Composites, eg Hardox surface, aramid fabric, etc.

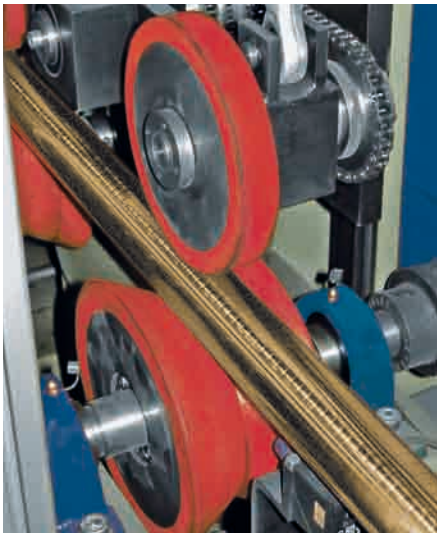
securoll for barrels and rolls

The special layer

securoll - the innovative turner and roller coating
With securoll secutex offers a specially developed coating for barrels and rollers in the form cast or directly to the roll core is applied.
With the vast experience of secutex with coatings, all is possible. secutex delivers securoll with a large selection for nearlly any application.
There are material hardness of 55° - 90° Shore A available.

This innovative process ensures high precision of the coating with very low tolerances, and an optimal and permanent connection to barrels/roll core and securoll material. This ensures a high mechanical strength and wear resistance with the securoll coated barrels and rolls.

securoll with secutex Heat
Equiped with heat resistant impact protection.
For use up to 150° C.



What does securoll offer?

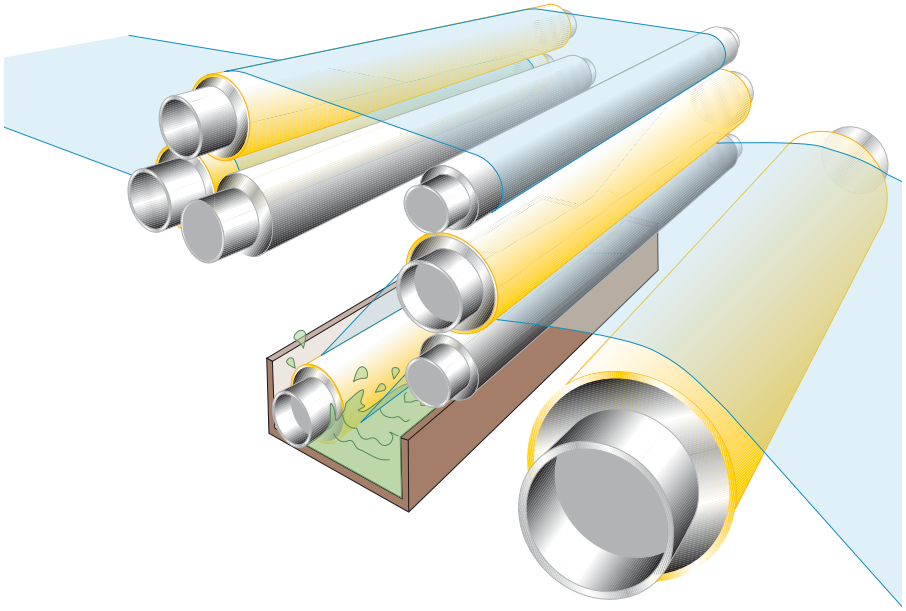
- Especially designed for round surfaces developed coating
- High variability
- Wide selection of coatings
- Low tolerances
- Various surfaces
- If requested, also delivery of barrels/ Roll cores

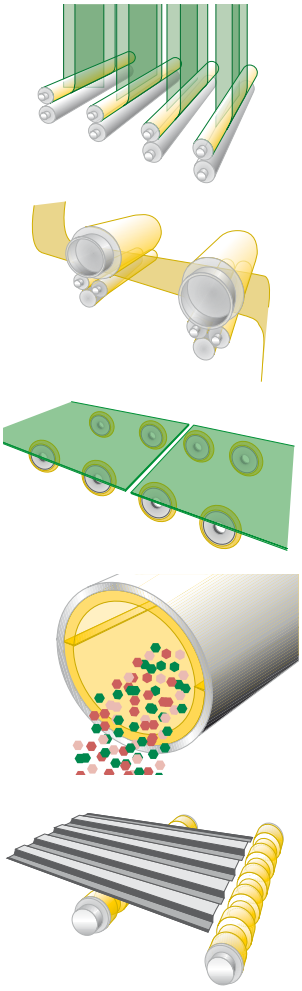
Info

Allow securoll to create a tailor made offer, beased on your own individual needs!

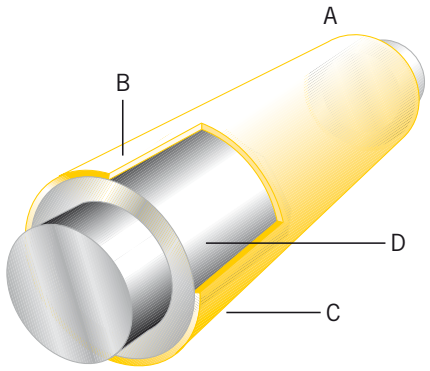
For this we need your data on surface area, PUR version, insert and barrel form.

securoll inquiry on the following page.

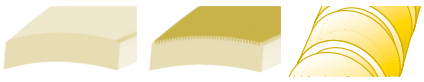




securoll Technical versions



A) Surface		
snooth	rough	contoured



B) PUR-variants	Surface hardness
securoll:	55° Shore A
securoll:	75° Shore A
securoll:	90° Shore A

C) Fittings
Fibers / fabrics or customizing to choice

D) Barrel form		
straight	round	conical

Info

Nach der Maxime „Alles aus einer Hand“ liefern wir auch gern den Kern der beschichteten Walzen und Rollen.

Special elasticity
securoll offers a substantially higher amount of elasticity compared to conventional rubber. Even by extreme temperature fluctuations ... securoll remains elastic.

Structural strength
Opposed to other chemical materials,- securoll offers an extreme ripping strenght. Thus, the secutex material can be stretched to 500% of the original length without breaking

Hardness
securoll is available in the range of Shore A 50 ° - 90 °.

Chemical resistance
Securoll is immune to most everyday chemicals. The 200-hour test proves that at 20 ° C. Short-term wetting is completely irrelevant. We are happy to inform you!

Extreme wear and tear resistance
Secutex can’t be put down. In the abrasion resistance test, secutex was better than some metals.

Sizes

Length:	max. 4 m
Diameter:	max. 1 m
Material strength:	from 2 mm

Your inquiry

Barrel ☐ Roll ☐
Length (mm) _____
Diameter (mm) _____ Coating thickness (mm) _____
Surface ☐ smooth ☐ rough ☐ contour
Shore A ☐ 55° ☐ 75° ☐ 90°
☐ Core should be delivered by secutex
Version _____
Material _____ Size _____
Description _____

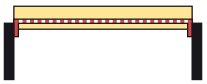
Company: _____
Name: _____ Branch: _____
Street/Post box: _____ Zip/town.: _____
Phone/Fax: _____ Mail address: _____

Date Signature

secutex®

Prong protective shoes Normal

For flexible mounting. Quick and easy to manipulate. Ideal for most applications. The secutex prong protective shoe has no supporting function.

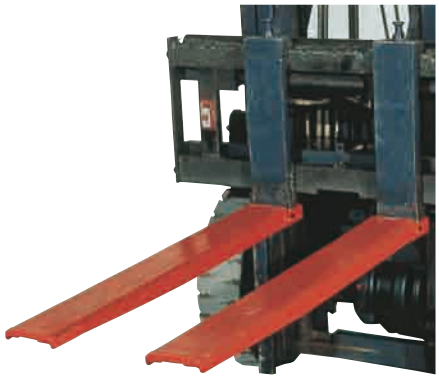


SZ-S

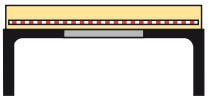
Wide prong protective shoe [mm]	Order-no.	Price/prong € Fork length 1,0 [m]	1,1 [m]	1,2 [m]	1,3 [m]	1,4 [m]	1,5 [m]	Surcharge/ 100 mm length €
80	SZ.N0.08.00	169,00	179,00	189,00	199,00	209,00	219,00	9,99
90	SZ.N0.09.00	174,50	184,50	195,00	205,50	216,00	226,50	10,40
100	SZ.N0.10.00	179,50	190,00	201,00	212,00	222,50	233,50	10,80
110	SZ.N0.11.00	184,50	195,50	207,00	218,00	229,50	240,50	11,20
120	SZ.N0.12.00	189,50	201,00	213,00	224,50	236,00	247,50	11,60
10 mm more	SZ.N0.00.00	4,40	4,80	5,20	5,60	6,00	6,40	

Order example: Prong Width. Include the length! SZ.N0.11.12
Standard prong protection shoe width 110 mm length 1,2 m

Prong protective shoes Heavy load



Extremely robust profiled steel fabrication, specially designed for high work volume. The secutex prong protective shoe has no supporting function.

