



## FULL CATALOGUE

Fall protection systems

Personal protective equipment for the prevention of falls

**2017**

# SAFE AT WORKPLACE



Dear customers,

within the 4.0 industry era people and machines are highly efficient working together in intelligent and flexible work places.

Nevertheless fall endangered areas at industrial work places will still be there. Since years we occupy with tasks in work safety, especially in the area of fall protection systems and personal protective equipment for the prevention of falls. For the year 2017 you will find valuable notes to the complexity of this theme on the following pages as well as a broad range of products and services.

Take advantage of this offer and take us with you on the journey to your work places.

We advise you to all questions and find common solutions at the selection of the necessary products and systems.

## YOUR UNBEATEN BENEFITS AT CARL STAHL

### SOLUTIONS NOT JUST PRODUCTS

We offer you perfect solutions to your special requirements regarding safety, ergonomics and efficiency.

### POWERFUL PARTNERS

High quality products and delivery performance based on the cooperation with international leading manufacturers.

### CONSULTATION SERVICE ON-SITE

68 Service-Centers worldwide - also close to you. Individual advice from our experts.

### EXPERTISE OF THE MARKET LEADER

Benefit from 137 years of international experience and a complete range of wire rope and lifting equipment.

### REPAIR SERVICE

Our experts in one of our Service-Centers will be pleased to repair your lifting equipment.

### COMPREHENSIVE SEMINAR PROGRAM

Recognised experts transmit knowledge in wire rope and lifting technology.

### THE NEW KIND OF INDUSTRIAL SAFETY

With Carl Stahl Integrated Services you will meet a major part of industrial safety requirements in your company.

### ERGONOMIC WORK PROCESSES

High grade work place solutions from Carl Stahl improve processes in your company and increase ergonomics.

### PROJECT PLANNING

Be it production halls, workshops, workplaces - we plan with you - right from the beginning.

# STRONG BRANDS!

Our premium brands within the fall protection systems and personal protective equipment section:



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# YOUR NEW

# HELMET

Safety at work with the  
right helmet



**KASK**

## PLASMA AQ Helmet, Standard EN 397

The comfortable, easy to wear helmet with ventilation, attachment clips for headlamps, removable internal padding and individual size adjustment by rotary knob.

For more information about this helmet please see page 148.



Fitting for visor



Helmet holder

Ventilation



Individual size adjustment  
by rotary knob

High-grade polystyrol  
inner layer



Removable  
internal padding

Attachment clips for headlamps



Bayonet adapter  
attachment for  
ear protection

Adjustment for  
chin strap

# THE

# IGNITE SERIES

Honoured with the German Design Award 2017 in gold for excellent product design and highest functionality!



## IGNITEION

Fall arrest- and work positioning harness

Allround-harness for classic applications in the construction industry and maintenance with simplified adjustments in the chest- and leg area.

For more information please see page 40.



## IGNITETRION

Fall arrest- and work positioning harness

Powerful complete harness for industry and craft. Extremely flexible adjustable straps, which are guided through the thin but efficiency hip pad.

For more information please see page 40.



## IGNITEPROTON

### Fall arrest- and work positioning harness

Complex designed harness with thermoformed AIRPAD hip pads and clever construction. Leaves nothing to be desired in wearing comfort and useability.

For more information please see page 40.



## IGNITEARGON

### Fall arrest- and work positioning harness

Solid harness for rope access technology, which convinces by many improvements in ergonomics, useability and a highly wearing comfort.

For more information please see page 41.



ONLY

**SAFE**

IS SAFE

with the 2017 novelties



## NEWTON EASYFIT HI-VIZ Fall arrest harness

Easy to put on Fall Arrest Harness with good visible vest.

For more information please see page 51



## TACTIKKA E93ACA Headlamp

Ultra-compact HYBRID-Headlamp with several lighting modes.

For more information please see page 160



## Fall protection for tools

Tool attachments, Quick Wrap Tapes, D-rings, Adjustable wristbands, Trigger2Trigger Coil Tether

For more information please see pages 164-165

# FALL PROTECTION DURING AIRCRAFT MAINTENANCE

## VACUUM ANCHOR SYSTEM

### MOBI-LOK™ ACC. TO EN 795

During maintenance of aircrafts the maintenance personnel often has to be anchored in dangerous heights and on smooth surfaces which can cause the risk of slipping or falling. The sensitive surface of the aircraft must never be damaged during these services.

With the flexible vacuum anchor system Mobi-Lok™ Carl Stahl offers an innovative, highly variable solution which offers maximum safety during work in heights and simultaneously saves the surface of the aircraft.





## Vacuum Anchor System Mobi-Lok™

Tested for fall protection  
and certified acc. to EN 795  
class B.

Page 110

## Safety railings as collective protection on flat roofs of new and old buildings

The Barrial®-System basically consists of three types of railing:

- Barrial® fixed
- Barrial® self-supporting
- Barrial® folding

**Material : Aluminium**

Depending on the property, fastening area, installation method and visual and functional requirements, the different shoe types, post types and options offer a broad range of usage and design options.

The simple installation of the fully-compatible components and their ability to be adjusted is highly rated on construction sites.

The surface treatment (Danilac) in the factory-own powder coating system also makes it possible to individually adapt the colour of the Barrial railings to that of the property.



### Colour variety

Due to its filigree optic the railing in painted version (250 RAL colours to choose) perfectly fits to the structure of the building.

Railing type	Installation area in several shoe types	Pillar			Post foldable	Parapet capping option	Skirting option
		straight	rounded	inclined 15° / 30° / 45°			
Barrial fixed	Inside of parapet wall	✓	✓	✓		✓	
Barrial fixed	Facade		✓	✓		✓	✓
Barrial fixed	On parapet wall	✓	✓	✓		✓	✓
Barrial fixed	On roof surface	✓	✓	✓		✓	✓
Barrial self-supporting	On roof surface	✓	✓	✓ ✓	✓	✓	✓
Barrial folding	Inside of parapet wall				✓	✓	
Barrial folding	On parapet wall				✓	✓	

Height- and depth variable consoles for installation in insulated parapet walls available.

Railing type	Item no.	Price/€
Barrial aluminium-safety railing	45101000 035000	<b>Project related</b>
Barrial rooflight dome railing	45102000 035001	<b>Projektbezogen</b>
Barrial corridor	45102500 035000	<b>Projektbezogen</b>

## Carl Stahl Service, that convinces!

Comprehensive, professional support from planning through to implementation  
We support you throughout all your project planning phases:

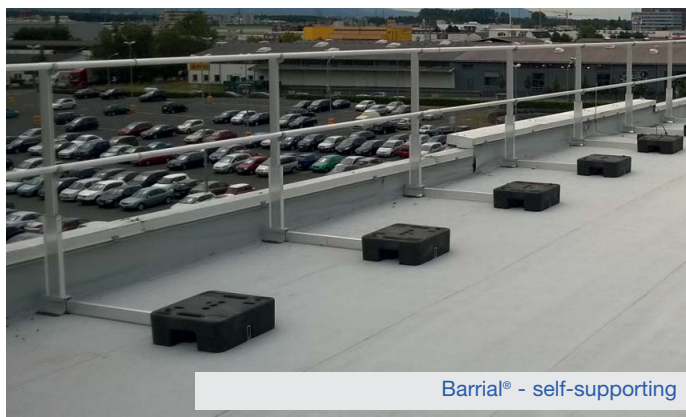
- Safety analysis
- Clarification of technical details
- Proposal of suitable solutions
- Measurements on the construction site
- Planning using special Danisoft software
- Products supplied made-to-measure and with a layout drawing
- Technical support during installation
- After-sales service

**For further information please contact your local Carl Stahl dealer!**

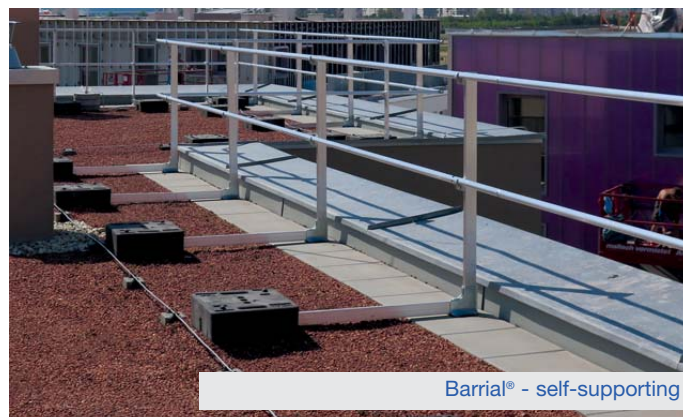




## Barrial® - a extremely versatile railing system



Barrial® - self-supporting



Barrial® - self-supporting



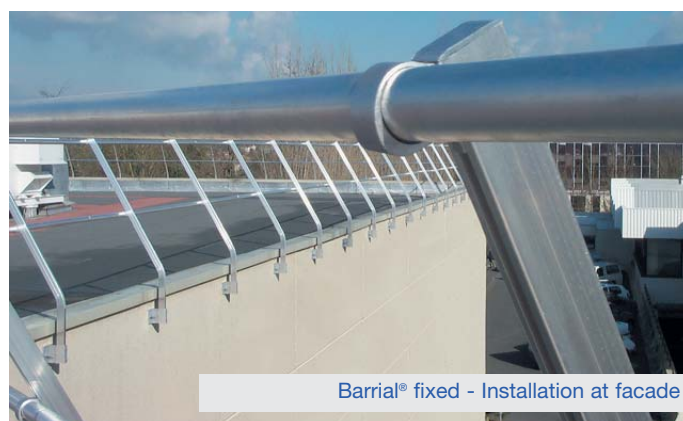
Barrial® - self-supporting rooflight dome railing



Barrial® fixed - on parapet wall



Barrial® fixe - inside of parapet wall



Barrial® fixed - Installation at facade



Barrial® fixed - Installation on roof surface



Barrial® foldable - on parapet wall





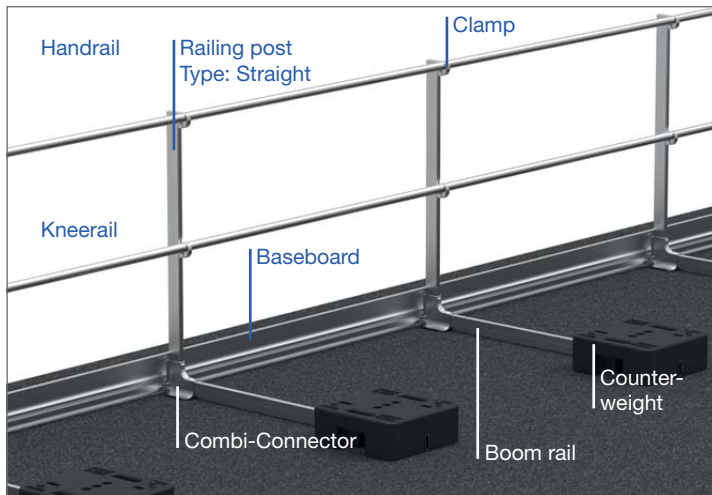
## Practible, elegant and high-class

The load supported railing made from aluminium guarantees safety during all maintenance and care works on privately used flat roofs.

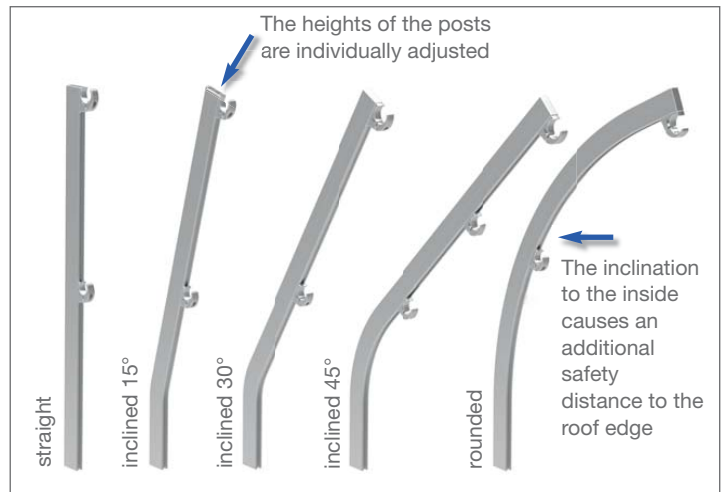
Barrial® self-supporting fulfills optimally all legal regulations for a permanent collective prevention against fall.

- ✓ Non-penetrative
- ✓ Without thermal bridge
- ✓ No sound transmission
- ✓ No warranty regulation problems
- ✓ Fast installation due to pre-installed clamp
- ✓ Functional design

## The components of the system



## Flexible posts



## Counterweights made of 100 % recycled PVC with 10 years warranty

- CO2-neutral and 100 % recyclable (with guaranteed redemption system)
- drillable, screwable, millable and cuttable
- UV- and weather resistant
- Material compatible to all usual sealing sheets
- Grip recesses for a safe transport and high wearing comfort
- Space-saving and stackable
- Fixing of the weight on the boom rail by an self-drilling screw



## Practically combi-connector

- Connection of post and boom rail by easy plug in
- Fixation by integrated clamp with just one screw
- Especially space-saving during transport
- Non-slip protective cap at the bottom
- Height adjustment of railing post up to 30 mm possible
- Mounting fixture for an easy installation of the baseboard by quick connector



## Practically clamp mounting

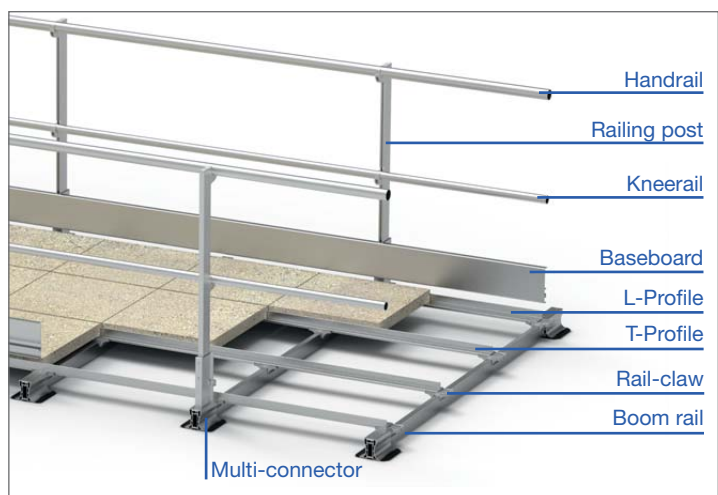
- Fast installation by factory-made by pre-assembled clamp mountings
- No scratching of the profiles during installation
- Easy adjustment without disassembling
- Easy to open and close with just one tool



## Escape-, rescue- and maintenance routes with system

- ✓ Height adjustment up to 300 mm
- ✓ Supported by load, without penetration of the sealing
- ✓ Modular system for variable route widths
- ✓ Patented rail claw, no pre-drilling
- ✓ Installation by minimal amount of tools
- ✓ Fast connection of the parts
- ✓ Regulation compliant, tested and certified
- ✓ Design in Alu natural or painted in RAL
- ✓ Special designs for schools and play schools

## The components of the system



### Aluminium boom rail

- Solid extrusion moulding profile with mounting groove Strangpressprofil
- Continuous height adjustable
- Easy installation at the post sleeve by fast-connector



### Practically clamp mounting

- Fast installation by factory-made by pre-assembled clamp mountings
- No scratching of the profiles during installation
- Easy adjustment without disassembling
- Easy to open and close with just one tool



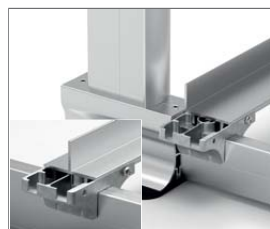
### Multi-connector with level compensation function

- Compensation of level differences between 0 up to 300 mm possible (bigger sleeve heights on request)
- Mounting fixture for an easy installation of the baseboard by quick connector



### Innovative rail-claw

- solid aluminium die-cast part
- Easy adjustment on the boom rail
- Connecting part between boom rail and L-/T-Profiles
- Extra-wide for practicable design of profile-joints
- No pre-drilling necessary
- Fixation with an self-drilling screw



### L- and T-Profiles for mounting of floor covering

- Specially manufactured profiles with a high stability
- Profiles were clamped not screwed
- Very fast installation time, completely without drilling



### Door element

- Precast standard elements
- Automatic closing mechanism
- Direction of doorway to the inside
- Easy assimilation by clamp butt connector



### Counterweights made of 100% recycelt PVC

- Counterweights made of 100% recycelt PVC with 10 years warranty
- CO2-neutral and 100 % recyclable (with guaranteed redemption system)
- drillable, screwable, millable and cuttable
- UV- and weather resistant
- Material compatible to all usual sealing sheets
- Grip recesses for a safe transport and high wearing comfort
- Space-saving and stackable
- Flexible installation and load distribution by steps of 12,5 kg
- Fixing of the weight on the boom rail by an self-drilling screw





## Horizontal cable mesh with demonstrated protection against falls in accordance with European Technical Approval ETA-13/0650

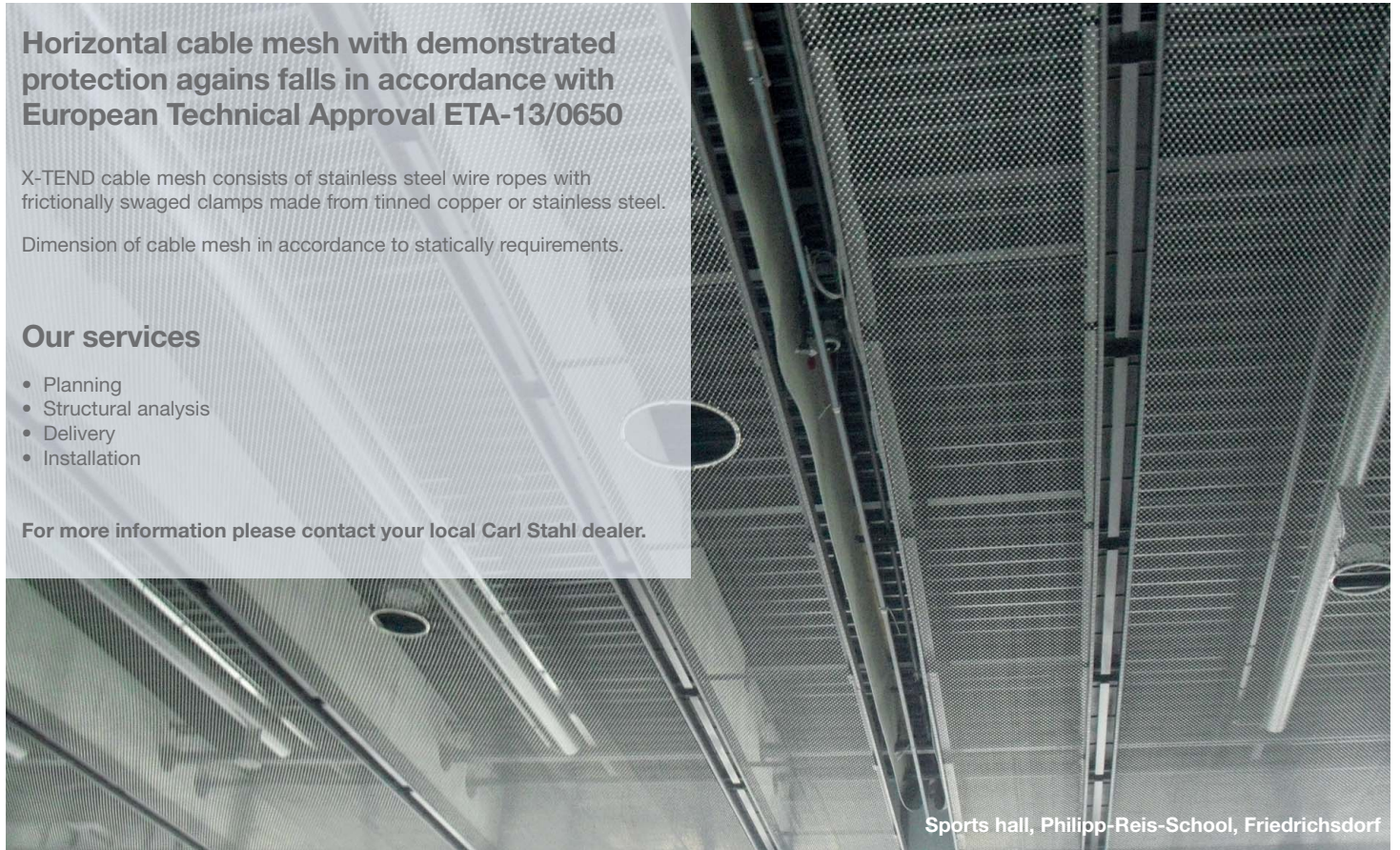
X-TEND cable mesh consists of stainless steel wire ropes with frictionally swaged clamps made from tinned copper or stainless steel.

Dimension of cable mesh in accordance to statically requirements.

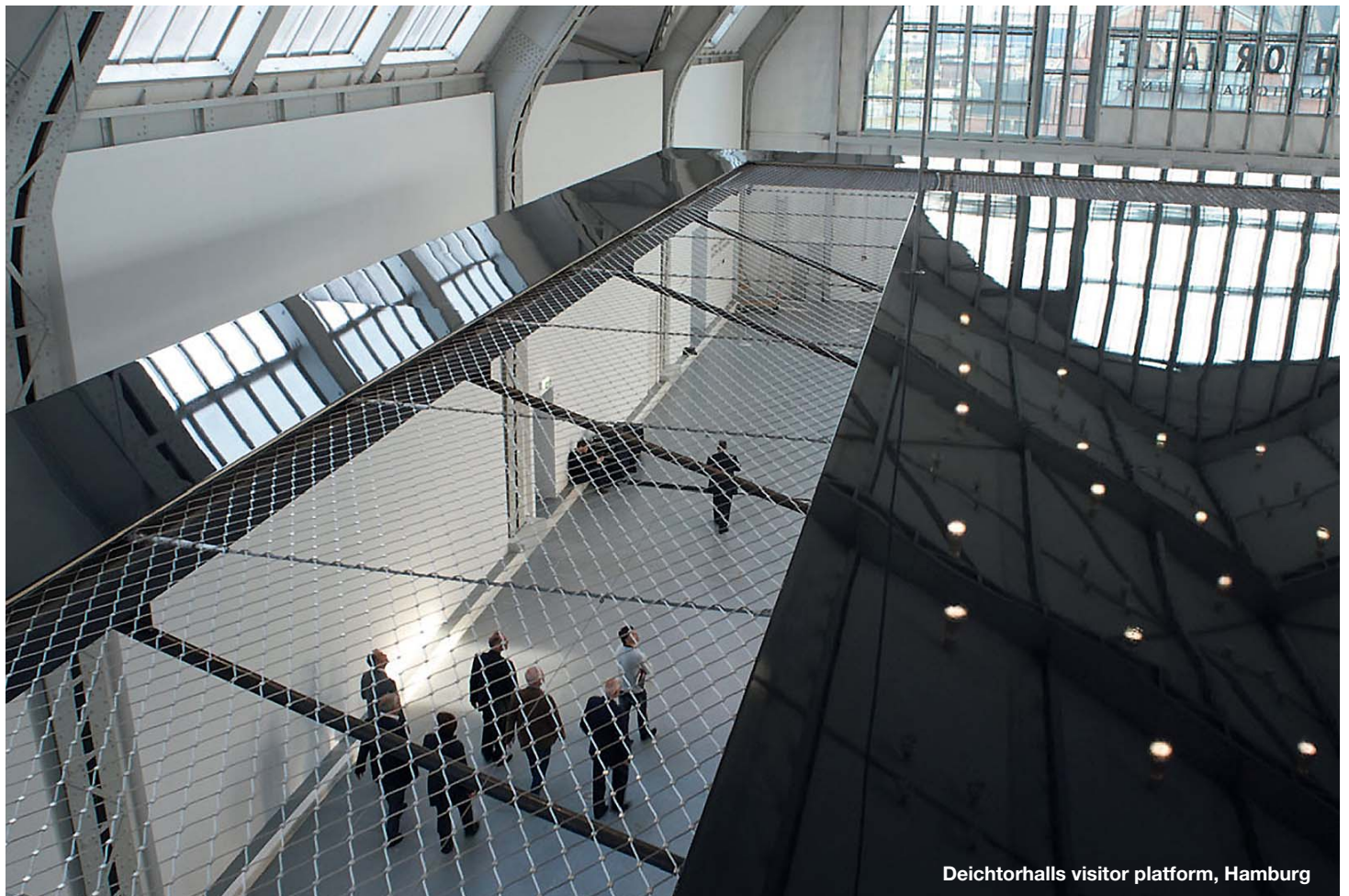
### Our services

- Planning
- Structural analysis
- Delivery
- Installation

For more information please contact your local Carl Stahl dealer.



Sports hall, Philipp-Reis-School, Friedrichsdorf

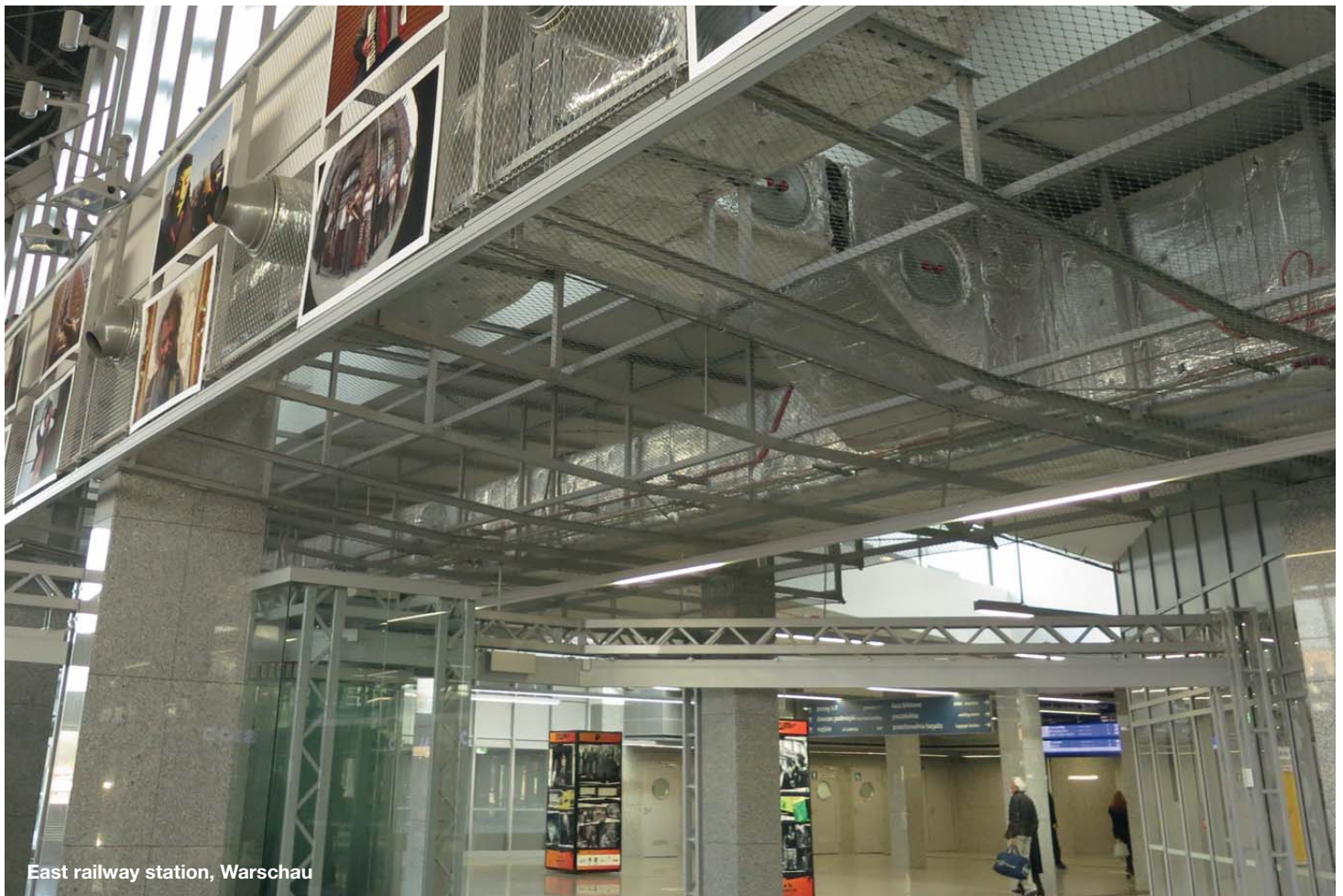


Deichtorhalls visitor platform, Hamburg





Helipad Hospital St. Marienwirth, Bad Kreuznach



East railway station, Warschau



## Safety nets

Safety nets can prevent people from falling and incurring serious or even fatal injuries. They can also prevent objects from falling onto the lower areas of construction sites, e.g. when installing overhead lines, constructing houses etc. Attached horizontally, they provide effective accident prevention in line with the provisions of the German employers' insurance associations for the construction sector. All the nets are produced in compliance with European Standard EN 1263-1, as is evidenced by GS marks.

**Caution: remember that safety nets must be inspected annually!**



### Safety nets edged with rope

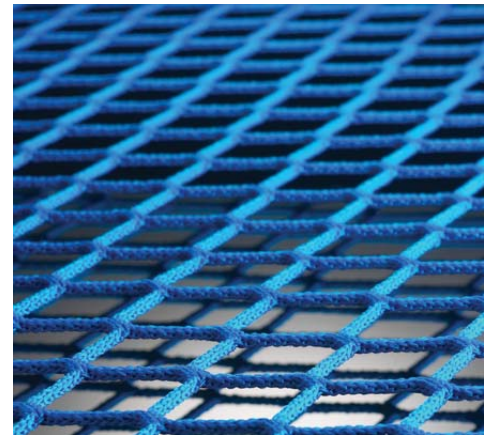
Knotless safety net conforming to EN 1263-1, system S, square mesh, fully edged with 30 kN rope, approx. 12 mm in diameter.

Material: high tenacity polypropylene, mesh size: approx. 100 mm

Material thickness: approx. 4.75 mm

Net class A2, GS test certificate 7100004

Type	Size in m	Colour	Weight in kg	Item no.
19040-100-01	5 x 10	green	13.7	45151000 015004
19040-100-04	5 x 10	blue	13.7	45151000 015003
19041-100-01	6 x 10	green	16.5	45151000 015008
19041-100-04	6 x 10	blue	16.5	45151000 015007
19042-100-01	10 x 10	green	27.5	45151000 015002
19042-100-04	10 x 10	blue	27.5	45151000 015001



### Suspension rope according to EN 1263-1, type L

For single-rope suspension, one end with spliced loop, the other end firmly sealed off, minimum rope breaking strength of 30 kN.

According to BGR 179, safety nets must be fastened to stable suspension points at a maximum distance of 2.50 m. When using single-rope suspension, the rope must have a minimum breaking strength of 30 kN.

Type	Length in m	Colour	Weight in kg	Item no.
2011	2.50	white	0.200	45151000 015011



### Safety nets with rope edge and clips

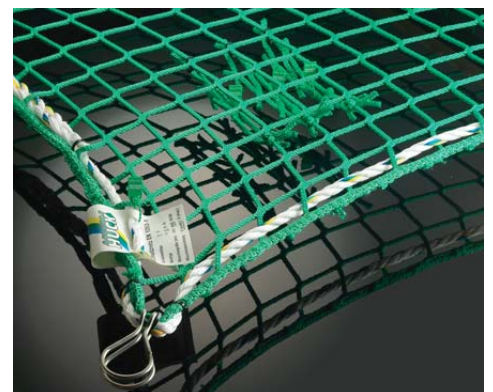
Knotless safety net conforming to EN 1263-1, system S, square mesh, fully edged with 30 kN rope, approx. 12 mm in diameter

Clips at 2.50 m intervals

Material: high tenacity polypropylene, mesh size: approx. 100 mm

Material thickness: approx. 4.75 mm

Type	Size in m	Colour	Weight in kg	Item no.
20030-100-01	5 x 10	green	15.00	45151000 015005
20030-100-06	5 x 10	black	15.00	45151000 015006
20031-100-01	6 x 10	green	18.00	45151000 015009
20031-100-06	6 x 10	black	18.00	45151000 015010





## Side protection nets

Safety nets offer clear benefits as side protection on scaffolds or side fall protection when working on flat roofs, bridges and the like: low weight, quick to attach/detach and minimal space requirement during storage. They not only provide fall protection for people but also offer protection against falling objects. Whether standard or customised versions, all of our nets are produced in line with the requirements of the employers' insurance associations and European Standard EN 1263-1. They are fully edged with an integral surround rope. Alternatively, they can also come with sewn-on quick-connect buckles. Our practical Isilink clips or clamp-lock belt-snap buckles enable the nets to be attached in seconds, even when wearing protective gloves.

## Side protection nets with sewn-on belt snap buckles

Knotless side protection nets conforming to EN 1263-1, safety net system U.  
Made from high tenacity polypropylene, approx. 5 mm in diameter, with integral surround rope and sewn-on belt snap buckles at approx. 75 cm intervals.  
With GS test certificate 03006

Type	Size in m	Mesh size in mm	Colour	Weight in kg	Item no.
3006-100GSV-01	2 x 5	100	green	4.1	45151500 015001
3006-100GSV-04	2 x 5	100	blue	4.1	45151500 015002
3006-100GSV-07	2 x 5	100	red	4.1	45151500 015003
3006-045GSV-01	2 x 5	45	green	6.1	45151500 015004
3006-045GSV-04	2 x 5	45	blue	6.1	45151500 015005
3006-045GSV-07	2 x 5	45	red	6.1	45151500 015006
3008-100GSV-01	2 x 10	100	green	7.7	45151500 015007
3008-100GSV-04	2 x 10	100	blue	7.7	45151500 015008
3008-100GSV-07	2 x 10	100	red	7.7	45151500 015009
3008-045GSV-01	2 x 10	45	green	11.7	45151500 015010
3008-045GSV-04	2 x 10	45	blue	11.7	45151500 015011
3008-045GSV-07	2 x 10	45	red	11.7	45151500 015012



## Light dome nets

A missing light dome protection can cause heavy injuries. Because of that a mobile safety solution for companies is getting more and more interesting to safe their personnel during work on roofs. During maintenance or especially during snow removal in winter, light domes are often be underestimated as potentially sources of danger and cause sadly deadly work accidents.

Roof fall protection and roof safety itself are important terms today for all work or residence which is done on buildings.

For the Huck-light dome net the following inspections exist:

- Roof fall protection in accordance to DIN EN 1263-1
- Anchorage system in accordance to DIN EN 795:1996 Class B
- EG type examination certificate with CE label (CE 0158)

### Parts and dimension of the net:

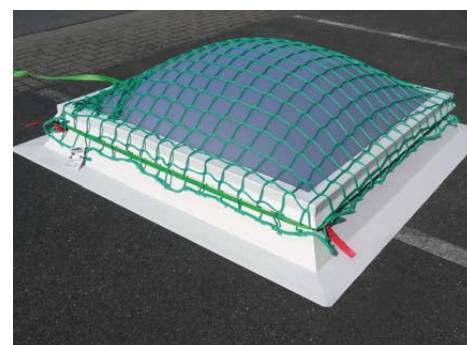
- a) Net 3 x 3 m or rather 2 x 2 m
- b) Handels
- c) Test threads

### Anchorage system:

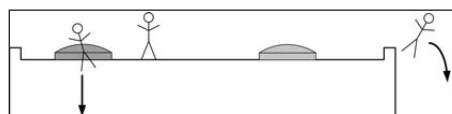
- d) Webbing 8,50 m
- e) Ratchet

### Material :

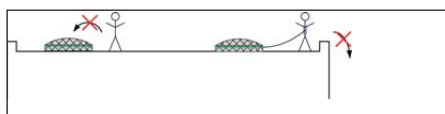
Netting: Polypropylene, high-strength  
Ratchet: hot-dip galvanised steel



**Application:** Fall protection and anchorage system for one person.



**Danger** exists: Fall through light dome or rather person falls from roof edge



**Protection** with light dome net and personal protective equipment against falls

Type	Size in m	Mesh size in mm	Colour	Weight in kg	Item no.
17410-100-01	2 x 2	100 x 100	green	2.5	45152000 035003
17411-100-01	3 x 3	100 x 100	green	3.6	45152000 035004



# Regulations and standards

European regulations: "Who does what?"

European directives: at the suggestion of the Commission, the Council of the European Communities issues directives (laws) establishing general regulations.

The European Committee for Standardisation is the body responsible for the harmonisation and approval of standards and works with the Commission.

The Commission publishes these standards in the official journal of the European Community.

The appointed bodies are determined by the European Commission and continually re-assessed. The manufacturers send them the design specifications of the PPE that require a CE conformity assessment and all the necessary technical documents. They conduct tests and certify that the PPE design specifications in question comply with the provisions of the directive and then issue CE certificates.

New PPE directive of the EU\*. An overview of the most important changes from the point of view of occupational health & safety:

- On 20 April 2016, the new PPE directive of the European Union came into force. It replaces PPE directive 89/686/EEC and is principally aimed at the manufacturers of personal protective equipment (PPE). It is applicable for a transitional period of two years. In this time, manufacturers, government authorities and certification agencies have the opportunity to prepare themselves for the changes. An overview of the most important changes from the point of view of occupational health & safety:
- Some important changes are the result of an altered categorisation of products as PPE. There are three categories to which different test requirements are assigned. In future, products such as ear protectors, life jackets or PPE for protection against chain-saw cuts will come under Category III. This means that they will be subject to monitoring by a certified body (authorised testing agency in the EU).
  - The altered categorisation of PPE also has a consequence for the users of PPE. In Germany, the obligation to give employees practical instructions on the use of PPE applies to protective equipment of Category III. Companies must adapt their instructions to the employees accordingly.
  - In future, manufacturers must provide a so-called declaration of conformity with each individual product. This declaration confirms that the product complies with the requirements of the directive. Until now, it was sufficient to be able to present the declaration of conformity "on request".
  - The scope of the directive is more comprehensive than before. In future, it will apply to all participants in the economy. Whereas, up to now, only the manufacturers have had to check whether their PPE products comply with the safety requirements, dealers and importers will now also be obliged to comply with the directive. They must make sure that the products they trade in have been examined and have a corresponding certificate.
  - Before now, EU type examination certificates were valid indefinitely. According to the new directive, they will now only be valid for a maximum of five years. This means that manufacturers are compelled to test their products at least every five years and either confirm to the certification body that nothing has changed or ask the certification body to independently check any changes. "For a long time", says Dr. Walter Eichendorf, "we have been campaigning for a time limitation on the certificates."
  - The EU Commission has already announced that the PPE directive is to be supplemented with a set of guidelines. It has done this in response to requests for an explanation of the text.

Source: Deutsche Gesetzliche Unfallversicherung (DGUV = Association of Occupational Accident Insurance Funds)

## • Council Directive 89/656/EEC describes the use of PPE at the workplace

This directive describes the correct usage conditions for PPE and its role in improving the health and safety conditions in the workplace.

As stated in this directive, PPE means: "... all equipment designed to be worn or held by the worker to protect him against one or more hazards likely to endanger his safety and health at work..."

On this basis, the directive reminds us that from the moment that health and safety risks are detected, priority must be given to eliminating these by means of collective technical protection or by measures, methods or procedures of work organisation.

PPE should only be considered if the necessary protection level cannot be achieved through the use of one of these methods or in the form of collective protection.

The directive emphasizes that:

- all components of the PPE must comply with the valid regulations such as Council Directive 89/686/EEC;
- all PPE provided must correctly fit the wearer and be suitable for the task to be carried out according to the manufacturer's instructions;
- in the event of several risk factors that require several items of personal protective equipment to be used at the same time, these equipment items must be compatible;
- the PPE components should be designated for personal use in so far as possible.

According to the directive, the employer must therefore:

- conduct a risk assessment study;
- define the equipment properties necessary to protect the employees;
- provide employees with PPE that complies with the legal regulations free of charge;
- conduct regular equipment inspections and note the results on the product's ID cards;
- retain supporting documents on the assessments and the reasons that justify the use of a particular type of PPE.

## \*Definition of personal protective equipment (PPE)

PPE is any type of device or equipment worn or held by a person to protect him/herself against dangers that could be detrimental to his/her health or safety.

## Extract of regulations:

EN 353-1:2014	PPE; Guided type fall arresters including a anchor - part 1: Guided type fall arresters including a rigid anchor
DIN EN 353-2	PPE; Guided type fall arresters including a flexible anchor
DIN EN 341	PPE; Descenders
DIN EN 354	PPE; Lanyards
DIN EN 355	PPE; Energy absorbers
DIN EN 358	PPE for positioning and prevention of falls; positioning systems
DIN EN 360	PPE; Retractable type fall arresters
DIN EN 361	PPE; Fall arrest harnesses
DIN EN 362	PPE; Connectors
DIN EN 363	Fall arrest systems
DIN EN 364	PPE; Test methods
DIN EN 365	PPE; General requirements about instructions for use, marking and packaging
DIN EN 397	Industrial helmets
DIN EN 566	Climber equipment - slings - safety-related requirements and test methods
DIN EN 567	Climber equipment - rope clamps - safety-related requirements and test methods
DIN EN 795-2012	PPE; Anchorage devices
DIN CEN/TS 16415	PPE - Anchorage devices - Recommendations for a similar use of anchorage devices by several people
DIN EN 813	PPE - Seat harnesses
DIN EN 892	Climber equipment - dynamic mountain ropes - safety-related requirements and test methods
DIN EN 958	Climber equipment - fall absorber for usage on alpine climbs, safety-related requirements and test methods
DIN EN 959	Climber equipment - bolts - safety-related requirements and test methods
DIN EN 1496	PPE - Rescue lifting devices
DIN EN 1497	PPE - Rescue harnesses
DIN EN 1808	Safety requirements to hanging personal admission devices - calculation, stability, structure tests
DIN EN 1891	PPE for prevention of falls - kernmantle ropes with low elongation
DIN EN 4426	Equipments for the maintenance of structural works - safety-related requirements to workplaces and routes - planning and execution
DIN EN 12275	Climber equipment - karabiners - safety-related requirements and test methods
DIN EN 12277	Climber equipment - harnesses - safety-related requirements and test methods
EN 12841	PPE - Systems for rope-supported work - rope presettings
DIN 5290-1	Lightweight metal karabiner hook with union nut; Dimensions, requirements and testing





## Personal fall protection in industry

Collective protective measures take absolute priority. The use of personal protective equipment (PPE) is regarded as a last resort and is only permitted if it is not possible or too time and cost-intensive to install railings or scaffolding or to use lifting platforms.

This catalogue has been specially developed for the protection of people working at heights in industry, in particular in the construction industry.

## Combating challenges in the construction industry

We know that there is no more complex work environment than a construction site. Not only is the construction environment constantly changing as the work progresses, but the industry itself is always innovating, with new procedures and materials that present new challenges for your fall protection planning.

Construction sites require a full range of fall protection solutions to meet the needs of a dynamic yet safe workplace. Our customers therefore turn to Carl Stahl for industry expertise, superior-quality products and continual systems innovation.