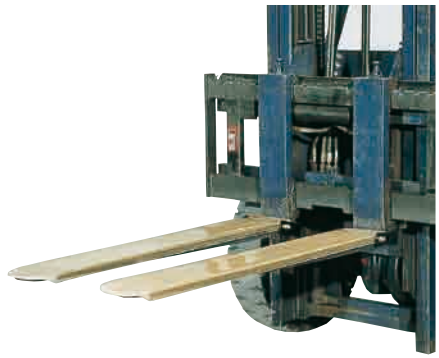


SZ-S Heavy load

Wide prong protective shoe [mm]	Order-no.	Price/prong € Fork length 1,0 [m]	1,1 [m]	1,2 [m]	1,3 [m]	1,4 [m]	1,5 [m]	Surcharge/ 100 mm length €
80	SZ.S0.08.00	193,50	205,00	216,50	228,00	239,50	251,00	11,80
90	SZ.S0.09.00	199,50	211,50	223,50	235,00	247,00	259,00	12,30
100	SZ.S0.10.00	205,50	218,00	230,00	242,50	255,00	269,50	12,75
110	SZ.S0.11.00	267,50	211,50	224,00	237,00	262,50	275,50	13,20
120	SZ.S0.12.00	217,00	230,50	244,00	257,00	270,50	283,50	13,65
10 mm more	SZ.S0.00.00	5,30	5,75	6,20	6,65	7,10	7,55	

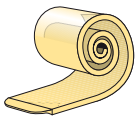
Order example: Prong Width. Include the length! SZ.N0.11.12
Regular prong protection shoe width 110 mm length 1,2 m

Prong protective shoes Gewebe



Specifically for use with light loads. Since no perforated metal plate is cast, these prong protective shoes are very simple and easy to manipulate. They roll up!

SZ-GE

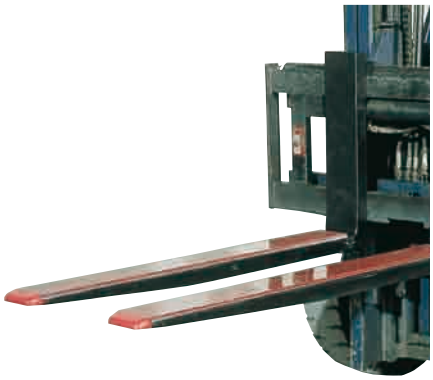


Prong width [mm]	Order-no.	Price/prong € fork length 1,0 [m]	1,1 [m]	1,2 [m]	1,3 [m]	1,4 [m]	1,5 [m]	Surcharge/ 100 mm length €
80	SZ.GE.08.00	105,00	113,50	122,00	130,50	139,00	148,00	8,51
90	SZ.GE.09.00	110,00	118,50	127,50	136,50	145,50	154,00	8,87
100	SZ.GE.10.00	114,50	123,50	133,00	142,00	151,50	160,50	9,22
110	SZ.GE.11.00	119,00	128,50	138,00	147,50	157,50	167,00	9,58
120	SZ.GE.12.00	123,50	133,50	143,50	153,50	163,50	173,00	9,94
10 mm more	SZ.GE.00.00	3,90	4,25	4,60	4,95	5,30	5,65	

Surcharge

Order example: Prong Width. Include the lengt! SZ.N0.11.12
Regular prong protection shoe width 110 mm length 1,2 m

Hard coat For stacking prongs



This is for sure: Prongs with a constantly reinforced coating are set to last, for the long run!
Non slip, sound resistant, damping, wear and tear proof!
The prong peak is equipped with a pre shaped cross bar, which prevents the peeling of the secutex coating.
The rounded, tapered design allows easy access into the pallets.
Optimal protection for the load and lifting device within a small footprint.

The prong becomes inseparable as soon as it is attached. The perforated sheet denies its release from the forklift prongs.

Info

Optional: Fork backs, price upon request.

Prong width [mm]	Order-no.	Price/prong € Fork length 1,0 [m]	1,1 [m]	1,2 [m]	1,3 [m]	1,4 [m]	1,5 [m]	Surcharge/ 100 mm Length €
80	SZ.FB.08.00	169,00	179,00	189,00	189,00	209,00	219,00	9,99
90	SZ.FB.09.00	174,50	184,50	195,00	205,50	216,00	226,50	10,40
100	SZ.FB.10.00	179,50	190,00	201,00	212,00	222,50	233,50	10,80
110	SZ.FB.11.00	184,50	195,50	207,00	218,00	229,50	240,50	11,20
120	SZ.FB.12.00	189,50	201,00	213,00	224,50	236,00	247,50	11,60
10 mm more	SZ.FB.00.00	4,40	4,80	5,20	5,60	6,00	6,40	

Order example: Prong Width. Include the length
SZ.FB.08.11 Zinc protection standard width 80 mm length 1,1 m

Prong shoe coil

With the secutex coil prong shoe you make your fork lift a lot more flexible.
For after you have carefully and safely shipped your coils, just pull up with your forklift fitted with the prong coil shoe and use your truck as normal, without having to mount and dismount different fork prongs.
Specially designed, robust construction for transportation of round loads, such as coils.
The secutex prong protection coil is carried by both prongs.

The integrated grill prevents the release of the secutex shoe.
The rounded, tapered front surface of the Coil module facilitates the access into the coils.

Info

Do you need prong protection products according to your requirements, talk to us.

Info

secutex Coil storing from page 404.

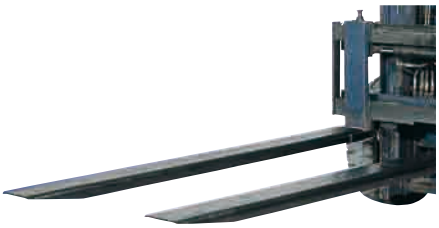
Coil inner-Ø min. [mm]	Fork length [m]	Order-no.	Price €	Surcharge / 100mm length €
500	1,0	SZ.COIL.10	1.784,00	112,00
500	1,1	SZ.COIL.11	1.896,00	112,00
500	1,2	SZ.COIL.12	2.008,00	112,00
500	1,3	SZ.COIL.13	2.120,00	112,00
500	1,4	SZ.COIL.14	2.232,00	112,00
500	1,5	SZ.COIL.15	2.343,00	112,00

Surcharge

Interchangeable prong peaks for prong protection Coil

Order-no.	Price/piece €
SZ.COIL.SP	372,00

Fork extension Open version



Ideal light weight prong extension. Easy assembly without tools, secured with pin and clevis ring. secutex optional coating according to your needs. Top coating prevents the release of the perforated plate from the secutex coating. Thickness and width of the fork extensions depend on the prong width, thickness and loading capacity.

GVO GVO with secutex

GVO-standard, open bottom, without coating

Fits forks cross section [mm]	Fork length [m]	Order-no.	Price/piece €	Fork length [m]	Order-no.	Price/piece €
80 x 30, 80 x 35, 80 x 40	1,2 - 2,0	GV1.083.00	391,00	2,1 - 2,5	GV1.083.20	436,50
100 x 30, 100 x 35, 100 x 40	1,2 - 2,0	GV1.103.00	421,50	2,1 - 2,5	GV1.103.20	474,00
100 x 45, 100 x 50	1,2 - 2,0	GV1.104.00	431,50	2,1 - 2,5	GV1.104.20	486,50
120 x 40	1,2 - 2,0	GV1.124.00	435,00	2,1 - 2,5	GV1.124.20	493,00
120x45, 125x40, 125x45, 120x50	1,2 - 2,0	GV1.125.00	490,50	2,1 - 2,5	GV1.125.20	563,50

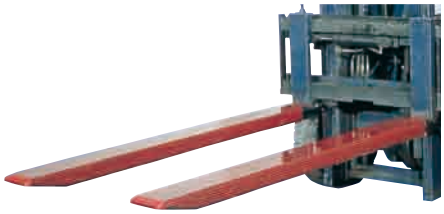
secutex GVO standard, bottom opening, top side coated with secutex.

Fits forks cross section [mm]	Order-no.	Price/piece € Fork length 1,2 [m]	1,4 [m]	1,5 [m]	1,6 [m]	1,8 [m]
80 x 30, 80 x 35, 80 x 40	GV2.083.00	593,00	615,50	626,50	638,00	660,50
100 x 30, 100 x 35, 100 x 40	GV2.103.00	635,00	659,50	672,00	684,50	709,00
100 x 45, 100 x 50	GV2.104.00	645,00	670,00	682,00	694,50	719,50
120 x 40	GV2.124.00	657,00	684,00	697,50	711,00	738,00
120 x 45, 125 x 40, 125 x 45, 120 x 50	GV2.125.00	717,50	745,50	759,50	773,00	801,00
150 x 45, 150 x 50	GV2.150.00	758,50	789,00	804,00	819,50	849,50

Order example: Include prong length! GV2.103.16 SZ-GMO standard with coating length 1.6 m

Fork extension Enclosed version

With th Enclosed construction prong extension equipment ‚flapping up‘‘ is out of the question However, due to the increased height of the profile, it is not possible to transport standard sized pallets.



Optionally, also available with a strong, noise reducing and slip resistant secutex coating. Easy secured by cotter pins and clevis nails.

GVG GVG with secutex

GVG, all round enclosed equipment, without secutex coating

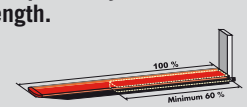
Fits forks cross section [mm]	Order-no.	Price/piece € fork length 1,2 [m]	1,4 [m]	1,6 [m]	1,8 [m]
80 x 30, 85 x 35	GV3.083.00	507,00	553,00	599,00	645,50
100 x 30, 100 x 35, 100 x 40	GV3.103.00	537,00	588,50	640,50	692,00
100 x 45, 105 x 45	GV3.104.00	562,00	614,50	667,50	720,00
120 x 40, 120 x 45, 120 x 50	GV3.124.00	586,00	643,00	700,50	758,50
125 x 50	GV3.125.00	593,50	652,50	711,00	770,00

secutex GVG, completely enclosed equipment, with secutex coating on the upper side

Fits forks cross section [mm]	Order-no.	Price/piece € fork length 1,2 [m]	1,4 [m]	1,6 [m]	1,8 [m]
80 x 30, 85 x 35	GV4.083.00	708,50	777,50	846,00	914,50
100 x 30, 100 x 35, 100 x 40	GV4.103.00	750,50	827,00	903,50	980,00
100 x 45, 105 x 45	GV4.104.00	775,50	853,00	930,50	1.008,00
120 x 40, 120 x 45, 120 x 50	GV4.124.00	811,50	896,00	980,50	1.065,00
125 x 50	GV4.125.00	825,00	912,00	999,00	1.086,00

Info

Please note that the prong extensions must be suported by at least 60% of the prong length.