While Carl Stahl operates with a commitment to safety and quality, each of the brands it offers has their own objectives. For example, **PROTECTA** represents standard equipment with exceptional value and is committed to reliability, quality and cost-effectiveness. **DBI-SALA** represents the ultimate in fall protection for any work environments and is committed to offering an excellent, innovative and broad product range.

Together, the two brands offer our customers access to the most comprehensive range of products.

The world's most technologically advanced safety equipment is developed through the combination of experience, knowledge and state-of-the-art outdoor and indoor testing procedures. This equipment more than complies with both national and international standards, including OSHA, ANSI, CSA and CE. We call this 'creating a contemporary safety standard'.

## Your partner for safety

Our services do not end with the sale of products. The trained professionals at Carl Stahl offer teaching and training measures as well as comprehensive long-term support to ensure the success of all aspects of your fall protection programme.

## The ABC of personal fall protection.

Carl Stahl provides a full array of passive and active fall protection systems. The basic principles behind every personal fall protection system can be described using the ABC of fall protection.

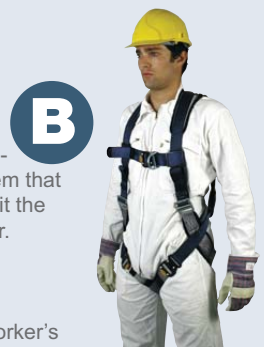
### ANCHORAGE

Fall protection system should only ever be anchored by secure attachment points (on a structure with sufficient load-bearing capacities). The type of anchorage point depends on the construction, the work to be carried out, the installation method and the available structure. The anchorage provides a means of connecting personal protective equipment to the available construction.



### BODY SUPPORT

Fall arrest harnesses provide one or more connection points, which can be used to connect the person to the personal fall protection system. Depending on the application, they can be used as part of a system that prevents the person from falling and to limit the extent of potential injury if a fall does occur.



### CONNECTORS

Connectors are devices that connect the worker's fall arrest harness to the anchorage system. Connectors include lanyards, snap hooks, karabiners, energy absorber devices and special systems such as retractable type fall arresters, ladder systems, guided type fall arresters including a flexible anchor line and rope grabs.



### DESCENT/RESCUE

The descent and rescue of a person who has fallen are essential parts of any fall protection programme.

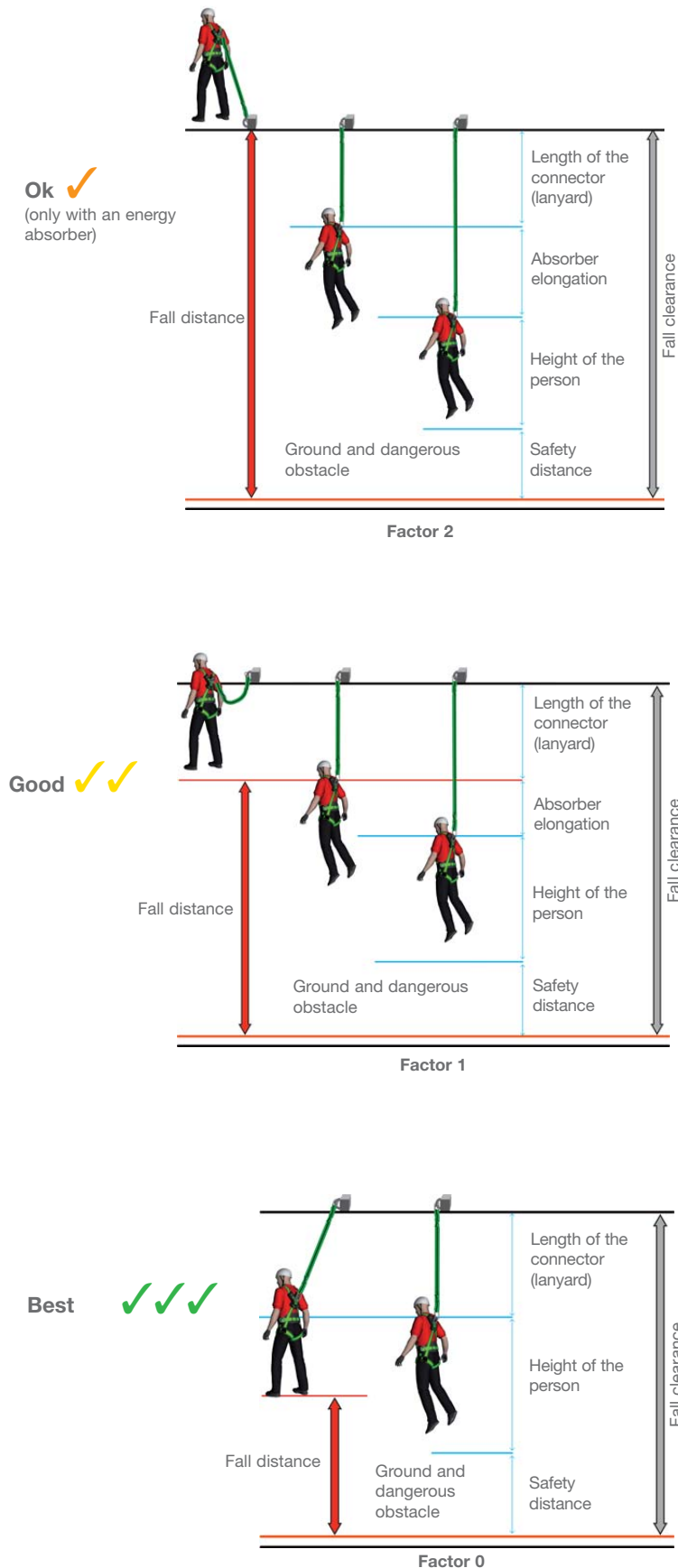


Extract from the „Leitfaden Absturzschutz“ (only available in Germany)

## How to reduce the risks?

The fall clearance distance is the maximum vertical distance that a worker could potentially fall and still avoid contact with a lower level.

### ■ Fall distances



## ■ Calculating Fall Clearance

When using a shock-absorbing lanyard it is important to understand how to calculate the potential fall distance to avoid contact with the lower level. The calculation below gives the minimum fall clearance required between the anchorage point of the lanyard at **fall factor 2** and the lower level.

- Twice the lanyard length (allows for 1 lanyard length plus the worker's height).
- + 1.75 m deceleration distance to allow for maximum elongation of the energy absorber.
- + 1 m safety margin.

### Example:

#### Using a 2 m lanyard in a fall factor 2:

$2 \times 2 \text{ m} + 1.75 \text{ m} + 1 \text{ m}$ .

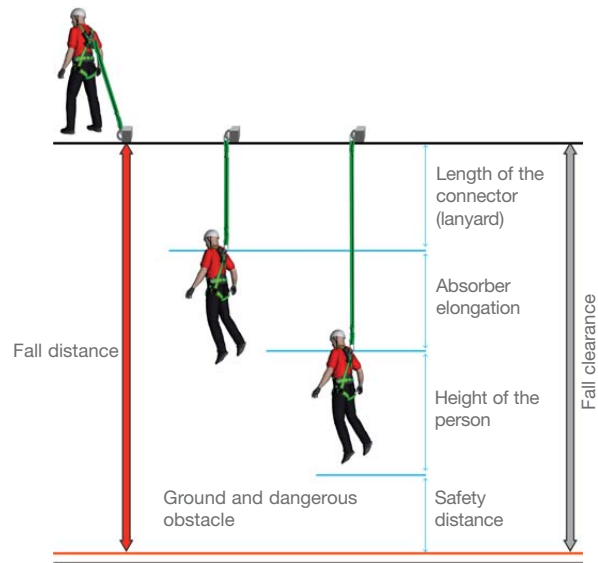
The required fall clearance = 6.75 m

#### Using a 1.5 m lanyard in a fall factor 2:

$2 \times 1.5 \text{ m} + 1.75 \text{ m} + 1 \text{ m}$ .

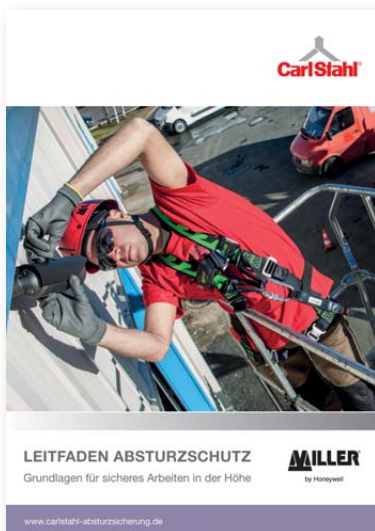
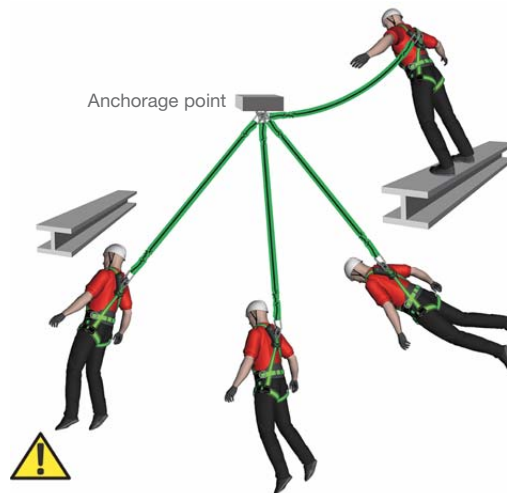
The required fall clearance = 5.75 m

**A personal fall limiter limits the fall distance making it an ideal solution when working at low levels or when fall clearance is critical.**



## ■ The Pendulum Effect

If the lifeline is not anchored vertically over the working place, the worker will swing laterally in the event of a fall, and may get injured. Alternatively two anchorage points either side of the worker can be used to prevent any swing.



**For more information about using personal protective equipment against fall please see our „Leitfaden Absturzschutz“**

Only available in Germany



## PROTECTA

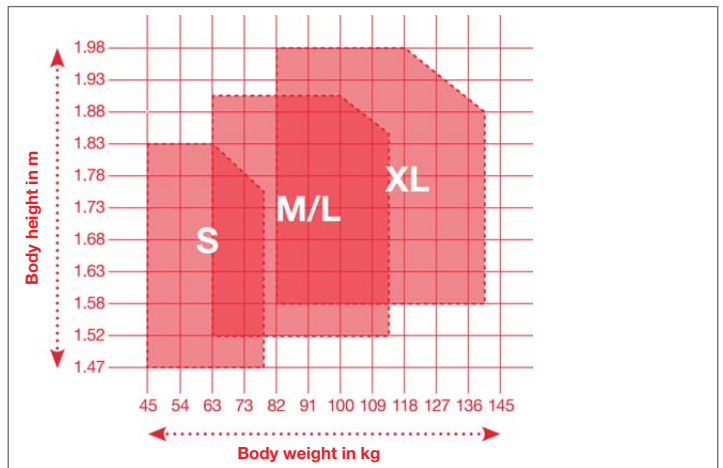
Safe, practical, user-friendly equipment at low prices.

For over 50 years, the brand **PROTECTA** has represented superior-quality fall protection safety equipment around the world.

### The new PRO™ Series of fall arrest and work positioning harnesses

The new enhanced PROTECTA® PRO™ fall arrest harness design fulfills the same safety regulations, but offers more comfort equally, better adjustment options, better fixation of the webbing belt and a better functionality. The comprehensive product series stays the same one of the biggest in this branch. Equally to your requirements in use, a suitable PROTECTA® PRO™ fall arrest harness is available.

PRO™ harness size chart



#### Options for buckles

Standard buckles  
Automatic buckles for more comfort

#### Chest strap

Ideal position for attachment of lanyards and climbing protection runner.  
Lower injury risk in the facial area due to its lower position

#### Easy web adjustment

Sprung brackets prevent a slipping of the web.  
Easy adjustment by pulling down.

#### Strap positioning

Special design in the hip area.  
All seams have no contact to the body for a better comfort



#### Big dorsal attachment ring

Easy attachment  
Suitable for rescue

#### Adjustable shoulder straps

**Web**  
Polyester, Width 45 mm  
Seam: high-strength polyester thread

#### Fall indicator

In case of a fall the seam tears up

#### Covered labels

A covering protects the labels



#### Options with removable upholstery

Can be attached by the user itself at every harness of this series.

Optional for all PRO® -harnesses



Shoulder pad  
AK096NG



Leg pad  
9502120NG

Type	Size	Weight in kg	Item no.
AK096NG Shoulder pad	Unisize	0.17	45204815 015008
9502120NG Leg pad	Unisize	0.12	45204815 015009



## PRO® 1-point fall arrest harness

Back D-ring, standard locks, better adjustment possibilities, fall indicator

Illustration shows type AB10112NG

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB10112NG (13NG) (14NG)	Universal	Back	Standard	1.06 (1.11) (1.15)	EN361	45202610 015005	(004)	(006)

Permissible total weight including equipment = 140 kg



## PRO® 2-point fall arrest harness

Back and front D-ring, standard locks, better adjustment possibilities, fall indicator

Illustration shows type AB11312NG

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB11312NG (13NG) (14NG)	Confined spaces	Back, Chest	Standard	1.13 (1.17) (1.21)	EN361	45202610 015017	(016)	(018)

Permissible total weight including equipment = 140 kg



## PRO® 3-point fall arrest harness

Back D-ring, shoulder rings for entry and rescue from confined spaces, fall indicator

Illustration shows type AB10212NG

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB10212NG (13NG) (14NG)	Universal	Back, Chest	Standard	1.28 (1.30) (1.31)	EN361	45202610 015008	(007)	(009)

Permissible total weight including equipment = 140 kg



## PRO® 5-point fall arrest and work positioning harness

Back and front D-ring, fixation rings and climbing protection ring, fall indicator

Illustration shows type AB116125NG

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB116125NG (35NG) (45NG)	Climbing protection system	Back, Chest, climbing protection	Standard	2.02 (2.06) (2.15)	EN361	45202615 015005	(004)	(006)

Permissible total weight including equipment = 140 kg



## PRO® 5-point fall arrest and work positioning harness

Back D-ring, shoulder rings for entry and rescue from confined spaces, fixation rings

Illustration shows type AB105125NG

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB105125NG (35NG) (45NG)	Confined spaces	Back, Side, Chest	Standard	2.07 (2.14) (2.21)	EN361-358	45202615 015002	(001)	(003)

Permissible total weight including equipment = 140 kg



## PRO® 2-point welder fall arrest harness

Extremely robust and heat resistant (370 °C)  
Especially resistant against possible thermal damages, which can occur during welding.

Illustration shows type AB11313K

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB11313K (13K) (14K)	Steel work, construction	Back, Chest	pass-thru buckle	1.25 (1.30) (1.40)	EN361	45202610 015010	(011)	(012)

Permissible total weight including equipment = 140 kg





## PRO® Hi-Vis vest fall arrest harness

Inclusion of the PRO-fall arrest harness with a safety vest for a quick and easy dressing.

- integrated pockets
- light-weight, breathable textile
- inside mesh-lining and fixations keep the shape of the vest
- dressing like a coat
- Reflecting warning stripes according to EN 471 Class B

Illustration shows type AB10112HVNG

Type and Size S M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M/L)	(XL)
AB10112HVNG (13HVNG) (14HVNG)	Universal	Back	Standard	1.5 (1.56) (1.6)	EN361/EN471	45202610 015002	(001)	(003)

Permissible total weight including equipment = 140 kg



## FLEXA harness

with thorn lock in the leg area.

- comfort-elastic web in the shoulder area
- match to the user
- for a fatigue-free work

Illustration shows type AB12433

Type and Size S M L	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
						Size S	(M)	(L)
AB12432 (33) (34)	Universal	Back, Chest	thorn buckle	1.44 (1.48) (1.92)	EN361	45202610 015021	(020)	(019)

Permissible total weight including equipment = 140 kg



## FLEXA harness

Product line with elastic web and automatic fast-lock, equipped with D-ring at the back and front.

- comfort-elastic web in the shoulder area
- match to the user
- for a fatigue-free work

Illustration shows type AB113EA

Type and Size M/L XL	Area of application	D-Rings	Buckle type	Weight in kg	Standard	Item no.	
						Size M/L	(XL)
AB113EA (ELA)	Universal	Back, Chest	Automatic	1.395	EN361	45202610 015028	(029)

Permissible total weight including equipment = 140 kg

## KIT 1

### for vertical standard work within industry and construction

#### Kit contents:

- 1 x fall arrest harness AB11313NG\*
- 1 x fall arrester „Rebel“ 3100437, L = 6 m
- 1 x karabiner AJ501
- 1 x webbing loop AM450/80 (L = 80 cm)
- 1 x carrying bag 45204600 015011



Type and Size	Area of application	Weight in kg	Item no. Size (M/L)
KIT 1, *Standard size M/L	Industry, Construction	4.57	45205000 015001

## KIT 2

### for vertical standard work within industry and construction

#### Kit contents:

- 1 x fall arrest harness AB11313NG\*
- 1 x fall arrester type Rebel 3590521, L = 10 m including karabiner
- 1 x webbing loop AM450/80 (L = 80 cm)
- 1 x carrying bag 45204600 015011



Type and Size	Area of application	Weight in kg	Item no. Size (M/L)
KIT 2, *Standard size M/L	Industry, Construction	7.55	45205000 015002





## KIT 3 for vertical work and restraint systems

### Kit contents:

- 1 x fall arrest harness AB105135NG\*
- 1 x guided fall arrester AC202/01 „Cobra“
- 1 x stranded rope AC210, Length 10 m, ø 14 mm
- 1 x carrying bag 45204600 015011

Type and Size	Area of application	Weight in kg	Item no. Size (M/L)
KIT 3, *Standard size M/L	Vertical work, Restraint systems	5.35	45205000 015003



## KIT 4 Universal Kit

### Kit contents:

- 1 x fall arrest harness AB10113NG\*
- 1 x positioning sling AE5220WAE
- 1 x webbing loop AM450/80 (L = 80 cm)
- 1 x carrying bag 45204600 015011

Type and Size	Area of application	Weight in kg	Item no. Size (M/L)
KIT 4, *Standard size M/L	Universal	2.70	45205000 015004

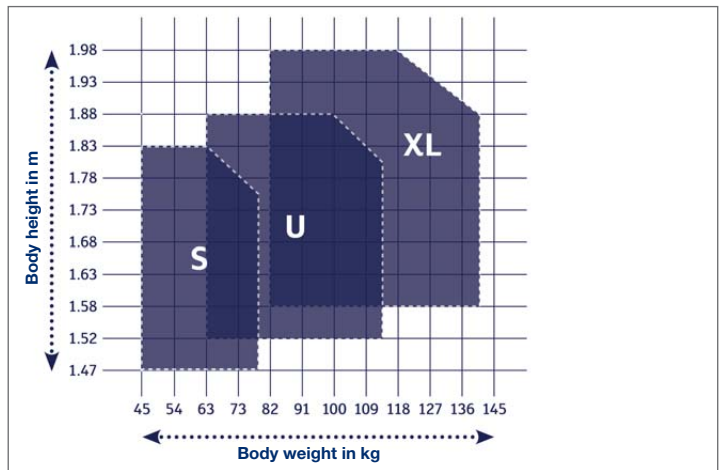
## The new DELTA™ fall arrest harnesses:

Innovative fullbody assistance since more than two decades.  
Robust, practicable and comfortable.



All DBI-SALA harnesses are equipped with i-Safe, an integrated RFID system

DELTA™ harnesses size chart



Permissible user weight including equipment = 140 kg



## DELTA™ Fall arrest and work positioning harness

Front and back D-ring  
Side D-rings

Illustration shows type 1112909

Type and Size Unisize	D-Rings	Buckle type	Positioning Harness	Weight in kg	Standard	Item no. Size Unisize
1112909	Back and Chest, positioning harness	Automatic lock	✓	2.60	EN361, EN358	45202615 015007

Permissible user weight including equipment = 140 kg



## DELTA™ Fall arrest harness

Front and back D-ring, positioning harness, automatic locks

Illustration shows type 1112912

Type and Size Unisize	D-Rings	Buckle type	Weight in kg	Standard	Item no. Size Unisize
1112912	Back and Chest	Automatic lock	1.75	EN361	45202610 015022

Permissible user weight including equipment = 140 kg



## DELTA™ Fall arrest harness

Back D-ring, automatic locks

Illustration shows type 1112918

Type and Size Unisize	D-Rings	Buckle type	Weight in kg	Standard	Item no. Size Unisize
1112918	Back	Automatic lock	1.65	EN361	45202610 015023

Permissible user weight including equipment = 140 kg



## The new ExoFit STRATA™ Fall arrest harnesses:

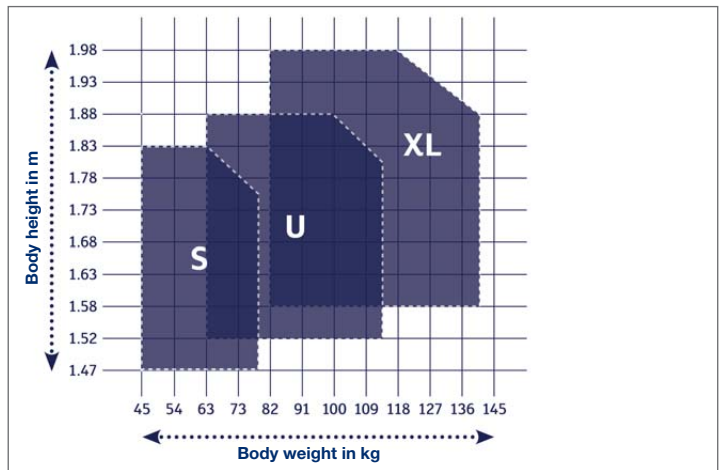
The most comfortable, lightest-wearing, truly innovative fall arrest harness ever created. The ExoFit STRATA™ harness literally takes the weight off your shoulders and redistributes it down to your hips, dramatically reducing shoulder strain and fatigue.

85% less shoulder weight while standing  
64% less shoulder weight during stretching  
+ Almost no impairment of mobility or by body temperature



All DBI-SALA harnesses are equipped with i-Safe, an integrated RFID system

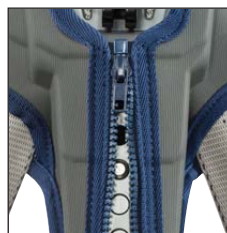
ExoFit STRATA™ fall arrest harness size chart



## Features of the ExoFit™ STRATA fall arrest harness



**EZ-Link™ Quick SRL Adapter**  
No more messing around with the webbing to attach your personal Self-Retracting Lifelines (SRLs). The EZ-Link Quick SRL Adapter lets you quickly attach SRLs to a durable connection point while keeping your dorsal D-ring available. This reduces connection and disconnection time up to 80% compared to competitive harnesses.



**LIFTech™ Load Distribution System**  
This revolutionary LIFTech Load Distribution System - available on all belted models of the ExoFit STRATA - features an adjustable „spine“ that lifts the weight off of your shoulders and transfers it to the base of your torso. Tests resulted in a reduction of forces on shoulders up to 85% compared to leading competitor harnesses.



**Front Snap D-Ring**  
The front D-ring snaps into a vertical position for use with fall arrest or vertical systems. When not in use, it easily stores flat against the chest strap to keep it stowed and out of the way.



**Lanyard Keepers**  
The highly durable breakaway lanyard keepers automatically reset when hooks are pulled out. They're conveniently designed to be adjusted to any position or placement along the webbing.



## ExoFit™ STRATA Fall arrest harness with retrieval D-rings

- TRI-LOCK REVOLVER™ quick connect buckles
- D-rings on the back and front
- Side D-rings
- Shoulder D-rings for rescue positioning lanyard

Standard: EN 361, 358



## Rescue positioning lanyard

Rescue positioning lanyard: The spreader bar prevents the shoulder straps from drawing together

Illustration shows type KF71201466

Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1114045 (46) (47) (48) KF71201466	Back, Chest for attachment	Automatic lock -	4.2 (4.2) (4.2) (4.2) 1.3	EN361, EN358 EN357	45202615 035034	(035)	(036)	(037)
					45204815 015010			

Permissible user weight including equipment = 140 kg



## ExoFit™ STRATA Fall arrest harness

- TRI-LOCK REVOLVER™ quick connect buckles
- D-rings back and front
- Side D-rings

Standard: EN 361, 358

Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1114049 (50) (51) (52)	Back, Chest	Automatic lock	3.9 (3.9) (3.9) (3.9)	EN361, EN358	45202615 035038	(039)	(040)	(041)

Permissible user weight including equipment = 140 kg

## ExoFit™ XP Fall arrest harness

### Developed for quality

This standard gives you peace of mind when selecting a fall arrest harness. A quality fall arrest harness means maximum comfort, freedom of movement and ease of use. Industry innovations such as the spring-loaded stand-up back D-ring and the no-tangle Delta™ pad are signs of an innovative development.

A fall arrest harness is designed with straps to fasten around the user in order to distribute fall arrest forces over at least the thighs, pelvis, chest and shoulders. This moves the impact of a fall from the internal organs to the major bone and muscle groups around the pelvis. The fall arrest harness includes the means to be attached to the other components of a fall protection system. All fall arrest harnesses meet strict OSHA, ANSI, and CSA standards.

### No-tangle design

Donning a harness incorrectly can mean the equipment may not work properly. The patented Delta™ pad and the ExoFit™ exclusive wrap-around X-design make these harnesses easy to don and comfortable to wear with a wide spread over the shoulders to prevent irritating abrasion.

### Colour-coded sizing

Colour-coded sizing allows workers to quickly and easily choose the harness that will work best for their size.

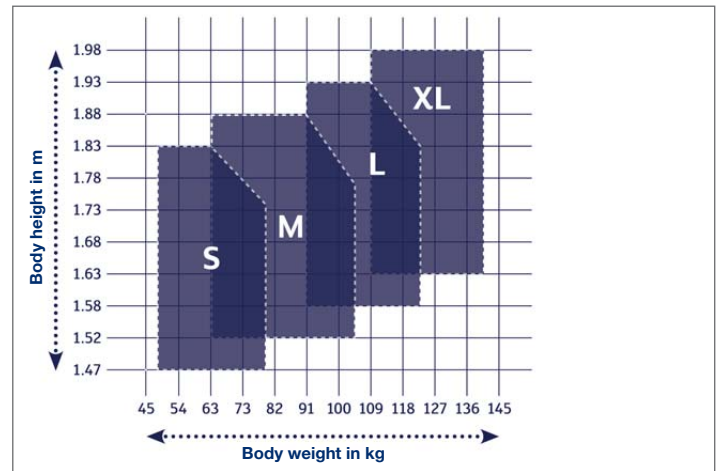
### Arc Flash

Arc Flash harnesses are made from a material such as 31 kN nylon to meet the requirements of uses in the utility industry where protection against static build-up is required. Options include non-conductive, non-sparking PVC-coated metal parts and a back PVC-coated D-ring. Leather insulators beneath the metal parts reduce static energy transfer.



All DBI-SALA harnesses are equipped with i-Safe, an integrated RFID system

## ExoFit XP™ Fall arrest harness size chart



## Features of the ExoFit™ XP fall arrest harness



### Removable shoulder, back and leg padding

Moisture wicking and washable with soft edging wraps around the wearer for the ultimate in comfort, security and no-tangle donning.



### Quick-connect buckles

Provide one-handed operation for fast, easy donning.



### Built-in impact indicator

The fall arrest harnesses are equipped with impact indicators. Impact indicators provide immediate notice that the worker and harness have been in a fall. This feature promotes safety and proper inspection.



### Built-in lanyard keepers

Hold your unused snap hooks preventing dangerous entanglements and snap free when snagged.



### Stand-up back D-ring

Patented spring-loaded design automatically stands-up ensuring fast, easy and safe connections to your fall arrest system.

### Padding

ExoFit and ExoFit XP Fall arrest harnesses are equipped with a breathable lining which draws moisture away from your body keeping you dry and comfortable during work. Its state-of-the-art 3-D mesh lining, first developed for sports, recreation and work shoes, is rugged, smell- and mold-resistant.





## ExoFit™XP Fall arrest harness

- The industry's first truly washable harness with removable padding
- Breathable 3D mesh lining with soft edging for enhanced comfort
- Unique spring-loaded stand-up back D-ring with impact indicator
- Integrated lanyard holder to eliminate the risk of tripping

Type and Size S M L	D-Rings	Buckle type	Weight in kg	Standard	Item no.		
					Size S	(M)	(L)
KB11109745 (46) (47)	Back, front	Automatic lock	2.0 (2.1) (2.2)	EN361, EN358	45202610 015041	(040)	(039)

Permissible user weight including equipment = 140 kg



## ExoFit™XP Fall arrest and work positioning harness

- The industry's first truly washable harness with removable padding
- Breathable 3D mesh lining with soft edging for enhanced comfort
- Unique spring-loaded stand-up back D-ring with impact indicator
- Integrated lanyard holder to eliminate the risk of tripping

Type and Size S M L	D-Rings	Buckle type	Positioning harness	Weight in kg	Standard	Item no.		
						Size S	(M)	(L)
KB11100585 (86) (87)	Back, front, side	Automatic lock	✓	3.2 (3.4) (3.6)	EN361, EN358	45202615 015046	(045)	(044)

Permissible user weight including equipment = 140 kg

## ExoFit™ Fall arrest harness, standard model

The ExoFit™ fall arrest harnesses have a wrap-around, no-tangle design that slips on like a jacket, making them quicker and easier to put on while providing ventilation, comfort, padding and safety.

The materials are soft and lightweight, yet extremely durable. The shoulder, hip and leg pads are built-in so that they cannot slip. The breathable lining keeps you dry and comfortable all day while the quick-connect buckles are fast, efficient and totally secure.

- The soft edges move with you to prevent uncomfortable rubbing or chafing and thus enhance comfort and mobility

### Ergonomic Design

The ergonomic design incorporates integrated shoulder, hip and leg padding.

### Soft Edges

The soft edges move with you to prevent uncomfortable rubbing or chafing and thus enhance comfort and mobility.



## ExoFit™ Standard fall arrest harness

Ideal fall arrest harness for all general uses

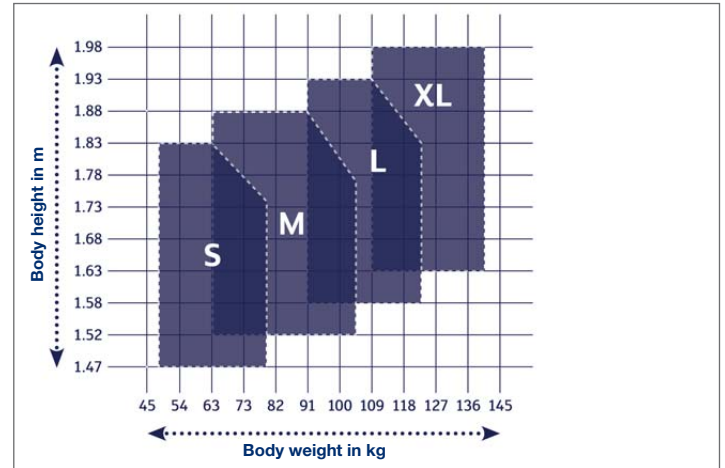
Illustration shows type KB1EXO/M

Type and Size S M L	D-Rings	Buckle type	Weight in kg	Standard	Item no. Size S (M) (L)
KB1EXO/S (M) (L)	Back, front	Automatic lock	1.74 (1.78) (1.82)	EN361, EN358	45202610 015027 (026) (025)

Permissible user weight including equipment = 140 kg



## ExoFit™ Fall arrest harness size chart



## ExoFit™ Fall arrest harness with positioning harness

Hip pad and belt for use with tool pouches. D-rings also on the sides

Illustration shows type KB1EXO/MB



Type and Size S M L	D-Rings	Buckle type	Positioning harness	Weight in kg	Standard	Item no. Size S (M) (L)
KB1EXO/SB (MB) (LB)	Back, front, side	Automatic lock	✓	2.78 (3.0) (3.0)	EN361, EN358	45202615 015013 (012) (011)

Permissible user weight including equipment = 140 kg

## Delta™ II heat resistant fall arrest harness

The Delta™ II fall arrest harnesses feature the patented Delta™ no-tangle pad for extra comfort across the neck, shoulders and back.

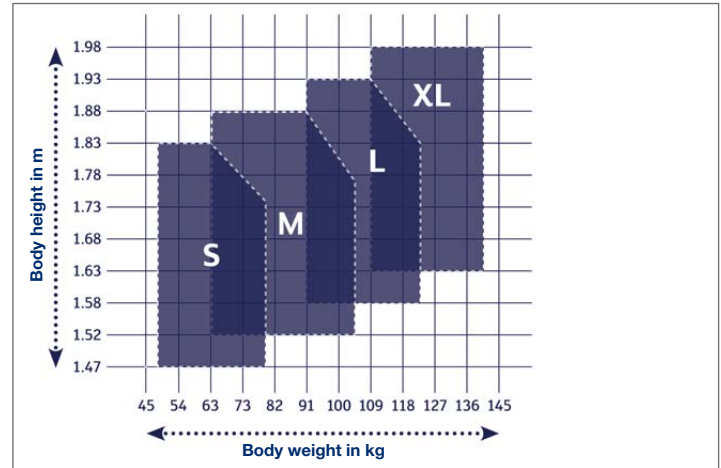
This design holds the shape of the harness, making it easier to put on. This added comfort and ease of donning has greatly improved worker acceptance and reduced the probability of improper usage. Our patented spring-loaded 'stand-up' back D-ring ensures quick and easy connection to your fall arrest device. A wide variety of models and options lets you find just the right fall arrest harness for almost any work application.

- Melting point of 425° C
- Patented spring-loaded stand-up back D-ring for quick and easy connection
- Book-style labels make information and inspection logs readily available
- Forged alloy steel hardware for maximum strength and durability



All DBI-SALA harnesses are equipped with i-Safe, an integrated RFID system

## Delta™ II Fall arrest harness size chart



## Delta™ II Nomex®/Kevlar® heat resistant fall arrest harness

Flame resistant Nomex®/Kevlar® webbing

Illustration shows type KB1K-P29

Other models available on request

Type and Size	Description	D-Rings	Buckle type	Hip pad/belt	Belt loops	Weight in kg	Additional	Item no.
KB1K-P29 (U)	Nomex® / Kevlar®	Back	Pass thru buckle	✓	✓	1.45	Nomex® / Kevlar®-web	45202610 015030

Size „U“ = Universal size – one size fits the most users; „Medium“ and „Large“ range  
Permissible user weight including equipment = 140 kg



## ExoFit™ Nex Fall arrest and work positioning harness

- Two loops for hanging lanyards while not in use. The loop opens when pulled to prevent any risk of tripping. A sleeve protects the labelling and contains a transponder for electronically managing inspections (i-Safe™).
- Duo-Lok™ quick connect buckles. One-handed operation and high-grip mechanism for the webbing provide safety.
- Revolver™ webbing adjustment. Quick adjustment and retraction of excess webbing, no troublesome webbing ends.
- Repel™ webbing coating. Longer service life thanks to enhanced wear resistance. Water and dirt repellent.
- Stand-up rear fall arrest eyelet.
- Fall indicator, load display makes inspection quick and reliable.
- Foot loops are integrated into the fall arrest harness to prevent suspension trauma.
- Reflective textile sections.

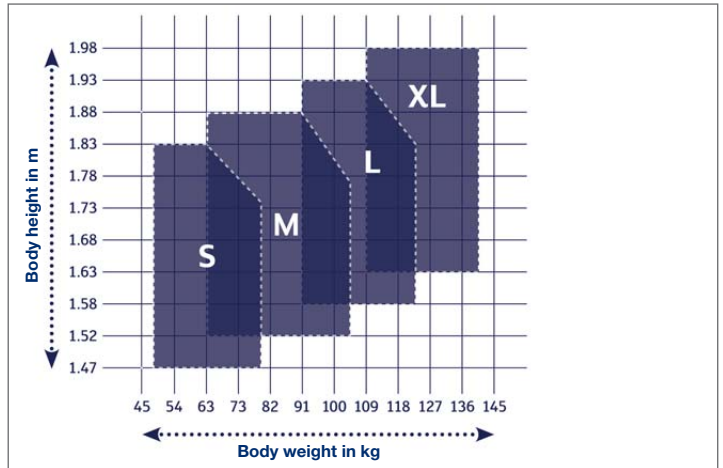
Approved for weights of up to 140 kg

Standard: EN 361, EN 358, ANSI, OSHA and CSA versions available



All DBI-SALA harnesses are equipped with i-Safe, an integrated RFID system

### ExoFit Nex™ Fall arrest harness size chart



### ExoFit™ Nex Fall arrest harness

- Breathable 3D mesh lining with soft edging for comfort
- Spring-loaded stand-up back D-ring with impact indicator
- Integrated lanyard holder to eliminate the risk of tripping

Illustration shows type 1113900

Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1113900 (01) (02) (03)	Back, chest	Automatic lock	1.86 (1.9) (1.95) (1.99)	EN361, EN358	45202610	015035	(036)	(037) (038)

Permissible user weight including equipment = 140 kg



### ExoFit™ Nex Fall arrest harness

- Breathable 3D mesh lining with soft edging for comfort
- Spring-loaded stand-up back D-ring with impact indicator
- Integrated lanyard holder to eliminate the risk of tripping

Illustration shows type 1113910

Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1113910 (11) (12) (13)	Back, chest, side	Automatic lock	2.75 (2.81) (2.86) (2.92)	EN361, EN358	45202615	015018	(019)	(020) (021)

Permissible user weight including equipment = 140 kg



## ExoFit™ Nex Fall arrest harness

- Breathable 3D mesh lining with soft edging for comfort
- Spring-loaded stand-up back D-ring with impact indicator
- Integrated lanyard holder to eliminate the risk of tripping

Illustration shows type 1113925

Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1113925 (26) (27) (28)	Back, chest, side, add. climbing protection eyelet	Automatic lock	3.0 (3.05) (3.10) (3.12)	EN361, EN358	45202615 015016	(015)	(014)	(017)

Permissible user weight including equipment = 140 kg



## ExoFit™ Nex Rescue

- Additional eyelets on the shoulder webbing for rescue
- Particularly suitable for use in shafts and containers with narrow access openings

Illustration shows type 1113970 to 1113973



## Rescue positioning lanyard

- Rescue positioning lanyard: The spreader bar prevents the shoulder straps from drawing together

Illustration shows type KF71201466

Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1113970 (71) (72) (73)	Back, chest for attachment	Automatic lock	2.02 (2.06) (2.11) (2.15)	EN361, EN1497	45202610 015033	(032)	(031)	(034)
KF71201466		-	1.3	EN357	45204815 015010			

Permissible user weight including equipment = 140 kg



## ExoFit™ Nex Suspension fall arrest harness

- Suitable for rope-supported work, Tech-Lite™ sternal and dorsal fall arrest eyelets
- Stand-up rear D-ring, Duo-Lok™ quick-connect buckle with web-lock on the legs and chest area prevents unintentional slippage
- Equipment loops for attaching equipment or tools

Illustration shows type 1113960 to 1113963



Type and Size S M L XL	D-Rings	Buckle type	Weight in kg	Standard	Item no.			
					Size S	(M)	(L)	(XL)
1113960 (61) (62) (63)	Back, chest	Automatic lock	2.2 (2.3) (2.4) (2.5)	EN361, EN358, EN813	45202615 015024	(023)	(022)	(025)

Permissible user weight including equipment = 140 kg



## IGNITE ION

Our new all-round safety harness for all classical applications in construction and maintenance has above all one major feature due to simplified adjustment options in the chest and leg area as well as three different sizes: exceptional fit! Even for users who rarely wear personal protective equipment against falls from height, the IGNITE ION is extremely easy to use and self-explanatory. The buckle by Fidlock in the chest area snaps magnetically and closes almost automatically. The two orange roping-up loops made of fabric are approved for joint use and equipped with abrasion indicator for maximum safety.

Permissible user weight including equipment: 140 kg

### Areas of application:

Construction, Roofer/Carpenter, Facade/Window cleaning, High Rack, Lift Construction, Metal Construction, Mobile Work Platforms, Power Supplies / - Transmission / Telecommunications, Scaffolding

### Standard:

EN 361

Type	Size	Weight in kg	Item no.
G-1130-XS/M	XS/M	1.1	45202610 035008
G-1130-M/XXL	M/XXL	1.2	45202610 035009
G-1130-XXL/5XL	XXL/5XL	1.3	45202610 035010



## IGNITE TRION

The new high-performance full body harness for industry and trade is uncomplicated and very easy to buckle on. The harness scores with extremely flexible adjustments of belt straps that are passed through the thin but effective hip padding. Due to its asymmetric shape, the padding ensures that the buckle does not exert any pressure in the abdominal area. Ergonomic eyelets are perfectly folded in at the hip without interfering. They are unfolded for use and maintain their position after snapping - if necessary throughout the day. The innovative OKTALOCK click buckles made of stainless steel include new adjustment elements that eliminate undesirable loosening of the belt strap during movement and obviate the need for readjusting during work.

Permissible user weight including equipment: 140 kg

### Areas of application:

Construction, Roofer/Carpenter, Facade/Window cleaning, High Rack, Lift Construction, Metal Construction, Mobile Work Platforms, Power Supplies / - Transmission / Telecommunications, Scaffolding, Wind Energy / Offshore Industry

### Standard:

EN 358, EN 361

Type	Size	Weight in kg	Item no.
G-1131-XS/M	XS/M	1.9	45202615 035025
G-1131-M/XXL	M/XXL	2.0	45202615 035026
G-1131-XXL/5XL	XXL/5XL	2.1	45202615 035027



## IGNITE PROTON

The IGNITE PROTON is the evolution of the popular ARG 51 to a higher level. A safety harness with an elaborate and thought-out design with thermoformed hip padding AIRPAD and sophisticated construction leaves nothing to be desired in terms of comfort and usability. The central chest eyelet can be adapted perfectly to the user. Anatomically preformed shoulder and leg padding clings to the body and distributes the load optimally. Excess belt strap is no longer a disturbing factor due to practical belt strap coiling with fixation. The harness comes with preformed gear loops and tool eyelets for any user requirement.

Permissible user weight including equipment: 140 kg

### Areas of application:

Fire brigade / Rescue / Special Forces, Metal Construction, Mobile Work Platforms, Power Supplies / - Transmission / Telecommunications, Wind Energy / Offshore Industry

### Standard:

EN 358, EN 361, ANSI Z359.1

Type	Size	Weight in kg	Item no.
G-1132-XS/M	XS/M	2.7	45202615 035028
G-1132-M/XXL	M/XXL	2.8	45202615 035029
G-1132-XXL/5XL	XXL/5XL	2.9	45202615 035030





## IGNITE ARGON

A solid safety harness for rope access that impresses through many improvements in ergonomics and usability with very high wearing comfort. In developing this special safety harness in V-design, great importance was attached to ergonomic adjustments and optimum freedom of movement. The extremely flexible leg joint is a major contributor to this achievement. The retaining eyelets adapted to the body shape cling perfectly to the hip in folded and unfolded state. In addition, the anatomically shaped leg and hip padding ensures that no pressure points develop when sitting in the safety harness even during long working days.

Permissible user weight including equipment: 140 kg

### Areas of application:

Confined Spaces, Facade / Window Cleaning, Fire brigade / Rescue / Special Forces, Power Supplies / - Transmission / Telecommunications, Rope Access / Rigging, Rope Courses, Scaffolding, Wind Energy / Offshore Industry.

### Standard:

EN 358, EN 361, EN 813, ANSI Z359.1

Type	Size	Weight in kg	Item no.
G-1133-XS/M	XS/M	2.1	45202615 035031
G-1133-M/XXL	M/XXL	2.2	45202615 035032
G-1133-XXL/5XL	XXL/5XL	2.3	45202615 035033



## ARG31 SKYFIZZ Lifter Click

The harness is ideal for work on working platforms, but also for all other uses. It has an extremely resilient front and rear suspension eyelet made from robust steel. The click fasteners make the harness easy to handle and put on. The central chest eyelet sits perfectly against the body. The comfortable back padding makes it easy to put on the harness, distributes the load evenly and is breathable. The crossed harness straps are sewn on to the back padding and distribute the load perfectly. The double-coated and firmly sewn belt ends prevent the harness from slipping.

### Areas of application:

Working platforms, industrial use, maintenance, steel construction, construction

### Standard:

EN 361

Type	Size	Weight in kg	Item no.
G-0031-LC-M/L	M/L	2.1	45202610 015084
G-0031-LC-L/XXL	L/XXL	2.1	45202610 015083



## Rescue PRO 2.0

The original development idea came from the design of a harness for conducting maintenance work on wind turbine rotor blades.

This resulted in the development of the rope access technology for the fall arrest harness in cooperation with well-known members of the leading rope access associations.

The special padding around the hips and legs ensures good wear comfort even when working in the harness for prolonged periods.

Permissible user weight including equipment: 140 kg

### Areas of application:

Wind energy, catenary and overhead cable construction, telecommunication, rope access technology, rescue

### Standard:

EN 358:1999, EN 361:2002, EN 813:2008

Type	Size	Weight in kg	Item no.
G-1083-AL-XS/M	XS/M	2.6	45202615 015034
G-1083-AL-M/XXL	M/XXL	2.6	45202615 015033
G-1083-AL-XXL/5XL	XXL/5XL	2.6	45202615 015035



## ARG59 Utility

The ARG59 Utility has been specially developed for the field of catenary and overhead cable construction. The harness offers the following benefits: quick-connect click fasteners to make the harness easy to put on. The harness has a ventral double-buckle strap to prevent any shifting due to the weight hung on the harness. The two side rings allow the four bands to independently move together, facilitating climbing and bending. A dorsal connection has been created between the waist belt and the shoulder strap to evenly distribute the tool weight and padding has been provided in the shoulder area to reduce pressure. Once the harness has been adjusted, the remaining belts are affixed to the harness so that they can no longer slip. This eliminates the need to constantly re-adjust the harness.

### Areas of application:

Catenary and overhead cable construction, industrial use and steel construction

### Standard:

EN 358, EN 361

Type	Size	Weight in kg	Item no.
G-0059-M	M	2.95	45202615 015039
G-0059-L	L	3.00	45202615 015038
G-0059-XL	XL	3.05	45202615 015040



## ARG30

The ARG30 is the all-rounder for maintenance work and construction. It is lightweight, uncomplicated and yet still provides maximum safety. The adjustable buckles in the shoulder and leg areas mean that the ARG 30 can be quickly put on, taken off and adjusted. The harness belt cannot slip while the harness is being worn and sits compactly against the body, even in cases of head-first falls. The steel central chest eyelet meets the EN 361 standard and is suitable as a fall-arrest eyelet as well as for rescue.

### Areas of application:

Industrial use, maintenance, construction, fire brigade, rigging

### Standard:

EN 361, GOST

Type	Size	Weight in kg	Item no.
G-0030	Unisize	1.1	45202610 015081





## ARG30 HRS

Like the ARG30 but with side holding eyelets for optimal work positioning. The back support on the rear offers additional wear and holding comfort.

### Areas of application:

Industrial use, maintenance, construction, fire brigade, rigging, steel construction, telecommunications

### Standard:

EN 358, EN 361, GOST 12.4.205-99, LA-Mark

Type	Size	Weight in kg	Item no.
G-0030-HRS	Unisize	1.7	45202615 015041



## ARG30 E

The ARG30 E is specially designed for the descent into and rescue from shafts. When used with the V-band, people can even be rescued from the narrowest of shafts. This is because the harness has rescue eyelets in the shoulder area that allow the person to be pulled straight out of the shaft.

### Areas of application:

Sewerage systems work

### Standard:

EN 361

Type	Size	Weight in kg	Item no.
G-0030-E	Unisize	1.7	45202610 015082

## V-Band

For use when descending into shafts or containers with harnesses such as ARG21 or ARG30 E.

### Areas of application:

Descending into shafts and containers

### Standard:

EN 354



Type	Length in m	Weight in kg	Item no.
L-0151-0,5	0.5	0.2	45204815 015077



**Miller H-Design™ fall arrest harnesses stand for a new generation of fall protection equipments for the construction industry and various industry sectors, who guaranty more comfort, mobility and safety for the user.**

#### EASY AND FAST ADAPTION AND CONNECTION

- Easy accessible attachment points: with curved positioning D-ring on the back and long webbing loops or one D-ring on the front for an easy connection.
- Adjustable sternum strap for a perfect width adjustment: allows the movement of the sternum strap along the shoulder web (Models with loops and 1-point fall arrest harnesses) and ensures a better fitting and more comfort for every body shape.

#### MORE SAFETY AND EASIER TRACEABILITY

- Unique, patented D-ring on the chest for a adjustment of the sternum strap, which ensures a automatic centring in case of a fall to avoid, that the user tips over to the side.
- Well visible green design elements and seams as well as fall indicators at the front and back lighten the check before the start of work.
- Better traceability: protected pocket for 5 labels behind attachment for tools and accessories, which lightens the yearly checks and following inspections and ensure a better traceability. The labels now include additional informations about the user (name) and the inspections (10 year overview, date of next inspection).
- Better durability: water- and stain-resistant webbings.

#### COMFORT AND MOBILITY

- The elastic webbing straps of the Duraflex-version at the shoulders adapt to the body shape of the user and allow a higher mobility by a better freedom of movement.

Miller H-Design Fall arrest harness size chart

Body weight in kg											
140											on request
130											
120											
110											
100											
90											
80											
70											
60											
50											
40											
	150	155	160	165	170	175	180	185	190	195	200
Body height in cm											

Curved positioning D-ring on the back for an easy connection



Fall indicators on the back plate for an easy inspection



Elastic webbings for more mobility

Adjustable sternum strap for a perfect fit

Protected label pocket for a better traceability



Fall indicators at the front webbing loops for an easy inspection

Patented chest-D-ring: for adjustment of the sternum strap; D-ring centers itself in case of a fall



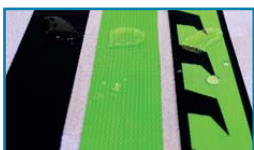
Long loops at the front for an easy connection



Well placed buckles for a precise adjustment



Water resistant webbings, which ensure a longevity to the product



Large free space at both sides of the fall arrest harness (no cross design) easy connection



Horizontal leg loops for more comfort during work

CERTIFIED up to 140 kg



### Miller® H-Design™ 1-point fall arrest harness

The lightweight and robust 1-point universal harness includes a positioning D-ring on the back for a easy connection  
The webbings are not elastic

#### Areas of application:

Fall protection areas during assembling, suppliers and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1032831	1-point harness, manual lock	1	0.94	45202610 015045
1032832	1-point harness, manual lock	2	0.96	45202610 015046
1032833	1-point harness, manual lock	3	0.98	45202610 015047
1032835	1-point harness, automatic lock	1	0.98	45202610 015048
1032836	1-point harness, automatic lock	2	1.00	45202610 015049
1032837	1-point harness, automatic lock	3	1.02	45202610 015050



### Miller® H-Design™ 2-point fall arrest harness

The lightweight and robust 2-point universal harness includes a positioning D-ring on the back and 2 webbing loops on the chest  
The webbings are not elastic

#### Areas of application:

Fall protection areas during assembling, suppliers and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1032839	2-point harness, manual lock	1	1.00	45202610 015051
1032840	2-point harness, manual lock	2	1.02	45202610 015052
1032841	2-point harness, manual lock	3	1.04	45202610 015053
1032847	2-point harness, automatic lock	1	1.04	45202610 015057
1032848	2-point harness, automatic lock	2	1.06	45202610 015058
1032849	2-point harness, automatic lock	3	1.08	45202610 015059



### Miller® H-Design™ 2-point fall arrest harness

The lightweight and robust 2-point universal harness includes a positioning D-ring on the back and 1 D-ring on the chest  
The webbings are not elastic

#### Areas of application:

Fall protection areas during assembling, suppliers and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1032843	2-point harness, manual lock	1	1.11	45202610 015054
1032844	2-point harness, manual lock	2	1.13	45202610 015055
1032845	2-point harness, manual lock	3	1.14	45202610 015056
1032851	2-point harness, automatic lock	1	1.15	45202610 015060
1032852	2-point harness, automatic lock	2	1.17	45202610 015061
1032853	2-point harness, automatic lock	3	1.19	45202610 015062



### Miller® H-Design™ 1-point fall arrest harness

The lightweight and robust 1-point universal harness includes a positioning D-ring on the back for a easy connection  
**The webbings are elastic**

#### Areas of application:

Fall protection areas during assembling, suppliers and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1032855	1-point harness, manual lock	1	0.98	45202610 015063
1032856	1-point harness, manual lock	2	1.00	45202610 015064
1032857	1-point harness, manual lock	3	1.02	45202610 015065
1032859	1-point harness, automatic lock	1	1.02	45202610 015066
1032860	1-point harness, automatic lock	2	1.04	45202610 015067
1032861	1-point harness, automatic lock	3	1.06	45202610 015068



### Miller® H-Design™ 2-point fall arrest harness

The lightweight and robust 2-point universal harness includes a positioning D-ring on the back and 2 webbing loops on the chest  
**The webbings are elastic**

#### Areas of application:

Fall protection areas during assembling, suppliers and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1032863	2-point harness, manual lock	1	1.04	45202610 015069
1032864	2-point harness, manual lock	2	1.06	45202610 015070
1032865	2-point harness, manual lock	3	1.07	45202610 015071
1032871	2-point harness, automatic lock	1	1.08	45202610 015075
1032872	2-point harness, automatic lock	2	1.10	45202610 015076
1032873	2-point harness, automatic lock	3	1.12	45202610 015077



### Miller® H-Design™ 2-point fall arrest harness

The lightweight and robust 2-point universal harness includes a positioning D-ring on the back and 1 D-ring on the chest  
**The webbings are elastic**

#### Areas of application:

Fall protection areas during assembling, suppliers and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1032867	2-point harness, manual lock	1	1.14	45202610 015072
1032868	2-point harness, manual lock	2	1.16	45202610 015073
1032869	2-point harness, manual lock	3	1.18	45202610 015074
1032875	2-point harness, automatic lock	1	1.18	45202610 015078
1032876	2-point harness, automatic lock	2	1.20	45202610 015079
1032877	2-point harness, automatic lock	3	1.22	45202610 015080



## Miller H-Design® BodyFit and BodyFix Fall arrest harnesses

A new series of fall arrest harnesses, specially suitable for utility companies.

The exclusive and H-shaped fall arrest harness is now equipped with a patented, vertical, adaptable body harness (BodyFit-Version) which adapts perfectly to all body shapes. The harness offers an unique comfortable solution for freehand working on supply posts and masts.

### COMFORT AND FREEDOM OF MOVEMENTS:

- exclusive H-Design with ergonomic placed webbings
- horizontal leg straps
- elastistic shoulder webbing

### EASY AND QUICK ADJUSTABILITY & CONNECTION:

- intuitive movement up to down
- very accessible anchor points: bended position back D-ring
- easy connection with the front D-ring or with 2 large belt loops

### GREATER SAFETY AND MORE TRACEABILITY:

- fluo green textile, high visible stitching
- front and back fall indicators
- water-repellent and stain free webbing

The Miller H-Design body harness offers:

### UNIQUE COMFORT DURING WORK POSITIONING:

- Belt with ergonomic and breathable padding
- rotating harness (BodyFit-Version)
- unique, patented, vertical adjustable harness (BodyFit-Version)

### Miller H-Design Fall arrest harness size chart

Body weight in kg												
140												
130												
120												
110												
100												
90												
80												
70												
60												
50												
40												
	150	155	160	165	170	175	180	185	190	195	200	
Body height in cm												





## Miller® H-Design™ BodyFit Fall arrest harness

The lightweight and robust 2-point fall arrest harness includes a positioning D-ring on the back for a easy connection as well as 2 webbing loops on the chest or one adjustable D-ring and 2 attachment points on the side.

The included positioning harness is adjustable horizontally and vertically.

**The webbings are elastic**

### Areas of application:

Utility

### Standard:

EN 361, EN 358

Type	Description	Size	Weight in kg	Item no.
1033528	2-point harness, manual lock, 2 webbing loops	1	1.61	45202615 035022
1033529	2-point harness, manual lock, 2 webbing loops	2	1.67	45202615 035023
1033530	2-point harness, manual lock, 2 webbing loops	3	1.71	45202615 035024
1033532	2-point harness, manual lock, 1 D-ring	1	1.71	45202615 035007
1033533	2-point harness, manual lock, 1 D-ring	2	1.77	45202615 035008
1033534	2-point harness, manual lock, 1 D-ring	3	1.81	45202615 035009
1033536	2-point harness, automatic lock, 2 webbing loops	1	1.66	45202615 035010
1033537	2-point harness, automatic lock, 2 webbing loops	2	1.72	45202615 035011
1033538	2-point harness, automatic lock, 2 webbing loops	3	1.77	45202615 035012
1033540	2-point harness, automatic lock, 1 D-ring	1	1.77	45202615 035013
1033541	2-point harness, automatic lock, 1 D-ring	2	1.82	45202615 035014
1033542	2-point harness, automatic lock, 1 D-ring	3	1.87	45202615 035015



## Miller® H-Design™ BodyFix Fall arrest harness

The lightweight and robust 2-point fall arrest harness includes a positioning D-ring on the back for a easy connection as well as 2 webbing loops on the chest or one adjustable D-ring and 2 attachment points on the side.

The included positioning harness is adjustable horizontally and vertically.

**The webbings are not elastic**

### Areas of application:

Utility

### Standard:

EN 361, EN 358

Type	Description	Size	Weight in kg	Item no.
1033512	2-point harness, manual lock, 2 webbing loops	1	1.53	45202615 035016
1033513	2-point harness, manual lock, 2 webbing loops	2	1.59	45202615 035017
1033514	2-point harness, manual lock, 2 webbing loops	3	1.63	45202615 035018
1033516	2-point harness, manual lock, 1 D-ring	1	1.64	45202615 035019
1033517	2-point harness, manual lock, 1 D-ring	2	1.69	45202615 035020
1033518	2-point harness, manual lock, 1 D-ring	3	1.74	45202615 035021



### R2 Revolution™ Comfort fall arrest harness Duraflex®

As a two-point fall arrest harness, the professional R2 offers full freedom of movement thanks to the Duraflex® webbing and the ErgoArmor™ comfort back padding. The harness has PivotLink™ connections with a pivot point at the hips and harness end clips for attaching unused lengths of webbing.

#### Areas of application:

Fall protection areas during assembling, general industry and construction industry

#### Standard:

EN 361

Type	Description	Size	Weight in kg	Item no.
1014236	Automatic locks	S/M	1.5	45202610 015042
1014237	Automatic locks	L/XL	1.7	45202610 015043
1014238	Automatic locks	XXL*	1.8	45202610 015044

\*Size XXL was delivered on an order-related basis



### R6 Revolution™ Premium fall arrest harness Duraflex®

The five-point fall arrest harness adapts to the wearer's movements thanks to the elasticated material, therefore supporting fatigue-free working.

Duraflex® webbing and ErgoArmor™ comfort back padding ensure greater mobility during ascents and descents. The harness has PivotLink™ connections with a pivot point at the hips. In addition to fall arrest eyelets on the chest and back, it also has two attachment points on the waistbelt and one climbing protection eyelet.

Quick-adjust CAM buckles on the shoulder straps ensure a perfect fit and quick adjustment.

#### Areas of application:

Fall protection areas during assembling, general industry and construction industries as well as the climbing protection field in general

#### Standard:

EN 361 and EN 358

Type	Description	Size	Weight in kg	Item no.
1014257	Automatic locks	S/M	1.9	45202615 015008
1014258	Automatic locks	L/XL	2.0	45202615 015009
1014259	Automatic locks	XXL*	2.1	45202615 015010

\*Size XXL was delivered on an order-related basis





Sternal FAST automatic buckle allows the harness to be opened and closed simply and quickly



## NEWTON

**Comfortable, easy to use fall arrest harness for work.**

- Comfortable throughout the working day:  
Anatomical design is close-fitting, while giving optimal freedom of movement  
Lightweight, breathable construction.  
Slots on the shoulder straps allow installation of a LIFT spreader for descending in an upright position.
- Easy to use:  
Color coded straps (yellow/black) provide rapid identification of the upper and lower parts of the harness before donning.  
Shoulder straps and leg loops equipped with self-locking DoubleBack buckles for quick and easy adjustment
- Sternal attachment point: fall arrest system attachment.
- Dorsal attachment point: fall arrest system attachment.

Standard: CE EN 361, EAC

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C73AAA 1	1	70 - 93	47 - 62	165 - 185	1.050	45202610 035003
C73AAA 2	2	83 - 120	50 - 65	175 - 200	1.080	45202610 035004



Sternal FAST automatic buckle allows the harness to be opened and closed simply and quickly



## NEWTON EASYFIT

**Easy-to-don fall arrest harness**

- Rapid donning thanks to the EASYFIT design:  
Vest ensures the harness keeps its shape.  
FAST automatic buckles (sternal and leg loop) allow the harness to be easily donned with both feet on the ground. These buckles retain their adjustment settings between donnings.
- Comfortable throughout the work day:  
Anatomical design is close-fitting, while giving optimal freedom of movement.  
Lightweight, breathable construction.  
Slots on the shoulder straps allow installation of a LIFT spreader for descending in an upright position.
- Easy to use:  
Shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment
- Sternal attachment point: fall arrest system attachment.
- Dorsal attachment point: fall arrest system attachment.

Standard: CE EN 361, EAC

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C73JFA 0	0	65 - 80	44 - 59	160 - 180	1.240	45202610 035005
C73JFA 1	1	70 - 93	47 - 62	165 - 185	1.300	45202610 035006
C73JFA 2	2	83 - 120	50 - 65	175 - 200	1.350	45202610 035007



## LIFT

**Spreader for NEWTON harness allows upright descent (for confined spaces)**

- Triangular karabiners for easier insertion into harness slots
- Rigid structure keeps the spreader's shape around the user's head
- Certification: CE

Type	Weight in kg	Item no.
L54	0.52	45204815 015070



Practical stowage system for MGO-connectors



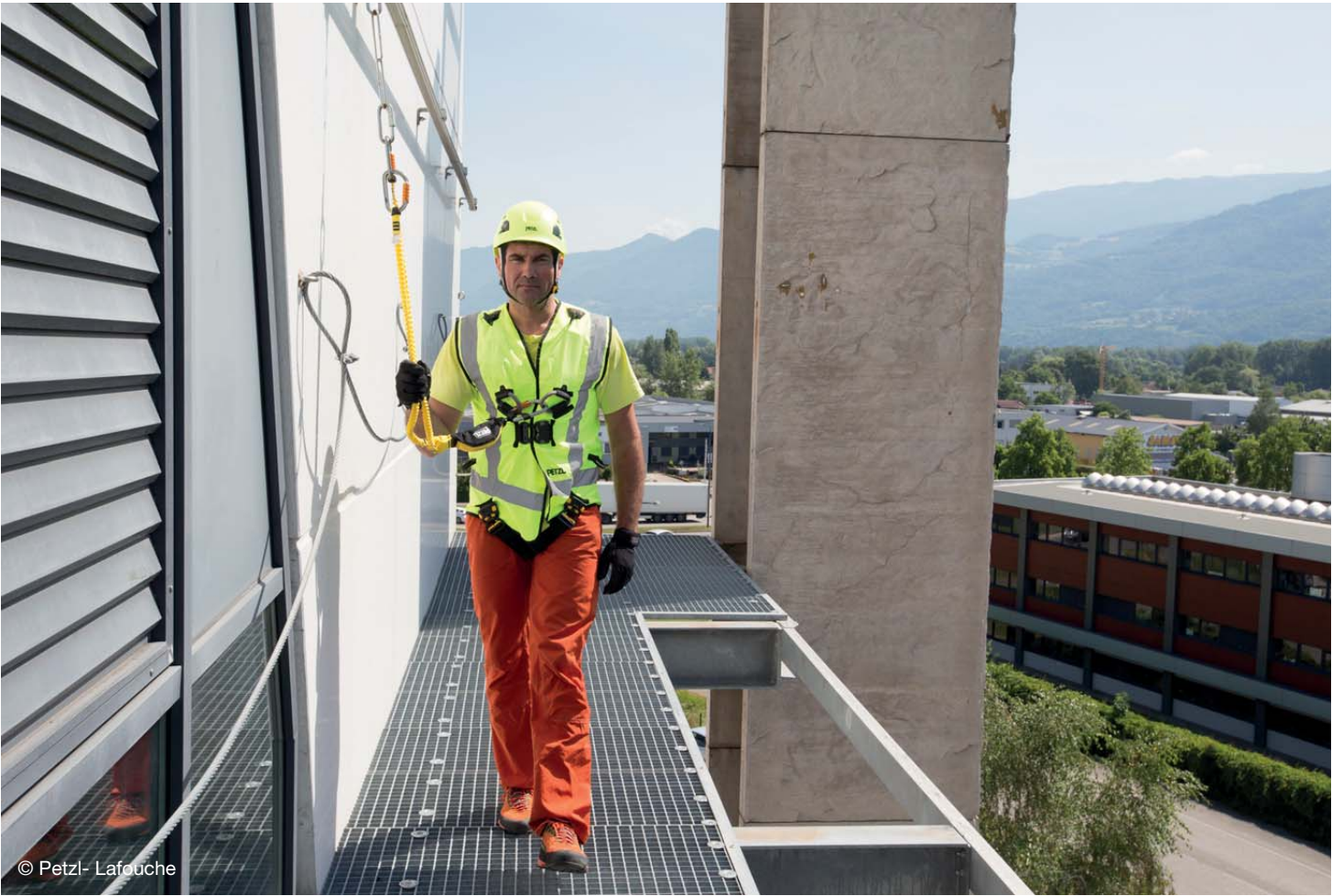
## NEWTON EASYFIT HI-VIZ **NEW!**

Easy-to-put on fall arrest harness with high visibility vest.

- Easy and fast to put on
- Comfortable in all work situations
- Easy to use:  
 Harness easy to open and close  
 Immediately access to the work tools  
 Easy inspection of the harness
- High visibility

Standard: CE EN 361, EAC

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C73JFV14	1	70 - 93	47 - 62	165 - 185	1.46	45202610 035237
C73JFV24	2	83 - 120	50 - 65	175 - 200	1.46	45202610 035240



© Petzl- Lafouche

## VOLT

### Fall arrest and work positioning harness

- Rapid donning thanks to the EASYFIT design:  
Vest ensures the harness keeps its shape.  
FAST automatic buckles on the waistbelt and leg loops allow the harness to be very easily donned, with both feet on the ground.  
These buckles retain their adjustment settings between donnings.
- Comfortable throughout the work day:  
Anatomical design is close-fitting, while giving optimal freedom of movement.  
Lightweight, breathable construction.  
Wide, semi-rigid waistbelt for excellent support.  
For vertical progression with a rail or cable-based fall protection system, the LADDER CLIMB attachment point allows for ventral attachment of the fall-arrest trolley; it distributes the load on the waistbelt and thus ensures optimal comfort during progression. In case of a fall, this attachment point automatically moves upward to a sternal position to ensure a vertical post-fall body position.  
Leg loop foam position can be adjusted for perfect positioning.  
Side slots allow a seat to be installed for greater comfort in prolonged suspension.
- Easy to use:  
Waistbelt and shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment.  
Side attachment points can be folded down to prevent them snagging accidentally when not in use.  
Stowage system for the MGO connectors on fall arrest lanyards, on each shoulder strap.  
In case of a fall, this system releases the MGO connectors and allows the absorber to be deployed.  
Fall indicators on the sternal and dorsal attachment points. If a fall indicator is visible after a fall, the harness must be retired.  
Equipment loops, slots for CARITOOL tool holder.
- Side attachment points: for attaching a positioning lanyard for use in double mode
- Sternal attachment point: for attaching a fall arrest system
- Dorsal attachment point: for attaching a fall arrest system
- Rear waistbelt attachment point: for attaching a restraint lanyard

Standard: CE EN 361, CE EN 358, EAC



LADDER CLIMB-attachment point: for attaching the trolley of a rail or cable-based fall protection system



The semi-rigid, wide waistbelt causes a excellent support and the lightweight, breathable construction a optimal comfort.



Stowage system for the MGO connectors on fall arrest lanyards.



Fall indicators on the sternal and dorsal attachment points. If a fall indicator is visible after a fall, the harness must be retired.

Type	Size	Dimension in cm			Weight in kg	Item no.
		A	B	Body height		
C72AFA 0	0	65 - 80	44 - 59	160 - 180	1.955	45202615 035001
C72AFA 1	1	70 - 93	47 - 62	165 - 185	2.000	45202615 035002
C72AFA 2	2	83 - 120	50 - 65	175 - 200	2.080	45202615 035003





**LADDER CLIMB-**  
attachment point: for  
attaching the trolley of  
a rail or cable-based fall  
protection system



## VOLT WIND

### Fall arrest and work positioning harness for the wind power industry

- Rapid donning thanks to the EASYFIT design:  
Vest ensures the harness keeps its shape.  
FAST automatic buckles on the waistbelt and leg loops allow the harness to be very easily donned, with both feet on the ground.  
These buckles retain their adjustment settings between donnings.
- Comfortable throughout the work day:  
Anatomical design is close-fitting, while giving optimal freedom of movement.  
Lightweight, breathable construction.  
Wide, semi-rigid waistbelt for excellent support.  
For vertical progression with a rail or cable-based fall protection system, the LADDER CLIMB attachment point allows for ventral attachment of the fall-arrest trolley; it distributes the load on the waistbelt and thus ensures optimal comfort during progression. In case of a fall, this attachment point automatically moves upward to a sternal position to ensure a vertical post-fall body position.  
Leg loop foam position can be adjusted for perfect positioning.  
Side slots allow a seat to be installed for greater comfort in prolonged suspension.
- Easy to use:  
Waistbelt and shoulder straps equipped with self-locking DoubleBack buckles for quick and easy adjustment.  
Side attachment points can be folded down to prevent them snagging accidentally when not in use.  
Stowage system for the MGO connectors on fall arrest lanyards, on each shoulder strap.  
In case of a fall, this system releases the MGO connectors and allows the absorber to be deployed.  
Fall indicators on the sternal and dorsal attachment points. If a fall indicator is visible after a fall, the harness must be retired.  
Equipment loops, slots for CARITOOL tool holder.
- Side attachment points: for attaching a positioning lanyard for use in double mode
- Sternal attachment point: for attaching a fall arrest system
- Dorsal attachment point: for attaching a fall arrest system
- Rear waistbelt attachment point: for attaching a restraint lanyard
- It has wear protectors on the waistbelt and under the dorsal point to prevent strap wear when moving about inside the wind turbine tower

Standard: CE EN 361, CE EN 358, EAC



The semi-rigid, wide  
waistbelt causes a  
excellent support and  
the lightweight,  
breathable construction  
a optimal comfort.



Stowage system for the  
MGO connectors on fall  
arrest lanyards.



Fall indicators on the  
sternal and dorsal  
attachment points. If a  
fall indicator is visible  
after a fall, the harness  
must be retired.

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C72WFA 0	0	65 - 80	44 - 59	160 - 180	2.055	45202615 035004
C72WFA 1	1	70 - 93	47 - 62	165 - 185	2.100	45202615 035005
C72WFA 2	2	83 - 120	50 - 65	175 - 200	2.180	45202615 035006



## AVAO® BOD CROLL FAST

Comfortable harness for areas with restricted access

- Integrated CROLL (ventral) rope clamp for ascending ropes
- Semi-rigid waistbelt and leg loops for optimum support
- Waistbelt and shoulder straps equipped with self-locking DoubleBack buckles
- The ventral attachment point distributes the load between the waistbelt and the leg loops when suspended and during descents
- Two lateral attachment points transfer the load to the waistbelt during work positioning
- One sternal and one dorsal attachment point for connecting a fall arrest system
- Five pre-shaped equipment loops with a protective sheath

Standard: EN 361, EN 358, EN 813, EN 12841 Type B

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C71CFA0	0	60 - 90	45 - 65	160 - 180	2.33	45202615 015028
C71CFA1	1	70 - 110	45 - 65	165 - 185	2.37	45202615 015029



## AVAO® BOD with DoubleBack-buckles

Comfortable fall arrest and work positioning harness

- Semi-rigid waistbelt and leg loops for optimum support
- Waistbelt and shoulder straps equipped with self-locking DoubleBack buckles
- The ventral attachment point distributes the load between the waistbelt and the leg loops when suspended and during descents
- Two lateral attachment points transfer the load to the waistbelt during work positioning
- One sternal and one dorsal attachment point for connecting a fall arrest system
- Five pre-shaped equipment loops with a protective sheath

Standard: CE EN 361, EN 358, EN 813

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C71AAA1	1	70 - 110	45 - 65	165 - 185	2.1	45202615 015026
C71AAA2	2	80 - 130	60 - 75	175 - 200	2.18	45202615 015027



## AVAO® BOD with automatic FAST-buckles

Comfortable fall arrest and work positioning harness

- Semi-rigid waistbelt and leg loops for optimum support
- Waistbelt and shoulder straps equipped with self-locking DoubleBack buckles
- The ventral attachment point distributes the load between the waistbelt and the leg loops when suspended and during descents
- Two lateral attachment points transfer the load to the waistbelt during work positioning
- One sternal and one dorsal attachment point for connecting a fall arrest system
- Five pre-shaped equipment loops with a protective sheath

Standard: CE EN 361, EN 358, EN 813

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C71AFA1	1	70 - 110	45 - 65	165 - 185	2.19	45202615 015031
C71AFA2	2	80 - 130	60 - 75	175 - 200	2.27	45202615 015032



## AVAO® SIT with DoubleBack-buckles

### Work positioning seat harness

- Wide, semi-rigid waistbelt and leg loops for optimum support
- With self-locking DoubleBack buckles on the leg loops
- One ventral and two lateral attachment points
- One dorsal eyelet on the waistbelt for suspending a restraint system

Standard: EN 358, EN 813

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C79AAA1	1	70 - 110	45 - 65	-	1.12	45202625 015001
C79AAA2	2	80 - 130	60 - 75	-	1.14	45202625 015002



## AVAO® SIT with DoubleBack-buckles (colour black)

### Work positioning seat harness

- Wide, semi-rigid waistbelt and leg loops for optimum support
- With self-locking DoubleBack buckles on the leg loops
- One ventral and two lateral attachment points
- One dorsal eyelet on the waistbelt for suspending a restraint system

Standard: EN 358, EN 813

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C79AAN1	1	70 - 110	45 - 65	-	1.12	45202625 015003
C79AAN2	2	80 - 130	60 - 75	-	1.14	45202625 015004



## AVAO® SIT with automatic FAST-buckles

### Work positioning seat harness

- Wide, semi-rigid waistbelt and leg loops for optimum support
- With FAST automatic buckles on the leg loops
- One ventral and two lateral attachment points
- One dorsal eyelet on the waistbelt for suspending a restraint system

Standard: EN 358, EN 813

Type	Size	Dimensions in cm			Weight in kg	Item no.
		A	B	Body height		
C79AFA0	0	60 - 90	45 - 65	-	1.2	45202625 015005
C79AFA1	1	70 - 110	45 - 65	-	1.21	45202625 015006
C79AFA2	2	80 - 130	60 - 75	-	1.23	45202625 015007



## CARITOOL

### Tool holder

- Tools can be attached and removed with one hand
- The small hole can be used to attach a keeper cord to secure the tool
- Slips through the waist belt slots or onto the harness webbing and always stays in place

**This tool holder is not a form of PPE!**

Type	Load in kg	Weight in g	Item no.
P42	5	25	45204815 015022
P42L	15	60	45204815 015023



## Connectors (Carabiners)



### AJ501/AJ514/AJ521

#### Steel carabiner

Self-locking carabiner. Fast and easy to open with just one hand.



AJ501



AJ514



AJ521

Type	Locking method	Minimum breaking load in kN	Standard	Description	Weight in kg	Item no.
AJ501	Screwgate	25	EN 362	17 mm opening width, galvanized steel	0.17	45201410 015004
AJ514	Twistlock	25	EN 362	18 mm opening width, steel, galvanized finish	0.18	45201410 015005
AJ521	Twistlock	23	EN 362	18 mm opening width, aluminium alloy	0.10	45201410 015006



### AJ301/AJ302/AJ303

#### Anchor clamp in stainless steel

The Manucroche ist the ideal connector for anchoring a fall arrest system to a steel structure. Its double locking automatic closure system guarantees a connection that will withstand any challenge.



AJ301

Type	Carabiner type	Description	Length in m	Weight in kg	Item no.
AJ301	Anchor clamp acc. to EN362	Attached around piping up to 140 mm in diameter (AJ303), stainless steel (AISI 204)	0.075	0.30	45201410 015001
AJ302			0.110	0.35	45201410 015002
AJ303			0.140	0.40	45201410 015003



### OVAL SCREW

#### Aluminium carabiner (anodised)



H-176-SC  
OVAL SCREW

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
H-176-SC	Screwgate	Aluminium	24	9	7	109 x 58	EN 362, EN 12275, UIAA 121	20	80	45201410 035022

## OVALSTEEL SC/TW/TRI

### Steel oval carabiner (galvanised)

Oval carabiners are the most suitable ones for use with pulleys, as carriers for belay devices and as center carabiners at the belay station.



H-037  
OVALSTEEL SC



H-038  
OVALSTEEL TW



H-051  
OVALSTEEL TRI

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
H-037	Screwgate	Galv. steel	25	9	8	108 x 58.5	EN 362-B	18	160	45201410 015042
H-038	Twistlock	Galv. steel	22	7	-	110 x 60	EN 362-B	18	190	45201410 015043
H-051	Trilock	Galv. steel	30	15	10	111 x 62	EN 362-M	21	190	45201410 015044

## STEEL D TW

### Steel carabiner (galvanised)



H-129  
STEEL D TW

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
H-129	Twistlock	Galv. steel	41	10	16	110 x 67	EN 362-B, ANSI Z359.12:2009, CSA Z259.12-Cl.1:2011	20	250	45201410 015049

## passO-SC/passO-Tri/passO-TWIST

### Aluminium carabiner (anodised)

The passO HMS carabiner provides the foundation for the pinchLock and inLock. Area of application: Rescue, Rope Access/Rigging.

The passO-Tri has a smooth-running, twist-lock closure for maximum HMS carabiner safety. Area of application: Arborists, Rescue, Rope Access/Rigging.

The passO-Twist has a smooth-running, twist-lock closure for maximum HMS carabiner safety. Area of application: Rescue, Rope Access/Rigging.



H-137-SC-GR  
passO-SC



H-137-TRI  
passO-Tri



H-137-TW  
passO-TWIST

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
H-137-SC-GR	Screwgate	Aluminium	22	10	7	112 x 76	EN 362-B, EN 12275, UIAA 121	30	82	45201410 015050
H-137-TRI	Trilock	Aluminium	22	10	7	112 x 76	EN 362-B, EN 12275, UIAA 121	30	90	45201410 015051
H-137-TW	Twistlock	Aluminium	22	10	7	112 x 76	EN 362-B, EN 12275, UIAA 121	30	89	45201410 015052

## OVALOY SC BLACK/TW/TRI

### Aluminium carabiner (anodised)

These carabiners are ideal for using with a pulley and are available in either screwgate, twistlock or trilock version.






**H-035-SW  
OVALOY SC BLACK**



**H-036  
OVALOY TW**



**H-069  
OVALOY TRI**

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
										
H-035-SW	Screwgate	Aluminium	22	9	7	108 x 59	EN 362-B	18	76	45201410 015040
H-036	Twistlock	Aluminium	22	7	-	108 x 58	EN 362-B	18	82	45201410 015041
H-069	Trilock	Aluminium	24	7	-	110 x 60	EN 362-B	21	82	45201410 015045

## VIPER ALU TRI/TW/SC

### Aluminium carabiner (anodised)

VIPER ALU TRI carabiner with Trilock closure.

The VIPER ALU TW carabiner was originally designed for industrial rope access work and therefore complies with the very highest standards. Twistlock closure mechanism, designed to ensure easy handling.

VIPER ALU SC carabiner with screwgate closure.






**H-088  
VIPER ALU TRI**



**H-102  
VIPER ALU TW**



**H-115  
VIPER ALU SC**

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
										
H-088	Trilock	Aluminium	30	7	-	125 x 90	EN 362-B	24	122	45201410 015046
H-102	Twistlock	Aluminium	30	7	-	125 x 90	EN 362-B	24	120	45201410 015047
H-115	Screwgate	Aluminium	30	7	-	125 x 90	EN 362-B	26	110	45201410 015048

## DOUBLE-O TRI/TWIST DOUBLE TRI/TWIST

### Aluminium carabiner (anodised)

DOUBLE-O, the new generation of oval carabiner with 180° technology and smooth triple-locking mechanism for maximum safety. For all those who work and climb left-handed or use both hands. With the innovative design (180° spring rotation), the sleeve that closes the gate can rotate in both directions. Conventional Twist/TriLock carabiners can be turned only to the right; therefore, they are more difficult to use for left-handers. Can be used in accordance with mountaineering and industry standard.



**H-176-TRI  
DOUBLE-O TRI**



**H-176-TW  
DOUBLE-O TWIST**



**H-173-TRI  
DOUBLE TRI**



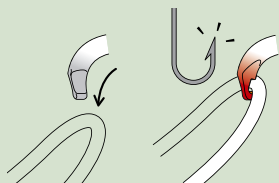
**H-173-TW  
DOUBLE TWIST**

Type	Locking method	Material	Minimum breaking load in kN			Width x Height in mm	Standard	Max. opening in mm	Weight in g	Item no.
										
H-176-TRI	Trilock	Aluminium	24	9	7	109 x 58	EN 362, EN 12275, UIAA 121	21	90	45201410 035012
H-176-TW	Twistlock	Aluminium	24	9	7	109 x 58	EN 362, EN 12275, UIAA 121	21	90	45201410 035013
H-173-TRI	Trilock	Aluminium	24	9	7	112 x 76	EN 362, EN 12275, UIAA 121	26	90	45201410 035014
H-173-TW	Twistlock	Aluminium	24	9	7	112 x 76	EN 362, EN 12275, UIAA 121	26	90	45201410 035015



## KEY-LOCK-System

To ensure an optimum handling, all Petzl carabiners are equipped with Keylock: Comprising the body and catch, the interface does not have a hook and therefore cannot be hung on anchorages, the rope or the harness etc.



With Keylock Without Keylock

## TRIACT-LOCK

Automatic locking system for regular opening and closing

- Quick to unlock in two steps by raising and turning the sleeve
- Suitable for carabiners that are frequently opened and closed



## SCREW-LOCK

Manual locking system for occasional opening and closing

- The red band provides a visual warning when the carabiner is unlocked
- Recommended for harsh environments where single-handed attachment and detachment is required or where mud or ice could cause an automatic locking mechanism to malfunction
- Suitable for carabiners that are occasionally opened and closed



## OK M33A SL, M33A TL **NEW!**

Lightweight oval carabiner

- Flexible usable oval shape for optimal positioning of equipment (Pulleys, Rope clamps etc.).
- Ideal for pulley systems.
- Compatible with CAPTIV connector positioning bar



M33A SL



M33A TL

Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
M33A SL	SCREW-LOCK	Aluminium	25	8	7	CE EN 362	22	85	45201410 035124
M33A TL	TRIACT-LOCK	Aluminium	25	8	7	CE EN 362	22	94	45201410 035126

## OXAN M72A SL/SLN, TL/TLN **NEW!**

High strength steel carabiner, oval shape

- Keylock-System to prevent, that the carabiner interlocks during hang up and hang out
- Red band that is visible only when the carabiner is not locked
- Compatible with CAPTIV connector positioning bar

Locking methods see table



M72A SL



M72A SLN



M72A TL



M72A TLN

Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
M72A SL	SCREW-LOCK	Steel	38	16	15	DIN EN 362	22	200	45201410 035127
M72A SLN	SCREW-LOCK	Steel	38	16	15	DIN EN 362	22	200	45201410 035132
M72A TL	TRIACT-LOCK	Steel	38	16	15	DIN EN 362	22	220	45201410 035134
M72A TLN	TRIACT-LOCK	Steel	38	16	15	DIN EN 362	22	220	45201410 035136

## Am'D

### Asymmetric aluminium carabiner

- D shape is particularly suited for connection to equipment such as descenders or positioning lanyards. May be used with a CAPTIV positioning bar to favor loading of the carabiner along the major axis, to limit the risk of it flipping and to keep it integrated with the device (Image 1).
- Easier handling:  
Fluid interior design limits the risk of having a catch point and facilitates rotation of the carabiner (Image 2).  
Keylock system to avoid any involuntary snagging of the carabiner (Image 3).
- H cross-section:  
Ensures an improved strength-to-weight ratio.  
Protects markings from abrasion.
- Available in two different locking systems:  
SCREW-LOCK: the manual screw-lock with red band provides a visual warning when the carabiner is unlocked (Image 4).  
TRIACT-LOCK: automatic locking with triple-action gate opening.



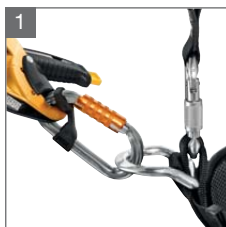
M34A SL



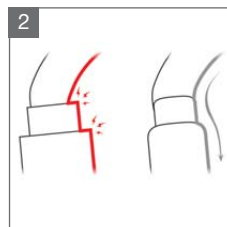
M34A TL



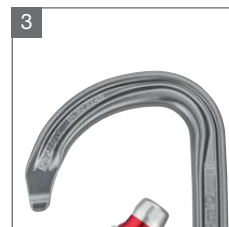
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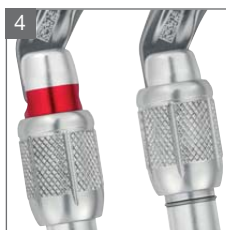
1



2



3



4

Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
			⬇	↔	⬆				
M34A SL	SCREW-LOCK	Aluminium	27	8	8	CE EN 362, EAC NFPA 1983 Technical Use	25	70	45201410 035003
M34A TL	TRIACT-LOCK	Aluminium	27	8	8	CE EN 362, EAC, NFPA 1983 Technical Use	24	75	45201410 035004
M93000 CAPTIV	Positioning bar	Plastic	-	-	-	-	-	10	45201410 035005

## VULCAN M73 SL/SLN, M73 TL/TLA/TLN

### High-strength asymmetric carabiner with large capacity

- For use with heavy loads
- Large size for easy attachment of multiple items
- Keylock system helps prevent the carabiner snagging during maneuvers.