Surcharge

Order example: Include prong length!
GV4.083.14 SZ-GVG with standard coating length 1.4 m

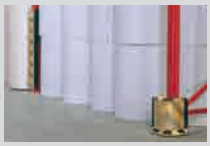
Collision and impact shield

Collision and impact shield for your equipment

The collision and impact shield protects your equipment. Ram and collision shields preserve corners, shelving unit storage, walls, doors ...and your nerves. Equipped with bright, signaling colors, the entire collision and impact shield is visible in all directions made of sturdy polyurethane.

Info

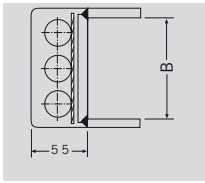
Upon request, the secutex impact shield can be custom fabricated to fit size and needs



Impact shield SAS AB, transparent, for palleting shelves

Is attached to the front supports of the pallet rack and protects the uprights from buckling.

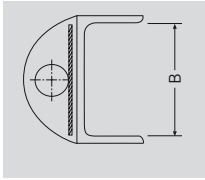
Label	Width [mm]	Length [mm]	Weight [kg]	Order-no.	Price/piece €
Impact shield SAS-AB	82	1000	11,0	SAS.A.0082	229,00
Impact shield SAS-AB	87	1000	11,3	SAS.A.0087	238,00
Impact shield SAS-AB	102	1000	16,2	SAS.A.0102	269,50
Impact shield SAS-AB	112	1000	16,9	SAS.A.0112	287,00



Impact Shield SAS-B

Rounded at the front. So that it facilitates access to the shelves. Especially in tight to maneuver areas.

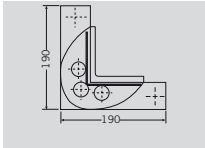
Label	Width [mm]	Length [mm]	Weight [kg]	Order-no.	Price/piece €
Impact shield SAS-B	82	1000	9,2	SAS.B.0082	198,00
Impact shield SAS-B	87	1000	9,2	SAS.B.0087	200,00
Impact shield SAS-B	102	1000	15,3	SAS.B.0102	256,00
Impact shield SAS-B	112	1000	16,4	SAS.B.0112	281,50



Impact Shield SAS-C

Extra Robust design for use in heavy load operation.

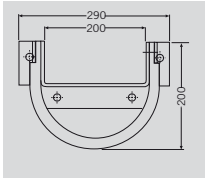
Label	Weight [kg]	Order-no.	Price/piece €
Impact shield SAS-C	10	SAS.C.0000	218,00
SPL-hollow profile	2,9	SAS.C.HOPR	121,00
Steel socket	7,1	SAS.C.STSO	80,10



Impact Shield SAS-D

It protects, for example free standing columns and concrete pillars.

Label	Weight [kg]	Order-no.	Price/piece €
Impact shield SAS-D	8,7	SAS.D.0000	184,50
SP-Special profile	2,7	SAS.D.SOPR	89,90
Steel socket	5,2	SAS.D.STSO	69,40
Mounting plate	0,4	SAS.D.BEBL	12,85

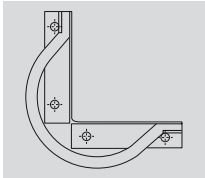


Impact Shield SAS-E

For use with trolley jack and forklift truck.

Label	Weight [kg]	Order-no.	Price/piece €
Impact shield SAS-E	8,9	SAS.E.0000	125,50
SP-Special profile	2,7	SAS.E.SOPR	89,90
Steel socket	5,4	SAS.E.STSO	46,25
Mounting plate	0,4	SAS.E.BEBL	12,85

Surcharge



Coil Yard for secure coil handling

The robust construction for the long term storage of coils

Info

Available upon request in the following types: Heat, Tropic

A significant proportion of the damage a product incures, is due to the fact that it didn't have the protective gear. The main causes are carelessness, negligence and improper handling. These are avoidable damages to goods and inventory. secutex Coilprotect is the optimal solution for the secure handling, the efficient transport and the gentle storage of coils and bundles

At the fabrication plants coils must be positioned in the upright position for processing. It happens time and time again, large accidents due to heavy coils tippling over.
The protection of the manufactured coils, or coils prepared for further processing is increasingly important. Improper handling and improper storage are the most common causes of dents on delicate fine sheet coils. This in turn, can lead to serious problems in the subsequent forming phase.
Well known car manufacturers have found that the dent can be noticed in up to the sixth layer. This causes serious problems and additional costs during the forming process.

Coilprotect made of steel in high rise form

The secutex coil storage is made out of steel and is of robust construction, built for lasting coil Storage. The design is well suited for all coil sizes, the placement is achieved by hook or gripper.

- The robust construction for the long term storage of coils
- Protect the valuable coils with a secutex impact shield cover
- Oil pan and mounting holes
- Grid of the marking rods: 100 mm
- 10 marking rods included starting with 3 m

Optional

- Impact shield overlay made of heat-resistant protective „secutex Heat"

Diameter [mm]	Height [mm]	Width [mm]	Length [mm]	Order-no.	Price €
1.200 - 2.400	210	1.225	3.000	SCS.080.0S	3.928,00
Trolley for marking rods				TW.ASS.00.0	866,00

Shorter lengths on request

Trolley for marking rods

Coilprotect Semi Made of low profile steel

Special design developed for the fork lift truck.

- Equipped with forklift and coil hooks
- Protection of all surfaces by secutex impact protection of all kinds
- Oil pan and mounting holes
- Grid of the marking rods: 100 mm
- 10 marking rods included starting with 3 m

Optional

- Impact shield overlay made of heat-resistant protective „secutex Heat"

Diameter [mm]	Height [mm]	Width [mm]	Length [mm]	Order-no.	Price €
800 - 2.000	80	675	3.000	SCS.S80.0S	2.570,00
Trolley for marking rods				TW.ASS.00.0	866,00

Shorter lengths on request

Coil mat For short term storage

Lightweight and flexible to use

The lightweight and portable Coilmat was designed for the temporary storage of coils. It is practical to use. Like this you can easily and quickly win gang way, or widen certain bottle neck, or narrow passages.

- Easily positioned by hand
- Close to indestructible, made from solid secutex
- Oil and lubricant resistant, not a cheap product to recycled

Optional

- Handle and oil outlet rim
- Heat resistant collision shield, secutex heat
- Mounting holes
- Sloping head and tail for easy access with the fork lift truck

Info

Available upon request in the following types: Heat, Tropic

Diameter [mm]	Height [mm]	Width [mm]	Length [mm]	Order-no.	Price €
800- 1.400	30	400	3.000	SCM.A.08.14	433,50
1.000 - 1.600	43	400	3.000	SCM.B.10.16	441,50
1.200 - 1.800	54	400	3.000	SCM.C.12.18	462,00

Coil mats For short term storage

Avoid constant use scratches and ripped materials

Due to the unprotected storage of wire bundles the base becomes heavily scratched. The forklift moves the coils of wire in position, often the rings simply slide off during storage. During the processing of these scratches, they gain very long surface damage or tears. This often leads to a halt in production. The well loved secutex mats reliably prevent scratches and bruises.
The lightweight mat is quickly brought into position. Users applaud especially for the new Slip Stop, each hook-wire coils tightly to the grooves, tit will not slip any more due to its on weight. That‘s one big worry less.

Optional

- Oil discharge channel
- Heat resistant collision shield, secutex heat
- Mounting holes including perforated metal insert
- Sloping head and tail for easy access with the fork lift truck

Info

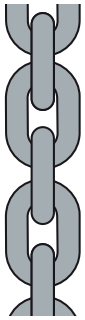
Available upon request in the following types: Heat, Tropic

Diameter [mm]	Height [mm]	Width [mm]	Length [mm]	Order-no.	Price €
for all diameters	54	400	3.000	DM.0400.00	519,50

Round steel chain Chains by the meter

Round steel chain

- Non-calibrated
- Tested to DIN 766



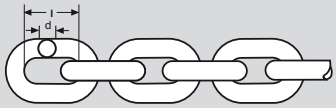
	Chain measure d x l [mm]	Outer max. width [mm]	Load b. capacity [kg]	Order-no.	Price lin. m €
FEUER-VERZINKT	4 x 16	13,6	200	KM.K04.16.F	2,30
	5 x 18,5	17	320	KM.K05.18.F	3,10
	6 x 18,5	20,4	400	KM.K06.18.F	4,40
	7 x 22	23,8	630	KM.K07.22.F	5,30
	8 x 24	27,2	800	KM.K08.24.F	7,10
	10 x 28	36	1250	KM.K10.28.F	11,40
	13 x 36	47	2000	KM.K13.36.F	18,60
EDELSTAHL Rost frei Werkstoff Nr. 1.4401	4 x 16	13,6	200	KM.K04.16.E	9,40
	5 x 18,5	17	320	KM.K05.18.E	13,10
	6 x 18,5	20,4	400	KM.K06.18.E	19,80
	7 x 22	23,8	630	KM.K07.22.E	26,10
	8 x 24	27,2	800	KM.K08.24.E	35,30
	10 x 28	36	1250	KM.K10.28.E	57,60
	13 x 36	47	2000	KM.K13.36.E	89,30

Info

DIN 763 chains and plastic chains may not be used as a

Hoisting device, sling or carrier as defined by DIN 15003.

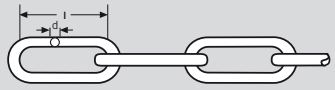
The dimensions and weights are approximate values.