M73 SL



M73 SLN



M73 TL



M73 TLA



M73 TLN

Locking methods see table

Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
			⬇	↔	⬆				
M73SL	SCREW-LOCK	Steel	40	16	11	CE EN 362, EAC, NFPA 1983 General Use	29	265	45201410 015029
M73SLN	SCREW-LOCK	Steel	40	16	11	CE EN 362, EAC, NFPA 1983 General Use	29	265	45201410 015030
M73TL	TRIACT-LOCK	Steel	40	16	11	CE EN 362, EAC, NFPA 1983 General Use	28	285	45201410 015031
M73TLA	TRIACT-LOCK	Steel	40	16	11	CE EN 362, EAC, ANSI Z359.12, NFPA 1983 General Use, CSA Z259.12	27	305	45201410 015032
M73TLN	TRIACT-LOCK	Steel	40	16	11	CE EN 362, EAC, ANSI Z359.12, NFPA 1983 General Use, CSA Z259.12	27	305	45201410 015033

## WILLIAM

### Lightweight asymmetric large-capacity carabiner

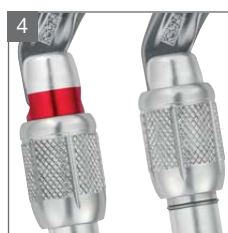
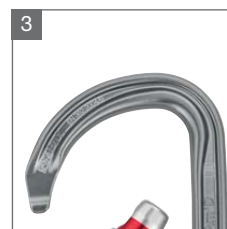
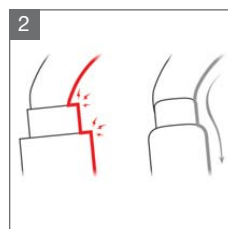
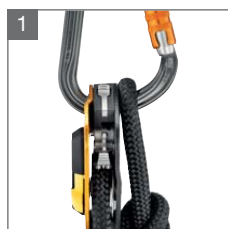
- Pear shape offers a large capacity and wide opening:  
Facilitates connection of multiple items (Image 1).  
Allows Munter hitch use for escape.
- Easier handling:  
Fluid interior design limits the risk of having a catch point and facilitates rotation of the carabiner (Image 2).  
Keylock system to avoid any involuntary snagging of the carabiner (Image 3).
- H cross-section:  
Ensures an improved strength-to-weight ratio.  
Protects markings from abrasion.
- Available in three different locking systems:  
SCREW-LOCK: the manual screw-lock with red band provides a visual warning when the carabiner is unlocked (Image 4).  
TRIACT-LOCK: automatic locking with triple-action gate opening.  
BALL-LOCK: automatic locking with triple-action gate opening, with lock indicator.



M36A SL



M36A TL



Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
M36A SL	SCREW-LOCK	Aluminium	27	8	8	CE EN 362, EAC, NFPA 1983 Technical Use	28	85	45201410 035006
M36A TL	TRIACT-LOCK	Aluminium	27	8	8	CE EN 362, EAC, NFPA 1983 Technical Use	27	90	45201410 035007

## MGO OPEN 60

### Auto-locking directional connector with large gate opening, and a gated connection point (1)

- Designed for connection to metal structures or to large-diameter cables and bars.
- Gated connection point for direct attachment of the MGO OPEN to ABSORBICA or GRILLON lanyards. If the lanyard is damaged, the connector can thus be reused.
- Special connection point helps keep the carabiner loaded on its major axis.
- Ergonomic unlocking handle.



ABSORBICA and GRILLON lanyards can be directly attached into the screwable connection eyelet of the MGO OPEN.

Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening Connection eyelet in mm	Max. Opening in mm	Weight in g	Item no.
MGOO 60	Automatic	Aluminium	23	-	-	CE EN 362, EAC	14	63	490	45201410 035008



## OMNI M37 SL, M37 TL

### Multi-directional semi-circle carabiner

- Used to close harnesses on which two attachment points have to be connected.
- Designed for three-dimensional load.



M37 SL



M37 TL

Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
M37SL	SCREW-LOCK	Aluminium	20	15	7	CE EN 362	22	85	45201410 015014
M37TL	TRIACT-LOCK	Aluminium	20	15	7	CE EN 362	22	90	45201410 015015

## DELTA P11 / P11-8

### Triangular steel quick link

- High breaking load on the different axes.
- Closed with a wrench.
- P11: 10 mm diameter rod stock
- P11-8: 8 mm diameter rod stock



Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
P11	Quick link	Steel	25	10	-	CE EN 362 Typ Q	12	150	45201410 015016
P11-8	Quick link	Steel	25	10	-	CE EN 362 Typ Q	10	85	45201410 015039

## GO P15

### Oval steel quick link

- High breaking load on the different axes.
- Closed with a wrench.



Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
P15	Quick link	Steel	25	10	-	CE EN 362 Typ Q	16	60	45201410 015017

## DEMI ROND P18

### Semi-circle aluminium alloy quick link

- Used to close harnesses on which two attachment points have to be connected.
- High breaking load on the different axes.
- Closed with a wrench.



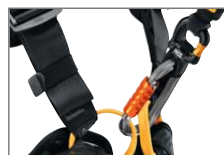
Type	Locking method	Material	Minimum breaking load in kN			Standard	Max. Opening in mm	Weight in g	Item no.
P18	Quick link	Aluminium	25	10	-	CE EN 362 Typ Q	10	55	45201410 015018

## MICRO SWIVEL P58XSO

### Compact openable swivel (1)

- Designed for attachment to a locking carabiner: attachment point for a locking carabiner. This point has a flexible ring that helps hold the carabiner in the major axis position.
- Wide opening for easy, semi-permanent installation on a lanyard or device.
- Avoids twisting of lanyards and allows correct positioning of devices.
- Turns freely when not loaded and stops moving when loaded in order to maintain the devices in position.

Standard: CE, EAC



Can be used for a connection of the ABSORBICA-Y-lanyard with the harness to avoid screwing of the cords and lighten handling.

Can be combined with the MICROFLIP-lanyard with steel wire rope core to avoid twisting of the rope.

The compact screwable part allows creation of compact and lightweight systems.

Type	Breaking load in kN	Max. Opening Connection eyelet in mm	Weight in g	Item no.
P58XSO	23	14	75	45201410 035009

## SWIVEL OPEN P58SO

### Compact openable swivel (1)

- Avoids twisting of the rope, if the load rotates around its own axis.
- Sealed ball bearings require no maintenance.
- Suitable for pulleys, lanyards etc.
- Openable attachment rings.

Standard: CE, EAC, NFPA 1983 Technical Use



Type	Breaking load in kN	Max. Opening Connection eyelet in mm	Weight in g	Item no.
P58SO	23	14	130	45201410 015037

## SWIVEL P58S

### Compact swivel

- Avoids twisting of the rope, if the load rotates around its own axis.
- Sealed ball bearings require no maintenance.
- Compact for smaller loads.

Standard: CE, EAC, NFPA 1983 Technical Use



Type	Breaking load in kN	Weight in g	Item no.
P58S	23	95	45201410 015036

## SWIVEL P58L

### Compact swivel

- Avoids twisting of the rope, if the load rotates around its own axis.
- Sealed ball bearings require no maintenance.
- Suited for bigger loads.
- Up to three carabiners can be attached to both ends.

Norm: CE, EAC, NFPA 1983 General Use



Type	Breaking load in kN	Weight in g	Item no.
P58L	36	150	45201410 015035

# Lanyards



## Rope Positioning lanyard

Standard: EN 354



Type	Description	1-leg	Length in m	Weight in kg	Rope ends	Item no.
AL420C	Kernmantle rope 10.5 mm	✓	2.0	0.22	2 rope thimbles	45201800 015004



## Web Positioning lanyard

Standard: EN 354



Type	Description	1-leg	Length in m	Weight in kg	Max. Opening	Item no.
AL4220WAE	25 mm nylon webbing	✓	2.0	0.53	1 carabiner - 18 mm, 1 carabiner - 17 mm max. opening	45201800 015003



## Work Positioning lanyard „Trigger“

Standard: EN 358



Type	Description	1-leg	Length in m	Weight in kg	Max. Opening carabiner	Item no.
1200314	Kernmantle rope 10.5 mm	✓	0.4 - 2.0	0.75	at device = 24 mm, Rope end = 21 mm	45201800 035070



## Non-adjustable dynamic rope lanyard

Non-adjustable dynamic rope lanyard combines with an ABSORBICA energy absorber to create an I or Y energy-absorbing lanyard that helps hold the connector in position, with abrasion protection for both ends.

Standard: CE EN 354



Type	Length in cm	Weight in kg	Item no.
L5060	60	0.125	45201600 015042
L50100	100	0.150	45201600 015043
L50150	150	0.195	45201600 015044
L50200	200	0.235	45201600 015045



## **SKYLOTEC** Holding rope ERGOGRIP SK 12

ERGOGRIP SK12 holding rope is for getting into the right working position. The core-sheathed ropes used can withstand extreme edge loads, are resistant to abrasion, remain soft in damp conditions and feature a long service life. It is an extremely easy simple matter to adjust the ERGOGRIP range with self-locking carabiners with one hand. This holding rope can also be used as a guided type fall arrester in accordance with EN 353-2. Version with FS 51/Steel D TRI carabiner



Standard: EN 358, EN 353-2

Type	Length in m	Rope-ø in mm	Weight in kg	Item no.
L-0031-1,5	1.5	12	0.9	45201800 015006
L-0031-2	2.0	12	1.0	45201800 015005

## **SKYLOTEC** Holding rope ERGOGRIP CORE S15

- Diameter: 15 mm
- Max. number of persons: 1
- Max. permissible weight: 100 kg
- Suitable for edges: Yes
- Suspension element: Stainless steel rope (coated) 8 mm
- Carabiner on device: HMS PASSO TRI
- Carabiner on rope: SIDEWINDER TRI
- Material rope: V2A/stainless steel

Standard:  
EN 358:1999



Type	Length in m	Rope-ø in mm	Weight in kg	Item no.
L-0249-2	2.0	15	1.57	45201800 015007
L-0249-3	3.0	15	1.94	45201800 015008
L-0249-4	4.0	15	2.32	45201800 015009
L-0249-5	5.0	15	2.70	45201800 015010

## **Honeywell** HandZup® positioning and restraint rope

### Advantages

- Ergonomic, flexible, replaceable and highly durable lanyard

### Features

- 2 Aluminium jaws, ABS grip, aluminium housing
- Twisted rope made from 100% polyamide with 12 mm diameter
- With rope shortener and carabiner
- Rope lengths up to 30 m available

### Area of use:

Restraint and positioning work

Standard:  
EN 358



Type	Description	Length in m	Weight in kg	Item no.
1032097	With automatic carabiner	2.0	0.82	45201800 015011
1032128	Spare rope 12 mm Ø	2.0	0.32	45204810 015013

# Slings



Illustration shows type AM450/80

## Anchorage web sling

Standard: EN 795 Class B

Type	Product	Description	Length in m	Weight in kg	Item no.
AM450/80	Web sling	25 mm wide nylon web sling	0.8	0.08	45201018 015004
AM450/150	acc. to EN795		1.5	0.15	45201018 015007

Other lengths on request



Illustration shows type AM401G

## Anchorage slings

Standard: EN 795 Class B

Type	Product	Description	Length in m	Weight in kg	Item no.
AM401G	Steel wire rope sling	Coated steel wire rope, 6 mm diameter, galvanized finish, thimbled ends	1.0	0.30	45201018 015005
AM402G	acc. to EN795		2.0	0.46	45201018 015008

## SKYLOTEC LOOP 35 kN web sling

Colour black



Standard:  
EN 354, EN 566, EN 795 Class B

Type	Length in m	Weight in kg	Item no.
L-0010-SW-0,4	0.40	0.06	45201018 015018
L-0010-SW-0,6	0.60	0.09	45201018 015019
L-0010-SW-0,8	0.80	0.11	45201018 015020
L-0010-SW-1,0	1.00	0.14	45201018 015021
L-0010-SW-1,2	1.20	0.16	45201018 015022
L-0010-SW-1,5	1.50	0.20	45201018 015023
L-0010-SW-1,8	1.80	0.23	45201018 015024
L-0010-SW-2,0	2.00	0.26	45201018 015025

## SKYLOTEC LOOP 35 kN web sling

Colour yellow



Standard:  
EN 354, EN 566, EN 795 Class B

Type	Length in m	Weight in kg	Item no.
L-0010-GE-0,4	0.40	0.06	45201018 015010
L-0010-GE-0,6	0.60	0.09	45201018 015011
L-0010-GE-0,8	0.80	0.11	45201018 015012
L-0010-GE-1,0	1.00	0.14	45201018 015013
L-0010-GE-1,2	1.20	0.16	45201018 015014
L-0010-GE-1,5	1.50	0.20	45201018 015015
L-0010-GE-1,8	1.80	0.23	45201018 015016
L-0010-GE-2,0	2.00	0.26	45201018 015017

## SKYLOTEC LOOP SEP 40 KN web sling

The LOOP SEP web sling was specially developed for working at sharp edges. The tensile force of 40 kN and the flexible casing made from special cutproof fibres make the loop practically indestructible. The fixing is stitched conically so that the loop does not get caught at this critical point. Equipped with TW carabiner

Standard:  
EN 354, EN 566, EN 795 Class B, ANSI Z359.1



Type	Length in m	Weight in kg	Item no.
L-0397-0,75	0.75	0.476	45201018 015026
L-0397-1,35	1.35	0.7	45201018 015027
L-0397-2	2.00	0.9	45201018 015028

## Honeywell MILLER TITAN™ anchorage sling

Versatile webbing anchorage sling adapts to a wide range of anchorage points

Standard:  
EN 795 B, EN 566



Type	Length in m	Breaking load in kN	Material	Weight in kg	Item no.
1008360	0.60	22	20 mm polyamide webbing	0.105	45201018 015029
1008361	0.80	22	20 mm polyamide webbing	0.16	45201018 015030
1008362	1.00	22	20 mm polyamide webbing	0.18	45201018 015031
1008363	1.20	22	20 mm polyamide webbing	0.16	45201018 015032
1008364	1.50	22	20 mm polyamide webbing	0.25	45201018 015033

## PETZL ANNEAU C40A

Webbing roundsling

Standard: CE EN 566, CE EN 795 B, EAC



C40A 60



C40A 80



C40A 120



C40A 150

Type	Length in cm	Breaking load in kN	Weight in kg	Item no.
C40A 60	60	22	0.060	45201018 035002
C40A 80	80	22	0.080	45201018 035003
C40A 120	120	22	0.100	45201018 035004
C40A 150	150	22	0.135	45201018 035005



## CONNEXION FIXE C42 100

Anchor strap with forged steel D-rings on the ends.

Standard: CE EN 795 B



Type	Length in cm	Breaking load in kN	Weight in kg	Item no.
C42 100	100	22	0.365	45201018 015038
C42 150	150	22	0.425	45201018 015039
C42 200	200	22	0.485	45201018 015040

## CONNEXION VARIO C42 V

Adjustable anchor strap with adjustment buckle and forged steel D-rings on the ends.

Standard: CE EN 795 B



Type	Length in cm	Breaking load in kN	Weight in kg	Item no.
C42 V	80-130 adjustable	22	0.480	45201018 015042

## CONNEXION FAST C42 F

Rapid adjustment anchor strap with rapid adjustment buckle and forged steel D-rings on the ends.

Standard: CE EN 795 B

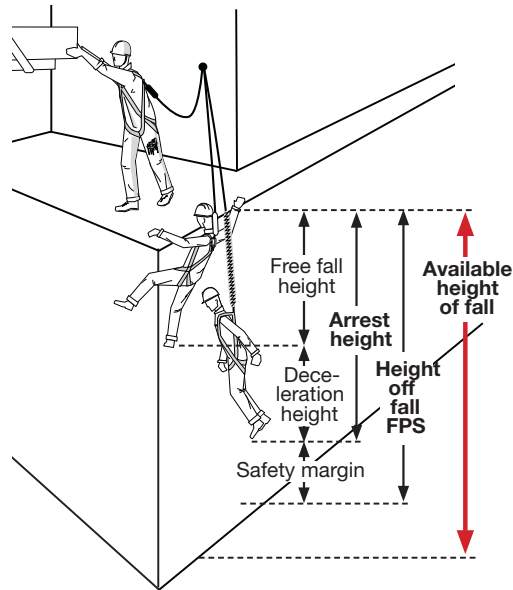


Type	Length in cm	Breaking load in kN	Weight in kg	Item no.
C42 F	20-150 adjustable	18	0.440	45201018 015041

## PROTECTA offers the broadest range of fall arrest devices in the industrial worldwide

Simple use and lightweight materials are combined to comply with and exceed the requirements of European standards.

### Height of fall calculation



### Lanyards - selection guide

Product	Area of use	Material	Connector	Fall indicator
PRO™	<ul style="list-style-type: none"> <li>Construction industry</li> <li>Utilities industry and maintenance</li> <li>Installation and service</li> <li>High-bay warehouses</li> </ul>	25 mm polyester webbing 10.5 mm rope	Self-locking carabiner	Transparent plastic cover over energy absorber

### Energy absorbing lanyards

The **PROTECTA** energy absorbing lanyards provide high quality at a low price. They have a transparent cover over the energy absorber to make it easy to inspect the stitching. Available with several different karabiner options and configurations depending on the requirements of your work site.

#### Energy absorbing kernmantle rope lanyard



Type	Material	1-leg	2-leg	Length in m	Weight in kg	Connector	Item no.
AE522/3	10.5 mm kernmantle rope	✓		2.0	0.88	2 carabiner - 18 mm opening width	45201600 035003

#### Y-Energy absorbing kernmantle rope lanyard



Type	Material	1-leg	2-leg	Length in m	Weight in kg	Connector	Item no.
AE532/3	10.5 mm kernmantle rope		✓	1.8	1.73	1 carabiner - 18 mm, 2 scaffold hooks - 60 mm opening width	45201600 015003

## Webbing shock absorbing lanyard

Standard: EN 355



Type	Material	1- leg	2- leg	Length in m	Weight in kg	Connector	Item no.
AE5220WAE	25 mm polyester webbing	✓		2.0	0.81	1 carabiner - 17 mm, 1 carabiner - 18 mm opening width	45201600 015016

## Y-Webbing shock absorbing lanyard

Standard: EN 355



Type	Material	1- leg	2- leg	Length in m	Weight in kg	Connector	Item no.
AE5320WAF	25 mm polyester webbing		✓	2.0	1.80	1 carabiner - 17 mm, 2 scaffold hooks - 60 mm opening width	45201600 015004

## PRO™ Stretch Energy absorbing lanyard with impact indicator

Standard: EN 355



Type	Material	1- leg	2- leg	Length in m	Weight in kg	Connector	Item no.
AE5220SAK	50 mm stretch material	✓		2.0	1.03	Screw carabiner 17 mm, scaffold hook - 60 mm opening width	45201600 015001

## Pro™ Stretch Lanyards



- Tested on an edge with a radius of 0.5 mm
- Enhanced protection for workers subjected to the risks associated with working over edges
- Two layers of tubular webbing create a highly durable product with an outstanding service life
- Available with a screw or twist lock karabiner
- Differentiated from Pro Stretch standard lanyards by means of the orange labelling on the packaging and the black stripes on the lanyard



Standard: EN 355

Type	Material	1-leg	Length in m	Carabiner	Weight in kg	Item no.
AE5220SBB/SE	50 mm stretch fabric	✓	2.0	2 steel carabiners AJ 514 = 18 mm opening width	0.79	45201600 015010

## Pro™ Stretch Lanyards



- Tested on an edge with a radius of 0.5 mm
- Enhanced protection for workers subjected to the risks associated with working over edges
- Two layers of tubular webbing create a highly durable product with an outstanding service life
- Available with a screw or twist lock karabiner
- Differentiated from Pro Stretch standard lanyards by means of the orange labelling on the packaging and the black stripes on the lanyard



Standard: EN 355

Type	Material	1-leg	Length in m	Carabiner	Weight in kg	Item no.
AE5220SBK/SE	50 mm stretch fabric	✓	2.0	1 x steel carabiner AJ 514 = 18 mm opening width 1 x aluminium carabiner AJ 527 = 60 mm opening width	1.08	45201600 015011

## Pro™ Stretch Lanyards



- Tested on an edge with a radius of 0.5 mm
- Enhanced protection for workers subjected to the risks associated with working over edges
- Two layers of tubular webbing create a highly durable product with an outstanding service life
- Available with a screw or twist lock karabiner
- Differentiated from Pro Stretch standard lanyards by means of the orange labelling on the packaging and the black stripes on the lanyard



Standard: EN 355

Type	Material	1-leg	Length in m	Carabiner	Weight in kg	Item no.
AE5220SYK/SE	50 mm stretch fabric	✓	2.0	1 x aluminium carabiner AJ 512 = 22 mm opening width 1 x aluminium carabiner AJ 527 = 60 mm opening width	1.08	45201600 015002



## Sanchoc™ kernmantle rope lanyard



- Tested on an edge with a radius of 0.5 mm
- Enhanced protection for workers subjected to the risks associated with working over edges
- 12.5 mm kernmantle rope makes for an extraordinarily reliable product with an outstanding service life
- Available with a screw or twist lock karabiner
- Differentiated from the Sanchoc standard kernmantle rope lanyard by means of the orange pattern



Standard: EN 355

Type	Material	1- leg	2- leg	Length in m	Carabiner	Weight in kg	Item no.
AE5220REK/SE	12.5 mm kernmantle rope	✓		2.0	1 x steel carabiner AJ 565 = 17 mm opening width 1 x aluminium carabiner AJ 527 = 60 mm opening width	1.20	45201600 015009

## Sanchoc™ kernmantle rope lanyard



Specification as type AE5220REK/SE

Standard: EN 355



Type	Material	1- leg	2- leg	Length in m	Carabiner	Weight in kg	Item no.
AE5315REK/SE	12.5 mm kernmantle rope		✓	1.5	1 x steel carabiner AJ 565 = 17 mm opening width 2 x aluminium carabiner AJ 527 = 60 mm opening width	1.70	45201600 015008

## Sanchoc™ kernmantle rope lanyard



Specification as type AE5220REK/SE

Standard: EN 355



Type	Material	1- leg	2- leg	Length in m	Carabiner	Weight in kg	Item no.
AE5220RBB/SE	12.5 mm kernmantle rope	✓		2.0	2 x steel carabiner AJ 565 = 17 mm opening width	0.90	45201600 015006

## Sanchoc™ kernmantle rope lanyard



Specification as type AE5220REK/SE

Standard: EN 355



Type	Material	1- leg	2- leg	Length in m	Carabiner	Weight in kg	Item no.
AE5220RBK/SE	12.5 mm kernmantle rope	✓		2.0	1 x steel carabiner AJ 514 = 18 mm opening width 1 x aluminium carabiner AJ 527 = 60 mm opening width	1.40	45201600 015007

## Energy absorbing lanyard



- The kernmantle rope with 12 mm diameter offers extreme durability, but is flexible in use at the same time for a high usability. Orange marks indicates the suitability for a work in edge areas.
- Lightweight trilock aluminium carabiner for easy and safe attachment to the harness.

### Specifications

- Warning marks
  - iSafe™ transponder
  - Protected label pocket
  - Very small and lightweight shock absorber
- Max. user weight 100 kg

Standard: EN 354, EN 355



Type	Description	Length in m	Weight in kg	Item no.
1245553	both sides trilock aluminium carabiner hook (20 mm)	2.0	0.90	45201600 015013

Annual visual inspection, revision on basis of expertise

## Energy absorbing lanyard



Specifications as type 1245553

Standard: EN 354, EN 355



Type	Description	Length in m	Weight in kg	Item no.
1245554	One side trilock aluminium carabiner hook (20 mm), other side scaffold hook (60 mm)	2.0	1.10	45201600 015014

Annual visual inspection, revision on basis of expertise

## Energy absorbing lanyard



Specifications as type 1245553

Standard: EN 354, EN 355



Type	Description	Length in m	Weight in kg	Item no.
1245555	automatic carabiner (20 mm) at absorber, other side 2 scaffold hooks (60 mm)	1.5	1.50	45201600 015015

Annual visual inspection, revision on basis of expertise

## SHOCKYARD FLEX lanyard

The SHOCKYARD FLEX and SHOCKYARD FLEX V are firstly encased in elastic tubing. This eliminates any slack rope when the SHOCKYARD is not suspended. The risk of tripping is reduced as the SHOCKYARD remains kink-free and sits close to the body. Integrated rescue loops allow a rescue device to be attached directly, making rescue easier and quicker, without necessitating additional equipment such as rope grabs. In the SHOCKYARD, the absorber is distributed along the entire length. In the event of a fall, the fall energy is limited to far below 6 kN, evenly absorbed without any peak forces and converted into a plastic deformation of the SHOCKYARD energy absorber line. The SHOCKYARD has a very short fall-arrest distance of just 0.95 m and absorbs the fall without the usual tearing noises. This psychological effect appreciably reduces the shock of the fall. Kobra TRI / FS 90 aluminium carabiner.

Standard: EN 354, EN 355



Type	Length in m	Weight in kg	Item no.
L-0425-1,5	1.5	1.1	45201600 015025
L-0425-1,8	1.8	1.2	45201600 015026

## BFD Y SK 12 energy absorbing lanyard with STAK TRI and FS 90 aluminium carabiner

The Skylootec energy absorbing lanyards provide high quality at a low price. Available with several different karabiner options and configurations depending on the requirements of your work site.

Standard: EN 354, EN 355, GB 6095:2009 at L-0103-1,5



Type	Length in m	Weight in kg	Item no.
L-0103-1,5	1.5	1.4	45201600 015021
L-0103-2,0	2.0	1.6	45201600 015022



## BFD SK 12 energy absorbing lanyard with STAK TRI and FS 90 aluminium carabiner

The Skylotec energy absorbing lanyards provide high quality at a low price. Available with several different karabiner options and configurations depending on the requirements of your work site.

Standard: EN 354, EN 355, GB 6095:2009 at L-0097-1,5



Type	Length in m	Weight in kg	Item no.
L-0097-1,5	1.5	0.9	45201600 015019
L-0097-2,0	2.0	1.0	45201600 015020

## BFD SK 12 energy absorbing lanyard with STAK carabiner on both sides

Standard: EN 354, EN 355



Type	Length in m	Weight in kg	Item no.
L-0095-1,5	1.5	0.48	45201600 015017
L-0095-2,0	2.0	0.52	45201600 015018

## SKYSAFE PRO FLEX energy absorbing lanyard

New, patented energy absorbing system, which always ensures a maximum impact force of less than 6 kN and a maximum fall arrest distance of 1.75 m for a weight range of 50 kg - 140 kg. Final strength: 22 kN, including in the energy absorber, before and after the dynamic drop. Integrated rescue loop for quicker rescue without additional equipment such as rope clamps etc.

Standard: EN 354, EN 355, AS/NZS 1891.1



Type	Length in m	Weight in kg	Item no.
L-0561-1,8	1.8 (2-leg)	2.2	45201600 015027



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Standard: EN 354, EN 355, AS/NZS 1891.1



Type	Length in m	Weight in kg	Item no.
L-0563-1,8	1.8 (2-leg)	2.8	45201600 015028

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Standard: EN 354, EN 355, AS/NZS 1891.1, ANSI Z359.13, CSA Z259.11



Type	Length in m	Weight in kg	Item no.
L-0565-1,8	1.8 (1-leg)	1.4	45201600 015029

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New, patented energy absorbing system, which always ensures a maximum impact force of less than 6 kN and a maximum fall arrest distance of 1.75 m for a weight range of 50 kg - 140 kg. Final strength: 22 kN, including in the energy absorber, before and after the dynamic drop. Integrated rescue loop for quicker rescue without additional equipment such as rope clamps etc.

Standard: EN 354, EN 355, AS/NZS 1891.1



Type	Length in m	Weight in kg	Item no.
L-0568-1,8	1.8 (1-leg)	1.3	45201600 015030

## D12 edge-tested energy absorbing lanyard



Preventing damage to fall arrest equipment on edges is a technical challenge, for which Miller offers several solutions.

To combat equipment wear during work at heights in the vicinity of edges that present a fall hazard, the use of edge-tested lanyards is recommended. These products have been designed to not tear or become damaged in the event of a fall over an edge, as well as to absorb impact forces.

### Advantages

- Mechanical properties ensure good cut and shear resistance
- Energy absorbers reduce the impact force to under 6 kN

### Features

- Even withstand falls over very sharp edges

### Area of use:

Fall arrest areas during installation work as well as for the utility and construction industries

### Standard:

EN 355



Type	Description	Length in m	Weight in kg	Item no.
1016847	Automatic carabiner and scaffold hook (65 mm)	2.0	1.07	45201600 015031

## D12 edge-tested energy absorbing lanyard



Specifications as type 1016847

Standard: EN 355



Type	Description	Length in m	Weight in kg	Item no.
1016848	With 2 screw carabiner	2.0	0.81	45201600 015033

## D12 edge-tested energy absorbing lanyard



Specifications as type 1016847

Standard: EN 355



Type	Description	Length in m	Weight in kg	Item no.
1016849	Screw carabiner and scaffold hook (65 mm)	2.0	1.09	45201600 015032

## D12 edge-tested energy absorbing lanyard

Specifications as type 1016847

Standard: EN 355



Type	Description	Length in m	Weight in kg	Item no.
1016850	With screw carabiner and 2 scaffold hooks (65 mm)	1.5	1.48	45201600 015034

## Edge-tested lanyard and Manyard® edge



Preventing damage to fall arrest equipment on edges is a technical challenge, for which Miller offers several solutions. To combat equipment wear during work at heights in the vicinity of edges that present a fall hazard, the use of edge-tested lanyards is recommended. These products have been designed to not tear or become damaged in the event of a fall over an edge, as well as to absorb impact forces.



### Advantages

- Mechanical properties ensure good cut and shear resistance
- Energy absorbers reduce the impact force to under 6 kN
- Flexible stretch fabric prevents tripping and entanglement

### Features

- The black stripes indicate that the product is edge tested
- Integrated energy absorber

### Area of use:

Fall arrest areas during installation work as well as for the utility and construction industries

### Standard:

EN 355

Type	Description	Length in m	Weight in kg	Item no.
1017916	With aluminium screw carabiner and scaffold hook (63 mm)	2.0	1.26	45201600 015035

## GRILLON

### Adjustable lanyard for work positioning

The 5, 10 and 20 m long versions also can be used as a temporary railing rope. Its adjustable mechanism has a handle, to loosen the rope under tension (if attached at the central eyelet of the harness).

Type	Standard	Length in m	Weight in kg	Item no.
L52A002	CE EN 795 B, EAC	2	0.435	45201800 015012
L52A003	CE EN 795 B, EAC	3	0.515	45201800 015013
L52A004	CE EN 795 B, EAC	4	0.595	45201800 015014
L52A005	CE EN 795 B, EAC	5	0.675	45201800 015015
L52A010	CE EN 795 B, EAC	10	1.055	45201028 015038
L52A015	CE EN 795 B, EAC	15	1.455	45201028 015039
L52A020	CE EN 795 B, EAC	20	1.900	45201028 015040



## GRILLON HOOK

### Adjustable work positioning lanyard with HOOK connector

The GRILLON HOOK adjustable lanyard is used to make work positioning systems, to complement a fall-arrest system. Its length can be very easily and precisely adjusted as necessary for comfortable positioning at the work station. Its HOOK connector is ideal for using the lanyard in double mode on the harness side attachment points.

Type	Standard	Length in m	Weight in kg	Item no.
L52H002	EN 358	2	0.625	45201800 015016
L52H003	EN 358	3	0.735	45201800 015017
L52H004	EN 358	4	0.815	45201800 015018
L52H005	EN 358	5	0.895	45201800 015019



## GRILLON MGO

### Adjustable work positioning lanyard with MGO OPEN connector

MGO OPEN 60 is an auto-locking directional connector with very large gate opening for connection to metal structures or to large-diameter cables and bars. It has a gated connection point for attachment to different types of lanyards. If the lanyard is damaged, the connector can thus be reused.

For technical description of MGO OPEN 60 please see page 61.

Type	Standard	Length in m	Weight in kg	Item no.
L52A003	CE EN 795 B, EAC	3	0.515	45201800 015013
MGOO 60	CE EN 362, EAC	-	0.490	45201410 035008





## Spare ropes for GRILLON

Type	Length in m	Weight in kg	Item no.
L52R002	2	0.236	45204810 015001
L52R003	3	0.32	45204810 015002
L52R004	4	0.4	45204810 015003
L52R005	5	0.49	45204810 015004
L52R010	10	0.89	45204810 015005
L52R015	15	1.38	45204810 015006
L52R020	20	1.5	45204810 015007

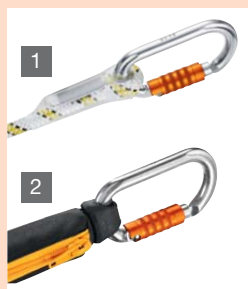


## Spare ropes for Grillon HOOK

Type	Length in m	Weight in kg	Item no.
L52RH002	2	0.395	45204810 015008
L52RH003	3	0.479	45204810 015009
L52RH004	4	0.559	45204810 015010
L52RH005	5	0.649	45204810 015011



**Sewed end connections** on rope lanyards are more tear-resistant than knotted ends.



Depending on the type, the end connections on Petzl lanyards are equipped with plastic covers (Image 1) or STRING elements (Image 2). They ensure, that the lanyard is loaded on its longitudinal axis and lightens attachment. They also protect against abrasion.

## ABSORBICA-I

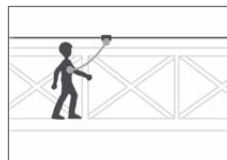
### Single lanyard with integrated energy absorber

- Designed for protection on a horizontal lifeline (rope or cable) or on an elevated platform.
- Works with users who weigh between 50 and 130 kg. Impact force below 6 kN. Progressive tearing reduces the deceleration on lightweight users.
- Compact energy absorber facilitates handling.
- Two options for installation on the harness, depending on use:  
Frequent connection/disconnection: with a carabiner held in correct position by the STRING (included with the lanyard). Semi-permanent connection: with a RING OPEN, whose circular shape ensures optimal positioning
- Two connector options for the end of the lanyard: a locking carabiner, or MGO OPEN connector with large gate opening

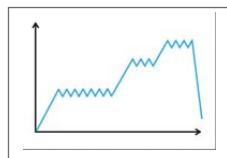
Standard: CE EN 355, CE EN 354, EAC



L64IA 80



Designed for protection on a horizontal lifeline (rope or cable) or on an elevated platform.



Progressive absorbing of fall energy, to adapt to the users weight.



Compact energy absorber facilitates handling

Type	Material	Maximum authorized length (with connectors) in cm	Maximum length of torn lanyard after fall in cm	Maximum clearance (for fall factor 2) in cm	Weight in kg	Item no.
L64IA 80	Kernmantle rope	130	210	440	0.270	45201600 035004
L64IA 150	Kernmantle rope	200	320	620	0.330	45201600 035005

## ABSORBICA-I VARIO

### Adjustable single lanyard with integrated energy absorber

Technical design as ABSORBICA-I, difference:

- With VARIO adjustment system

Standard: CE EN 355, CE EN 354, EAC



VARIO adjustment system allows the lanyard to be adjusted from 150 to 100 cm in order to reduce the potential fall height.

Type	Material	Maximum authorized length (with connectors) in cm	Maximum length of torn lanyard after fall in cm	Maximum clearance (for fall factor 2) in cm	Weight in kg	Item no.
L64IAR 150	Webbing	200	320	620	0.390	45201600 035006

## ABSORBICA-Y

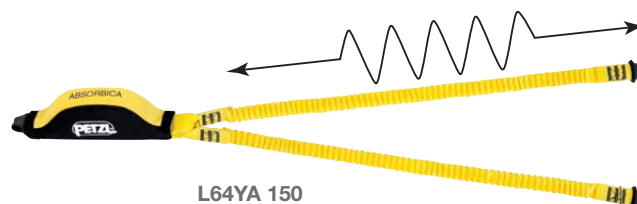
### Double lanyard with integrated energy absorber, without connector

- Designed for continuous protection when passing intermediate anchor points.  
Works with users who weigh between 50 and 130 kg.  
Progressive tearing reduces the deceleration on lightweight users.
- Compact energy absorber facilitates handling.
- The 150 cm version has elastic arms, to avoid hindering progression.
- Two options for installation on the harness, depending on use:  
Frequent connection/disconnection: with a carabiner held in correct position by the STRING (included with the lanyard) or with a MICRO SWIVEL to avoid tangling. Semi-permanent connection: With a RING OPEN whose circular shape ensures optimal positioning, or with a SWIVEL OPEN to avoid tangling.

Standard: CE EN 355, CE EN 354, EAC



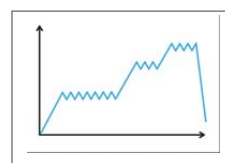
L64YA 80



L64YA 150



Designed for continuous protection when passing intermediate anchor points



Progressive absorbing of fall energy, to adapt to the user's weight.



Compact energy absorber facilitates handling

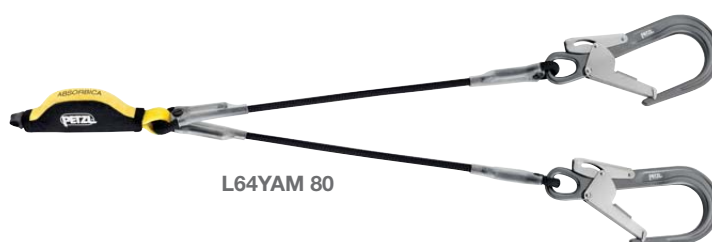
Type	Material	Maximum authorized length (with connectors) in cm	Maximum length of torn lanyard after fall in cm	Maximum clearance (for fall factor 2) in cm	Weight in kg	Item no.
L64YA 80	Kernmantle rope	130	210	440	0.370	45201600 035007
L64YA 150	Elastic webbing	200	320	620	0.430	45201600 035008

## ABSORBICA-Y

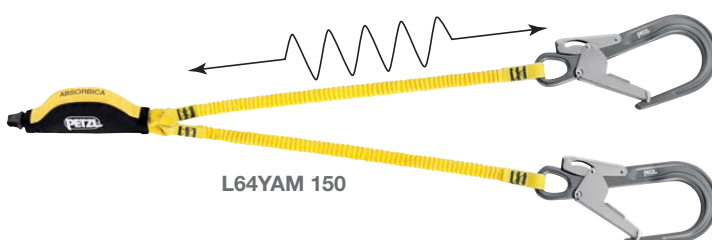
### Double lanyard with integrated energy absorber, with two MGO 60 connectors

- Designed for continuous protection when passing intermediate anchor points.  
Works with users who weigh between 50 and 130 kg.  
Progressive tearing reduces the deceleration on lightweight users.
- Compact energy absorber facilitates handling.
- The 150 cm version has elastic arms, to avoid hindering progression.
- Two options for installation on the harness, depending on use:  
Frequent connection/disconnection: with a carabiner held in correct position by the STRING (included with the lanyard) or with a MICRO SWIVEL to avoid tangling. Semi-permanent connection: With a RING OPEN whose circular shape ensures optimal positioning, or with a SWIVEL OPEN to avoid tangling.

Standard: CE EN 355, CE EN 354, CE EN 362, EAC



L64YAM 80



L64YAM 150

Type	Material	Maximum authorized length (with connectors) in cm	Maximum length of torn lanyard after fall in cm	Maximum clearance (for fall factor 2) in cm	Weight in kg	Item no.
L64YAM 80	Kernmantle rope	115	190	400	1.290	45201600 035009
L64YAM 150	elastic webbing	185	300	585	1.430	45201600 035010

## CLiC-iT Lanyard

Interruption-free fall arrest system - always at your side! With the new ABS CLiC-iT can be anchored to every permanently mounted ladder, an on-site climbing protection system is not necessary. Also the usage on scaffolds or rope lifeline systems is possible. Due to its lightweight design (only around 2 kg) you can take this mobile system with you easily.

ABS CLiC-iT is based on two interconnected hooks, which have to be attached to the sternal eyelet of the harness. Alternate attached from rung to rung, one hook could not be opened, until the locking mechanism of the second hook hasn't snapped. This prevents an accidental release.

- No on-site climbing protection system necessary
- Accidental release impossible
- Vertical use on permanent mounted ladders
- Horizontal use on scaffolds for example
- 100% mobile, weighs under 2 kg

Standard: 355:2002



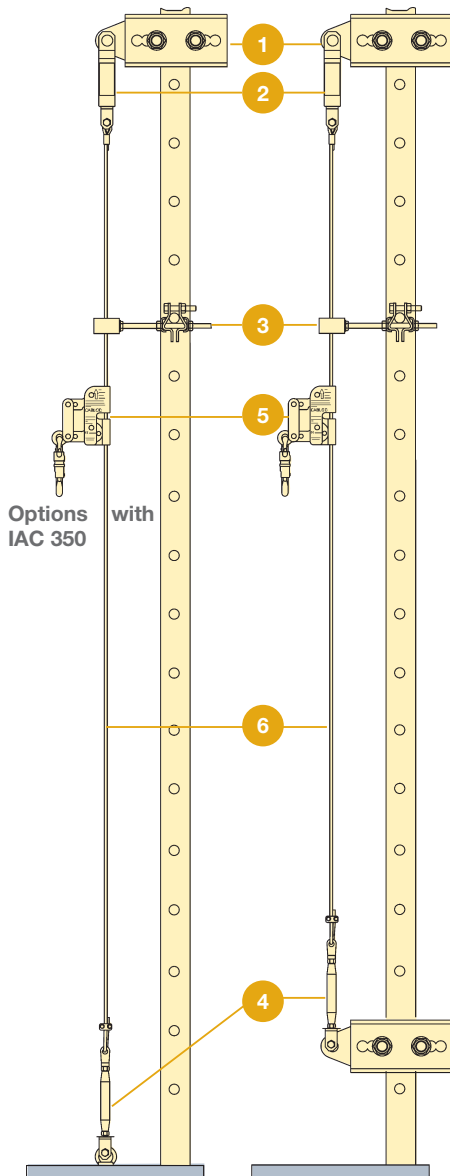
Type	Material	1- leg	2- leg	Length in m	Weight in kg	Connector	Item no.
PS-CLIC-IT	Webbing with integrated opening function		✓	1.2	1.76	2 carabiner - 60 mm opening width	45201600 035015



## Vertical lifeline system CABLOC

The CABLOC system ensures users' safety when climbing masts, chimneys, fixed ladders etc. The CABLOC system runs freely on the permanently attached wire rope and secures users while also providing them with unrestricted freedom of movement. Standard: EN 353-1, 353-2

### CABLOC Installation principle



## 1 General-purpose anchorage beam

- Material: stainless steel 1.4401
- Absorbs all forces generated during a fall
- Suitable for the most common types of anchor lines with a diameter of 30 to 90 mm
- Design according to EN795, Class A1
- Net weight: 2.450 g

Item no. 45201210 015005



## 2 Energy absorbtion element

- Material: stainless steel 1.4301
- Tripping threshold: 2.4 kN
- Use: vertical and horizontal
- Energy absorbtion element for one-off use
- Net weight: 1.1 kg

Item no. 45201210 015002



## 3 General-purpose cable guide

- Material: stainless steel 1.4301 and rubber
- Suitable for the most common installation methods; limits cable floating
- Net weight: 360 g

Item no. 45201210 015001



## 4 Clevis and eye cable tensioner with a rigid anchor line

- Material: stainless steel 1.4401
- The built-in tension indicator can be used to monitor the optimum tension required for the smooth functioning of the CABLOC system
- Also available as a clevis/clevis version (Item no. 45201210 015004)

Item no. 45201210 015003



## 5 CABLOC fall arrester

with built-in energy absorber for installations without a line head energy absorber

- Material: stainless steel 1.4301
- Easy connection and disconnection at any point of the line
- Version with rigid guide in accordance to DIN EN 353-1 and version with mobile guide in accordance with DIN EN 353-2

Item no. 45201210 015007



## 6 Thimble loop on one end, loop U-clamp terminal on the other end

- Material: stainless steel 1.4401
- Rope diameter: 8 mm
- Rope construction: 7 x 19

Item no. 45202830 015007



## AC3000 Cabloc kit for a vertical lifeline system

AC3000/10 (10 m), AC3000/20 (20 m), AC3000/30 (30 m)

The Cabloc kit combines all the components required to install a safety system that provides access to a work position at a height via a ladder or metal structure. The user instructions provide users with detailed information on all the system installation steps and the necessary precautionary measures. This enables users to safely access work positions at heights.