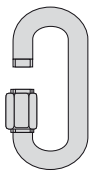
Round steel chains

- Long-linked
- Non-calibrated
- Tested to DIN 763

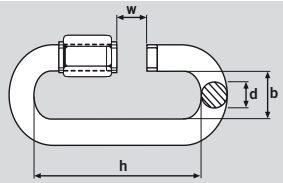
	Chain measure d x l [mm]	Outer max. width [mm]	Load b. capacity [kg]	Order-no.	Price lin. m €
FEUER-VERZINKT	4 x 32	16,8	100	KM.L04.32.F	1,90
	5 x 35	21	160	KM.L05.35.F	2,60
	6 x 42	25,2	200	KM.L06.42.F	3,10
	7 x 49	29,4	300	KM.L07.49.F	3,90
	8 x 52	33,6	400	KM.L08.52.F	5,00
	10 x 65	42	630	KM.L10.65.F	8,30
	13 x 82	54,6	1000	KM.L13.82.F	14,20
EDELSTAHL Rost frei Werkstoff Nr. 1.4401	4 x 32	16,8	100	KM.L04.32.E	7,60
	5 x 35	21	160	KM.L05.35.E	11,40
	6 x 42	25,2	200	KM.L06.42.E	15,40
	7 x 49	29,4	300	KM.L07.49.E	23,50
	8 x 52	33,6	400	KM.L08.52.E	24,60
	10 x 65	42	630	KM.L10.65.E	36,40
	13 x 82	54,6	1000	KM.L13.85.E	69,90



Chain Quick Link



	Nom. size [mm]	h [mm]	b [mm]	w [mm]	d [mm]	Weight [kg]	Order-no.	Price/ piece €
FEUER-VERZINKT	4	33	10	5,5	4	0,01	KSV.0400.F	0,55
	5	39	12	6,5	5	0,02	KSV.0500.F	0,60
	6	45	13	7,5	6	0,04	KSV.0600.F	0,70
	7	53	16	8,5	7	0,06	KSV.0700.F	0,90
	8	59	16	10,0	8	0,08	KSV.0800.F	1,05
	10	70	20	12,0	10	0,15	KSV.1000.F	1,80
EDELSTAHL Rost frei Werkstoff Nr. 1.4401	4	33	10	5,5	4	0,01	KSV.0400.E	3,00
	5	39	12	6,5	5	0,02	KSV.0500.E	3,50
	6	45	13	7,5	6	0,04	KSV.0600.E	4,40
	7	53	16	8,5	7	0,06	KSV.0700.E	5,40
	8	59	16	10,0	8	0,08	KSV.0800.E	5,90
	10	70	20	12,0	10	0,15	KSV.1000.E	9,50



Plastic chains made of PE

Red and white, color change after 6 pieces, 100% UV-resistant, unedited cold resistance to -35 ° C, not electrically conveying.

Chain measure d x l x b [mm]	VE m/roll	Order-no.	Price/m €	Price/VE €
6 x 40 x 22	30	KK.PE.06.30	1,40	42,00
8 x 48 x 26	25	KK.PE.08.30	3,36	82,00

Info

Gallivanted steel chains in red and white on request. Talk to us!

SIP-Balancer We make your tool weightless!

Your tools are always ready on hand without being in the way

The SIP Balancer provides safety and effectiveness. At a touch your tool is immediately available - and you move it with one finger. The excellent quality and ease of operation guarantee a long life.

The SIP Balancer has a die-cast aluminum housing, a flexible and durable steel wire rope, friction bushings and precise guide rails, safety hook and designed for a long life. They also have an additional safety chain with a 2 m long cable.

In accordance with the strictest safety standards, in the models from No. TCN.9370 a kinematic blocks of the drum in the case of the spring breaking, thus preventing the load from falling. The very stable mono-block design protects the balancer in the extra-heavy use very well. Rotation is achieved on ball bearings. The cable guide suffers no friction damage over the bearings.

For these models, there is a control panel from beneath, to lift the load from ground level and to block manually (see technical description).
The added price is € 56.00.

Info

Type EW deliverable upon request!

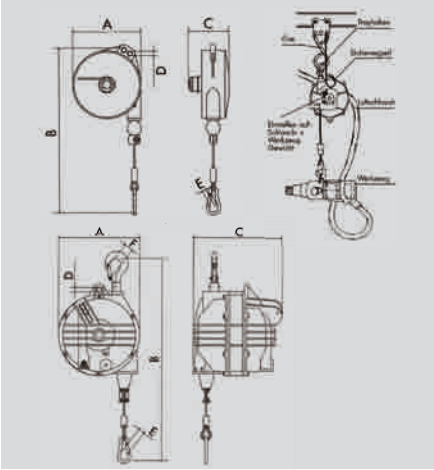
Info

Have a look at our automatic hose reel for air or water hoses! See page 329.

High quality for a long life!

Load b. capacity [kg]	Rope length [m]	Rope-Ø [mm]	Weight [kg]	Dimensions a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order-no.	Price/ piece €
0,4 - 1	1,6	2,0	0,6	109	272	55	8	6	TCN.9311.0	42,50
1 - 2	1,6	2,0	0,6	109	272	55	8	6	TCN.9312.0	48,00
2 - 3	1,6	2,0	0,7	109	272	55	8	6	TCN.9313.0	51,50
1 - 2,5	2,0	2,0	2,0	149	324	85	8	8	TCN.9320.0	115,00
2 - 4	2,0	2,0	2,0	149	324	85	8	8	TCN.9321.0	117,00
4 - 6	2,0	2,0	2,3	149	324	85	8	8	TCN.9322.0	137,50
6 - 8	2,0	2,0	2,5	149	324	85	8	8	TCN.9323.0	164,00
2 - 4	2,5	2,5	3,0	180	368	98	9	10	TCN.9341.0 *	153,00
4 - 6	2,5	2,5	3,3	180	368	98	9	10	TCN.9342.0 *	174,00
6 - 8	2,5	2,5	3,6	180	368	98	9	10	TCN.9343.0 *	189,50
8 - 10	2,5	2,5	3,8	180	368	98	9	10	TCN.9344.0 *	210,00
75 - 90	2,0	5,0	17,3	240	630	250	12,5	12	TCN.9370.0	996,50
15 - 20	3,0	5,0	19,1	290	710	220	15	20	TCN.9431.0	1.322,00

*Including internal latch lock



The types TCN.9341.0 to TCN.9344.0 are equipped with internal latch lock that activates by pulling the rope, and the hanging load holds. A brief tug of the rope, and it rolls back to the drum. Typical applications for electric and pneumatic tools, grinders, polishers, impact wrenches, rivet machines, spot welding guns.

Rope clamp

The quickest "eye splice" – with the rope clamp you can create a rope eye within minutes which can be adjusted again and again: In four sizes, UV resistant, salt water resistant.
Not approved for PSA or sling!

Rope-Ø [mm]	Breaking load ca. [kg]	Order-no.	Price/piece €
6	600	SF.523106	4,00
8	700	SF.523108	5,00
10	850	SF.523110	6,50
12	950	SF.523112	8,80

Surcharge

Vario-rope clamp

Specially designed cable clamp for 8-mm lines.
Ideal for infinite adjustment with a very resistant breaking point. Quickly secured and quickly removed. Very good as sail, sun canvas etc. Developed by professionals for professionals. Patent pending. SB-compliant with instructions and EAN-supplied packaged. For quick clamping of tarpaulins, blankets, solar arrays. With glass fiber components for super-strength.
Not approved for PSA and as slings.

Rope-Ø [mm]	Label	Strength [daN]	Order-no.	Price/piece €
8	Vario-rope clamp	1000	SF.5231.20	10,60

Surcharge

Cable hooks

The rope hook is designed for continuous adjustment of rope for 6 - 8 mm in diameter. Thus, allowing you to hang curtains, pictures and much more very fast and without knotting the rope.
Not approved for PSA and as slings.

Article	Order-no.	Price/piece €
Rope hook for 20-25 mm trav., rope 6-8 mm	SF.5917.10	8,70
Rope hook for 6-8 mm rope strength	SF.5917.11	8,70

Surcharge

North Face special hook for stepless rope adjustment

The North Face special hook brings an end to complicated knots and irritating knotting. Also, with minimal physical effort you can tension the rope tension. Ideal for quick clamping. For tent ropes, decorations, pictures, etc. Made from high strength aluminum. A guide is engraved.

Dimensions [mm]	Rope-Ø [mm]	Tensile strength [kg]	Weight [g]	PU	Order-no.	Price/piece €
40 x 28 x 3	2 - 5	22,5	3,6	10	SF.537085	3,50
76 x 56 x 8	3 - 9	67,5	30,8	10	SF.537086	7,00

Minimum order for products on this page € 50,00.

Construction Hoist Rope

Spiral woven BIROTEX rope DIN 83307, form H, PP multi-filament solid, non-twisting ready spliced with thimble, zinc-coated ring 10 x 70 and inserted snap hook 11 x 120, durable and non-rot in individual packaging.

Diameter: **16 mm**
Rope break strength: **1900 kp**
Colour: **White with blue spots**

Length [m]	Order-no.	Price/VE €
10 m	SF.BS.0010	30,50
15 m	SF.BS.0015	42,50
20 m	SF.BS.0020	55,40
25 m	SF.BS.0025	67,00
30 m	SF.BS.0030	80,00
40 m	SF.BS.0040	105,00
50 m	SF.BS.0050	130,00
75 m	SF.BS.0075	194,00
100 m	SF.BS.0100	290,00

Diverting bloc

NEW

- 1 Roll
- Hinged
- Gliding
- High quality Aluminium

Break load [kN]	Rope-Ø [mm]	Roll-Ø [mm]	Order-no.	Price/piece €
22	<16	40	SF.537.043	11,70

Surcharge

NEW

- 2 Rolls
- Hinged
- With becket for pulley construction
- Gliding
- High quality Aluminium

Break load [kN]	Rope-Ø [mm]	Roll-Ø [mm]	Order-no.	Price/piece €
35	<16	40	SF.537.044	18,90

Surcharge

NEW

- 1 Roll
- Hinged
- Gliding
- High quality Aluminium

Break load [kN]	Rope-Ø [mm]	Roll-Ø [mm]	Order-no.	Price/piece €
40	>16	60	SF.537.045	17,80

Surcharge

NEW

- 1 Rolle
- Hinged
- With becket for pulley construction
- Gliding
- High quality Aluminium

Break load [kN]	Rope-Ø [mm]	Roll-Ø [mm]	Order-no.	Price/piece €
38	>16	60	SF.537.046	23,80

Surcharge

Info

Suitable snap hooks can be found on page 285 of this catalogue (see application example).