- Stainless steel cable with  $\varnothing$  8 mm with factory-manufactured end connections
- Cabloc fall arrester AC350
- 2 general-purpose anchorage beams (upper and lower) AC340
- Energy absorber AC325
- Cable tensioner with pretension indicator AC330
- Name plate AN126
- General-purpose cable guide AC320
- System breaking strength > 15 kN

Standard: EN 353-1



Type	Length in m	Rope-Ø in mm	Weight in kg	Number of users	Item no.
AC3000/10	10	8	11.3	1	45205000 015008
AC3000/20	20	8	14.4	1	45205000 015009
AC3000/30	30	8	17.1	1	45205000 015010



AC202/01

## COBRA™ Rope Grab devices, Standard: EN 353-2

Type	Product	Description	Weight in kg	Item no.
AC202/01	COBRA™ Manual and automatic rope grab device	Can be attached or detached anywhere along the lifeline for vertical hands-free operation. Suitable for ropes with 14 mm diameter. Delivery with a screw gate carabiner - 17 mm opening width	0.98	45201220 015001
AC202/03	COBRA™ rope grab with extension strap	see AC202/01 additionally with extension webbing L = 28 cm including automatic carabiner AJ565	1.05	45201220 015002



AC202/03

## Safety rope for COBRA™ Rope Grab devices

Type	Product	Description	Weight in kg	Item no.
AC205	Safety rope	14 mm twisted rope with 3 strands for Cobra - length 5 m* Delivery with screw gate carabiner - 17 mm opening width	0.92	45202820 015001
AC210	Safety rope	14 mm twisted rope with 3 strands for Cobra - length 10 m* Delivery with screw gate carabiner - 17 mm opening width	1.53	45202820 015002

\*other lengths on request



AC4002

## VIPER™ LT manual Rope Grab device with energy absorber, Standard: EN 353-2, EN 358

Type	Product	Description	Weight in kg	Item no.
AC4002	VIPER™ LT	Absorbing fall arrest device, • vertical use with 140 kg tested • horizontal use as restraining system with 100 kg tested	0.35	45201220 015003

## Safety rope for VIPER™ LT manual Rope Grab device

Type	Product	Description	Weight in kg	Item no.
AC4005	Safety rope	Kernmantle rope, length 5 m, Ø 12.5 mm	1.00	45202810 015001
AC4010	Safety rope	Kernmantle rope, length 10 m, Ø 12.5 mm	1.5	45202810 015002
AC4015	Safety rope	Kernmantle rope, length 15 m, Ø 12.5 mm	2.0	45202810 015003
AC4020	Safety rope	Kernmantle rope, length 20 m, Ø 12.5 mm	2.5	45202810 015004



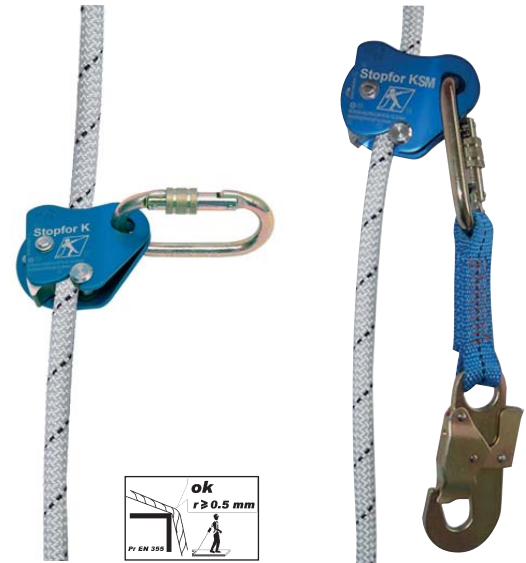
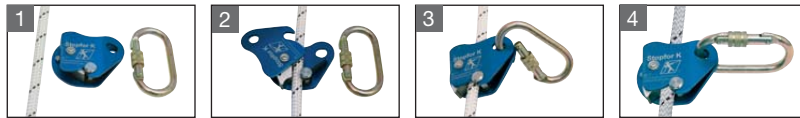
AC4015

## Tractel® Stopfor™ K Stopfor™ KSM

Guided type fall arresters in the Stopfor K series, detachable from the rope, integrated energy absorption by tilting the device. Approved for horizontal and vertical use in accordance with EN 353-2 and EN 358.

The Stopfor™ K is a new kind of guided type fall arrester that combines simple use with outstanding running characteristics. The Stopfor™ K is designed for use during vertical work and access (ladders, scaffolds, towers, masts etc.). Its ergonomic and robust design makes it quick, simple and secure to attach the device to a static kernmantle guide rope (diameter: 10.5 - 12.5 mm).

Type	Description	Carabiner	Weight in kg	Item no.
98469	Stopfor K	M10	0.55	45201220 015015
51172	Stopfor KSM 0,3-M42	M42	0.63	45201220 015016



Stopfor™ K

Without lanyard M10 carabiner

Stopfor™ KSM

With lanyard, M42 carabiner, webbing length 30 cm, reverse brake and reinforced springs

## Tractel® Static kernmantle rope for Stopfor™ K with carabiner and end stop

Certified to EN 1891

Type	Rope ø in mm	Length in m	Carabiner	Weight in kg	Item no.
37532	11	5	M10	0.375	45202810 015021
37542	11	10	M10	0.750	45202810 015022
37552	11	15	M10	1.125	45202810 015023
35562	11	20	M10	1.50	45202810 015024
37572	11	30	M10	2.25	45202810 015025

## SKYLOTEC ERGOGRIP SK 16 - FS 51/90 St

The Ergogrip SK 16 is suitable for use with sharp edges. It is a length-adjustable fall arrest device used for safe and flexible positioning during work. It can be used as a guided type fall arrester or a holding rope. Used as a restraint system, it can prevent or, in the event of a fall, arrest a fall. It is edge and abrasion-resistant and remains soft and flexible even when damp. The special self-adhesive shrinking sleeve made from tough polyolefin is also abrasion-resistant and hard-wearing. Rope Ø = 16 mm.

Standard:  
EN 353-2, EN 358



Type	Length in m	Weight in kg	Item no.
L-0280-5	5	1.1	45201215 015001
L-0280-10	10	1.9	45201215 015002
L-0280-15	15	2.6	45201215 015003
L-0280-20	20	3.4	45201215 015004
L-0280-25	25	4.2	45201215 015005



## ASAP LOCK

The ASAP LOCK guided type fall arrester has been developed for easier handling while climbing ropes. During standard use, the device automatically follows the user's movements on the rope without manual intervention. In the event of a fall or abrupt acceleration, the fall arrest device locks onto the rope and stops the user from moving. The ASAP LOCK's integrated locking function enables users to immobilise the device to reduce the fall height. The connection arm prevents the loss of the device when passing interim anchors. The ASAP LOCK is used with an energy absorbing lanyard to enable users to work at a distance from the rope.

### ASAP LOCK B71ALU

#### Mobile fall arrest device with locking function

- Permanent protection against falls:
  - Locks in the event of a fall, slip or uncontrolled descent
  - Works on vertical or angled ropes
  - Locks onto the rope even if the user grabs for the device during a fall
- The fall arrest device's integrated locking function enables users to immobilise the device to reduce the fall height. This function also stops the rope from being pulled upwards in high winds.
- Simple and efficient:
  - The ASAP runs up and down ropes without manual intervention
  - Can be easily attached and detached from the rope at any point
  - The connection arm prevents the loss of the device when passing interim anchors
  - Used with an ASAP'SORBER energy absorbing lanyard to enable users to work at a distance from the rope

CE EN 353-2 with ropes for which the device has been certified, e.g. PETZL AXIS 11 mm or PETZL PARALLEL 10.5 mm, CE EN 12841 with all semi-static ropes (EN 1891 type A) from 10.5 mm to 13 mm, e.g. PETZL PARALLEL 10.5 mm to PETZL VECTOR 12.5 mm.\*

\* For further information, please visit [www.petzl.com/ASAP](http://www.petzl.com/ASAP)



Type	Clearance in m	Weight in kg	Item no.
B71ALU	3.90	0.425	45201220 015005

## ASAP

With its unique locking system, the ASAP has set new standards in the field of fall protection systems for workers at heights. During standard use, the device automatically follows the user's movements on the rope without manual intervention. In the event of a fall or abrupt acceleration, the ASAP locks onto the rope and stops the user from moving. The ASAP can be combined with an ASAP'SORBER or ABSORBICA (L57) energy absorbing lanyard to enable users to work at a distance from the rope.

### ASAP B71AAA

#### Mobile fall-arrest device for ropes

- Permanent protection against falls:
  - Locks in the event of a fall, slip or uncontrolled descent
  - Works on vertical or angled ropes
  - Locks onto the rope even if the user grabs for the device during a fall
- Simple and efficient:
  - The ASAP runs up and down ropes without manual intervention
  - Can be easily attached and detached from the rope at any point
  - Can be combined with an ASAP'SORBER energy absorbing lanyard to enable users to work at a distance from the rope
- Supplied with an automatically locking OK TRIACT-LOCK karabiner

CE EN 353-2 with ropes for which the device has been certified, e.g. PETZL AXIS with sewn end loop, CE EN 12841 type A with all semi-static ropes acc. to EN 1891 type A from 10.5 mm - 13 mm, e.g. PETZL PARALLEL 10.5 mm to VECTOR 10.5 mm.\*

\* For further information, please visit [www.petzl.com/ASAP](http://www.petzl.com/ASAP)



Type	Clearance in m	Weight in kg	Item no.
B71AAA	3.90	0.370	45201220 015004

## ASAP'SORBER

The ASAP'SORBER lanyard connects to the ASAP or ASAP LOCK guided type fall arrester to enable the user to work at a distance from the rope in order to protect it during certain work phases. The lanyard is equipped with a strap energy absorber located in a zipped fabric pouch to protect it against abrasion and enable its regular inspection. This lanyard is available in two lengths to enable an optimum balance between the distance from the rope and the fall height reduction.

## ASAP'SORBER

### Energy absorbing lanyard for ASAP or ASAP LOCK

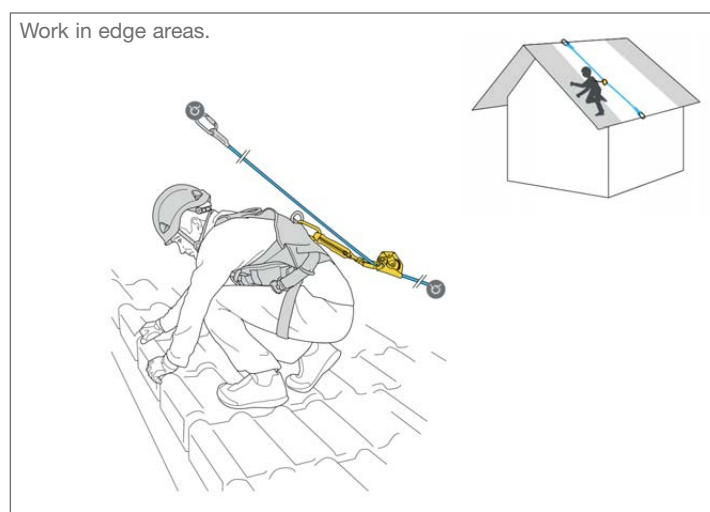
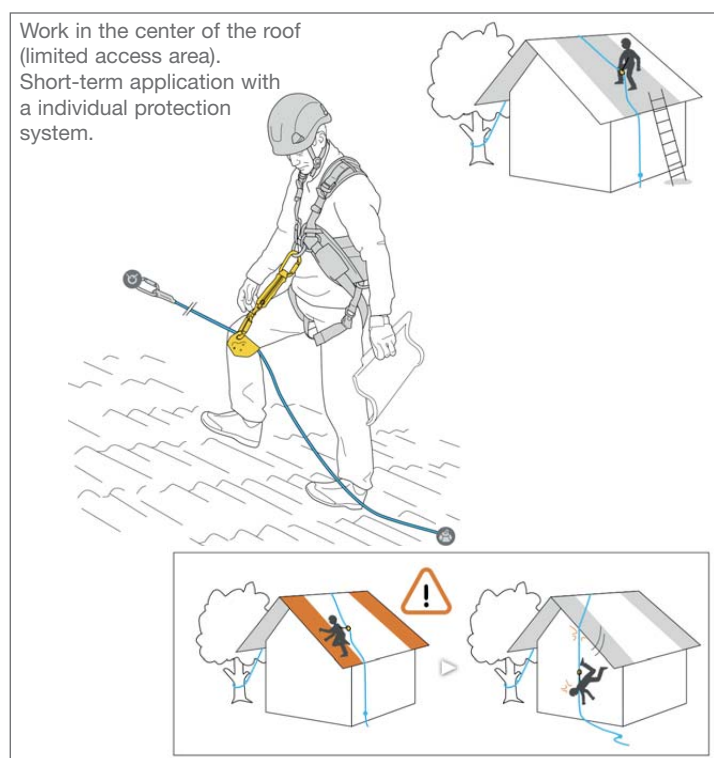
- Connects the ASAP or ASAP LOCK guided type fall arrester to the harness.
- Enables the user to work at a distance from the rope to:
  - Clear the work area
  - Protect the rope from sharp tools and molten metal splashes
- Absorbs energy during a fall by the special stitching tearing
- Available in two lengths to enable an optimum balance between the distance from the rope and the fall height reduction.
- The zipped fabric pouch protects the energy absorber against abrasion and splashes and enables its regular inspection.
- The ends are equipped with STRINGS to hold the connector in position and protect the webbing from abrasion.

CE EN 355, EAC



Attachment to the user's harness with the aid of an ASAP'SORBER energy absorbing lanyard (20 cm or 40 cm)

Type	Length in cm	Length after full extension in m	Minimum necessary clearance in m	Weight in kg	Item no.
L71AA20	20	0.45	3.90	0.075	45201600 015040
L71AA40	40	0.80	4.10	0.105	45201600 015041



## Self-braking descender I'D S

### Self-braking descender with anti-panic function

- Multi-functional handle that, in line with the situation at hand, allows the user to:
  - release the rope and commence the descent (the descent speed is controlled by the hand on the braking side of the rope);
  - move more easily along slanted or horizontal terrain (thanks to the button on the handle);
  - lock the rope and position him/herself without tying off the device (handle locked);
  - engage the anti-panic function (if the user pulls too hard on the handle, the clamping mechanism is released and automatically brakes to stop the descent).
- A safety catch reduces the risk of an accident due to the incorrect installation of the device on the rope
- The pivoting cam makes it easier to take up the slack in the rope. Can also be used to make a reversible haul system and for short ascents (in conjunction with a foot loop and a rope loop).
- For rope access work
  - Safety gate on the moving side plate for rope with diameters of 10 to 11.5 mm
- Individually tested

CE EN 341 Class A, CE EN 12841 Type C, NFPA 1983 General Use

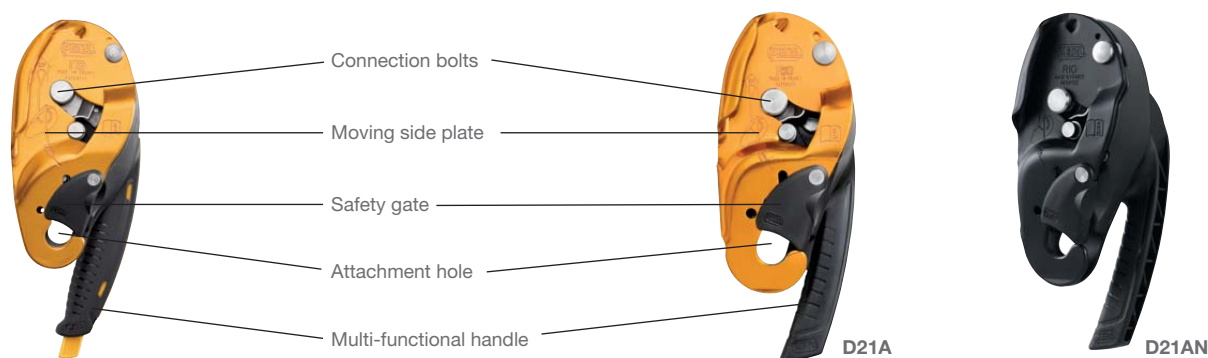
## Self-braking descender RIG

**Compact self-braking descender for rope access work in difficult to reach areas or rescue situations for expert users.**

**For rope diameters of 10.5 – 11.5 mm**

- Designed for expert users for rope access work
- Multi-functional handle that, in line with the situation at hand, allows the user to:
  - release the rope and control the descent with the hand on the free end of the rope
  - lock the rope and position him/herself without tying off the device
- The automatic return system on the handle limits the risk of accidental activation
- The handle 'parked' position reduces the risk of the handle snagging when the descender is being carried on the harness
- The safety gate on the moving side plate helps prevent the device from being dropped and facilitates its installation on the rope and the passing of intermediate anchors
- The pivoting cam makes it easier to take up the slack in the rope. Can also be used to make a reversible haul system and for short ascents (in conjunction with a FOOTPRO foot loop and an ASCENSION handled ascender).

CE EN 12841 Type C, CE EN 341 Class A, NFPA 1983 Technical Use

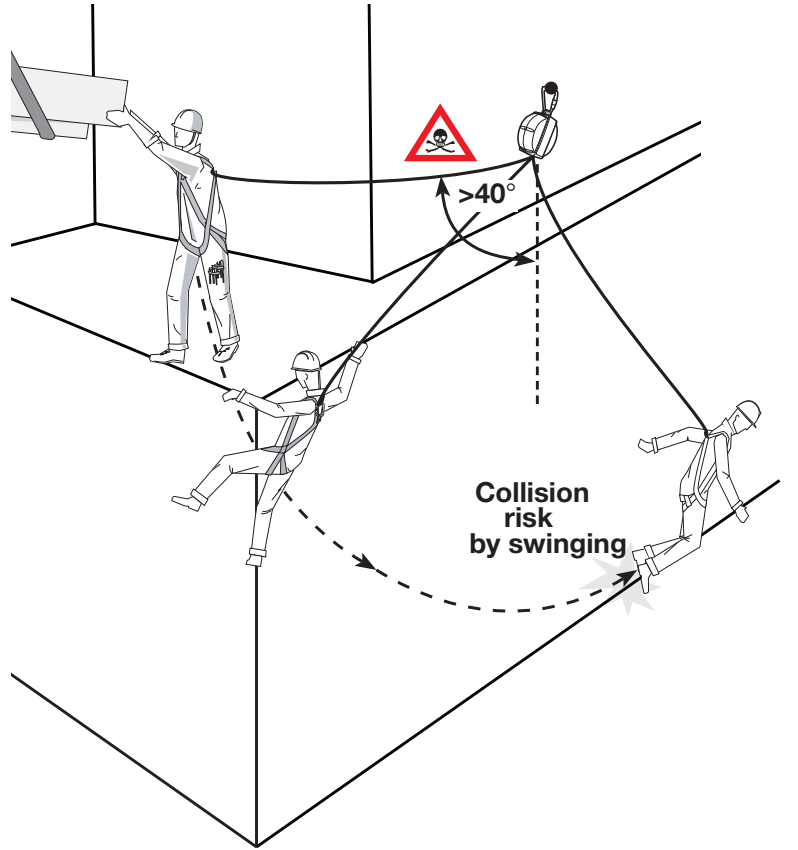


Type	Weight in kg	Item no.
D200SO	0.53	45203000 015001

Type	Colour	Weight in kg	Item no.
D21A	yellow	0.38	45203000 015002
D21AN	black	0.38	45203000 015003

### The pendulum effect risk

To limit the risk of accidents caused by the pendulum effect (or sideways swinging), the retractable type fall arrester must be vertically installed over the work zone. It is important to work in the 40° conical safety area beneath the anchorage point. If the work zone is outside this conical safety area, a second retractable type fall arrester is used, whereby the two retractable type fall arresters are attached to the two ends of the work zone.



### PROTECTA self-retracting lifelines - smooth, safe operation and built to last! - selection guide

Product	Description	Area of application	Housing	Fall indicator	Connector	Swivel suspension	Housing Carabiner
Rebel™ Webbing	Small, lightweight and compact	<ul style="list-style-type: none"> <li>Construction industry</li> <li>Assembly / Maintenance</li> <li>General industry</li> </ul>	Extruded aluminium or thermoplastic	✓	Automatic carabiner	✓	✓
Rebel™ Rope	Robust and with handle for transportation	<ul style="list-style-type: none"> <li>Construction industry</li> <li>Assembly / Maintenance</li> <li>Energy suppliers</li> <li>Telecommunications</li> </ul>		✓	Automatic carabiner with swivel suspension	✓	✓



## Rebel™ Self-Retracting lifelines with polyester webbing

The Rebel self-retracting lifeline is light-weight yet robust enough to withstand complex uses. The unique webbing enables flexible usage.

- High quality with outstanding features
- Compact and lightweight – at under 1.4 kg, the best length to weight ratio for industrial use
- Twistlock-carabiner (steel) on top of the housing, opening width 18 mm
- User weight: 140 kg

Standard: EN 360



**Rebel™**  
Self-retracting lifeline  
3 m polyester webbing

Illustration shows  
type 3100423

Type	Length in m	Webbing type	Carabiner opening width in mm		Housing	Weight in kg	Item no.
			At device	At lanyard			
3100423	3	25 mm polyester	18	19	Nylon	1.4	45202200 035001
3100437	6	25 mm polyester	18	19	Nylon	2.2	45202200 035002

## Rebel™ Self-Retracting lifelines with galvanised steel wire rope

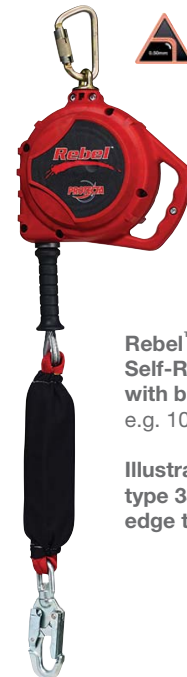
Because of the integrated structure and the fall indicator, specialists can conduct the annual inspection as a visual inspection. It is therefore not necessary to send the self-retracting lifeline to a service centre for the annual inspection. User weight 140 kg

Standard: EN 360



**Rebel™**  
Self-Retracting lifeline  
with built-in fall indicator  
e.g. 10 m rope

Illustration shows  
type 3590521



**Rebel™**  
Self-Retracting lifeline  
with built-in fall indicator  
e.g. 10 m rope

Illustration shows  
type 3590542,  
edge tested

Type	Length in m	Rope type	Housing	Carabiner opening width in mm		Weight in kg	Item no.
				At device	At lanyard		
3590521	10	5 mm galv. rope	Plastic	18	19	5.6	45202200 015003
3590570	15	5 mm galv. rope	Plastic	18	19	7.5	45202200 015004
3590610	20	5 mm galv. rope	Plastic	18	19	10	45202200 015005
3590690	30	5 mm galv. rope	Plastic	18	19	13.4	45202200 015006
3590542	6	5.5 mm galv. rope	Plastic	18	19	5.9	45202200 015007

## NANO-LOK Self-Retracting lifelines Direct attachment options to fall arrest harnesses



### Single leg connector

Galvanised steel catch with triple safety device. No additional carabiners required.



### Y-connector

A connector directly integrated into the harness webbing with a plastic insert keeps the two Nano-Loks apart.



Press the release buttons to open the connector. Allow the safety pin to slide out.



Push the plastic insert upwards and the carabiner gate inwards. Insert the carabiner nose into the swivel eye on the self-retracting lifeline and rotate it to the other side.



Thread the connector through the loosened loop beneath the rear fall arrest eyelet (D-ring), then pull the loop tight.



Slide the nose end of the carabiner behind the loosened loop beneath the rear fall arrest eyelet (D-ring) and attach the second self-retracting lifeline.



Re-insert the safety pin and push it through the swivel eye on the self-retracting lifeline. Press until the pin clicks into place.



Close the carabiner and rotate the plastic insert inwards and downwards to secure the connector, making sure the loop passes through the slot on the insert.



3101260



3101262



3101207



3101264



3101208



3101298

Type	1-leg	2-leg	Length retracted in m	Length extended in m	Weight in kg	Item no.
3101260	✓		0.47	1.83	1.14	45202200 015012
3101262	✓		0.54	1.86	0.99	45202200 015013
3101207	✓		0.56	1.92	1.3	45202200 015014
3101264	✓		0.56	1.92	0.87	45202200 015015
3101208	✓		0.61	1.97	1.18	45202200 015016
3101298		✓	0.58	1.94	2.39	45202200 015017

## NANO-LOK™ EDGE Self-Retracting lifeline with webbing



- Suitable for tie-off at foot level (fall factor 2)  
The special design minimises impact forces, while the automatic retraction of unused rope reduces the risk of tripping
- Integrated energy absorber for adjustment in the area of the dorsal webbing cross on the fall arrest harness  
360° rotatable  
Material: 20 mm wide Dyneema® webbing,  
max. person weight: 141 kg  
Leaves the suspension eyelet free, e.g. for rescue purposes
- Edge tested acc. to VG11.60, rev. 7 (edge radius 0.5 mm)
- Only annual visual inspection - no revision



		Nano-Lok™ web 1-leg				Nano-Lok™ web 2-leg			
		Type	Length in m	Weight in kg	Item no.	Type	Length in m	Weight in kg	Item no.
	Alu Twistlock Carabiner Opening width: 19 mm	3101430	2.40	1.30	45202200 015018	3101440	2.50	2.22	45202200 015020
	Alu-Carabiner Opening width: 57 mm	3101433	2.50	1.30	45202200 015019	3101443	2.40	2.22	45202200 015021

## NANO-LOK™ EDGE Self-Retracting lifeline with galvanised steel wire rope



- Suitable for tie-off at foot level (fall factor 2)  
The special design minimises impact forces, while the automatic retraction of unused rope reduces the risk of tripping
- Integrated energy absorber for adjustment in the area of the dorsal webbing cross on the fall arrest harness  
360° rotatable, max. person weight: 141 kg  
Leaves the suspension eyelet free, e.g. for rescue purposes, material: galvanised steel wire rope, Ø 5 mm
- Edge tested acc. to VG11.60 rev. 7 (edge radius 0,0 mm) over extremely sharp edges
- Only annual visual inspection - no revision



		Nano-Lok™ Cable 1-leg				Nano-Lok™ Cable 2-leg			
		Type	Length in m	Weight in kg	Item no.	Type	Length in m	Weight in kg	Item no.
	Alu Twistlock Carabiner Opening width: 19 mm	3500224	2.40	1.70	45202200 015022	3500239	2.40	2.90	45202200 015024
	Alu-Carabiner Opening width: 57 mm	3500244	2.50	2.10	45202200 015023	3500241	2.50	3.85	45202200 015025



## ABS B-LOCK 2 m

Extreme lightweight self-retracting lifeline. Perfectly suited for a use at the body (Chest- or Back D-ring of the harness).

- 26 mm web, length 2 meter from polyamide, breaking load: 15 kN
- Standard: EN 360
- compact, extreme lightweight shape
- The swivel suspension at the top and the bottom prevents a twisting of the web
- Including fall indicator at the carabiner



## ABS B-LOCK 10 - 30 m

Self-retracting lifeline with galvanized steel wire rope or sharp edge tested webbing. 6 lengths available. 10, 12, 15, 20, 25 or 30 m retractable depending on model. Rugged plastic housing.



## ABS B-LOCK 3,5 - 6 m

Self-retracting lifeline with integrated energy absorber. Available with a galvanized steel wire rope or sharp edge tested webbing, for wearing at the body. 3.5 or 6 m retractable depending on the model. Rugged plastic housing.

- Optionally with polyamide web 25 mm with a breaking load of 25 kN or with a galvanized steel wire rope DIN EN 360:2002, or with a galvanized steel wire rope with a breaking load of 12 kN
- Standard: EN 360
- Including energy absorber, including fall indicator at the carabiner
- Snap-carabiner with swivel suspension prevents a twisting of the rope/web

### ABS B-LOCK self-retracting lifeline with integrated fall indicator

The above shown B-LOCK series 1, 2 and 3 are all equipped with fall indicators. For this purpose there is a coloured mark at the rotation axis of the carabiner. If this mark shows „red“ the type fall arrester has to be taken out of usage and checked.

**Double indicator:** Additionally the rotation axis of the carabiner blocks. Then the self-retracting lifeline has to be send to a repair service.



	Type	Description	Connection type	Length in m	Weight in kg	Item no.
1	PS-BL-B-2	ABS-B-LOCK 2 m	Web	2.0	1.7	45202200 015026
2	PS-BL-B-3,5	ABS-B-LOCK 3.5 m	Web	3.5	2.5	45202200 015030
2	PS-BL-B-6	ABS-B-LOCK 6 m	Web	6.0	4.1	45202200 015027
3	PS-BL-B-12	ABS-B-LOCK 12 m	Web	12.0	6.1	45202200 015028
2	PS-BL-S-3,5	ABS-B-LOCK 3.5 m	Steel wire rope	3.5	2.7	45202200 015037
2	PS-BL-S-6	ABS-B-LOCK 6 m	Steel wire rope	6.0	4.3	45202200 015031
3	PS-BL-S-10	ABS-B-LOCK 10 m	Steel wire rope	10.0	4.9	45202200 015032
3	PS-BL-S-15	ABS-B-LOCK 15 m	Steel wire rope	15.0	6.9	45202200 015033
3	PS-BL-S-20	ABS-B-LOCK 20 m	Steel wire rope	20.0	7.2	45202200 015034
3	PS-BL-S-25	ABS-B-LOCK 25 m	Steel wire rope	25.0	12.5	45202200 015035
3	PS-BL-S-30	ABS-B-LOCK 30 m	Steel wire rope	30.0	13.0	45202200 015036





## Self-Retracting lifelines

### IKAR *flexible* in accordance with DIN EN 360:2002

#### HWDB 2 carabiner IKV 21

**Housing material:** Aluminium  
**Lanyard:** webbing with fall indicator

Robust, low-maintenance dual self-retracting lifeline for securing one person against a fall. Specially developed to enable secure work positioning changes through two-way anchorage and permanent prevention of falls. Webbing with fall indicators and 2 x 2 extension lengths. Energy-absorbing function in the aluminium housing. Swivel carabiner with a 26 mm opening. Swivel suspension on the aluminium housing.



#### HWDB 2R carabiner IKV 32W

**Housing material:** Aluminium  
**Lanyard:** webbing with fall indicator

Robust, low-maintenance dual self-retracting lifeline for securing one person against a fall. Specially developed to enable secure work positioning changes through two-way anchorage and permanent prevention of falls. Webbing with fall indicators and 2 x 2 extension lengths. Energy-absorbing function in the aluminium housing. Swivel carabiner with a 66 mm opening. Swivel suspension on the aluminium housing.



Type	Lanyard	Carabiner	Housing	Dimensions in mm	Weight in kg	Item no.
41-HWDB 2	2 x 2 m web	180	Aluminium	250 x 165 x 60	1.9	45202200 015056
41-HWDB 2R	2 x 2 m web	280	Aluminium	250 x 165 x 60	2.8	45202200 015057

Type	Carabiner type	Breaking load/Standard	Description	Weight in kg	Item no.
IKV13	Screw gate	25-kN-anchor, EN 362	17 mm opening width, galvanized steel	0.16	45201410 015019
IKV30	Trilock-closure	25-kN-anchor, EN 362	17 mm opening width, galvanized steel	0.195	45201410 015021



#### Explanation of device names:

**H** = self-retracting lifeline, **W** = swivel suspension, **B** = webbing, **number** = length of the retractable lanyard

Example: **HWB 2.5** means: self-retracting lifeline with swivel suspension and webbing, webbing length of 2.5 metres.



**\*IKAR self-retracting lifelines HWDB 2 are tested over the edge in a fall test.**  
**( $r \geq 0.5$ )**

## IKAR flexible in accordance with DIN EN 360:2002

**Housing material:** Plastic or aluminium  
**Lanyard:** Webbing or galvanized steel wire rope

Robust, low-maintenance retractable type fall arrester with webbing or galvanized steel wire rope, low weight thanks to ultra-light plastic housing, also with aluminium housing and swivel suspension.

The swivel suspension prevents the webbing or wire rope from twisting.



**\*IKAR self-retracting lifelines are tested over the edge in a fall test.**  
 $(r \geq 0.5)$



### IKAR ACB 1.8 $(2 \times r \geq 0.5)$

The retractable type fall arrester has been designed for the safety of people on working platforms. Only IKV 13 and IKV 30 connectors may be used.

- 1 41-ACB 1.8
- 2 41-HWB2 + HWPB 3.5
- 3 41-HWPB 7, 9, 12
- 4 41-HWPS 3
- 5 41-HWPS 6, 12, 18



Type	Lanyard	Housing	Dimensions in mm	Weight in kg	Item no.
41-ACB 1.8	1.80 m web	Aluminium	240 x 84 x 61	0.96	45202200 015050
41-HWB 2 (Sweety)	2.00 m web*	Aluminium	240 x 84 x 61	0.8	45202200 015055
41-HWPB 3.5	3.50 m web*	Plastic	326 x 104 x 78	1.2	45202200 015061
41-HWPB 7	7.00 m web*	Plastic	300 x 165 x 80	1.8	45202200 015058
41-HWPB 9	9.00 m web*	Plastic	335 x 168 x 88	2.3	45202200 015059
41-HWPB 12	12.00 m web*	Plastic	370 x 195 x 95	3.4	45202200 015060
41-HWPS 3	3.00 m wire rope	Plastic	390 x 104 x 78	1.9	45202200 015062
41-HWPS 6	6.00 m wire rope	Plastic	420 x 145 x 80	2.5	45202200 015063
41-HWPS 12	12.00 m wire rope	Plastic	500 x 195 x 95	4.9	45202200 015065
41-HWPS 18	18.00 m wire rope	Plastic	540 x 220 x 97	6.3	45202200 015066

### Explanation of device names:

**H** = self-retracting lifeline, **W** = swivel suspension, **S** = galvanised steel cable, **B** = webbing, **P** = plastic housing, **number** = length of the retractable lanyard

Example: **HWB 2.5** means: retractable type fall arrester with swivel suspension and webbing, webbing length of 2.5 metres

## IKAR HRA in accordance with DIN EN 360:2002 and DIN EN 1496:2007

**Housing material:** Aluminium or plastic  
**Lanyard:** galvanized steel wire rope

IKAR self-retracting lifelines with rescue lifting device (type HRA) are fitted with a winch unit. Following a fall, this winch unit can be easily engaged by a second person, for example in the event of unconsciousness due to gases in shafts and sewerage systems. The accident victim can therefore be saved quickly and safely. **The rescue lifting device has an integrated energy-absorbing function, as required by the new European harmonised standard EN 1496.** The entire unit is constructed from stainless steel, aluminium or impact-resistant plastic. The different wire rope lengths make the right device available for any use. **(Special wire rope lengths and Dyneema or stainless steel wire ropes are available on request)**



Carabiner IKV14

Type	Lanyard	Housing	Dimensions in mm	Weight in kg	Item no.
41-HRA 12	12.00 m wire rope	Aluminium	450 x 195 x 180	7.0	45202200 015051
41-HRA 18	18.00 m wire rope	Aluminium	570 x 240 x 200	11.5	45202200 015052
41-HRA 18p	18.00 m wire rope	Plastic	620 x 231 x 152	10.3	45202200 015053
41-HRA 33	33.00 m wire rope	Aluminium	640 x 315 x 230	21.0	45202200 015054

Type	Carabiner type	Breaking load/Standard	Description	Weight in kg	Item no.
IKV14	Screw gate	35-kN-anchor, EN 362	28 mm opening width, galvanized steel	0.28	45201410 015020



### Explanation of device names:

**H** = self-retracting lifeline, **R** = rescue lifting device, **A** = drain function, **p** = plastic housing, **number** = length of the retractable lanyard

Example: **HRA 15** means: self-retracting lifeline with a rescue lifting device, rope length 15 metres

## Blocfor™ Self-retracting lifelines

The Blocfor™ self-retracting lifelines automatically block the extension of the rope in the event of a fall; the fall height is minimised by the immediate tripping of the brake. The rope length is automatically adjusted by means of the integrated return spring, providing the user with great freedom of movement.

In accordance with standard EN360 and the test instructions VG11 CNB/P/11.060 07 and CNB/P/11.062.

### Blocfor™ 10 ESD

The self-retracting lifeline with automatic winding offers the following benefits:

- Usable length 10 m
- Low maintenance costs
- Automatic winding
- An energy absorber element at the rope end absorbs appearing forces
- Approval for horizontal and vertical use
- Rotatable connection element



Type	Model	Description	Weight in kg	L x W x H in mm	Item no.
70572	Blocfor™ 10 ESD M47-M10	galvanized steel wire rope with fall energy absorber	5.28	290 x 320 x 120	45202200 035207

### Blocfor™ 5 ESD

The new self-retracting lifeline with a 5 m or 6 m webbing offers the following benefits:

- Easy to handle and lightweight with 2 kg
- Easy installation
- Automatic winding
- Rotatable connection element
- Only 10 spare parts
- Approval for horizontal and vertical use
- Enhanced safety in the event of a fall
- Vertical motion with 20° deflection to the right or left



Type	Model	Description	Weight in kg	L x W x H	Item no.
70652	Blocfor™ 5 ESD M47-M10	5 m webbing with fall energy absorber	2.0	181 x 136 x 68	45202200 035208
70662	Blocfor™ 6 ESD M47-M10	6 m webbing with fall energy absorber	2.1	181 x 136 x 68	45202200 035210

## TurboLite™ fall limiter, inspection free

An alternative to shock-absorbing lanyards  
Suitable for fall factor 2

### Advantages

- Ideal for all situations with low clearance
- The necessary clearance is low (1.80 m) compared to that required for energy absorbing lanyards (fall factor 0)
- Suitable for use with fall factor 2 (anchorage point below the rear D-ring but not lower than the stand area) and can be attached on both sides
- Max. user weight of 100 kg with a fall factor of 2 (140 kg with a fall factor of 0 or 1)
- Suitable for horizontal and vertical use, no annual inspection required

### Features

- The fall indicator in the webbing informs users of the functional status
- All models have a 2 m action radius
- Special webbing for greater wear resistance, integrated swivel suspension prevents twisting

### Area of use:

Fall arrest areas during installation work as well as for the utility and construction industries

### Standard:

EN 360



Type	Description	Housing	Length in m	Weight in kg	Item no.
1018015	With 2 Twistlock carabiners	Nylon housing	2.0	0.87	45202200 015069
1018014	With 1 Twistlock and 1 scaffold hook	Nylon housing	2.0	1.32	45202200 015070



## FALCON™ Self-retracting lifeline, inspection free

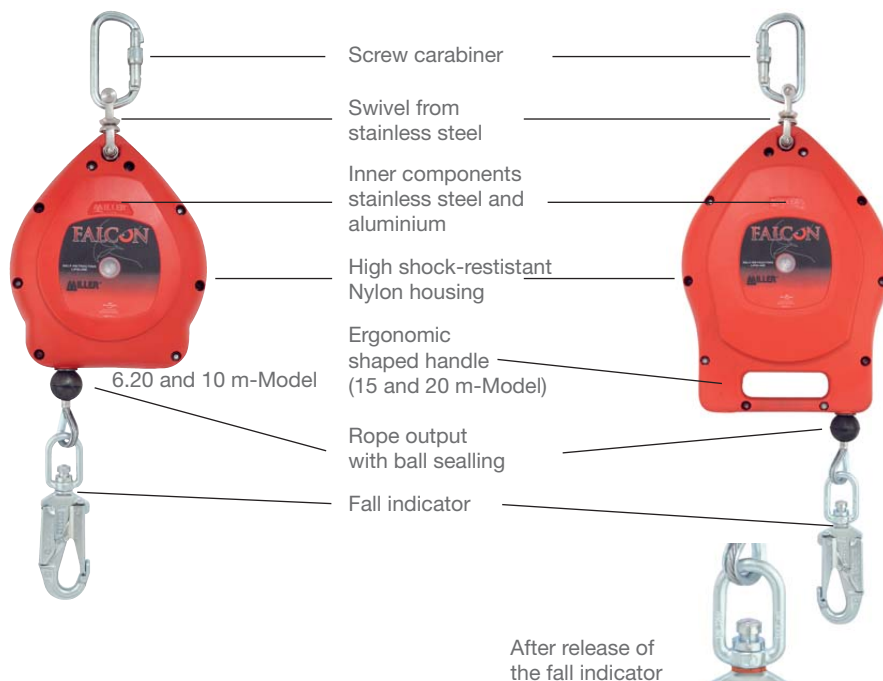
- Nylon housing with lifelong guarantee
- Stops falls after only a few centimetres and enables rapid, safe rescues
- Clearly visible fall indicator on the lower automatic karabiner
- Interior components made from stainless steel and aluminium
- No annual manufacturer inspection required. According to the CE standard, an inspection should be carried out by an expert, during which the Miller repair manual is considered

### Areas of application:

Fall arrest areas during installation work as well as for the utility and construction industries

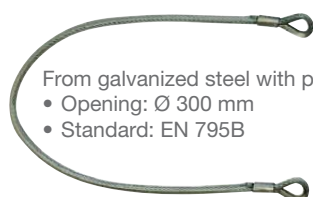
### Standard:

EN 360



Type	Lanyard	Automatic carabiner with fall indicator	Dimensions in mm	Weight in kg	Item no.
1011728	6.20 m galv. wire rope	Steel	255 x 213 x 101	4.0	45202200 015042
1011742	10 m galv. wire rope	Steel	255 x 213 x 101	5.0	45202200 015043
1011746	15 m galv. wire rope	Steel	342 x 246 x 101	6.7	45202200 015044
1011750	20 m galv. wire rope	Steel	342 x 246 x 101	7.6	45202200 015045
1011729	6.20 m stainless steel wire rope	Steel	255 x 213 x 101	4.0	45202200 015046
1011743	10 m stainless steel wire rope	Steel	255 x 213 x 101	5.0	45202200 015047
1011747	15 m stainless steel wire rope	Steel	342 x 246 x 101	6.7	45202200 015048
1011751	20 m stainless steel wire rope	Steel	342 x 246 x 101	7.6	45202200 015049

## Anchor sling for horizontal use



From galvanized steel with plastic covering, Ø 6.3 mm.