Minimum order for products on this page € 50,00.

Atlantic cable

Ideal for stretching and securing

Core shell fabric - pre-stretched and almost without elasticity.

- Ideal for stretching and securing
- Ideal as a drop rope in the tree care
- Highest strength

- Core and shell from abrasion resistant, endless Birol (polyester). Available by the bobbin only

Rope-Ø [mm]	Stretching %	Rope-minimal breaking str. [daN]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
6	1,2	1050	300	SF.1690.06	124,00
8	1,2	1180	150	SF.1690.08	186,00
10	0,8	1900	250	SF.1690.10	259,40
12	0,5	2800	150	SF.1690.12	350,00
14	0,4	4000	250	SF.1690.14	442,00
16	0,5	5300	200	SF.1690.16	560,00

Surcharge

Info

We provide a variety of quality products.

If you have any queries on the offered ropes, or need ropes with higher breaking points, please contact us.

SIP provides your partner you like to have the right rope!

Hemp rope Wound

- DIN EN 1261 type B (former DIN 83 325)
- 4-stranded
- From first-class long-hemp
- Presentation options: sheets, bobbins

Rope-Ø [mm]	Weight kg/ 100 m	Rope minim. breaking str. [daN]	recom. Usable [kg]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
8	4,7	450	45	220	FS.HS08.10	96,00
10	7,4	700	70	220	FS.HS10.10	118,00
12	11,1	1080	100	220	FS.HS12.10	148,00
14	14,1	1350	140	220	FS.HS14.10	190,00
16	18,5	1780	180	220	FS.HS16.10	255,00
18	23,0	2200	220	220	FS.HS18.10	315,00
20	28,5	2730	280	220	FS.HS20.10	400,00
25	41,0	3880	390	220	FS.HS24.10	600,00

Surcharge

Info

We also assemble with hooks and eyelets. Talk to us.

Fibre ropes cut to length

Rope-Ø mm	up to 100 m Length	from 100 m Length
up to 14	30 %	15 %
from 16	20 %	10 %

Heat Cutter for ropes and straps

For separation of all textile ropes and straps. Unit comes complete with welding tip.

- Power: incoming 100 Watts, release by VDO-standard 70 Watt

Rope-Ø [mm]	Order-no.	Price/piece €
universal	975010.00	126,30

Version	Order-no.	Price/piece €
Spare welding tip	975011.10	26,80

Polyamide rope

Braided nylon ropes to DIN 88 307 Form E

- Weave according to the diameter 8x, 12x or 16x, 24x
- Features: High strength, rot resistant, supple, elastic
- Rot resistant

Rope-Ø [mm]	Weight kg/ 100 m	Rope min. breaking str. [daN]	Recom. usable load [kg]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
1	0,2	30	3	500	FS.110.001	6,72
2	0,22	95	9	500	FS.110.002	11,40
3	0,36	160	15	500	FS.110.003	19,20
4	0,75	270	26	500	FS.110.004	29,60
5	1,4	400	40	500	FS.110.005	46,00
6	2,0	610	60	450	FS.110.006	66,00
8	3,3	1090	100	250	FS.110.008	112,00
10	5,6	1670	165	300	FS.110.010	147,00
12	8,1	2400	240	200	FS.110.012	226,00

Spun according to DIN 83 330 / EN 696

- 3 strand spun
- Highest strength
- Enviromental
- Rot resistant
- Elastic
- Presentation options: flat bobbins

Rope-Ø [mm]	Weight kg/ 100 m	Rope min. breaking str. [daN]	Recom. usable load [kg]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
8	4,0	1320	155	150	FS.0008.10	92,40
10	6,2	2040	140	250	FS.0010.10	143,00
12	8,9	2940	300	250	FS.0012.10	199,60
14	12,2	4020	450	200	FS.0014.10	264,00
16	15,8	5200	600	150	FS.0016.10	330,00
18	20,0	6570	700	100	FS.0018.10	440,00
20	24,5	8140	900	100	FS.0020.10	542,00

Available on request up to 40 mm

Polyester rope

Spun according to DIN 697 Form A 83331/EN

- 3-stranded
- Stretch free
- Does not go hard
- UV-and acid-resistant
- Color: white
- Presentation options: bobbins

Rope-Ø [mm]	Weight kg/ 100 m	Rope min. breaking str. [daN]	Recom. usable load [kg]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
8	4,8	1000	100	150	FS.PS08.10	83,00
10	7,6	1560	150	250	FS.PS10.10	130,00
12	11,0	2220	220	250	FS.PS12.10	190,00
14	14,8	3120	310	200	FS.PS14.10	252,00
16	19,5	3980	400	150	FS.PS16.10	336,00
18	24,5	4980	500	100	FS.PS18.10	410,00
20	30,3	6200	620	80	FS.PS20.10	532,00

Braided in DIN EN 83 307 Type E

- Made from the very best, high-strength material (Birol)
- Smooth and low torsion
- Stretch free, does not get hard
- UV-and acid-resistant
- Presentation options: bobbins

Rope-Ø [mm]	Weight kg/ 100 m	Rope min. breaking str. [daN]	Recom. usable load [kg]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
4	1,1	255	25	500	FS.FL04.10	32,00
6	2,4	564	60	450	FS.FL06.10	76,00
8	4,3	980	100	250	FS.FL08.10	120,00
10	6,8	1510	150	300	FS.FL10.10	160,00
12	9,8	2120	210	200	FS.FL12.10	210,00
14	13,3	2800	280	250	FS.FL14.10	332,00

Surcharge

Info

Cutting of ropes? See page 410.

Polypropylene rope Quality with a capital Q

Spun according to DIN 699 Form A

- 3-stranded
- PP-split yarn
- Buoyant
- Color: orange
- Presentation options: bobbins

Rope-Ø [mm]	Weight kg/ 100 m	Rope min. breaking strength [daN]	Recommend. usable load [kg]	Bobbin size ca. [m]	Order-no.	Price/ 100 m €
8	3,0	940	90	220	FS.PP08.10	40,40
10	4,5	1400	140	220	FS.PP10.10	62,00
12	6,5	2000	200	220	FS.PP12.10	93,00
14	9,0	2740	275	220	FS.PP14.10	124,00
16	11,5	3430	340	220	FS.PP16.10	153,20
18	14,8	4370	440	220	FS.PP18.10	208,00
20	18,0	5270	520	220	FS.PP20.10	254,00
24	26,0	7450	750	220	FS.PP24.10	400,00

Static-braided rope according to DIN EN 1891

Suitable for static needs, such as work safety, fire, and rope bridges construction.

Rope-Ø [mm]	Bobbin size ca. [m]	Order-no.	Price/100 m €
9	100	119110.09	284,00
10	100	119110.10	386,00
11,9	100	119110.11	250,00
12	100	119110.12	330,00

Rope type:	9,0 mm Form A	10 mm Form A	11,9 mm Form A	12 mm Form A
Meter weight:	54,19 g	70,18 g	88,1 g	113,83 g
Stretch:	4,3 %	5 %	3,4 %	2,2 %
Sheath perc.:	39,5 %	46,6 %	37,8 %	66,2 %
Numb. of falls:	6	10	8	>5
Imp. bumper:	5,2	5,0	<6	5,9

Dynamic rope 11 mm, according to EN 892 - CE 0123

For high-altitude rescues by firefighters, climbing sports, rescue from heights and depths, assisted work.

Rope-Ø [mm]	Bobbin size ca. [m]	Order-no.	Price/100 m €
11	100	119210.11	386,00

Rope type:	1
Meter weight:	73 g
Stretch:	5 %
Mass of coat:	32,8 %
Mass of core:	67,2 %
Knotability:	0,7
Nuber of falls (80 kg):	>5
Impact bumper:	10,0 kN

Tree climbing rope static 12 mm, according to DIN EN 1891

The climbing rope for arborists. On request, these ropes can be stitched and fitted with certified eyelet connections (hand strap or eye socket).

Rope-Ø [mm]	Bobbin size ca. [m]	Order-no.	Price/100 m €
12	100	119120.12	330,00

	Order-no.	Price/piece €
With thimble	SF.10.11.KA	10,80
With hand eyelet	SF.10.11.HA	10,80

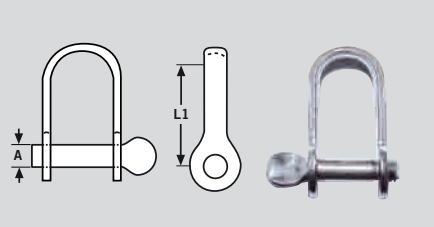
Surcharge

Rope type:	Form A
Meter weight:	113,83 g
Stretch:	2,2 %
Mass of coat:	66,2 %
Number of falls:	8
Impact bumper:	5,9 kN

Stainless steel shackle

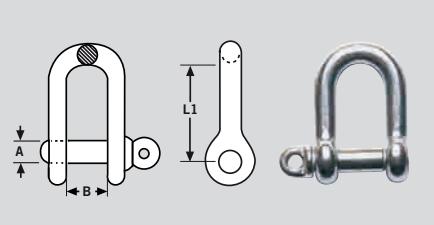
- Shackle accessories eg for the food industry, medicine and water technology
- Material 1.4401 AISI 316

Bolt strength A [mm]	WLL [kg]	Breaking strength [kg]	L1 [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pieces) €
4	55	220	16	SF.54.50.04	1,20	12,00
5	75	300	22	SF.54.50.05	1,70	17,00



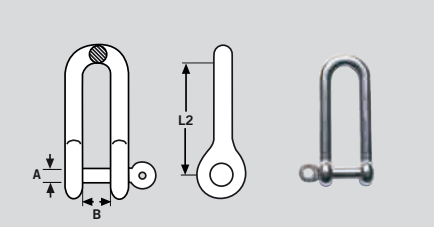
Form straight, short, round

Bolt strength A [mm]	WLL [kg]	Breaking strength [kg]	B [mm]	L1 [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
4	160	760	8	16	SF.54.70.04	1,30	13,00
5	250	1.300	10	20	SF.54.70.05	1,30	13,00
6	375	1.800	12	24	SF.54.70.06	1,60	16,00
8	625	2.500	16	32	SF.54.70.08	2,60	26,00
10	1.000	3.500	20	40	SF.54.70.10	4,20	42,00



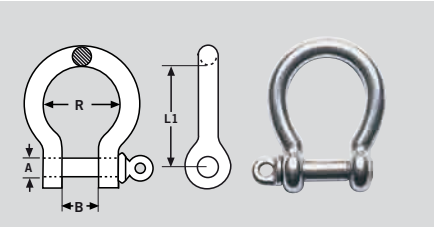
Form straight, long, round

Bolt strength A [mm]	WLL [kg]	Breaking strength [kg]	B [mm]	L1 [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
5	250	1.100	10	40	SF.54.79.05	1,70	17,00
6	375	1.600	12	48	SF.54.79.06	2,40	24,00
8	625	3.200	16	64	SF.54.79.08	3,40	34,00



Form cambered, round

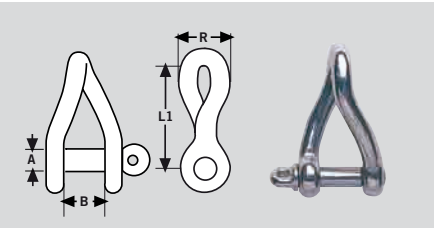
Bolt strength A [mm]	WLL [kg]	Breaking strength [kg]	B [mm]	L1 [mm]	R [mm]	Order-no.	Price/pc €	Price/VE (VE=10 pc) €
5	250	1.300	10	20	17	SF.54.71.05	1,30	13,00
6	375	1.800	12	24	21	SF.54.71.06	1,60	16,00
8	625	3.500	16	40	28	SF.54.71.08	2,60	26,00
10	1.000	5.400	21	45	35	SF.54.71.10	4,30	43,00



Form swiveled, round

Bolt strength A [mm]	WLL [kg]	Breaking strength [kg]	A [mm]	B [mm]	L1 [mm]	R [mm]	Order-no.	Price/pc €	Price/VE (VE=10 pc) €
6	375	1.800	6	12	24	21	SF.54.72.06	4,00	40,00
8	625	3.500	8	16	28	16	SF.54.72.08	4,80	48,00
10	1.000	5.400	10	20	34	40	SF.54.72.10	7,60	76,00
12	1.500	11.200	12	24	42	48	SF.54.72.12	10,80	108,00

Surcharge



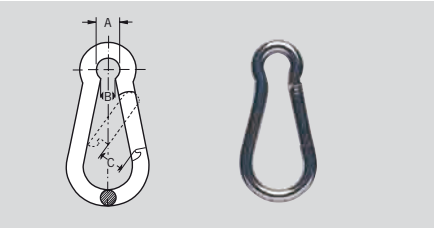
Minimum order for products on this page € 50.00.

Stainless steel carabiner hooks

- Shackle accessories eg for the food industry, medicine and water technology

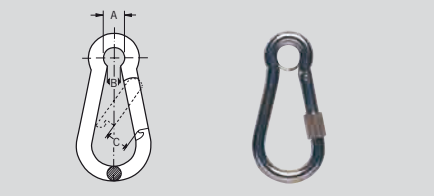
Pear-shaped, with open eyelets, without screw attachment

Size ca. [mm]	Breaking load ca. [kg]	A [mm]	B [mm]	C [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
50 x 5	570	8	4	7	SF.53.00.05	1,20	12,00
60 x 6	670	9	5	8	SF.53.00.06	1,50	15,00
80 x 8	870	12	8	11	SF.53.00.08	3,00	30,00
100 x 10	1.150	15	10	12	SF.53.00.10	4,90	49,00
120 x 11	1.250	18	13	16	SF.53.00.11	7,80	78,00



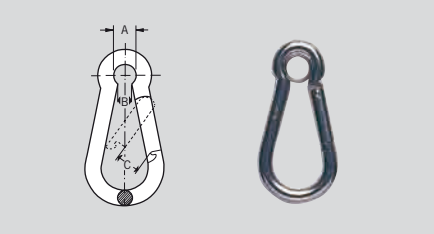
Pear-shaped, with closed eyelet, with threaded attachment

Size ca. [mm]	Breaking load ca. [kg]	A [mm]	C [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
80 x 8	870	10	7	SF.53.1.08S	6,80	68,00
100 x 10	1.150	13	11	SF.53.1.10S	8,40	84,00
120 x 11	1.250	17	16	SF.53.1.11S	10,30	103,00



Pear-shaped, with open eyelets, without screw attachment

Size ca. [mm]	Breaking load ca. [kg]	A [mm]	C [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
50 x 5	570	6	8	SF.53.01.05	1,30	13,00
60 x 6	670	7	8	SF.53.01.06	1,70	17,00
70 x 7	720	8	9	SF.53.01.07	2,20	22,00
80 x 8	870	10	10	SF.53.01.08	3,10	31,00
100 x 10	1.150	16	17	SF.53.01.10	6,00	60,00
120 x 11	1.250	18	18	SF.53.01.11	8,00	80,00



Egg shaped, with closed eyelets

Size ca. [mm]	Breaking load ca. [kg]	A [mm]	C [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
50	70	6	10	SF.53.02.01	2,40	24,00
75	150	9	11	SF.53.02.02	4,60	46,00
100	300	14	20	SF.53.02.03	7,80	78,00

Triangle shaped, with closed eyelet

Size ca. [mm]	Breaking load ca. [kg]	A [mm]	C [mm]	Order-no.	Price/piece €	Price/VE (VE=10 pc) €
10 x 100	1.500	13	18	SF.53.03.02	7,80	78,00

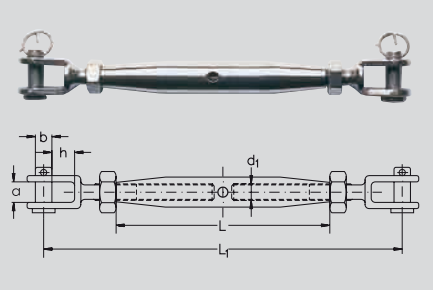
Surcharge

Info

Not allowed for operation as slings.

Stainless steel turnbuckle

For rope-Ø [mm]	Thread d1	Dimensions [mm] h	a	b	L	L_1	Order-no.	Price/piece €
2,5	M 5	9	6	5	80	120	SF.52.60.02	5,00
3	M 6	8,5	7	6	95	145	SF.52.60.03	6,60
4	M 8	11	10	8	105	165	SF.52.60.04	8,90
5	M 10	13	12	9	125	195	SF.52.60.05	15,40
6	M 12	21	13	12	150	245	SF.52.60.06	27,60
7	M 14	19	14	12,5	165	270	SF.52.60.07	33,40
8	M 16	26	17	16	190	325	SF.52.60.08	62,00
10	M 20	29	20	19	210	380	SF.52.60.10	102,00



Stainless steel iron wire rope clips

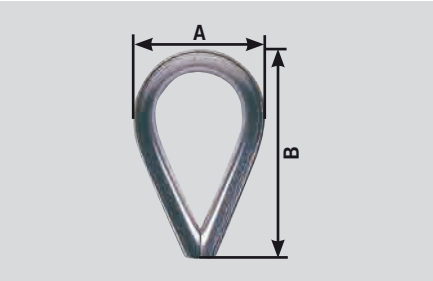
- Acid resistant AISI 316

For rope-Ø [mm]	Order-no.	Price/piece € [VE=10 pcs.]	Price/VE €
2	SF.52.1.02N	1,20	12,00
4	SF.52.1.04N	1,22	12,20
6	SF.52.1.06N	2,12	21,20
8	SF.52.1.08N	2,22	22,20
10	SF.52.1.10N	4,65	46,50

Stainless steel thimble, heavy

- Highly polished
- Acid resistant AISI 316
- Also for fiber ropes

For rope-Ø [mm]	Inner width A [mm]	Inner length B [mm]	Order-no.	Price/piece €	Price/VE € [VE=10 pcs.]
3	10	16	SF.51.10.03	0,34	3,40
4	11	17	SF.51.10.04	0,42	4,20
6	16	25	SF.51.10.06	0,72	7,20
8	20	32	SF.51.10.08	1,06	10,60
10	26	40	SF.51.10.10	1,48	14,80



Surcharge

Info

Stainless steel available on page 416.

Minimum order for products of this page € 50.00.

Stainless steel cable

- Material 1.4401/V4 AS and AISI 316
- Polished
- Preformed. nt jolting
- For example, for food, medicine and water technology

Properties		Strength [mm]	Breaking load [daN]	Order-no.	Price/m € min. length 20 m	Price/100 m € 125 m- o. 250 m-coils
Strand rope construction, 7 x 19 wires, super flexible - perfect for idlers		2,0	212	SF.354.020	0,66	66,00
		2,5	332	SF.354.025	0,74	74,00
		3,0	478	SF.354.030	0,90	90,00
		4,0	850	SF.354.040	1,49	149,00
		5,0	1328	SF.354.050	2,17	217,00
		6,0	1913	SF.354.060	2,96	296,00
		8,0	3400	SF.354.080	5,20	520,00
		10,0	5310	SF.354.100	8,90	890,00
Strand rope construction, 7 x 7 wires, semi flexible		2,0	230	SF.353.002	0,56	56,00
		3,0	520	SF.353.003	0,96	96,00
		4,0	920	SF.353.004	1,41	141,00
		5,0	1440	SF.353.005	2,33	233,00
Strand rope stainless steel white-coated, 7 x 7 wires		4,0/6,0	920	SF.355.006	1,60	160,00
		4,0/8,0	1440	SF.355.008	1,98	198,00

Info

Galvanized wire ropes in black available. Talk to us.