- Opening: Ø 300 mm
- Standard: EN 795B

## Suitable screw carabiner



Standard: EN 362

Type	Description	Material	Breaking load in kN	Dimension	Weight in kg	Item no.
1002897	Anchor sling for horizontal use MJ51	Coated steel wire rope	15	Length: 1.0 m	0.28	45201018 015003
1018960	Screw carabiner for the anchor sling ML00	Steel/Screw carabiner	25	Opening width: 17 mm	0.165	45201410 015038



Illustration shows  
type 1006603



Illustration shows  
type 1016115

## Load arresters are not products for personal protective equipment!

Load arresters are for securing of loads in case of a break of the load suspension device (e.g. Crane rope, chain). They are often used at production- and assembly work places of components.

The application of this products was primarily regulated in the EU by:  
Manufacturer's test/type examination from a EU notified testing lab.

- DIN EN 360, retractable type fall arresters (test basis at the type examination)
- DIN 3069 selection of suitable rope construction

Why application ?

- European guideline of minimum rules for safety and health protection at the use of work equipment by workers at work (89/391/EEG and modification guideline 95/63/EEG).
- DGUV-regulation 1 "Policies of prevention"
- DGUV-standard 100-501 "Operating of work equipment"

## Load arresters with galvanized steel wire rope

Type	Description	Max. Load in kg	Rope length in m	Weight in kg	Item no.
1006603	Load arrester 6-2000L, steel housing, fall indicator at the device, galvanized wire rope	500	10	11.30	15360000 015002
1006609	Load arrester, steel housing, fall indicator (plastic thimble at galvanized wire rope)	250	5	4.64	15360000 015003
ME13510	Load arrester, steel housing, fall indicator at the device, stainless steel wire rope	500	10	11.20	15360000 015006
ME13732	Load arrester, steel housing, fall indicator at the device, galvanized wire rope	500	15	18.40	15360000 015007
ME21505	Load arrester, steel housing, fall indicator at the device, galvanized wire rope	240	30	18.40	15360000 015008
1016115	Falcon load arrester, nylon housing, fall indicator, galvanized wire rope	200	10	5.28	15360000 015005

Delivery of the device with 2 carabiner acc. to EN 362.

## ABS-Lock® III-R Steel, 360° rotatable anchorage point

The system has been developed to provide a secure single anchorage point for simultaneous use by up to three people.  
Standards: DIN EN 795:2012, A and DIN CEN/TS 16415:2013 and DIN EN 50308:2004. GL-certified.

ABS-Lock® L3-ST-0-18-R-M12

ABS-Lock® L3-ST-0-24-R-M16

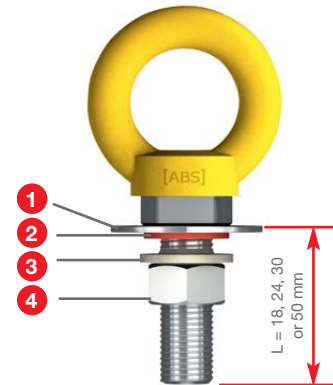
ABS-Lock® L3-ST-0-30-R-M20

ABS-Lock® L3-ST-0-50-R-M16

### Specifications

- FREELY rotating anchor eyelet!
- General type approval (DIBt) approx. at mid 2017
- For simultaneous use by three people
- Torque: 70 Nm
- Completely manufacture from 1.4571 stainless steel
- Vulcanised fibre disc and seal prevent water from seeping in around the bore hole
- 3 people acc. to EN 795, acc. to ANSI Z359.1 only 1 person
- 2 people acc. to EN 50308
- Load capacity: 22.4 kN
- M12-type only certified in acc. to EN 795:2012, Load capacity = 14 kN
- For screwing into metric threads M12, M16 and M20 available on site or securing using a bore hole (16-17 mm) with attachment material position **3** and **4**
- Installation: also suitable for overhead and wall mounting as well as pressure zones

- 1** Specification plate
- 2** Upper seal
- 3** Lower seal
- 4** Nut



### Attachment options on steel structures



Type	Thread length in mm	Thread	Mounting	Weight in kg	Item no.
L3-ST-0-18-R-M12	18	M12	Screwing in	0.35	45201010 015025
L3-ST-0-24-R-M16	24	M16	Screwing in	0.40	45201010 015026
L3-ST-0-30-R-M20	30	M20	Screwing in	0.40	45201010 015027
L3-ST-0-50-R-M16	50	M16	Securing	0.45	45201010 015028

Anchor eyelets available powder-coated in all RAL colours for a special price.  
The lengths 18, 24 and 30 mm are supplied without the seal and nut (for screwing in).

## ABS-Lock® III-R concrete, 360° rotatable anchorage point

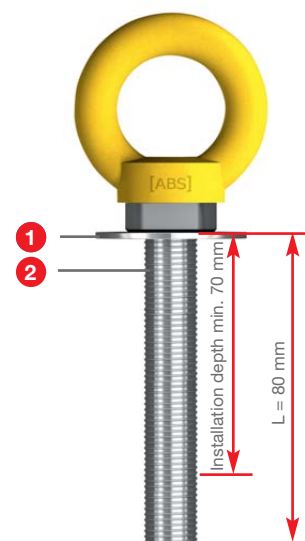
The system has been developed to provide a secure single anchorage point for simultaneous use by up to three people.  
Standards: DIN EN 795:2012, A and DIN CEN/TS 16415:2013 and DIN EN 50308:2004. GL-certified.

ABS-Lock® L3-B-0-80-R-M16

### Specifications

- FREELY rotating anchor eyelet!
- General type approval (DIBt) approx. at mid 2017
- For simultaneous use by three people
- Bore: min. 70 (standard: 100 mm) deep, Ø 18 mm
- Manufactured completely from 1.4571 stainless steel
- 3 people acc. to EN 795
- 2 people acc. to EN 50308
- Load capacity: 22.4 kN
- Two-component adhesive WIT-VM-250 or Hilti HIT or similar, Fischer FIS V, UPAT UPM 44
- Concrete quality min. C20/25, B25
- Special adhesive available for order, type ZU-1000, 330 ml (see table)
- Installation: also suitable for overhead and wall mounting as well as pressure zones

- 1 Specification plate
- 2 Thread installation



### Attachment options in concrete



Type	Thread length in mm	Thread	Mounting	Weight in kg	Item no.
L3-B-0-80-R-M16	80	M16	Gluing	0.50	45201010 015023
ZU-1000	-	-	-	0.66	45204815 015001

Anchor eyelets available powder-coated in all RAL colours for a special price.



## ABS-Lock® I, detachable stainless steel anchorage point

Perfect for work in a window situation. Detachable at the touch of a button. Can only be used in combination with ABS-Lock® II sleeve. A diagonal bracket prevents from accidental unlocking. For a maximum of 2 people. 360° rotatable.

The system is based on 2 elements. ABS-Lock® I is a detachable anchorage point which is mounted at the touch of the button and can be easily removed. Once the retainer ball bearings inside the anchorage point have locked into place, the device can withstand loads of up to 2 tons. This makes this fall protection device the ideal partner for work in a window situation.

**Standard:** DIN EN 795:2012, B;  
DIN CEN/TS 16415:2013



## ABS-Lock® II-B Stainless steel sleeve

In different lengths for detachable anchorage point ABS-Lock I, **for gluing in concrete or screwing in wood**. Including plug and plastic coverage. Optional: Stainless steel coverage.

- General type approval Z-14.9-688
- For concrete C20/25 (B25)
- For supporting wooden structures (Beam min. 120 x 120 mm)
- Attention: Axial load of wood version only possible at secured version!
- Recommended accessory: Two-component mortar WIT-VM-250
- If installed within Germany please note the general type approval legal requirements



**Standard:** DIN EN 795:2012, B; DIN CEN/TS 16415:2013

## Two-component mortar for concrete and masonry, type WIT-VM-250

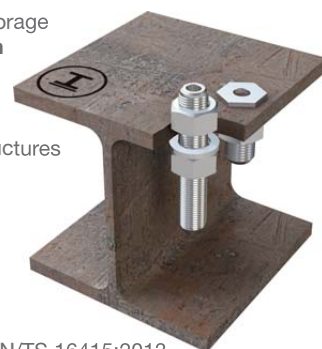
The injection mortar is delivered with a suitable mixer jet. One cartridge includes 330 ml of special mortar. The mortar is suitable for concrete and masonry (solid brick and perforated brick).



## ABS-Lock® II-ST Stainless steel sleeve

In different lengths for detachable anchorage point ABS-Lock I, **for securing through steel or wood**. Including plug and plastic coverage.

- For steel and supporting wooden structures
- Beam min. 60 x 120 mm
- Optional: Short version (30 mm) with hexagon annulus



**Standard:** DIN EN 795:2012, B; DIN CEN/TS 16415:2013

## ABS Epoxy Dispenser: Squeeze gun for injection mortar

During installation squeeze our two-component mortar WIT-VM-250 with the ABS Epoxy Dispenser into the bore holes. You need this device during the installation of anchorage points and anchorage devices, which are glued with heavy-duty anchors into concrete or masonry.



Type	Description	Thread length in mm	Thread	For usage in	Weight in kg	Item no.
L1-1000	ABS-Lock I, detachable anchorage point	-	-	-	0.25	45201010 035158
L2-B-100	ABS-Lock II-B, stainless steel sleeve	100	M22	Concrete/Wood	0.213	45201010 015035
L2-B-125	ABS-Lock II-B, stainless steel sleeve	125	M22	Concrete/Wood	0.263	45201010 035162
L2-B-150	ABS-Lock II-B, stainless steel sleeve	150	M22	Concrete/Wood	0.335	45201010 035164
L2-B-200	ABS-Lock II-B, stainless steel sleeve	200	M22	Concrete/Wood	0.461	45201010 035166
L2-B-250	ABS-Lock II-B, stainless steel sleeve	250	M22	Concrete/Wood	0.573	45201010 035167
L2-B-300	ABS-Lock II-B, stainless steel sleeve	300	M22	Concrete/Wood	0.712	45201010 035169
L2-ST-30	ABS-Lock II-ST, stainless steel sleeve	30	M22	Steel	0.134	45201010 035171
L2-ST-50	ABS-Lock II-ST, stainless steel sleeve	50	M22	Steel	0.180	45201010 035173
L2-ST-100	ABS-Lock II-ST, stainless steel sleeve	100	M22	Steel	0.346	45201010 035175
L2-ST-150	ABS-Lock II-ST, stainless steel sleeve	150	M22	Steel/Wood	0.468	45201010 035177
ZU-1000	Two-component mortar 330 ml	-	-	-	0.66	45204815 015001
ZU-1003	Squeeze gun ABS Epoxy Dispenser	-	-	-	0.97	45204815 035486



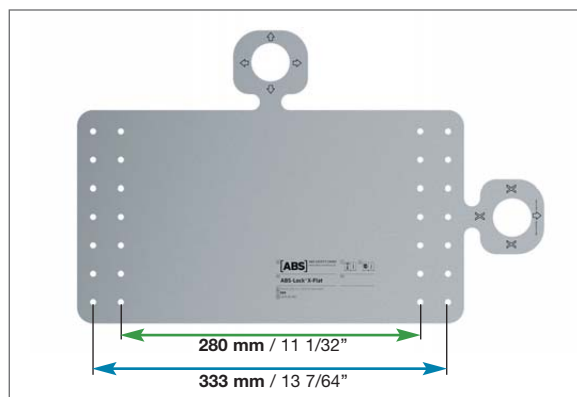
#### Application area

The ABS-Lock® X-Flat was especially developed for the fall protection of persons during work on containers. The anchorage point is particularly flat, so that the containers can be stacked furthermore easily. The anchorage point secures up to 3 persons at the same time in accordance to DIN EN 795:2012 (A) and DIN CEN/TS 16415:2013.

#### Operation and installation

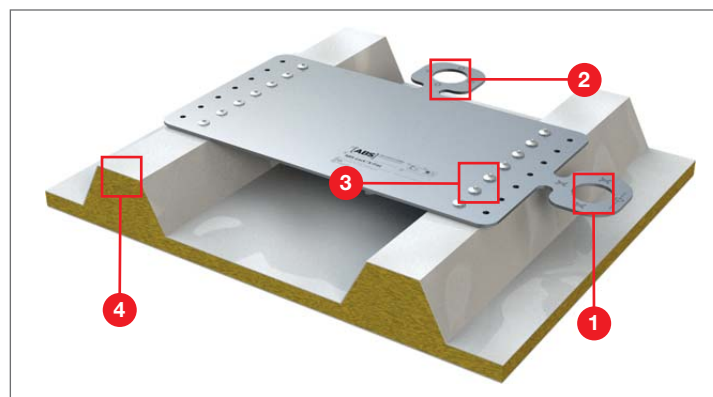
The person anchorage point ABS-Lock® X-Flat will be installed easily by 14 blind rivets and offers a optimum protection for a underground thickness beginning at 0.5 mm. He is completely manufactured from corrosion-resistant stainless steel and covers a integrated sealing.

#### Application



#### Technical specifications

- 1 Attachment ring
  - 2 Attachment ring
  - 3 Fixation with 14 blind rivets (included in delivery)
  - 4 Sheet thickness minimum 0.5 mm
- Anchorage point acc. to DIN EN 795:2012 (A) and DIN CEN/TS 16415:2013
  - Especially for installation on containers
  - Extremely flat, containers can be stacked
  - From corrosion-resistant stainless steel
  - Secures 3 persons at the same time
  - Always to be used with shock absorber (EN 355)
  - For the connection of two X-FLAT anchorage points the horizontal lifeline-system ASK8, page 138 can be used.



Type	Description	Weight in kg	Item no.
ABS-Lock® X-Flat	Anchorage point acc. to DIN EN 795:2012 (A)	1.9	45201010 015022

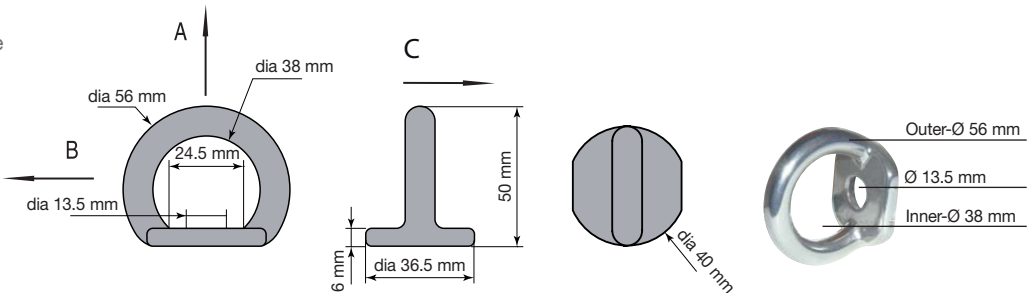
# Anchorage points



## Anchorage point AM211

Anchorage point AM211 for the anchorage of one person to common undergrounds like steel, concrete or masonry.

Breaking loads:  
A: = 15 kN  
B: = 15 kN  
C: = 15 kN  
Standard: EN795: 1996, Class A



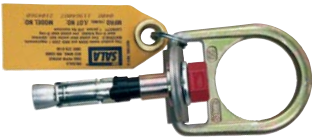
Type	Description	Material	Required anchoring	Standard	Weight in kg	Item no.
AM211	Standard single anchorage point	Stainless steel	in stainless steel Ø 12 mm	EN795, test load 10 kN	0.110	45201010 015001

Webbing loop not included.



## Concrete D-ring anchorage point

Reusable D-ring  
Bore Ø : 18 to 19 mm  
Material : Aluminium/Steel  
User: 1 person / 141 kg  
Usage: 360°, temporary usable



Type	Standard + optional	Weight in kg	Item no.
2104565	Standard model	0.55	45201010 015006
2104566	D-ring assembly with 6 additional bolts	0.65	45201010 015007
2104567	D-ring assembly with 12 additional bolts	0.75	45201010 015008

CE EN 795 Class B



## SAFLOK® concrete wedge anchor

Temporary anchorage point for hardened concrete.  
Bore Ø : 20 mm  
Depth: 80 mm  
Concrete: Strength class C20/25  
Material: Aluminum/Steel  
User: 1 person / 141 kg  
Usage: 360°, temporary usable



Type	Diameter in mm	Weight in kg	Breaking load in kN	Item no.
2100100	19.5	0.354	22	45201010 015009

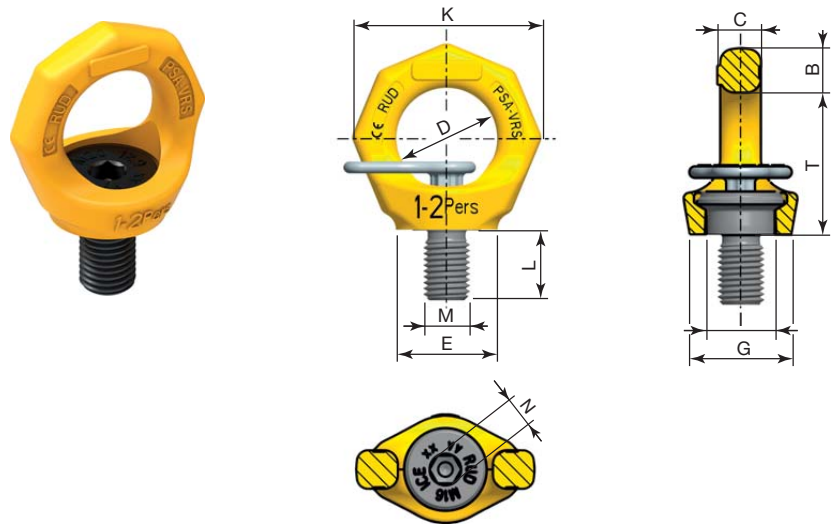
CE EN 795 Class B

## PSA-VRS STARPOINT

The RUD **PSA-VRS STARPOINT** anchor devices are attachment points for attaching personal protective equipment.

The **PSA-VRS STARPOINT** anchorage points can be long-term attached to a structure but are not intended for permanent outdoor use. The **PSA-VRS STARPOINT** devices comply with the EU Directive on personal protective equipment (89/686/EEC) and are labelled with both the CE mark and the number of people who can be carried (1 or 2 people). The valid test specifications are DIN 795, DIN 50308 and OSHA 1926.502. The test forces of 22.2 kN/person therefore exceed the requirements of the European standard.

The **PSA-VRS STARPOINT** devices have been successfully certified by the German employers' insurance association for the building industry.



Type	Description	Load capacity	Dimensions in mm										Tightening torque in Nm	Weight in kg	Item no.
			T	B	C	D	E	G	I	K	L	N			
7997100	PSA VRS M12	1 person	42	14	12	30	30	34	20	56	18	8	25	0.2	45201010 015015
8600400	PSA VRS M12	1 person	42	14	12	30	30	34	20	56	18-150*	8	25	0.2	on request
7997854	PSA VRS M16	max. 2 people	50	16	15	35	35	40	24	65	24	10	60	0.3	45201010 015016
8600401	PSA VRS M16	max. 2 people	50	16	15	35	35	40	24	65	24-120*	10	60	0.3	on request
7900920	PSA VRS M20	max. 2 people	57	19	17	40	43	54	30	74	30	12	115	0.5	45201010 015020

\*variable length on request

## PSA-INOX STAR

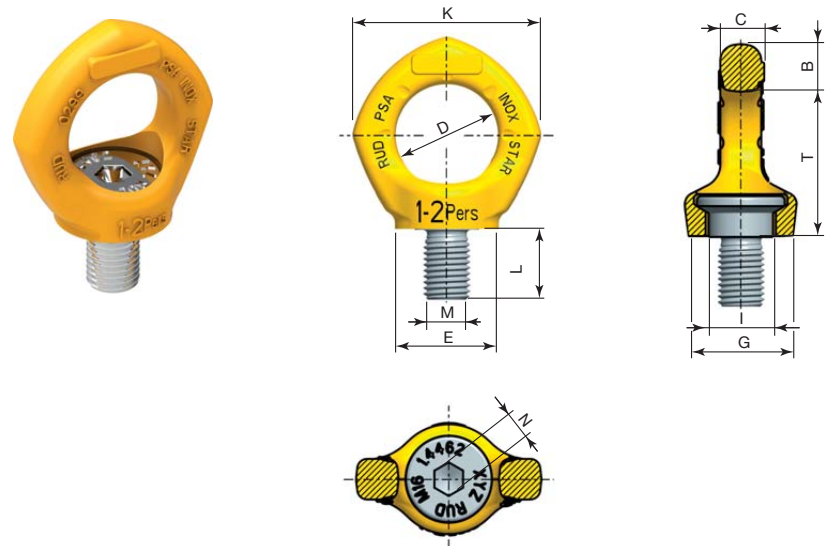


The RUD **PSA-INOX STAR** anchor devices are attachment points for attaching personal protective equipment. The non-corrosive, bright-yellow-coated **PSA-INOX STAR** devices can be permanently attached to a structure and used outdoors.

The **PSA-INOX STAR** devices comply with the EU Directive on personal protective equipment (89/686/EEC) and are labelled with both the CE mark and the number of people who can be carried (1 or 2 people).

The valid test specifications are DIN 795, DIN 50308 and OSHA 1926.502. The test forces of 22.2 kN/person therefore exceed the requirements of the European standard.

The **PSA-INOX STAR** devices have been successfully certified by the German employers' insurance association for the building industry.

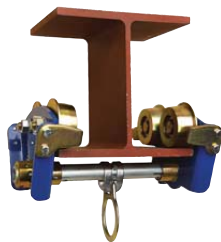


Type	Description	Load capacity	Dimensions in mm											Tightening torque in Nm	Weight in kg	Item no.
			T	B	C	D	E	G	I	K	L	N				
7997097	PSA-INOX-STAR M12	1 person	43	14	12	30	30	32	18	56	18	8	25	0.19	45201010 015014	
7997820	PSA-INOX-STAR M12	1 person	43	14	12	30	30	32	18	56	50	8	25	0.22	45201010 015018	
7996757	PSA-INOX-STAR M16	max. 2 people	50	16	15	35	35	38	22	65	24	10	60	0.31	45201010 015017	
7904107	PSA-INOX-STAR M16	max. 2 people	50	16	15	35	35	38	22	65	50	10	60	0.4	45201010 035007	
7900921	PSA-INOX-STAR M20	max. 2 people	57	19	17	40	43	47	28	74	30	12	115	0.56	45201010 015021	
7901252	PSA-INOX-STAR M20	max. 2 people	57	19	17	40	43	47	28	74	60	12	115	0.6	45201010 035008	



## T-beam trolley

Anchor system runs at T-beam and ensures horizontal mobility.  
Measurements: for 7.6 - 20.3 cm beams  
Material: Aluminium / Steel  
User: 1 Person / 141 kg



Type	Breaking load in kN	Material	Weight in kg	Item no.
2103148	22	Aluminium/Steel	6.80	45201022 015008

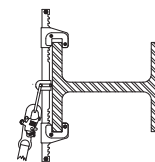
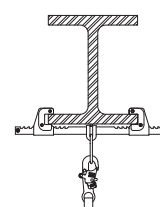
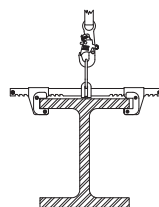
CE EN 795 Class B

## Glyder2™ sliding beam anchor

For horizontal mobility over head or at foot height.  
Integrated ratcheting adjustment for fast and easy installation and removal.  
Flange: 8.75 to 35 cm  
User: 1 Person / 141 kg



Installation options:



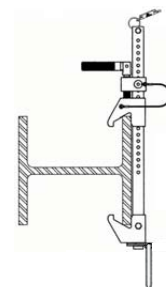
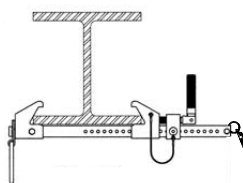
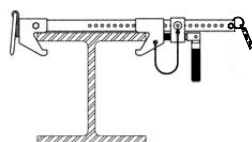
Type	Breaking load in kN	Material	Weight in kg	Item no.
2104700	22	Aluminium	1.66	45201022 015005

CE EN 795 Class B

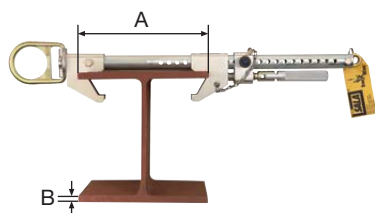
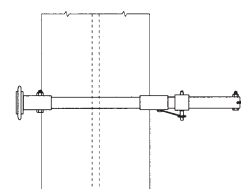
## Festträgeranker

Can be used horizontally and vertically.  
Material: Aluminium  
Breaking load: 22 kN  
User: 1 Person / 141 kg  
2 fixed beam anchors can be connected with a mobile attachment device.  
Can only be used for certain beam dimensions - see table.

Installation options:



At vertical steel post:



Type	Size of beam flange A in cm	Thickness of I-beam B in cm	Weight in kg	Item no.
2108412	6.35 - 30.48	3.81	1.70	45201022 015001
2108413	6.35 - 45.72	3.81	1.75	45201022 015002
2108414	6.35 - 60.96	3.81	1.80	45201022 015003
2108415	30.48 - 91.44	6.35	1.85	45201022 015004

CE EN 795 Class B

## **rollbeam**

Trolley with anchorage hole in acc. to DIN EN 795, Class B

For anchoring one person to a T-beams or similar profile with a minimum load-bearing capacity of 10 kN, 4 metal rollers.

Smallest traversable curve radius: 1.0 m.

Anchorage hole opening: 30 mm.



Type	Flange width in mm	Weight in kg	Item no.
54369	50 - 220	10.50	45201022 015009
88559	220 - 300	11.00	45201022 015010

## **Flexible anchorage point rollclamp**

For creating a mobile anchorage point on T, H and I beams for safely working with great freedom of movement. Thanks to the four castors, the rollclamp automatically moves along the beam as the user moves.



Type	Model	Description	Weight in kg	Item no.
86009	rollclamp M	for flange widths of 80–360 mm, flange thickness of up to 45 mm	1.50	45201022 015007
86019	rollclamp L	for flange widths of 80–640 mm, flange thickness of up to 100 mm	2.10	45201022 015006

## **Door jamb anchor**

Anchorage points was installed against door or window frame.

Required distance:

55 to 130 cm width.

User: 1 Person / 141 kg



Type	Breaking load in kN	Material	Weight in kg	Item no.
2100080	16	Aluminium	6.35	45201020 015001

CE EN 795 Class B

## **JAMBTAC Door jamb anchor**

- Mobile anchorage point for common door widths - even for overwidth hospital doors
- From Aluminium - lightweight, easy attachment
- Rounded profile edges and plastic covers on both ends - lowered risk of injury for the user as well as less scratches and traces of usage
- Usage for up to two people at the same time



Type	Description	Breaking load in kN	Material	Weight in kg	Item no.
AP-070-1	for door widths from 600 - 1.150 mm	15	Aluminium	6.0	45201020 035001
AP-070-2	for door widths from 985 - 1.525 mm	15	Aluminium	7.0	45201020 035002



## Vacuum Anchor System Mobi-Lok™

- Tested for fall arrest and certified according to EN 795 Class B. The big supporting surface ensures, that the capacity of the anchor pad exceeds the maximum breaking force by far.
- Lightweight design (lower than 10 kg) for a easy transport.
- Installation on various surfaces (also curved, with small diameter - at least 182 mm - and in any version). Versatile application, also overhead or at smaller planes.
- Version with integrated air bottle available. Faster installation, because pads can also be attached separately. Reduction of the equipment which has to be used and checked. For usage in situations which have no access to compressed air.
- Failure-free backup-systems with accoustic alarms and vacuum level indication. Audio alarm sounds, when connection to the compressed air resource is interrupted or the vacuum niveau is under acceptable level.
- Button „alarm bypass“ for usage during installation. The user don't has to suffer high alarm sounds and has to protect himself against them; everyone recognizing the alarm knows immediately, that a problem occurs and this is not the installation alarm.
- Can be used with synthetic horizontal fall arrest systems. For bigger mobility without the risk, that the plane could be damaged by the safety rope. Two-man and four-man version available.
- Mobi-Lok™ anchor pads are using stop valves. They keep the vacuum, if the connection to the compressed air ressource is disconnected.
- Mobi-Lok™ anchor pads have 3 inner sealing edges. They prevent leaks of the vacuum.
- ATEX-certification (electric/nonelectric). For usage in potentially explosive areas.

## Mobi-Lok™ Systems

### Mobi-Lok™ primary system without bottle attachment

Mobi-Lok™ independent vacuum anchor without bottle attachment for situations, in which compressed air is always available (for aviation industry).



Type 2200125

### Mobi-Lok™ primary system with bottle attachment

Mobi-Lok™ independent vacuum anchor system with bottle attachment and carrying bag for aviation industry. It can be supported by one integrated 0.8 liter compressed air bottle (available separately) or a separate bottle with bigger capacity or compressed air. It also can support a additional secondary pad.



Type 2200126



### Mobi-Lok™ secondary system without bottle attachment

Mobi-Lok™ independent vacuum anchor for aviation industry; secondary pad for connection to a primary pad.



Type 2200127

## Mobi-Lok™ Accessories

### Compressed gas cylinder

With CE-sign  
0.8 l, 2.068 kPa (300 psi).



Type 2200085

### Fill station

For filling of the compressed gas cylinder from a tank.



Type 2200086

### Fill adapter for SCVA-bottle

For filling of the gas cylinder from a tank.



Type 2200087

### Fill station adapter

For the connection of the fill station with the nitrogen bottle M25  
Connection type BV102.



Type 2200196

### Secondary pad air hose

15 m hose for a connection of the primary pad with the secondary pad.



Type 2200130

### Horizontal lifeline system

Horizontal lifeline system (8 m); only for usage with Mobi-Lok™.



Type 2200409

Type	Description	Weight in kg	Item no.
2200125	Mobi-Lok™ primary system without bottle attachment	8.00	45201024 015004
2200126	Mobi-Lok™ primary system with bottle attachment	10.46	45201024 015001
2200127	Mobi-Lok™ secondary system without bottle attachment	6.80	45201024 015002
2200085	Compressed gas cylinder	3.0	45204815 015016
2200086	Fill station	0.90	45204815 015011
2200087	Fill adapter for SCVA-bottle	1.50	45204815 015012
2200196	Fill station adapter	0.080	45204815 015013
2200130	Secondary pad air hose	2.10	45204815 015014
2200409	Horizontal lifeline system for 2 users	4.77	45204815 015015

Offer preparation after on-site inspection and consultation.



## Vacuum Anchor System Mobi-Lok™

in accordance to EN 795 Class B

This vacuum anchor system is a self-contained system intended for use by one person. No separate pumps, vacuum hoses or other components are required for the system's use. It can be quickly and easily started with a single integrated compressed gas bottle or workshop compressed air.

The system can supply an additional, secondary vacuum anchor, to create a horizontal fall protection system for example.

Other additional equipment available on request.

All of our vacuum anchors have interference-free back-up systems with an acoustic alarm and vacuum level indicator for complete safety.



### Specifications

- Main support assembly: anodised aluminium
- Vacuum seal pad material: natural rubber/polybutadiene blend
- Electronics: 4 AA lithium batteries
- Integrated compressed gas bottle requirements: 3 000 psi
- Dimensions: 55 cm x 55 cm x 15 cm
- System weight: 9.0 kg
- Capacity: 140 kg; one person
- Surface temperature range: -29 °C to 60 °C
- Minimum vacuum anchor static capacity: 15 kN



Type 2200111



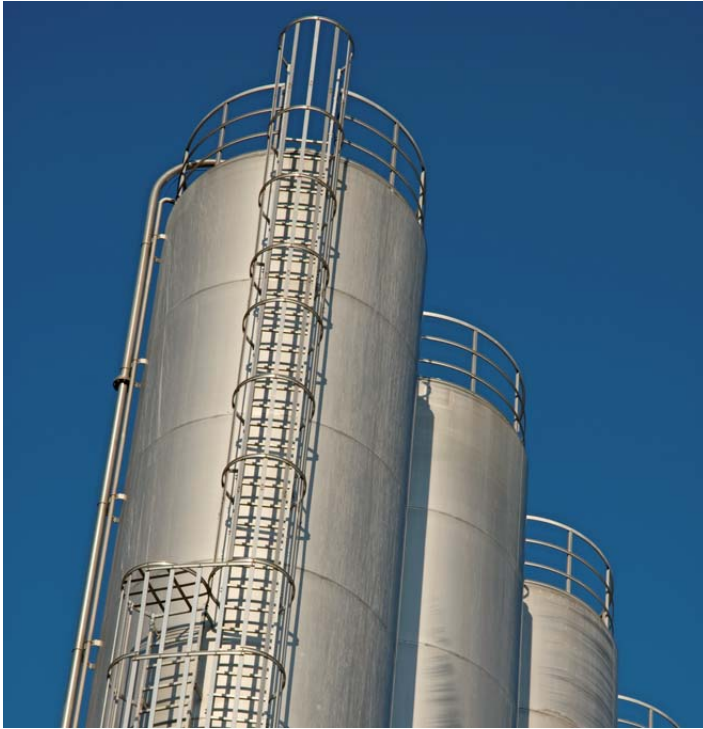
Type 2200085

Type	Description	Load capacity	Load capacity in kN	Weight in kg	Item no.
2200111	SCVA primary unit	140 kg / 1 person	15.0	9.0	45201024 015003
2200085	Compressed air bottle	-	-	3.0	45204815 015016

Offer preparation after on-site inspection and consultation.

## > Confined and hazardous <

### Working in containers, silos and confined spaces



Containers, silos and confined spaces are located both above and below ground and encountered in many different ways in industry. The risk of an accident in such working environments is always extremely high and should be given special consideration. Accident reports indicate that work conducted in confined spaces is among the most dangerous types of work. As the confined spaces looked at here generally only have 'person-sized access and exit openings', special technical equipment is required to both ensure safe working environments and rescue accident victims.

Since 2005, an important basis for these areas of work has been the German DGUV Practice 113-004 „working in containers, silos and confined spaces“. There are therefore clearly regulated access procedures, which specify that people should only access such places of work when using suitable fall arrest harnesses as personal protective equipment for the prevention of falls.

Work in silos that is subject to such risks is not permitted without a fall arrest harness, approved winch and a suitable anchor device (e.g. tripod, davit arm).

Irrespective of the possible insertion depth, the positioning procedure depends solely on the risk of sinking into the dry material. This means that for work in silos that should be carried out from a certain position, the users must be positioned using suitable procedures. Furthermore, when working in silos, the planning and practising of emergency and rescue measures is also a permanent part of a functioning overall concept.

Carl Stahl can help you select the right equipment and also offers **training and courses**.



### DBI-SALA retrieval and rescue equipment

#### Reliability when you need it the most

When it comes to rescue situations, it is essential that equipment functions perfectly and quickly. **DBI-SALA** has developed a complete line of rescue and retrieval systems that are more effective than any other in the industry. Safety engineers and site directors trust **DBI-SALA** in relation to this type of high quality, robust systems that ensure top performance.

Rescue and retrieval are critical aspects of any fall protection programme. The fast and effective performance of these tasks often means the difference between an injury-free fall and a fall resulting in serious damage to health.

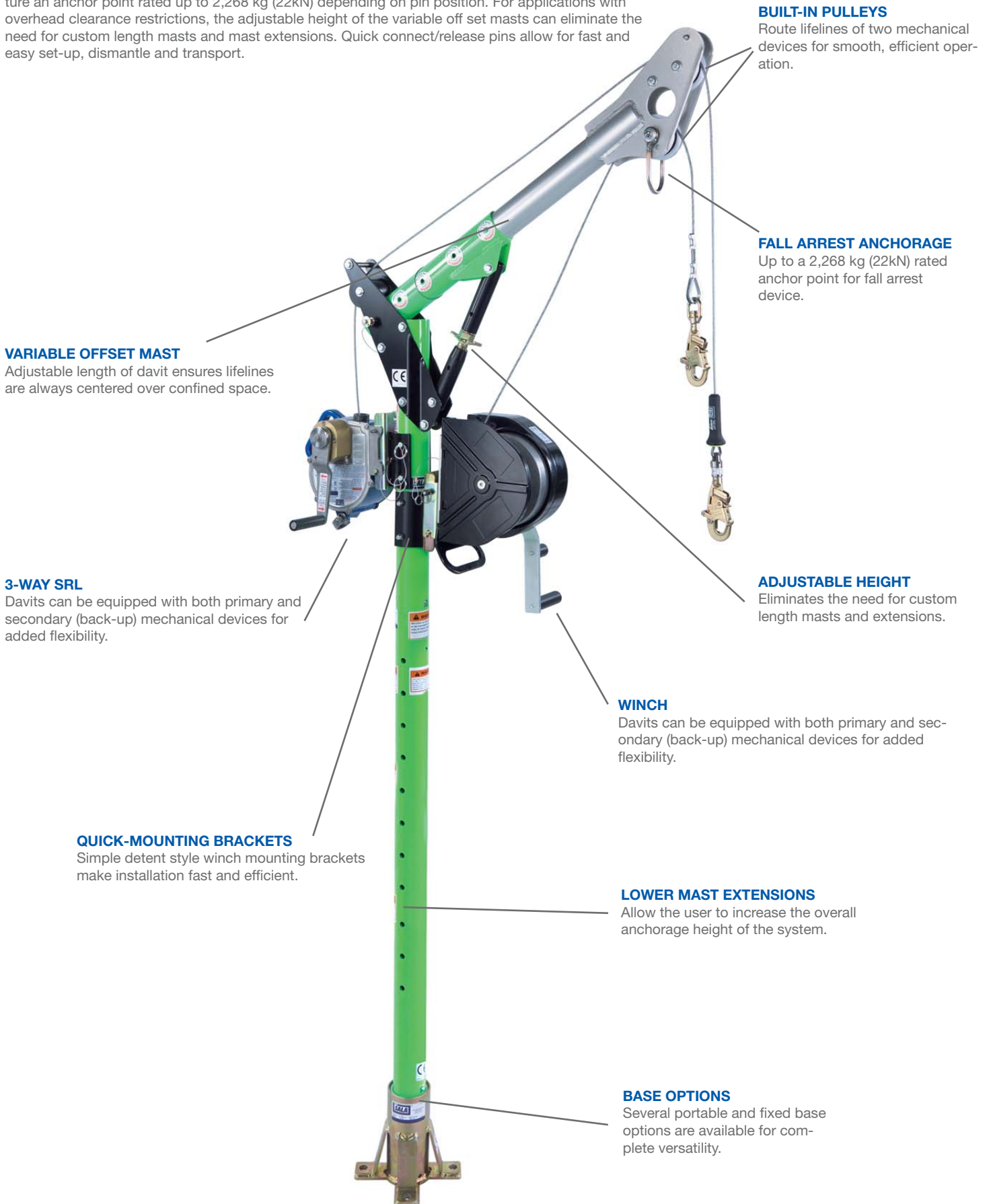
Rescue and descent equipment choices depend on the work site conditions, the tasks being performed and the available manpower.

#### Rescue basics

- If the person can be reached without auxiliary aids - immediate assistance. Experience has shown that it does not suffice to leave rescue to the local fire brigade. If rescue and retrieval measures are required, several teams are set up for immediate response.
- If descent to a fallen person is required, rescuers should always be secured by a secondary system such as a retractable type fall arrester that is totally independent of the primary means of rescue.
- All rescue team members should receive training and participate in practice exercises on a regular basis.

## Advanced Davit Arm System Components

Variable off set davits are designed for use where multiple off set masts are required. The variable off set masts may be equipped with front mounted and/or back mounted winches or SRLs and feature an anchor point rated up to 2,268 kg (22kN) depending on pin position. For applications with overhead clearance restrictions, the adjustable height of the variable off set masts can eliminate the need for custom length masts and mast extensions. Quick connect/release pins allow for fast and easy set-up, dismantle and transport.



### BUILT-IN PULLEYS

Route lifelines of two mechanical devices for smooth, efficient operation.

### FALL ARREST ANCHORAGE

Up to a 2,268 kg (22kN) rated anchor point for fall arrest device.

### VARIABLE OFFSET MAST

Adjustable length of davit ensures lifelines are always centered over confined space.

### 3-WAY SRL

Davits can be equipped with both primary and secondary (back-up) mechanical devices for added flexibility.

### ADJUSTABLE HEIGHT

Eliminates the need for custom length masts and extensions.

### WINCH

Davits can be equipped with both primary and secondary (back-up) mechanical devices for added flexibility.

### QUICK-MOUNTING BRACKETS

Simple detent style winch mounting brackets make installation fast and efficient.

### LOWER MAST EXTENSIONS

Allow the user to increase the overall anchorage height of the system.

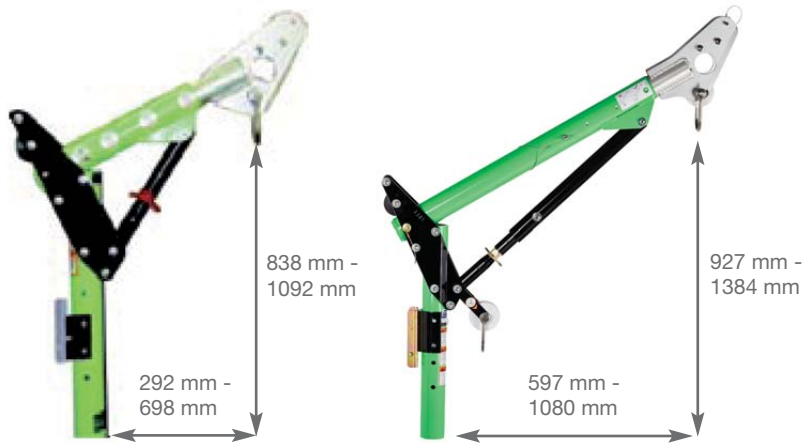
### BASE OPTIONS

Several portable and fixed base options are available for complete versatility.



## Adjustable offset davit masts

Standard masts are delivered with a quick mounting bracket for DBI-SALA winch or self-retracting lifeline of Sealed-Blok™-series. Other mounting brackets are available.



Type 8568001

Type 8568006

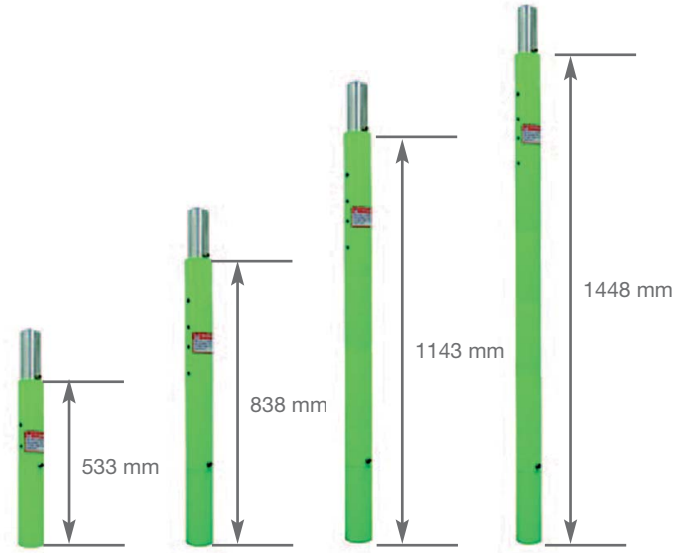
1 extension with max. 0.83 m at use of U-base  
2 extensions up to max. 2.29 m with built-in sleeve

1 extension with max. height 1.44 m

Type	Weight in kg	Item no.
8568001	11.25	45201014 015005
8568006	13.75	45201014 015006

## Lower masts and extensions

Lower masts and extensions are used with adjustable offset davit masts (left). Combine up to 2 lower mast extensions to reach requested anchoring height. Special lengths are available. Call us for further info.



Type 8568509

Type 8568002

Type 8568003

Type 8568004

Type	Weight in kg	Item no.
8568509	6.8	45204815 015043
8568002	8.2	45204815 015044
8568003	9.5	45204815 015045
8568004	10.9	45204815 015046

## Optional accessories



Type 8562285

Type 8566190

Type 8566191

Type 8560316

Type 8510826

Type 8510827

Type	Description	Weight in kg	Item no.
8562285	Adjustable mount sleeve for edge areas, walls, upturn beams and barrels etc. Wall thickness of up to 609 mm	25.20	45204815 015039
8566190	Floor mount sleeve, fixed base	5.90	45204815 015040
8566191	Wall mount sleeve, galvanised	5.40	45204815 015041
8560316	Floor mount sleeve	9.50	45204815 015047
8510826	Sleeve cap, galvanised	0.50	45204815 015048
8510827	Sleeve cap, stainless steel	0.40	45204815 015049

Prices on request.



## 5-piece modular hoist system

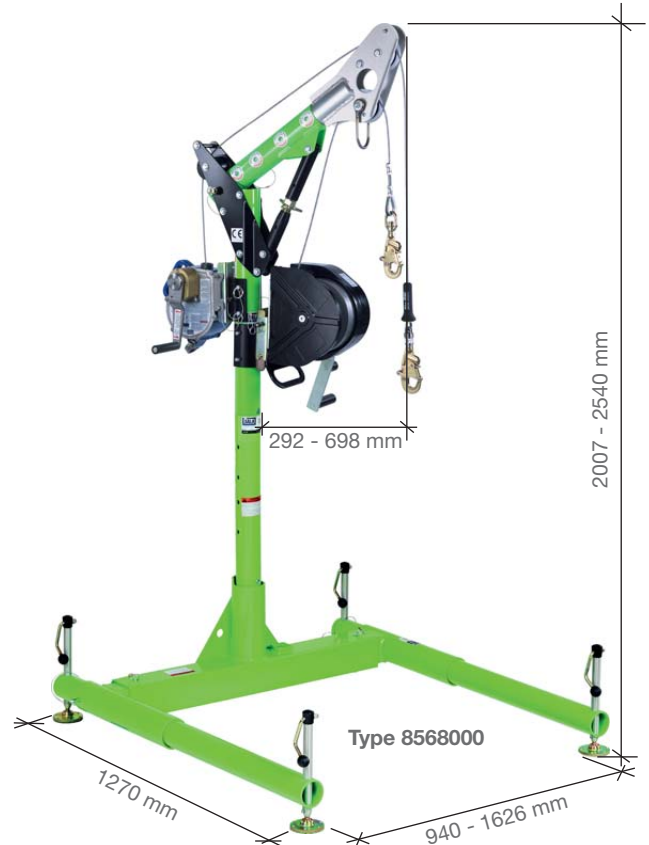
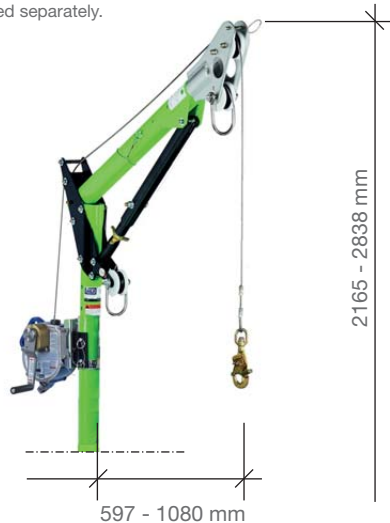
The Modular Series Hoist Systems are designed for manhole and confined space entry/retrieval applications.

These units are constructed on a modular design, using lightweight materials including high-strength aluminium. The davit is slewable for easy rescue and the base is adjustable to fit most standard entries. Many other portable and fixed bases are available to suit and special requirements.

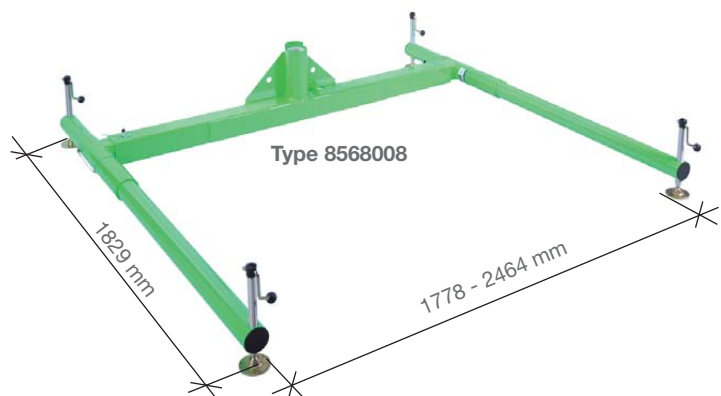
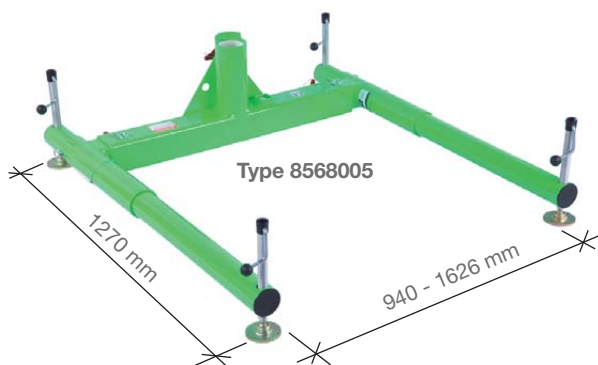
Type	Description	Weight in kg	Item no.
8568000	5-piece modular hoist system davit 292 - 698 mm	45.5	45201014 015001
8568040	5-piece modular hoist system davit 597 - 1080 mm	62.3	45201014 015002

Winches and adaptors must be ordered separately.

Type 8568040



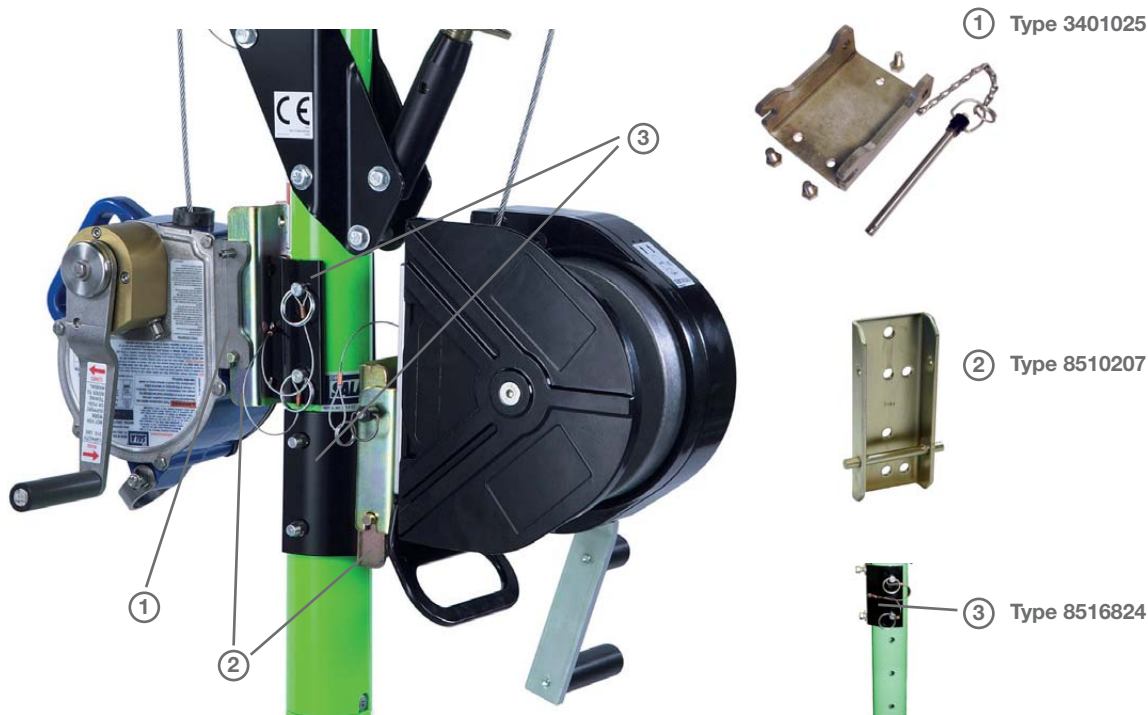
## Modulare 3-piece adjustable base



Type	Description	Weight in kg	Item no.
8568005	Modular 3-piece adjustable base for 737 mm maximum offset davit mast Foot width: 940 mm to 1626 mm	27.3	45201014 015003
8568008	Modular 3-piece adjustable base for 1219 mm maximum offset davit mast Foot width: 1778 mm to 2464 mm	41.8	45201014 015004

Prices on request.

## Winch adapters



Type	Description	Weight in kg	Item no.
3401025	Adapter for Sealed Blok	0.85	45204815 015050
8510207	Winch/SRL adapter with flat back for mounting on winch	0.97	45204815 015051
8516824	Quick Release mounting bracket for advanced upper and lower masts	0.70	45204815 015042

Prices on request.

## Advanced™ digital winch series

The digital winches can be used to a maximum capacity of 204 kg (safety factor 11:1). They are equipped with two speeds for rescue and descent. 3 standard sizes are available which are suitable for different rope diameters from 9.5 mm up to 15.9 mm. All ropes come with an automatic carabiner with an integrated fall indicator. Approved for use as a winch for people and materials.



Type	Description	Rope material	Rope length in m	Weight in kg	Item no.
8518558	Digital winch, detachable handle	Stainless steel	18	13.8	45202400 015003
8518559	Digital winch, detachable handle	Stainless steel	27	14.7	45202400 015004
8518579	Digital winch, detachable handle	Stainless steel	42	18.4	45202400 015005
8518580	Digital winch, detachable handle	Stainless steel	58	19.54	45202400 015006

Prices on request.

## SEALED-BLOK™ SRL with retrieval winch

The sealed self-retracting lifelines incorporate a revolutionary patented sealing technology that separates all dynamic components from foreign elements such as grease, moisture and dirt. Unparalleled in the industry, this truly sealed equipment ensures efficient, safe operation under all working conditions.

- The most durable and robust unit available on the market
- The self-adjusting disc brake limits arresting forces to 6 kN or less
- Hard-wearing, impact-resistant stainless steel housing ensures long-lasting, reliable performance
- L = 15 m, galvanised steel wire rope Ø 5 mm for excellent durability. Also available in 25 m and 39 m
- Optional 3-way retrieval winch mechanism for efficient and convenient rescue operations
- Horizontal and vertical use
- IP 68 - dust-tight and waterproof
- Only annual visual inspection - no revision
- Rope change at 15 and 25 m lengths without opening the device (after training by manufacturer) possible



Type 3400856

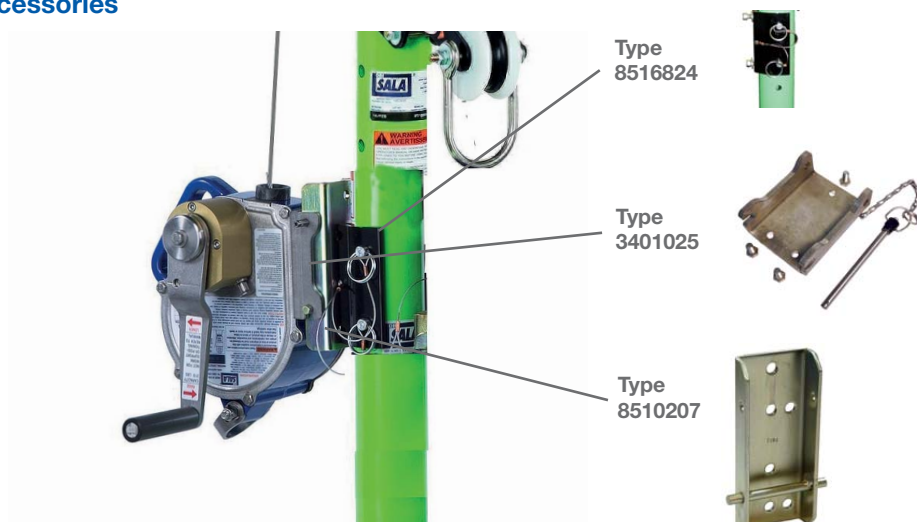


Type 3400956  
Type 3400881  
Type 3400986

Type	Description	Rope length in m	Rope diameter and material	Weight in kg	Item no.
3400856	SEALED-BLOK™ SRL with retrieval winch	9	5 mm Stainless steel	8.0	45202200 015011
3400956	SEALED-BLOK™ SRL with retrieval winch	15	5 mm Stainless steel	13.0	45202200 015008
3400881	SEALED-BLOK™ SRL with retrieval winch	25	5 mm Stainless steel	20.0	45202200 015009
3400986	SEALED-BLOK™ SRL with retrieval winch	39	5 mm Stainless steel	27.0	45202200 015010

Prices on request.

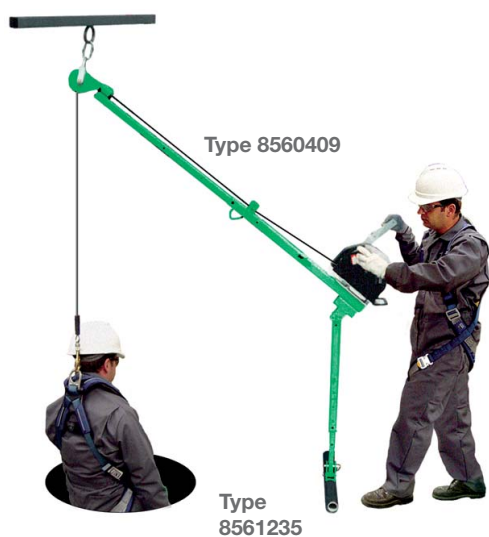
## Accessories



Type	Description	Weight in kg	Item no.
8510207	Winch/SRL adapter with flat back for mounting on winch	0.97	45204815 015051
8516824	Quick Release mounting bracket for advanced upper and lower masts	0.70	45204815 015042
3401025	Adapter for Sealed Blok™	0.85	45204815 015050

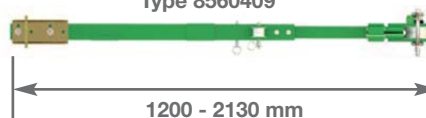
Prices on request.

## Extendable pole hoist



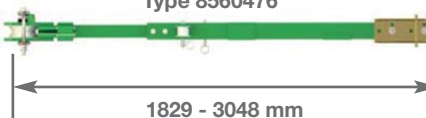
Extendable pole hoist 1.20 m to 2.13 m

Type 8560409



Extendable pole hois 1.80 m to 3.05 m

Type 8560476

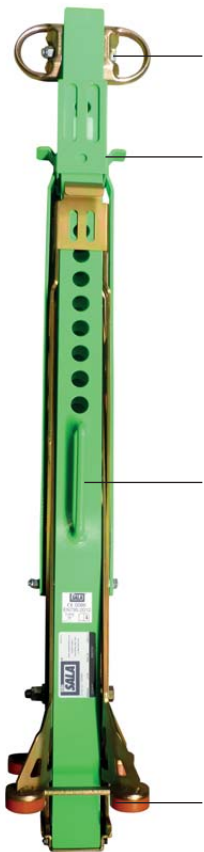


Type	Description	Weight in kg	Item no.
8560409	Extendable pole hoist 1.2 m to 2.13 m, swivel head & fittings and parts. Including winch adapter.	5.4	45201014 015011
8560476	Extendable pole hoist 1.8 m to 3.05 m, swivel head & fittings. Including winch adapter.	6.4	45201014 015012
8561235	T-rod	3.18	45201014 015013

Prices on request.



## Container fall arrest post



Type 8563161

**Attachment point**  
only for one  
person at  
same time

**Brackets**  
for tensioning

**Handle**  
for transport

**Anchorage**  
at container

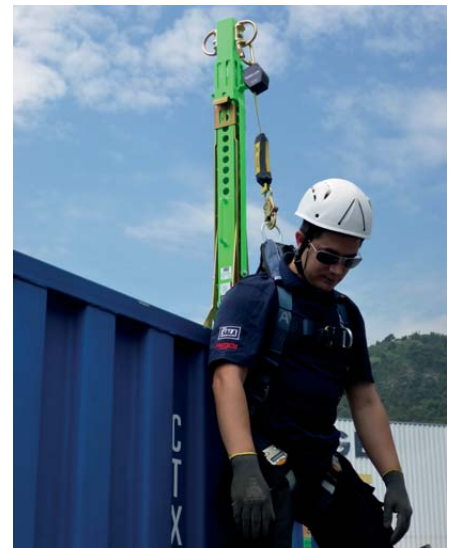
ISO certified 20- and 40' standard containers have a height of 2.59 m (8 feet and 6"). A protection against fall during work on a container was not possible up to now.

The ISO container post from SALA offers a solution. The post is buckled on a edge of the container. The height of the attachment point increases by 1.25 m to 3.84 m. Based on a length of the lanyard of 2 m and a safety distance of 1 m, there are just 0.84 m breaking distance (bursting of the lanyard) left. The most lanyards are not suitable for this. The NANO-LOK™ self-retracting lifelines from SALA even already break at a fall of 0.60 m and are the solution therefore (page 89).

Usage of type fall arresters with a horizontal application certification and lanyards with a maximum breaking load of 6 kN.

The use of a fall arrest harness is strictly required!

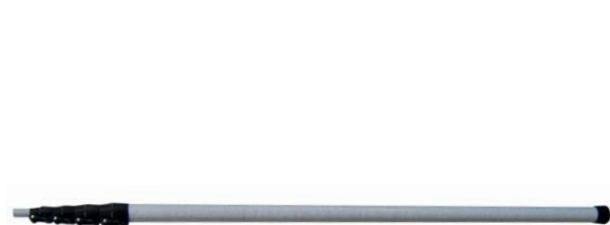
Standard: DIN EN 795-2012, Class B



## Climbing on the container:

Normally the climbing on the container is done with a ladder.

1. Be sure, that the ladder has a fixed location and cannot slip.
2. Attach the 2-leg NANO-LOK™ self-retracting lifeline to the loop of the pipe hook, who is attached to the „First-Man-Up“ telescopic rod.
3. Telescope the rod to the requested length and attach the pipe hook from a type fall arrester into the container post.
4. Connect the above fixed self-retracting lifeline with your fall arrest harness and climb up.
5. Reached the top secure yourself with a second self-retracting lifeline at the attachment point of the ISO container post.
6. Unhook the first security from the container edge.
7. Pull up the ISO container post with a rope.
8. Clamp the post in the edge of the container.



Type 2100094



Type 2100105

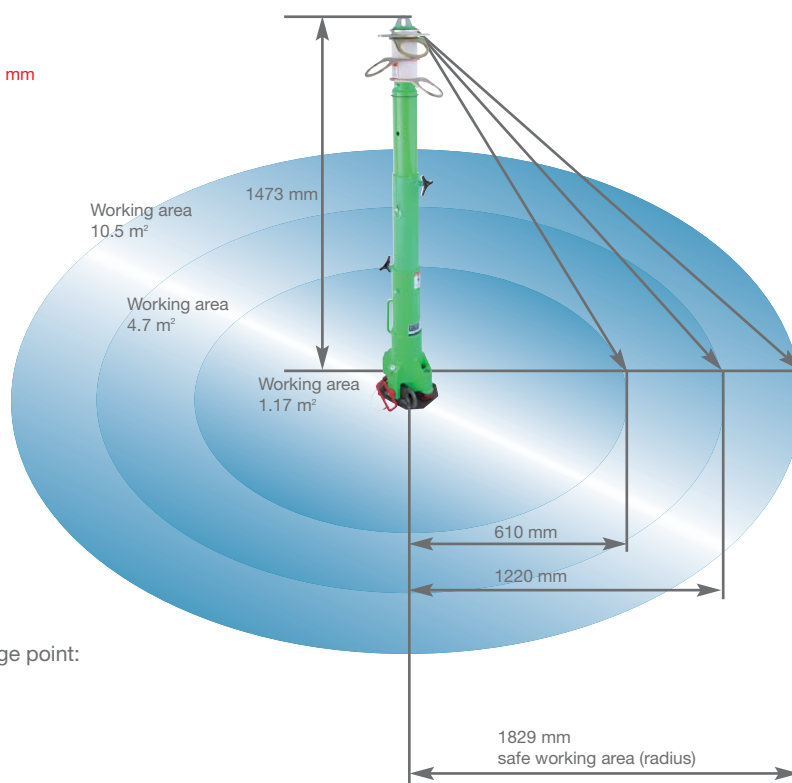
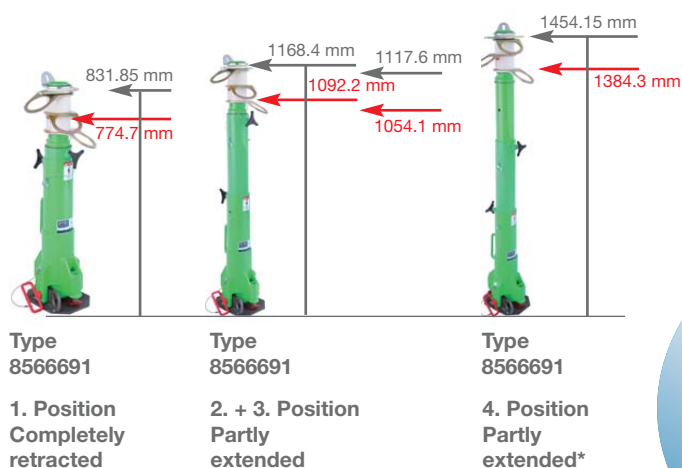
Type	Description	Material type	Load capacity	Weight in kg	Item no.
8563161	Container fall arrest post	Post/green items: Aluminium Fittings: Steel Surface: Power-coated	141 kg (1 person)	13.0	45201016 015002
2100094	Telescopic rod "First-Man-Up"	Aluminium	-	4.0	45204815 015064
2100105	Pipe hook, rod connection	Aluminium	-	0.30	45204815 015065

Prices on request.

## Advanced portable fall arrest post

The advanced portable fall arrest post has 3 independent swiveling tie-off points at 774 mm, 1092 mm and completely extended at 1384 mm. This reduces the fall height of a worker and therefore enlarges the working area for a maximum of 3 people. When using the anchor post extension type 8566692, only 2 workers may be anchored at any one time.

\*NOTE: the rescue davit arm only works in positions 2 and 4.



Force of radius anchorage point:

610 mm : 37.1 kN

1220 mm : 22.6 kN

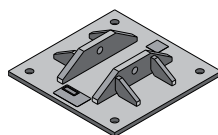
1829 mm : 18.7 kN



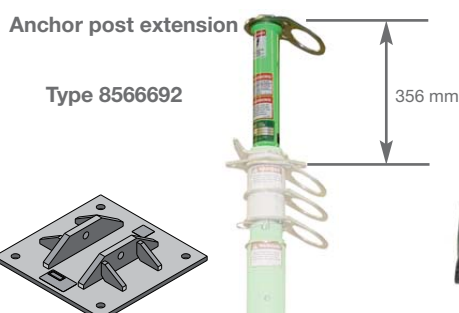
Type 8566997



Type 8567412



Type 8569819



Type 8517565



Type	Description	Weight in kg	Item no.
8566691	Advanced portable fall arrest post	17.5	45201016 015001
8566997	Uni anchor double-T-Beam base	25.5	45204815 015057
8567412	Steel Uni anchor with tie-off beam anchors	5.3	45204815 015058
8569819	Steel Uni anchor with screwable beam anchors	5.3	45204815 015062
8566692	Anchor post extension 356 mm	2.2	45204815 015059
8517565	Carrying bag for type 8566691	0.68	45204600 015001
8567422	Anchor with ring, sandblasted (without illustration)	5.4	45204815 015060

Prices on request.

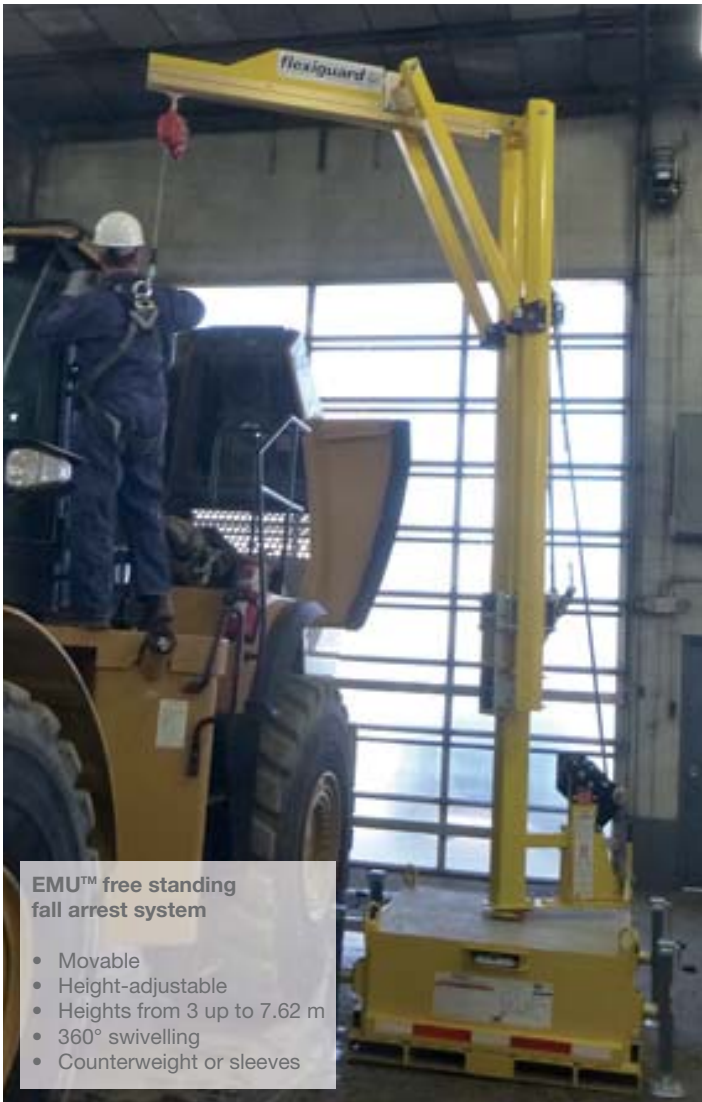








“FlexiGuard” free-standing horizontal rail fall protection systems







## Tripod self-locking pillar

Integrated in the aluminium head to cause, that the legs keep locked.

## 4 attachment points

Approved for 2 persons  
Load capacity 500 kg.

## Pulley

Guides the safety rope centred over the entry.

## Rebel™ with rescue winch

SRL with integrated winch 15 m.

## Adjustable telescopic legs

Self-locking pins  
8 adjustable height positions  
Usable height 1.35 - 2.35 m  
Basic diameter 1.50 - 2.56 m.

## Feet

Slip-resistant and slewable.

## 3 + 4 Rebel™ Self-retracting lifeline with rescue winch

- Mechanism for attachment of bracket
- 2 Swivel and fall indicator
- Twistlock-Carabiner at housing

### Technical details:

Length: 15 m  
Capacity: 140 kg  
Standard: CE EN 360:2002 and EN 1496:2006 Class B  
Housing material: Aluminium  
Dimensions: T14 x W28 x H61 cm  
Transmission of winch: 7,4 : 1



Type 3591002 und -003

## 5 Digital winch

- Rope length 18 m
- Max. capacity 205 kg
- Approved for use as a winch for people and materials
- More details see page 117



Type 8518558



8

Illustration no.	Type	Description	Weight in kg	Item no.
1	AM100	Aluminium-Tripod acc. to DIN EN 795	21.75	45201012 015001
2	AT052/1	Pulley	0.92	45204400 015001
3	3591002	Self-retracting lifeline with winch, Rope length 15 m, galvanised	12.0	45202200 015067
4	3591003	Self-retracting lifeline with winch, Rope length 15 m, stainless steel	12.0	45202200 015068
5	8518558	Digital winch with detachable handle, Rope length 18 m	13.8	45202400 015003
6	8005050	Adapter for load winch	2.0	45204815 015066
7	3590498	Adapter for Rebel™ self-retracting lifeline	0.7	45204815 015067
8	AK0100	Carrying bag (PVC)	1.0	45204600 015002

- 1 **Aluminium tripod EN 795** Adjustable in 5 positions  
Working height from 1.76 - 2.70 m, fast height-adjustment with locking pin and split pin protection
- 2 **incl. 2 pulleys**
- 3 **Rope winch Carol TS 250 kg including bracket (without rope)**  
Rope capacity: 20 m  
Rope-Ø: 5 mm
- 4 **Rope for winch Carol Ø 5 mm, L = 20 m with carabiner M47**
- 5 **Blocfor 20 R acc. to EN 360 and EN 1496 Class B**  
SRL with integrated winch 20 m, fall indicator at swivel carabiner M46
- 6 **Bracket**  
for Blocfor 20 R
- 7 **Equipment bag for transporting and storing the tripod (coated canvas)**  
Dimensions approx.: 1900 x 290 x 290 mm (L x W x H)



In accordance with DIN EN 360, self-retracting lifelines must be annually inspected to ensure they are fully functional. We will gladly conduct this inspection on your behalf.

Illustr. no.	Type	Description	Weight in kg	Item no.
1 2	108789	Aluminium tripod in acc. to DIN EN 795 incl. 2 pulleys	22.0	45201012 015002
2	66568	Spare pulley	1.40	45204400 015002
3	58199	Rope winch Carol TS 250 kg (without rope) incl. bracket	10.0	45202400 015007
4	51042	Rope for winch Carol Ø 5 mm, length 20 m, load capacity 250 kg with carabiner M47	2.5	45204810 015014
5	18042	Blocfor 20 R - SRL with integrated winch L = 20 m, EN 360, EN 1496 Class B	11.5	45202200 015038
6	29968	Bracket for Blocfor 20 R	3.0	45204815 015068
7	31572	ISC equipment bag for aluminium tripod	1.80	45204600 015024

## MILAN 2.0

- Even more powerful.
- New design with improved appearance and handling.
- Offers even more usage options for different rescue techniques.

The centrifugally-controlled brake maintains a constant speed during the entire descent process and permits a quick and safe rescue. The brake shaft runs on ball-bearings on both sides. The housing is constructed of milled aircraft-grade aluminium, which makes the MILAN the most robust device in the world.

This is what allows rescue techniques such as rescue support in lattice mast structures. A seal shows whether the MILAN 2.0 has been opened without authorization. The MILAN 2.0 is certified to international standards and special regulations for use on vessels and offshore structures, for example by Germanischer Lloyd.

### Standard:

EN 341 Kl. A, ANSI Z359.4

Type	Weight in kg	Item no.
A-027	1.6	45203200 015008

Device without rope



## MILAN 2.0 Hub

The MILAN 2.0 HUB is additionally equipped with a hub function. This enables accident victims to be lifted across a short distance in order to release their lanyards, after which they can be safely lowered. The new housing design improves handling during accompanied rescues. The Super Static 9.0 static rope fulfils this requirement despite its diameter of only 9 mm.

The packing size of the MILAN 2.0 HUB is therefore small compared to devices with 10.5 mm ropes. This is a great advantage, in particular at great heights.

### Standard:

EN 341 Kl. A, EN 1496, ANSI Z359.4

Type	No. of people	Weight in kg	Item no.
A-028	2	2.6	45203200 015009

Device without rope



## Super Static 9.0

The static rope Super Static is designed for heavy loads when working at heights as well as for rescue and winch operations. Expansion and sheath slip are low. The abrasion resistance of the sheath, on the other hand, is so high that it is even suitable for climbing clamps. At the same time, the Super Static is also flexible enough to be used for rescue operations with long descent distances.

Type	Jacket portion in %	Expansion in use in %	Maximum tensile strength (EN1891) in kN	Rope-ø in mm	Item no.
L-0520-10	38%	5%	24	9	45202810 015007

5 m rope steps possible (up to 300 m)



### Customer service for MILAN devices:

Carl Stahl is a manufacturer-certified specialist for:

- Level 1:  
Conducting the expert inspection
- Level 2:  
Conducting maintenance and repairs

For enquiries, please contact your local Carl Stahl dealer

## MILAN 2.0 Power

The MILAN 2.0 POWER is a special version of the MILAN 2.0 HUB, which can also be electrically driven.

- Mains-independent thanks to Li-ion rechargeable batteries
- Max. descent weight 250 kg
- Distance of up to 60 m at 100 kg with 1 battery charge
- Batteries can be easily replaced with hanging rope
- Hand wheel guarantees emergency operation in the event of device failure or insufficiently charged batteries.

Note: the MILAN 2.0 POWER must only be used with the devices supplied by SKYLOTEC!

### Standard:

EN 341 Kl. A, EN 1496, ANSI Z359.4



Type	No. of people	Weight in kg	Item no.
A-029	2	2.25	45203200 015010

## BATTERY-POWERED DEVICE



A-029-G

## BATTERY CHARGER

For charging A-029-G



A-029-L

## SPARE BATTERY

Included:

- Battery-powered device as a drive for the MILAN 2.0 POWER
- 2 x Li-ion rechargeable batteries
- Charger
- Plastic case



A-029-A

Type	Weight in kg	Item no.
A-029-G	1.6	45204815 015072
A-029-L	1.0	45204815 015073
A-029-A	0.8	45204815 015071

## SEAL PAC

All rescue devices must be inspected on an annual basis – including unused devices stored for emergencies. The SEAL PAC makes this regular inspection easier. The MILAN is stored in a sealed metal box. An authorised inspector opens the sealed box once a year and checks the moisture indicator on the MILAN packaging and the device's fully functional condition. If everything is as it should be, the inspector marks the month and year of the next inspection, signs, and seals the metal box with a new seal. The key advantage of the SEAL PAC is the ability to save costs and time with controlled safety. The rescue device can be stored in the Seal Pac for 10 years.



Type	For rope lengths in m	Material	Weight in kg	Item no.
SET-SEAL PAC 80	80	Aluminium	7.11	45204600 015009
SET-SEAL PAC 120	120	Aluminium	7.22	45204600 015007
SET-SEAL PAC 150	150	Aluminium	9.22	45204600 015008

## PERISROP

Edge guard with 3 cable guide rings, 2-metre keeper cord and oval, steel S22 KN carabiner

Type	Length in m	Weight in kg	Item no.
H-056	2.0	0.863	45204815 015031





## rollgliss® R350 rescue system



The rollgliss® system includes the patented one-way top shive (only rotates when raising) providing efficient hauling, but more importantly highly controlled lowering (a finger and thumb are all that is required to hold a load). This system also allows you to change the reduction ratios on the fly with a quick-release double-locking button on the top and auto-locking karabiners on the bottom.

This allows the system to be rigged for rooftop rescue, tower rescue or two person rescue. Standard: in accordance with EN 341, Class A (descender) and EN 1496 Class B (rescue lifting device).

Max. descent distance: 340 m

Type	Description	Length in m	for rope-Ø	Weight in kg	Item no.
AG6350ST21	R350 rescue system, ratio 2:1	10 - 100	9 mm rope	2.54	45203200 015005
AG6350ST31	R350 rescue system, ratio 3:1	10 - 100	9 mm rope	2.72	45203200 015006
AG6350ST51	R350 rescue system, ratio 5:1	10 - 100	9 mm rope	2.97	45203200 015007

Type	Length in m	Rope-Ø in mm	Description	Weight in kg	Item no.
AG6720060	60	9.0	Kernmantle rope	5.4	45202810 015005
AG6720080	80	9.0	Kernmantle rope	7.0	45202810 015006

**PLEASE NOTE:** The rope is sold in increments of 10 m and other accessories are also available, including pulleys for reduction ratios of 2:1 and 5:1, winch handles etc. Other rope lengths are available on request.

## rollgliss™ R550 Rescue and descent device



- Self- and victim rescue
- Compact and lightweight design
- Fully automatic controlled descent
- Two autonomic brakes for a double safety
- Bidirectional design enables multiple rescues
- 2 redirection points
- Mutual running
- i-Safe™ (for recording and storing information on inspections)
- Operating temperature -40° to +60°
- Prominent spindle for a controlled up- and abseiling with a cordless screwdriver
- Max. rope length 300 m
- 9.5 mm Kernmantle rope
- Capacity: 2 users / 59 kg to 282 kg
- Rate of descent:  
0.6m to 0.9m/sec. – 1 user  
0.6m to 1.2m/sec. – 2 users
- Certified acc. to EN 341:1992 1A and EN 1496:2006 Class B

## rollgliss™ R550 Accessories



Type	Description	Recommended numbers	Weight in kg	Item no.
9506162	Rope bag (A)	1	0.93	45204600 015005
3320003	Edge protection (B)	1	0.5	45204815 015027
AG570	Pulley (C)	1	0.6	45204400 015006
AC202	Guided fall arrester (D)	1	0.87	45201220 015006
2000112	Carabiner (E)	4	0.23	45201410 015007
AM450/120	1.20 m Webbing loop (F)	2	0.16	45201018 015006
AM450/80	0.80 m Webbing loop (G)	1	0.08	45201018 015004
9508289	Sealed Box* (H)	1	7.5	45204600 015006

\* Sealed Box (63 x 50 x 35 cm, 7 kg) for max.150 m rope length

Type	Description	Number of users	Kernmantle rope-Ø in mm	Max. user weight in kg	Max. height in m	Weight in kg	Item no.
3329010	R550 rescue device with 10 m rope	2	9.5	282	500	3.5	45203200 015001
3329020	R550 rescue device with 20 m rope	2	9.5	282	500	4.0	45203200 015002
3329030	R550 rescue device with 30 m rope	2	9.5	282	500	4.6	45203200 015003
3329040	R550 rescue device with 40 m rope	2	9.5	282	500	5.2	45203200 015004



## Rescue kit

The rescue kit has been specially designed for users who use a belt system in conjunction with a re-tractable type fall arrester or an energy-absorbing element and who end up in a hanging situation after a fall from which they are unable to free themselves using their own strength alone and must therefore turn to external means of rescue.

### The complete rescue kit comprises:

- Descender ABS 3a WH with rescue lifting device for optional lifting or controlled descending
- Anchorage loop with a length of 1 m
- Steel carabiner IKV13 as a connector
- Telescopic rod with an attached karabiner bracket (further automated open position retention) at the head end. Extendible to up to 3.60 m
- Maximum reachable working distance = approx. 5 m
- Optionally available with 20 m or 40 m kernmantle rope Ø 10.5 mm
- Practical bag
- Detailed user instructions



Type	Rope length in m	Weight in kg	Item no.
41-RSET/20	20	6.2	45203400 015001
41-RSET/40	40	7.5	45203400 015002

## „KLETTER-FIX“

Die kleinste Rettungsleiter der Welt

### fire escape ladder

Kletter-Fix is a compact folding ladder made from steel cable and aluminium rungs. It is small, stable, handy, non-flammable and suitable for use anywhere and at all times. Folding: folds up small like a book - but is tall as a high-rise building when used.

### Technical data:

Capacity:  
 - Whole ladder: 3 kN (≈ 300 kg / 4 people)  
 - Individual rung: 1.5 kN (≈ 150 kg / 2 people)  
 Rung width: 330 mm  
 Gap between rungs: 315 mm  
 Supporting cable gap: 303 mm  
 Distance from wall: 150 mm (type A)  
 Test length: 495 cm (in acc. to DGUV Information 208-013)



Test length:  
495 cm (in acc. to DGUV Information 208-013)

### Kletter-Fix type N:

Standard version. This version should be selected if your emergency escape route goes over the balcony, over the roof eaves or down a facade with protruding window ledges.



### Kletter-Fix type A:

Type A compact ladders have integrated spacers on every second rung and thereby offer maximum descent safety even on smooth facades.



Type	Approx. length in m	For no. of storeys	Weight in kg	Pack size in cm	Item no.
KF-N5	5	2	3.2	33 x 20 x 10	45203600 015001
KF-N8	8	3	4.5	33 x 20 x 10	45203600 015002
KF-N12	12	4	6.9	33 x 20 x 10	45203600 015003
KF-A5	5	2	4.7	33 x 20 x 19	45203600 015004
KF-A8	8	3	6.8	33 x 20 x 19	45203600 015005
KF-A12	12	4	8.9	33 x 20 x 19	45203600 015006

### Storage box for Kletter-Fix type N and A

Type	Weight in kg	Outer dimensions W x H x D in cm	Item no.
KF-N Box	3.340	380 x 265 x 145	45204600 015029
KF-A Box	4.220	380 x 265 x 235	45204600 015028



## Precision engineering

Proper engineering is critical for safe lifeline systems. Typical errors include the improper calculation of the fall distance, not taking into account sag in the lifeline and a lack of understanding of the existing build-structure.

When a fall is experienced on a horizontal lifeline, the load is magnified back to the anchorage, generating tremendous force. The amount of sag

amplifies the forces on the end anchors.

Other factors are the number of people secured to the system, the overall length and the connection material used.



## Selection guide

Product	Description	Area of application	Installation	Energy absorber	Rope	No. of users (max.):
EZ-Line™	<b>Temporary</b> Fastest horizontal lifeline to install and remove. Max. range 18 m. The cable simply retracts inside the housing for transportation and storage.	<ul style="list-style-type: none"> <li>• Maintenance/Assembly</li> <li>• Bridge work</li> <li>• Construction industry</li> <li>• Production</li> </ul>	Simple, no special tools or equipment required	Zorbit™	6.25 mm galvanised	1 - 2 depending on the fall distance

## EZ-Line™ Temporary horizontal lifeline system

EZ-Line™ is the most user friendly and fastest horizontal lifeline to install and remove on the market today. The 18 m lifeline is simply pulled out for installation and retracted into its housing with the built-in handle upon disassembly. No more unruly cable that is difficult to install, transport and store. Built-in tension and impact indicators take the guess work out of system set-up and maintenance. The extremely lightweight system is 33% lighter than conventional 18 m systems. Complies with standards DIN EN 795-C and OSHA.

Required attachment anchor = 22 kN.

Please see the user instructions.