Nico-Press sleeves

Original Nico-Press sleeves are a perfect and safe system to crimp cables. Because of the precision and strength, the sleeves are also approved for the aviation sector.

Label	For rope [mm]	VE	Order-no.	Price/VE €
press sleeves	2	50	SF.35.9320	13,60
press sleeves	2,5	50	SF.35.9325	35,50
press sleeves	3	50	SF.35.9330	45,60
press sleeves	4 + 4,5	50	SF.35.9345	122,40
press sleeves	5	50	SF.35.9350	258,60
press sleeves	6	50	SF.35.9360	260,00

Surcharge

Cable cutters

The clean, simple separation of steel cables. For workshop use.

Type	For ropeØ [mm]	Order-no.	Price/piece €
C 7	5	SF.97.4907	44,00
C 12	8	SF.97.4912	170,00
C 16	14	SF.97.4916	290,00

Crimping tool

For different cable diameters. Only use preformed Nico-Press sleeves for this. Nico-Press sleeves are sea water resistant (tinned copper).

Type	For rope [mm]	Order-no.	Price/piece €
Pliers with jaws and wire cutters	1,5 - 5	SF.35.9200	176,20

Minimum order for products on this page € 50.00.

RUD-ID-System Test Service and Management System

Testing and documentation made easy!

Mandatory periodic testing of load handling devices (see regulation § 2) is still time consuming and often error-prone.

But through the RFID technology (Radio Frequency Identification) this time-consuming process and the huge piles of paper belong in the past. Harnesses/ components can now be identified, recorded and managed without contact, accurately and quickly. This modern digital age of documentation and management of operating means reaches therefore a new peak. The current Privacy Policy Act is of course complied with.

- Reduction of inspection costs and the required time
- Maintenance and management of the relevant product data and documents (RUD-portal)
- Digital list of all mandatory testing components
- Time-saving, easy retrofitting of components based on maintained data
- Do not installation required on laptop/ PC or server environment
- Automatic generation of test reports
- Simple and extensible software for managing

The use of RFID transponders in a borehole of safety components for lifting and handling is **protected by a patent.**

RUD ID-POINT

The exclusive and unbeatable RUD-ID-Point® convinces by challenging applications and environments. It can be used from -80° C to +270° C, very high resilience against shocks, water, dirt, nor impair of the performance of the components that have integrated transponders.

RUD-ID-Point® (13.56 MHz RF): for press-in transponder in metal environments, the use of adhesives or resins is not necessary.

Size:
Ø 4 mm x 3,5 mm.
Ø 8 mm x 3,25 mm.

Original 1:1-illustration

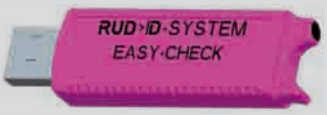
RUD-ID-TAG®
(13,56 MHz HF):
Reinforced label with metal for chains, links, wire ropes; alternatively screwed, size: 50 mm x 32 mm x 6 mm.

In addition to the two very robust and resistant transponders, other transponder types (glue, foil transponders, etc.) are offered and can be used for a variety of operating conditions.

RUD ID-EASY-CHECK

The RUD- ID-EASY-CHECK® readers are compatible with the RUD-ID- Points® and with the common high-frequency transponders (ISO15693). The transfer of the identification number is via USB or Bluetooth, and can be adopted in the RUD's own RUD-ID-NET® application as well as in virtually all office applications such as WordPad, MS Word, MS Excel, OpenOffice, and also in SAP or other programs.

RUD-ID-EASY-CHECK® (13,56 MHz): USB- reader for reading the RUD-ID-Point® identification number.



RUD-ID-DISPLAY-CHECK® (13,56 MHz): Bluetooth reader, reads the unique RUD-ID-Point® identification number, shows it on the integrated LCD display and transfers this to any Bluetooth-enabled receiving device (<10 m).

RUD ID-NET

The RUD-ID-NET® application makes many things easier. This Internet application will support you, among others, by testing services and minimizes the IT administration effort:

- Easy digital care, analysis, management of product data, test reports as well as documents (efficient test execution, automated test memory according to the statutory audit tests, automated test reports).
- Digital linkage with the latest product information and documentation (e.g. Test certificates) by accessing the RUD-web portal.
- Applications for all required testing equipment (e.g. work platforms, roll-up doors, etc.).
- A large product database already exists, which makes it considerably easier to record and manage your operating means.

Order form

Fax: (0 21 03) 4 00 22

GLOBUS HEBETECHNIK
KÜNNE GRUPPE

Globus Drahtseil GmbH & Co. KG
Herderstraße 24
D-40721 Hilden
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Fax (0 21 03) 4 00 22
Internet www.globus-hebetechnik.de
E-Mail info@glds.de

Tel.: (0 21 03) 94 42-0

customer ID: (if known)

_____

already client yes ☐ no ☐

Order-No.	name	amount	single price	total price

Mindestbestellwert EUR 100,00 oder Aufschlag EUR 30,00

Total without VAT _____

Address for account:

Company name: _____

Industry: _____

Street/No./P.O. Box: _____

Postal code/City: _____

e-mail: _____

_____

Calendar date Legally binding signature

Address for shipment: ☐ **such as adress for account**

Company name: _____

Street/No.: _____

Postal code/City: _____

District: _____

Please complete:

responsible person: _____

Phone No. (for notification): _____

Fax No. _____

You receive the goods to our Terms and Conditions.

Magnum-X SMART High Performance Round Slings up to 40 t

Heavy lifting technology for wear-intensive applications

- Sheath interchangeable
- Inner sheath protects the core
- After repair, practically new
- Long service life
- Good handling
- Standard RFID transponder

RFID integrated
The Magnum-X SMART round sling is already equipped with an EPIS RFID transponder. This allows for easy product identification and management.

Version	Capacity loop [kg]	Coating by WLL [mm]	Contact width by WLL [mm]	L min. [m]	L max. [m]	Order-No.	Price €
Magnum-X SMART 20000	20000	19	84	2,5	30	MGS.020.00	on request
Magnum-X SMART 30000	30000	24	94	2,5	30	MGS.030.00	on request
Magnum-X SMART 40000	40000	28	114	2,5	30	MGS.040.00	on request

4-t-/5-t-Spannfix-lashing acc. to EN 12195-2 with TFI 500

- Yellow chromed ratchet
- Abrasion resistant lashing
- Quality Tested

NEW With TFI

Under the same conditions you need less lashing when using the Spannfix 4/5 t an additional fixture - TFI (Tension Force Indicator). With the TFI you can prove that at the fastened end a pre-stressed force of 500 daN is attained. Together with the 250 daN at the loose end each Spannfix lashing attains 4/5, a total pre-stressed force of 750 daN in the strapping.

A Tie down (hook) B Snap links C Claw hook

08024

Hook	LC [daN]	LC [daN]	LC [daN]	STF [daN]	Band width [mm]	Stand. length IG [m]	Fixed end FE [m]	Order-no.	Price/ piece €
4 t Spannfix-lashing with TFI 500									
A	2000	4000		500	50	8,00	0,50	ZG.0405.SH	16,40
B	2000	4000		500	50	8,00	0,50	ZG.0405.KB	26,70
C	2000	4000		500	50	8,00	0,50	ZG.0405.KH	25,05
5 t Spannfix-lashing with TFI 500									
A	2500	5000		500	50	8,00	0,50	ZG.0505.SH	16,60
B	2500	5000		500	50	8,00	0,50	ZG.0505.KB	34,05
C	2500	5000		500	50	8,00	0,50	ZG.0505.KH	27,20

2-X 2-Point Fall-Arrest Harness according to EN 361

With corrosion-resistant steel fittings

The 2-X fall-arrest harness is lightweight and made of high quality ribbons and corrosion-resistant fittings made of steel and offers the highest wearing comfort. The fall- arrest harness is equipped with a stable design and a non-rotating triangle in the back area. The manual is in pictogram displayed on the label and thus ensures a simple application of the harness. The front and rear eyelets make the fall-arrest harness ideal for use in confined spaces and in the fall hazard areas. For the harness diverse accessories are available. For scaffold workers it can, for example, be equipped with wear protection for the shoulder area.

Typ	Bestell-Nr.	Preis/Stück €
2-X Fall arrest harness	D.038.060.1	88,20

Surcharge

Order form

Fax: (0 21 03) 4 00 22

GLOBUS HEBETECHNIK
KÜNNE GRUPPE

Globus Drahtseil GmbH & Co. KG
Herderstraße 24
D-40721 Hilden
Tel. (0 21 03) 94 42-0
Fax (0 21 03) 4 00 22
Internet www.globus-hebetechnik.de
E-Mail info@glds.de

Tel.: (0 21 03) 94 42-0

customer ID: (if known)

_____

already client yes ☐ no ☐

Order-No.	name	amount	single price	total price

Mindestbestellwert EUR 100,00 oder Aufschlag EUR 30,00

Total without VAT _____

Address for account:

Company name: _____

Industry: _____

Street/No./P.O. Box: _____

Postal code/City: _____

e-mail: _____

_____

Calendar date Legally binding signature

Address for shipment: ☐ **such as adress for account**

Company name: _____

Street/No.: _____

Postal code/City: _____

District: _____

Please complete:

responsible person: _____

Phone No. (for notification): _____

Fax No. _____

You receive the goods to our Terms and Conditions.

Einzeltragfähigkeiten

Anschlagseil „Flämisches Auge“ DIN EN 13411-3 mit SE

Seilnenn-Ø [mm]	Tragfähigkeit [kg]		
Belastungsfaktor	1,0	2,0	1,0
10	1150	2300	1250
12	1700	3400	1800
14	2250	4500	2500
16	3000	6000	3200
18	3700	7400	4000
20	4600	9200	5000
22	5650	11300	6300
24	6700	13400	7500

Polyester-Hebebänder nach DIN EN 1492-1

Seilnenn-Ø [mm] Nenntragfähigkeit [kg]	Tragfähigkeit [kg]				
	einfach direkt	einfach geschnürt	einfach umgelegt β bis 6°	Neigungswinkel β bis 45°	45° - 60°
Bel.-Faktor	1,0	0,8	2,0	1,4	1,0
1000	1000	800	2000	1400	1000
2000	2000	1600	4000	2800	2000
3000	3000	2400	6000	4200	3000
4000	4000	3200	8000	5600	4000
5000	5000	4000	10000	7000	5000
6000	6000	4800	12000	8400	6000
8000	8000	6400	16000	11200	8000
10000	10000	8000	20000	14000	10000

Polyester Rundschlingen nach DIN EN 1492-2

Seilnenn-Ø [mm] Nenntragfähigkeit in kg	Tragfähigkeit [kg]				
	einfach direkt	einfach geschnürt	einfach umgelegt β bis 6°	Neigungswinkel β bis 45°	45° - 60°
Bel.-Faktor	1,0	0,8	2,0	1,4	1,0
500	500	400	1000	700	500
1000	1000	800	2000	1400	1000
2000	2000	1600	4000	2800	2000
3000	3000	2400	6000	4200	3000
4000	4000	3200	8000	5600	4000
5000	5000	4000	10000	7000	5000
6000	6000	4800	12000	8400	6000
8000	8000	6400	16000	11200	8000
10000	10000	8000	20000	14000	10000
15000	15000	12000	30000	21000	15000
20000	20000	16000	40000	28000	20000
25000	25000	20000	50000	35000	25000
30000	30000	24000	60000	42000	30000
40000	40000	32000	80000	56000	40000

Anschlagketten VIP Sondergüte DIN EN 818

Kettennenn-Ø [mm]	Tragfähigkeit [kg]				
	einsträngig	Tragfähigkeit in kg zweisträngig 0-45°	45-60°	drei- und viersträngig 0-45°	45-60°
Bel.-Faktor	1,0	1,4	1,0	2,1	1,5
4	630	880	630	1320	950
6	1500	2100	1500	3150	2250
8	2500	3500	2500	5250	3750
10	4000	5600	4000	8400	6000
13	6700	9500	6700	14000	10000
16	10000	14000	10000	21000	15000
20	16000	22400	16000	33600	24000
22	20000	28000	20000	42000	30000

Anschlagketten in Güteklasse 12-ICE

6	1800	2500	1800	3750	2700
8	3000	4250	3000	6300	4500
10	5000	7100	5000	10600	7500
13	8000	11200	8000	17000	11800
16	12500	17000	12500	26500	19000

VRS Starpoint in Kraftrichtung ausrichten

Zugrichtung	für eine Schraube		für zwei Schraube
Gewindegröße	zulässige Höchstbelastung in kg		
M6	500	100	140
M8	1000	300	420
M10	1000	400	600
M12	2000	750	1000
M16	4000	1500	2100
M20	6000	2300	3200
M24	8000	3200	4500
M30	12000	4500	6300
M36	16000	7000	9800
M42	24000	9000	12600
M48	32000	12000	16800

Anschlagwirbel VLBG in jede Richtung belastbar

Zugrichtung	für eine Schraube		für zwei Schraube	
Anschlagart	zulässige Höchstbelastung in t			
Strangzahl	1	1	2	
Belastungsrichtung	0°	90°	0-45°	45-60°
Faktor	1	1	1,4	1
M 8	0,3	0,3	0,42	0,3
M 10	0,63	0,63	0,88	0,63
M 12	1,0	1,0	1,4	1,0
M 16	1,5	1,5	2,1	1,5
M 20	2,5	2,5	3,5	2,5
M 24	4,0	4,0	5,6	4,0
M 27	4,0	4,0	5,6	4,0
M 30	5,0	5,0	7,0	5,0
M 36	7,0	7,0	9,8	7,0
M 36	8,0	8,0	11,2	8,0
M 42	10,0	10,0	14,0	10,0
M 42	15,0	15,0	21,0	15,0
M 48	20,0	20,0	28,0	20,0
M 16 Niro	1	1	1,4	1
M 20 Niro	2	2	2,8	2

Anschlagwirbel Güteklasse 10, RUD (VWBG) in jede Richtung belastbar

Gewindegröße	Typ WBG	für eine Schraube			für zwei Schrauben	
Belastungsricht.		X	Y	zul. Höchstbel. [t]	X	Y
M33	VWBG 6(7,5)	6,0	(7,5)	15,0	12,0	(15,0)
M36	VWBG 8(10)	8,0	(10,0)	15,0	16,0	(20,0)
M42	VWBG 12(13)	12,0	(13,0)	17,0	24,0	(26,0)
M45	VWBG 12(15)	12,0	(15,0)	18,0	24,0	(30,0)
M48	VWBG 13(16)	13,0	(16,0)	25,0	26,0	(32,0)
M52	VWBG 14(20)	14,0	(20,0)	25,0	28,0	(40,0)
M56	VWBG 16(22)	16,0	(22,0)	28,0	32,0	(44,0)
M64	VWBG 16(25)	16,0	(25,0)	28,0	32,0	(50,0)
M72	VWBG 31,5(40)	31,5	(40,0)	50,0	63,0	(80,0)
M80	VWBG 35(48)	35,0	(48,0)	50,0	70,0	(90,0)
M90	VWBG 40(50)	40,0	(50,0)	50,0	80,0	(100,00)

Achtung: Belastungsrichtung beachten!

Ringschraube DIN 580 Werkstoff C 15

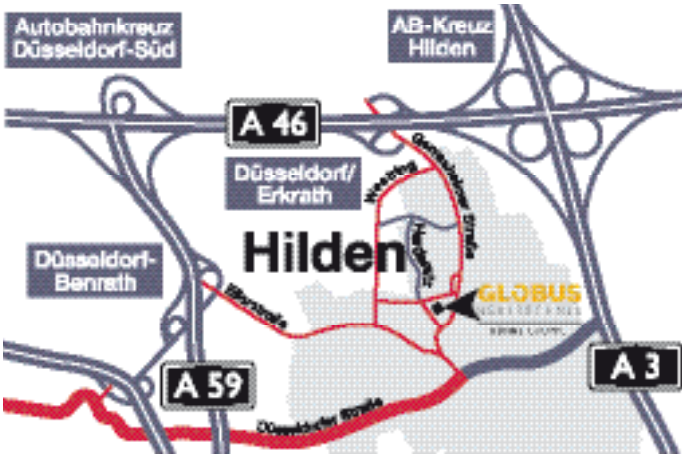
Gewindegröße	für eine Schraube	für zwei Schraube
	zulässige Höchstbelastung in kg	
M 8	140	100
M10	230	170
M12	340	240
M16	700	500
M20	1200	860
M24	1800	1290
M30	3600	2300
M36	4600	3300
M42	6300	4500
M48	8600	6100

GLOBUS HEBETECHNIK
KÜNNE GRUPPE

Ihr zertifizierter Partner für Lastaufnahme- und Anschlagmittel nach EN ISO 9001:2008

	Telefon	Telefax
Zentrale		
Barbara Remmel	02103/9442-10	02103/40022
Außendienst		
Oliver Beek	0172 2302831	02103/9442-21
Walter Beek	0152 22555046	02103/9442-21
Axel Worm	0157 72944202	02103/9442-21
Horst Schwerbel	0157 72944203	02103/9442-21
Thorsten Kleine	0157 72944204	02103/9442-21
Verkauf		
Thomas Urban	02103/9442-12	02103/9442-21
Tim Remmel	02103/9442-23	02103/40022
Markus Löken	02103/9442-25	02103/40022
Claudia Opitz	02103/9442-26	02103/40022
Thomas Schliwa	02103/9442-32	02103/40022
Sarah Wesoly	02103/9442-37	02103/40022
Betriebseinricht. & Arbeitsschutz		
Helga Heinen	02103/9442-27	02103/9442-29
Matthias Geiß	02103/9442-8844	02103/9442-29
Prüf- & Reprataturservice		
Michael Steinweg	02103/9442-13	02103/40022
Alex Röhrig	02103/9442-15	02103/40022
Rolf Abs	02103/9442-8838	02103/40022
Konstruktion/LAM		
Olga Schluter	02103/9442-16	02103/9442-21
Cono Massara	02103/9442-35	02103/9442-21
Patrick Emser	02103/9442-36	02103/9442-21
Olga Arvan	02103/9442-36	02103/9442-21
Michael Baumann	02103/9442-8842	02103/9442-21
Einkauf		
Elsbeth Löken	02103/9442-18	02103/40019
Therese Urban	02103/9442-24	02103/9442-21
Angelika Kiel	02103/9442-30	02103/9442-21
Angelika Beek	02103/9442-34	02103/9442-21
Versand		
Thomas Coenen	02103/9442-20	02103/40022
Betriebsleitung		
Peter Goertz	02103/9442-96	02103/40022
EDV		
Daniel Helbach	02103/9442-22	02103/40022

So finden Sie uns:



Geschäftszeiten:

Mo.-Do. 7.30 Uhr bis 17.00 Uhr
Fr. 7.30 Uhr bis 15.00 Uhr

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Duisburg (0203) 81635
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