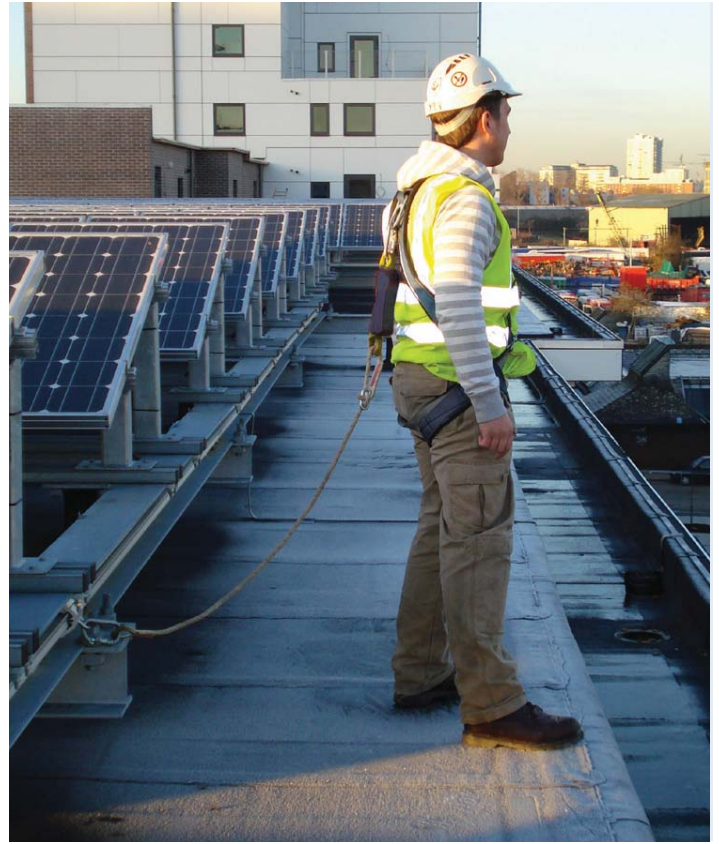
Type	Range in m	No. of users	Weight in kg	Item no.
7605061	18	2	11.25	45201028 015046



Following the integration of the Uniline systems into the Capital Safety Group's product range, new horizontal cable and rail-based fall protection systems are now available to us under the SALA brand. On request, we will gladly provide you with an on-site consultation.

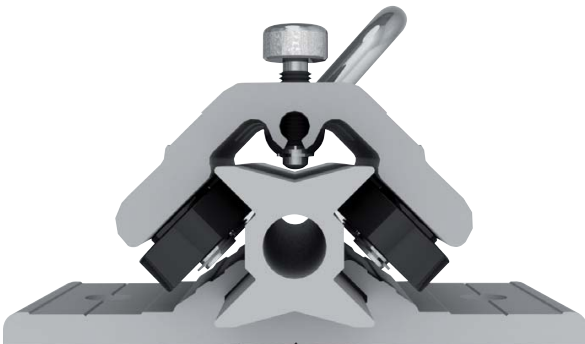
## Uni Rail™ Uni 8™ Uni 8™ Overhead Uni 16™

The Uniline® product range for horizontal fall arrest products has been developed to offer multiple solutions for compliance with workplace safety regulations. This enables our customers to efficiently and compliantly safeguard themselves against the situations and risks that arise when working at heights. Whatever your situation, we always offer you high-quality services, technical support and products.



## Uni Rail™

Uni Rail™ is the perfect choice for construction projects, especially those involving internal and external facade access, inspections and maintenance, including on walkways and suspended gantries. The product is also often used for suspended access work by rope access technicians as it meets the requirements of both abseil and fall protection standards.





## Uni-8™

Uni 8™ is best suited to modern construction projects and refurbishments but can also be used for industrial safety applications. Minimal moving parts and high grade materials ensure excellent durability and low operating costs, making this a sound investment. Uni 8™ can be fitted to steel beams, concrete and brickwork. When using special anchorages, it is also perfectly suited for use on older roof constructions.



## Uni-8™ overhead

Uni 8™ overhead fall protection systems were primarily developed to meet the needs of our customers in the industrial and transport sectors, especially for lorries, trains and airplanes, crane runways and loading bays. The system has also resolved access and safety problems in the entertainment sector and in arenas or stadiums. This high-quality safety solution can furthermore support heavy retractable type fall arresters without restricting workers' movement while working at height.





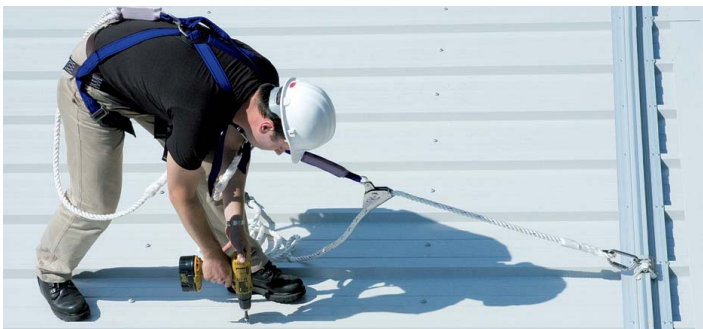
## RoofSafe™ rail RoofSafe™ anchor RoofSafe™ rope system

The Uniline® RoofSafe™ product range offers incomparable safety for roof access during maintenance and inspection work. Users benefit from a broad range of products, including roof anchors, horizontal lifelines and horizontal rail systems, which offer you comprehensive protection on all roof types.



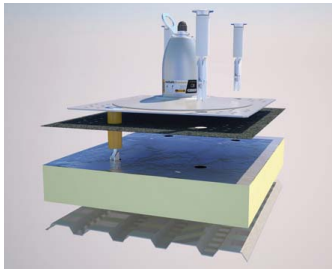
## RoofSafe™ rail

The RoofSafe™ rail is a high-quality rail system made from extruded aluminium that offers users optimum safety while blending into your environment with an aesthetically pleasing appearance. Thanks to the free-flowing attachment carriage and the lack of interim brackets to traverse, the rail is highly functional and enables users to keep their hands completely free for their work rather than using them to secure themselves.



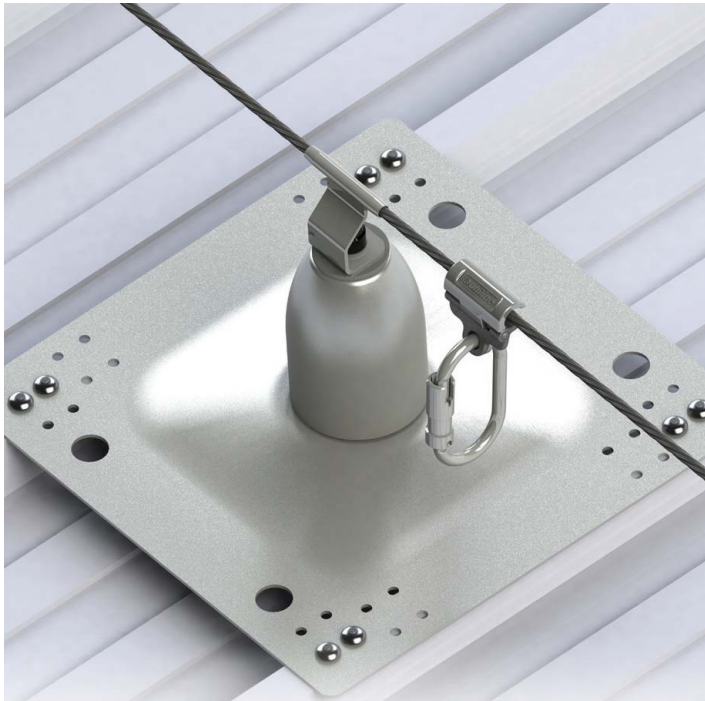
## RoofSafe™ anchorage points

The Uniline® RoofSafe™ anchorage points from Capital Safety have been designed to eliminate or substantially reduce the risk of injury or death to operatives working at height whilst also ensuring the integrity of the structure to which they are attached.

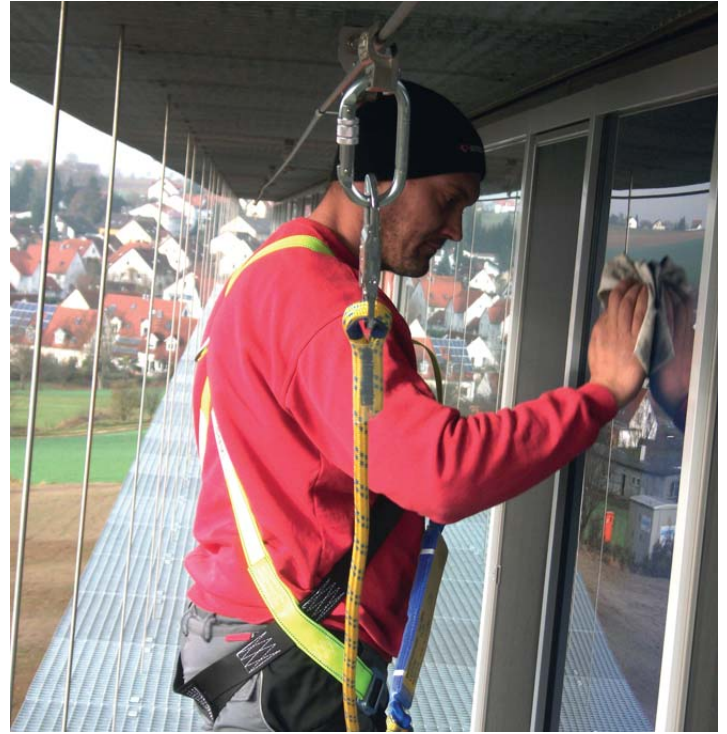


## RoofSafe™ rope system

The RoofSafe™ rope system has been designed to complement the RoofSafe™ anchor range. It takes advantage of the low system loads generated in the event of a fall. Providing the place of use, the system and the structural parameters are right, multiple workers can use the system at the same time. Anchors can be positioned at intervals of up to 12 m. The traversable interim brackets enable workers to move freely.











All systems, components and individual parts available on request!

## ABS-Lock® SYS I Rope lifeline system 8 mm, non-traversable

The ABS-Lock® SYS I rope lifeline system uses an 8 mm stainless steel wire rope (V4A) to provide simultaneous protection of up to 4 people. Workers can use this system to hook up their personal protection equipment in industrial applications, event halls, on roofs and when working on crane ways. The system can be installed on almost any surface: Steel, concrete, wood or metal.

The ABS-Lock® SYS I rope lifeline system is **non-traversable**, but can still be led easily around obstructions or curves.

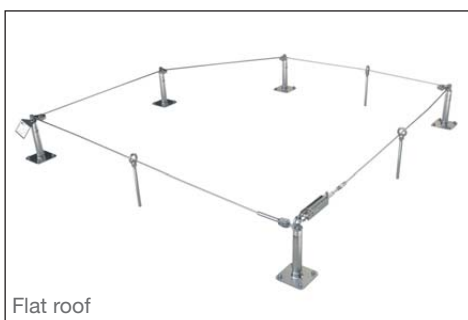
- Can be used with almost every ABS Safety system supports
- Installation on almost any common roofs
- Ø 8 mm V4A-rope
- Max. 4 people
- System non-traversable
- Tested in acc. to DIN EN 795, Type C
- General type approval (DIBt) Z-14.9-786

## ABS-Lock® SYS III Rope lifeline system 6 mm, non-traversable

The ABS-Lock SYS III system secures dangerous edges on buildings, roofs, in halls and in the vicinity of industrial machines. This lifeline system is based on a 6 mm stainless steel wire rope and is designed for the simultaneous protection of up to 4 individuals working at heights. The flexible stainless steel wire rope of the ABS-Lock SYS III system can be easily led around obstacles and corners.

- Compatible with most ABS Safety system supports
- Installation on almost any surface
- Ideal for flat roofs (schools, gyms, warehouses etc.)
- Ø 6 mm V4A-rope
- Max. 4 people
- System non-traversable
- Tested in acc. to DIN EN 795, Type C
- General type approval (DIBt) Z-14.9-786

Example of a system illustration of SYS I and SYS III





All systems, components and individual parts available on request!

### **ABS-Lock® SYS II** Rope lifeline system 8 mm, traversable

The ABS-Lock® SYS II is a fully-traversable lifeline system based on a 8 mm stainless steel wire rope. Implement this system for a hard-wearing, continuous overhead anchorage solution: The extra-rigid wire rope reduces the amount of pull on the wire rope when a self-retracting lifeline is attached. The glider runs smoothly over the intermediate and corner elements.

The traversable ABS TI-FlexCurve element is extremely easy to use and install. This curve element allows you to run your lifeline system easily around an obstacle or to even out a difference in height - with minimal effort: Simply adjust the ABS TI-FlexCurve manually to the required angle.

- System incl. ABS TI-FlexCurve (curve element) and ABS TI-Bracket (intermediate bracket) fully traversable
- Mounting options on almost every surface
- Ø 8 mm V4A-rope
- Max. 4 people
- Ideal for overhead use and on facades
- For facades, crane systems, filling plants, industry-, bus-, aircraft- maintenance halls etc.
- Tested in acc. to DIN EN 795, Type C
- General type approval (DIBt) Z-14.9-786

### **ABS-Lock® SYS IV** Rope lifeline system 6 mm, traversable

The ABS-Lock® SYS IV is a particularly user-friendly lifeline system. Thanks to a selection of different corner elements and a 6 mm flexible stainless steel wire rope, this system blends in perfectly with your building structure whilst remaining 100% traversable. Up to 4 workers can use the anchorage system at any given time.

The special ABS ProSlide aluminium glider offers the ultimate in maneuverability. When planning and installing your system, the numerous practical connection options offered by the ABS-Lock® SYS IV come out top. The ABS TI-FlexCurve, which can be manually adjusted, is the central component of this system: This curve element can be individually adjusted to fit any angle up to 180° - completely tool-free. This practical curve element can be used to easily get around the roof apex, corners or any other obstacle.

- System incl. ABS TI-FlexCurve (curve element) and ABS TI-Bracket (intermediate bracket) fully traversable
- Different system support for every surface
- Ø 6 mm V4A-rope
- Max. 4 people
- Ideal for overhead use and on facades
- For concrete, wood, steel, facades and almost any roof type (flat, pitched, metal and seam)
- Tested in acc. to DIN EN 795, Type C
- General type approval (DIBt) Z-14.9-786

Example of a system illustration of SYS II and SYS IV





**ABS ASK 8 is a horizontal lifeline system in accordance to EN 795 Class B + C for a temporarily use especially during a connection of two X-FLAT anchorage points on a container.**

Also for a use on flat- and steep roofs by latching to preinstalled anchorage points. A 14 mm diameter kernmantle rope is the basis for the horizontal lifeline system. The fall protection system is permitted for a maximum distance of up to 20 meter without intermediate brackets, at a attachment to two solid attachment options (e.g. steel beam) if necessary, because the kernmantle rope stretches less than a common rope during a fall. Therefor the fall distance will be extremely reduced.



PS-1013-15



PS-1013-23



PS-1013-30

Type	Description	Freely movable carabiner Number	Weight in kg	Item no.
PS-1013-15	Horizontal lifeline rope, polyamide Ø 14 mm, L = 15 m	1	3.0	45201028 015035
PS-1013-23	Horizontal lifeline rope, polyamide Ø 14 mm, L = 23 m	2	4.0	45201028 015036
PS-1013-30	Horizontal lifeline rope, polyamide Ø 14 mm, L = 30 m	3	5.0	45201028 015037

Standard: EN 795 Class B, Class C



ABS ASK 8 as a lifeline system on a steep roof.

## Lifeline Horizontal

Lifeline Horizontal is a temporary and highly flexible fall arrest device that can be quickly installed. Two people can use the device to work securely along a 20 m stretch. The anchorage points must be designed for a load of 25 kN. The Lifeline Horizontal is ideally complemented by the SEP anchorage loop.

**Standard:**  
EN 795 B

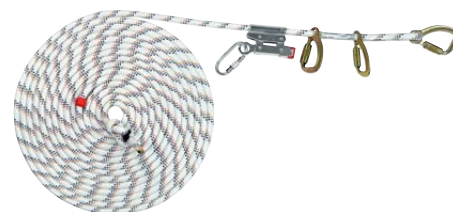


Type	Length in m	Weight in kg	Item no.
L-0329	20	2.9	45201030 015003

## Quick Safe

The horizontal safety system Quick Safe is a temporary fall arrest device for temporary use in accordance with standard EN 795, Class C. It acts as an anchorage point that must be used in conjunction with lanyards, which are in turn fitted with energy absorbers (EN 354/355) or guided type fall arresters (EN 353-2). The horizontal safety system is attached between two anchorages. These must comply with the requirements of standard EN 795 and guarantee a minimum strength of 10 kN. If the gap between the anchorages exceeds 6 m, the karabiners attached to the guide rope must be attached to additional anchorages as intermediate fixtures. These must also have a strength of 10 kN. The maximum field size (i.e. distance between two anchorages) must not exceed 6 m.

**Standard:**  
EN 795 C



Type	Length in m	Weight in kg	Item no.
L-0037-13	13	3.6	45201028 015041
L-0037-19	19	4.8	45201028 015042
L-0037-25	25	6.0	45201028 015043
L-0037-31	31	7.0	45201028 015044



## VERTEX BEST A10 B

### Comfortable helmet for work at height and rescue

- The six-point mesh liner ensures optimum fit and comfort. Impacts and blows are absorbed by the deformation of the inner shell.
- The CenterFit adjustment system ensures the helmet sits firmly on the centre of the head.
- Side slots for the use of standard hearing protection equipment
- Inserts for using a VIZIR face shield
- Slot for attaching a PIXA headlamp
- Four clips for attaching a headlamp with an elastic headband
- The chin strap is designed to limit the risk of losing the helmet during a fall (strength greater than 50 daN).
- The helmet's unventilated shell protects against electrical hazards and molten metal splashes.

**Certification:** CE\*, ANSI Z89.1-2009 Type I Class E, (CSA Z94,1-05 Type 1 Class C 9 available by special order)

\* Meets the requirements of the EN 397 and EN 12492 standards on impact protection. Meets the requirements of the EN 397 and EN 50365 standards on electrical insulation. Meets the optional requirements of the EN 397 standard on molten metal splash, lateral deformation and use in low temperatures.



A10BYA



A10BWA



A10BRA



A10BNA



A10BOA



A10BBA

Type	Colour	Size in cm	Weight in kg	Item no.
A10BYA	yellow	53 - 63	0.445	45203800 015018
A10BWA	white	53 - 63	0.445	45203800 015017
A10BRA	red	53 - 63	0.445	45203800 015016
A10BNA	black	53 - 63	0.445	45203800 015014
A10BOA	orange	53 - 63	0.445	45203800 015015
A10BBA	blue	53 - 63	0.445	45203800 015013

## VERTEX VENT A10 V

Comfortable ventilated helmet for work at height and rescue

- Additional ventilation holes with sliding shutters allow the ventilation to be adjusted as needed from the outside.
- The six-point mesh liner ensures optimum fit and comfort. Impacts and blows are absorbed by the deformation of the inner shell.
- The CenterFit adjustment system ensures the helmet sits firmly on the centre of the head.
- Side slots for the use of standard hearing protection equipment
- Inserts for using a VIZIR face shield
- Slot for attaching a PIXA headlamp
- Four clips for attaching a headlamp with an elastic headband
- The chin strap is designed to limit the risk of losing the helmet during a fall (strength greater than 50 daN).
- The helmet's unventilated shell protects against electrical hazards and molten metal splashes.

**Certification:** CE EN 12492 \*

- UIAA
- ANSI Z89.1-2009 Type I Class C
- (CSA Z94.1-05 Type 1 Class C available by special order)

\* Meets the requirements of the EN 397 and EN 12492 standards on impact protection. Meets the optional requirements of Standard EN 397 on lateral deformation and use in low temperatures.



A10VYA



A10VWA



A10VRA



A10VNA



A10VOA



A10VBA

Type	Colour	Size in cm	Weight in kg	Item no.
A10VYA	yellow	53 - 63	0.445	45203800 015026
A10VWA	white	53 - 63	0.445	45203800 015025
A10VRA	red	53 - 63	0.445	45203800 015024
A10VNA	black	53 - 63	0.445	45203800 015022
A10VOA	orange	53 - 63	0.445	45203800 015023
A10VBA	blue	53 - 63	0.445	45203800 015021

## VERTEX ST A10 S

Comfortable helmet for industry. The only Petzl helmet, who meets completely the EN 397.

- Shock absorption achieved through deformation of the outer shell.
- Its closed shell offers protection against electrical risk and molten metal splash
- Limits risk of choking, thanks to a chinstrap designed to release if snagged (strength less than 25 daN).
- Six-point textile suspension conforms perfectly to the shape of the head
- CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head
- Comes with two sizes of headband foam.
- Many accessories are available in order to adapt the helmet to its use: PIXA or ULTRA VARIO headlamp (front or back slots), headlamp with elastic headband (elastic clips), VIZIR, VIZIR SHADOW or VIZEN protective shield (side inserts), hearing protection (side slots)

Standard: CE EN 397, CE EN 50365

- ANSI Z89.1-2009 Type I Class E

- (CSA Z94.1-05 Type 1 Class E available on special request)



A10SRA



A10SWA

Type	Colour	Size in cm	Weight in kg	Item no.
A10SRA	red	53 - 63	0.445	45203800 015019
A10SWA	white	53 - 63	0.445	45203800 015020

## PELTOR

Accessories for VERTEX helmets. For expansion with visor, neck guard and hearing protectors.

Standards: H31PBE 300: CE EN 352-3. V1B and

V4JKSV: CE EN 166 1995 and EN 172 1995



GR1C



H31P3E 300



5B



V4JKSV



V4H



P3EV/2

Type	Description	Weight in kg	Item no.
GR1C	Neck guard	0.065	45204815 015018
H31P3E 300	Capsule ear protectors	0.295	45204815 015019
5B	Face shield, nylon mesh	0.065	45204815 015032
V4JKSV	Face shield, etched metal	0.065	45204815 015034
V4H	Face shield poly-carbonate 1.2 mm	0.065	45204815 015033
P3EV/2	Plug-in fastening adapter for PELTOR VISORS	0.200	45204815 015020

## ALVEO BEST A20 B

### Lightweight helmet for work at height and rescue

- Lightweight helmet with comfortable foam padding that is barely noticeable when wearing the helmet. Impacts and blows are absorbed by the deformation of the polystyrene foam inner shell.
- The CenterFit adjustment system ensures the helmet sits firmly on the centre of the head.
- Side slots for the use of standard hearing protection equipment
- Inserts for using a VIZIR face shield
- Slot for attaching a PIXA headlamp
- Four clips for attaching a headlamp with an elastic headband
- The chin strap is designed to limit the risk of losing the helmet during a fall (strength greater than 50 daN).
- The helmet's unventilated shell protects against electrical hazards and molten metal splashes.

### Certification: CE\*

- ANSI Z89.1-2009 Type I Class E

\* Meets the requirements of the EN 397 and EN 12492 standards on impact protection. Meets the requirements of the EN 397 and EN 50365 standards on electrical insulation. Meets the optional requirements of the EN 397 standard on molten metal splash, lateral deformation and use in low temperatures.



The helmet can be easily adjusted even when wearing gloves by simultaneously activating the CenterFit system's two adjustment wheels to keep the helmet in the centre of the head.



A20BYA



A20BWA



A20BRA

Type	Colour	Size in cm	Weight in kg	Item no.
A20BYA	yellow	53 - 63	0.345	45203800 015009
A20BWA	white	53 - 63	0.345	45203800 015008
A20BRA	red	53 - 63	0.345	45203800 015007



## ALVEO VENT A20 V

Lightweight, ventilated helmet for work at height and rescue

Same design as ALVEO BEST A20B

Additional feature: ventilation openings

### On request:

- Transparent label, type A10100
- Reflective label, type A20110
- Absorbent foam padding, type A20200

**Certification:** CE EN 12492 \*

- UIAA
- ANSI Z89.1-2009 Type I Class C

\* Meets the requirements of the EN 397 and EN 12492 standards on impact protection. Meets the optional requirements of the EN 397 standard on the lateral deformation and the use in low temperatures.



A20VYA



A20VWA



A20VRA

Type	Colour	Size in cm	Weight in kg	Item no.
A20VYA	yellow	53 - 63	0.340	45203800 015012
A20VWA	white	53 - 63	0.340	45203800 015011
A20VRA	red	53 - 63	0.340	45203800 015010

## VIZIR A15A, VIZIR A15AS Shadow

Protective face shield for VERTEX and ALVEO helmets

- Quick and easy to attach to VERTEX and ALVEO helmets using purpose-built inserts
- Two positions:
  - raised on top of the helmet if the face shield is not required
  - lowered in the working position in front of the face
- Scratch and fog-resistant
- A15AS Shadow protects against sunlight

**Certification A15A:** CE EN 166, 1B, average speed particles  
ANSI Z87.1-2010, (CSA Z94.3-07 available on special request)

**Certification A15AS Shadow:** CE EN 166, 1B, average speed particles,  
CE EN 172, 5-2.5 (protective filter level 2.5)  
ANSI Z87.1-2010, (CSA Z94.3-07 available on special request)



A15A



A15AS Shadow

Type	Description	Weight in kg	Item no.
VIZIR A15A	Face shield	0.06	45204815 015005
VIZIR A15AS	Face shield	0.06	45204815 015006

## SKYCROWN

The SKYCROWN is a classic! Optimal air circulation as a result of the integrated venting-system and the interior padding ensures best wearing comfort. The SKYCROWN can be individually adjusted with just one hand to the required head circumference by a small wheel on the backside.

Standard: EN 397



BE-016-BL



BE-016-OR



BE-016-RO



BE-016-SWM



BE-016-SWS



BE-016-WE

Type	Colour	Size in cm	Weight in kg	Item no.
BE-016-BL	blue	52-63	0.43	45203800 015001
BE-016-OR	orange	52-63	0.43	45203800 015002
BE-016-RO	red	52-63	0.43	45203800 015003
BE-016-SWM	matt black	52-63	0.43	45203800 015004
BE-016-SWS	black	52-63	0.43	45203800 015005
BE-016-WE	white	52-63	0.43	45203800 015006

### ZENITH, Standard: EN 397, EN 50365

- Polypropylene industrial helmet
- Innovative 2.0 UP&DOWN adjustment system ensures a precise and comfortable fit around the head
- Holding clips for headlamps
- Internal HD Polystyrene shell for enhanced impact/shock protection
- Protection against electrical hazards

- Internal padding from washable FAST 3DRY high-tech 3D mesh for a better wearing comfort
- Integrated 4-point chin strap from antiallergic and washable ECO-leather
- Adjustable from 53cm - 63cm head circumference
- On request the ZENITH helmet is also available as fluorescent version ZENITH HI VIZ in the colours white and yellow

**Standard:** EN 397 - EN 50365 (Class 0)



WHE00024.201



WHE00024.202



WHE00024.203



WHE00024.204



WHE00024.205



WHE00024.208



WHE00024.210

Type	Colour	Size in cm	Chin strap load in kN	Weight in kg	Item no.
WHE00024.201	white	53-63	25	0.40	45203800 035041
WHE00024.202	yellow	53-63	25	0.40	45203800 035042
WHE00024.203	orange	53-63	25	0.40	45203800 035045
WHE00024.204	red	53-63	25	0.40	45203800 035046
WHE00024.205	green	53-63	25	0.40	45203800 035047
WHE00024.208	blue	53-63	25	0.40	45203800 035048
WHE00024.210	black	53-63	25	0.40	45203800 035049

### SC Ear protection cups

- Universal connection 30 mm
- Colour-coded protection level
- Telescopic size-adjustment
- Non-conductive material
- Certified for the use with KASK helmets ZENITH and PLASMA AQ

**Standard:** EN 352-3:2002



WHP00001.203



WHP00001.205



WHP00001.202

Type	Colour	Description	Suitable for noise level in dB	Weight in kg	Item no.
WHP00001.203	orange	Ear protection cup SC3	> 31	0.300	45204815 035552
WHP00001.202	yellow	Ear protection cup SC2	26-30	0.271	45204815 035551
WHP00001.205	green	Ear protection cup SC1	< 26	0.250	45204815 035550

### Zen Half Visors

- Material: Polycarbonate
- Anti-fog and scratch resistant treatment
- Panoramic lens suitable for spectacle wearers
- Cut-proof edge
- Upper anti-drip rubber lip
- The adapter for attachment of the visors is not included in the delivery of the visor and has to be ordered separately (Type WAC00009)



WWI00007.015



WWI00007.055



WWI00007.009



WAC00009

**Standard:** EN 166, optical class 2

Type	Shield colour	Description	Weight in kg	Item no.
WWI00007.015	Transparent	Zen half visor	0.080	45204815 035530
WWI00007.009	Smoke	Zen half visor	0.080	45204815 035531
WWI00007.055	Silver Mirror	Zen half visor	0.080	45204815 035532
WAC00009.000	-	Zen visor adapter	0.020	45204815 035541

### Zen Full Visors

- Material  
Zen PM: Plastic  
Zen MM: Metal  
Zen FF Air: Polycarbonate  
Zen FF: Polycarbonate
- Panoramic visual field also suitable for spectacle wearers
- Protects a larger area of the face
- Anti-fog and scratch-resistant treatment (Type Zen FF Air, Zen FF)
- Enhanced, ergonomic frame protects against dirt and dust (Type Zen FF Air, Zen FF)
- Ventilation holes to facilitate and improve the air circulation (Type Zen FF Air)
- Light transmission 50% (Type Zen PM, Zen MM)
- The visor adapter (Type WAC00009) and the fixing (Type WAC000010) of the full visors are not included in the delivery of the visors and had to be ordered separately
- Accessory: Sun shield (Type WWI00011)



WWI00010



WWI00009



WWI00012.015



WWI00012.009



WWI00012.055



WWI00008.015



WWI00008.009



WWI00008.055



WAC00009



WAC000010



WWI00011

**Standard:** EN 166, optical class 1 (Type Zen FF Air, Zen FF)

Type	Shield colour	Description	Weight in kg	Item no.
WWI00010	Plastic mesh	Zen PM plastic mesh full visor	0.075	45204815 035539
WWI00009	Metal mesh	Zen MM metal mesh full visor	0.100	45204815 035540
WWI00012.015	Transparent	Zen FF Air full visor with ventilation holes	0.120	45204815 035536
WWI00012.009	Smoke	Zen FF Air full visor with ventilation holes	0.120	45204815 035537
WWI00012.055	Silver Mirror	Zen FF Air full visor with ventilation holes	0.120	45204815 035538
WWI00008.015	Transparent	Zen FF full visor	0.120	45204815 035533
WWI00008.009	Smoke	Zen FF full visor	0.120	45204815 035534
WWI00008.055	Silver Mirror	Zen FF full visor	0.120	45204815 035535
WAC00009.000	-	Zen visor adapter	0.020	45204815 035541
WAC00010.000	-	Zen visor fixing	0.035	45204815 035542
WWI00011	-	Sun shield	0.025	45204815 035543



### PLASMA AQ, Standard: EN 397

- Sportive polypropylene industrial helmet
- Size adjustment by rotary knob
- Maximum ventilation thanks to ten ventilation slits with protective grids
- Holding clips for headlamps
- Internal foamed HD Polystyrene shell for enhanced shock/impact protection

- Washable 2DRY internal padding for a high wearing comfort
- Integrated 4-point chin strap
- Adjustable from 51 cm up to 63 cm head circumference
- On request the PLASMA helmet is also available as fluorescent version PLASMA HI VIZ in the colours white, white/green, yellow, orange, red, lime, blue, blue/yellow and black

Standard: EN 397



WHE00008.201



WHE00008.202



WHE00008.203



WHE00008.204



WHE00008.205



WHE00008.206



WHE00008.207



WHE00008.208



WHE00008.210

Type	Colour	Size in cm	Chin strap load in kN	Weight in kg	Item no.
WHE00008.201	white	51-63	25	0.39	45203800 035060
WHE00008.202	yellow	51-63	25	0.39	45203800 035061
WHE00008.203	orange	51-63	25	0.39	45203800 035062
WHE00008.204	red	51-63	25	0.39	45203800 035063
WHE00008.205	green	51-63	25	0.39	45203800 035064
WHE00008.206	british green	51-63	25	0.39	45203800 035065
WHE00008.207	royal	51-63	25	0.39	45203800 035066
WHE00008.208	blue	51-63	25	0.39	45203800 035067
WHE00008.210	black	51-63	25	0.39	45203800 035069

### SC Ear protection cups

- Universal connection 30 mm
- Colour-coded protection level
- Telescopic size-adjustment
- Non-conductive material
- Certified for use with KASK helmets ZENITH and PLASMA AQ
- The bayonet adapter for attachment is not part of the delivery of the ear protection cup and has to be ordered separately (Type WAC00003)



WHP00001.203



WHP00001.205



WHP00001.202



WAC00003

Standard: EN 352-3:2002

Type	Colour	Description	Suitable for noise level in dB	Weight in kg	Item no.
WHP00001.203	orange	Ear protection cup SC3	> 31	0.300	45204815 035552
WHP00001.202	yellow	Ear protection cup SC2	26-30	0.271	45204815 035551
WHP00001.205	green	Ear protection cup SC1	< 26	0.250	45204815 035550
WAC00003	-	Bayonet adapter	-	0.015	45204815 035567

### Visor V2 half visor

- Material: Polycarbonate
- Anti-fog and scratch resistant treatment
- Panoramic visual field also suitable for eyeglass wearers
- Cut-proof edge
- Upper anti-drip rubber lip
- Shock resistant also at extreme temperatures



WVI00002.015



WVI00002.009



WVI00002.055

Standard: EN 166, optical class 2

Type	Shield colour	Description	Weight in kg	Item no.
WVI00002.015	Transparent	Visor V2 half visor	0.070	45204815 035556
WVI00002.009	Smoke	Visor V2 half visor	0.070	45204815 035557
WVI00002.055	Silver Mirror	Visor V2 half visor	0.070	45204815 035558

### Visor FF Full Visor

- Material: Polycarbonate
- Anti-fog and scratch resistant treatment
- Also suitable for eyeglass wearers
- Upper anti-drip rubber lip
- Shock resistant also at extreme temperatures
- Protects a larger face area
- Visor is delivered including mounting screw set

Standard: EN 166, optical class 2



WVI00003.015



WVI00003.009



WVI00003.055

### Mesh Visor Full Visor

- Material: Metal and Polypropylene
- Light transmission: 82-85,5%
- Hexagonal forestry visor which also ensures good visibility during bad light conditions
- Protection against dust and abrasion
- Also suitable for spectacle wearers
- Allows ventilation
- Visor connection (Type WVI00005) and the mounting (Type WAC00008) are not included in the delivery and have to be ordered separately

Standard: EN 1731



WVI00006



WAC00008\*



WVI00005

Type	Shield colour	Description	Weight in kg	Item no.
WVI00003.015	Transparent	Visor FF full visor	0.120	45204815 035559
WVI00003.009	Smoke	Visor FF full visor	0.120	45204815 035560
WVI00003.055	Silver Mirror	Visor FF full visor	0.120	45204815 035561
WVI00006.000	Metal mesh	Mesh Visor full visor	0.042	45204815 035563
WAC00008*	-	30mm mounting Visor	0.020	45204815 035564
WVI00005	-	Mesh visor attachment	0.050	45204815 035565

\*The attachment (WAC00008) is only necessary, if the mesh visor full visor without ear protection is used. If using the mesh visor full visor with ear protection and the required bayonet adapter the attachment is not necessary.

## Handled ascender ASCENSION B17

### Versions for the right and the left hands

- Ergonomically-shaped grip for comfortable and efficient handling
- Due to the wide opening the grip can also easily handled with thick gloves.
- Ergonomically shaped upper part for a maximum efficiency during pulling with both hands.
- Completely integrated release lever in the body of the rope clamp to avoid tripping.
- Toothed buckle cam with cleaning slot for a optimal function during all conditions (iced, silty rope etc.).
- Big eyelet in the lower part for attachment of karabiners from the PROGRESS-lanyard and the FOOTAPE- or FOOTCORD webbing foot loop.
- Upper loop for attachment of the rope.
- Material: aluminium, chromed steel, plastic, rubber, nylon.
- Rope diameter: 8 up to 13 mm.

**Standard:** CE EN 567, CE EN 12841 Type B, NFPA 1983 General Use, EAC



B17ALA



B17ARA

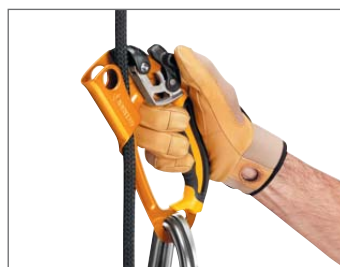
Type	Weight in kg	Item no.
B17ALA	0.165	45204210 015003
B17ARA	0.165	45204210 015004



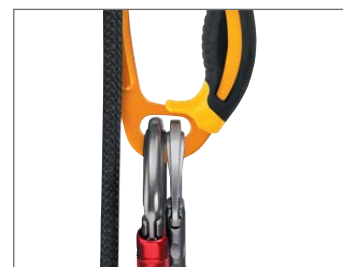
The two component material ergonomic shaped grip provides stability for the index finger and was widened in the lower part to avoid a slip down of the hand. The new design increases the comfort and enables a more efficient ascent at the rope.



The ergonomic shaped upper part enhances the efficiency during pulling with both hands.



Due to the release lever the hand ascender can be attached to the rope and taken off everywhere with one hand. The ascender is easy to handle also with gloves.



The lower eyelet is big enough to attach the karabiner from the PROGRESS-lanyard and the FOOTAPE- or FOOTCORD webbing foot loop.

## FOOTAPE C47A

### Adjustable webbing foot loop

- Attaches to the ASCENSION handled rope clamp and the BASIC rope clamp for rope ascents.
- Underfoot strap is abrasion-resistant and rigid to make it easier to step into. Height-adjustable to fit all footwear types.
- The DoubleBack buckle can be used to adjust the foot loop height



Type	Weight in kg	Item no.
C47A	0.076	45204815 015089

## Rope clamp BASIC B18BAA

### Lightweight, versatile rope clamp

- Used to ascend a fixed rope or as a progress capture pulley in a hauling system
- Toothed cam with self-cleaning slot (optimises performance when used with icy or muddy ropes). Stainless steel cam
- The wide lower hole makes it easy to connect carabiners for lanyards and foot loops
- The upper hole is used to clip a carabiner around the rope
- Rope diameter: 8 to 11 mm



**Standard:** CE EN 567, CE EN 12841 Type B

Type	Weight in kg	Item no.
B18BAA	0.085	45204210 015005

## Emergency rope clamp TIBLOC B01

- Extremely compact and lightweight
- Versatile: suitable for use for ascending ropes or as a backstop for hauling systems
- Cam with teeth and a self-cleaning slot: even suitable for use on dirty or icy ropes
- Attachment hole for keeper cord
- For use on single ropes with an 8 to 11 mm diameter with a locking carabiner with a 10 to 12 mm round or oval cross section
- Individually tested



**Standard:** CE EN 567

Type	Weight in kg	Item no.
B01	0.04	45204210 015001



## Chest ascender CROLL B16BAA

### for use at chest-height

- Used with the ASCENSION handled rope clamp for ascending ropes
- Toothed cam with self-cleaning slot (optimises performance when used with icy or muddy ropes). Stainless steel cam
- The lower attachment hole is angled to keep the rope clamp flat against the chest once attached to the rope
- Reinforced with stainless steel to prevent premature wear due to abrasion
- Upper hole for attaching a SECUR shoulder strap to keep the rope clamp in position
- Rope diameter: 8 to 11 mm



**Standard:** CE EN 567, CE EN 12841 Type B

Type	Weight in kg	Item no.
B16BAA	0.085	45204210 015002

## FREINO

### Carabiner with friction spur for descenders

- The carabiner is attached to the rope for a controlled descent using a descender
- For use with single ropes and the devices I'D, RIG, STOP, GRIGRI, SIMPLE and HUIT  
Strength 25 kN longitudinal, 10 kN diagonally, 9 kN open



**Standard:** CE EN 362, EN12275 Type B

Type	Weight in kg	Item no.
M42	0.085	45201410 015023

## Progress capture pulleys

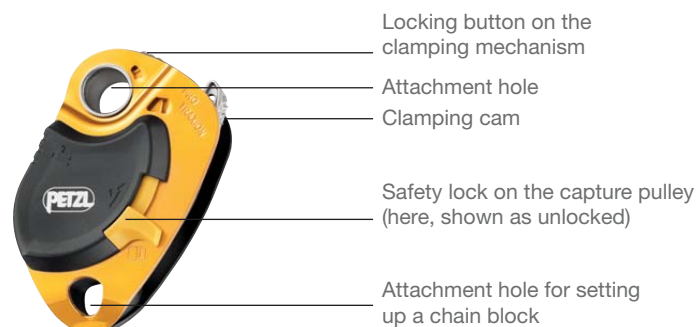
These pulleys replace the conventional return roller + rope grab combination. They are extremely versatile and can be used to lift loads in hauling systems and as a backstop.

They fulfil two functions:

- Function as a rope grab:  
Toothed cams with a self-cleaning stop for use even on dirty or icy ropes.  
The ergonomically-shaped safety catch can be operated simply, even when wearing gloves.
- Function as a return roller:  
The safety catch can be engaged in an open position to use the device as a standard return roller.

### Very efficient loss-resistant progress capture pulley PRO TRAXION P51A with backstop

- Capture pulley protected against loss:
  - The rope can be positioned in the capture pulley attached to the anchorage point
- Particularly suited to hauling heavy loads:
  - The large aluminium sheave with a sealed ball bearing ensures outstanding efficiency
  - The side plate locks when subjected to a load and prevents the capture pulley from opening during use
- Highly versatile:
  - Lower attachment hole for setting up different types of chain blocks
  - Toothed clamping cam with self-cleaning slot optimises performance under all conditions (frozen or dirty ropes etc.), suitable for use as a simple pulley by locking the clamping mechanism in the open position



**Standard:** CE EN 567, NFPA 1983 Technical Use

Type	Rope-Ø in mm	Weight in kg	Item no.
P51A	8-13	0.265	45204400 015012

### MICRO TRAXION P53

**Ultra-lightweight, high-performance progress capture pulley**

Working load  $2.5 \text{ kN} \times 2 = 5 \text{ kN}$ , breaking strength:  $7.5 \text{ kN} \times 2 = 15 \text{ kN}$   
 Working load as a progress capture pulley:  $2.5 \text{ kN}$   
 Breaking strength as a progress capture pulley:  $4 \text{ kN}$   
 Used with an OK or WILLIAM carabiner

**Standard:** CE EN 567



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P53	8-11	25	85	45204400 015014

### JAG TRAXION P54

**Double pulley with back rotation lock for a installation of a 4:1 hoist in combination with the double pulley JAG**

Working load:  $2 \times 1.5 \text{ kN} \times 2 = 6 \text{ kN}$   
 Breaking strength:  $2 \times 4 \text{ kN} \times 2 = 16 \text{ kN}$

**Standard:** CE EN 567, NFPA 1983 Technical Use



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P54	8-11	25	145	45204400 015015

## PARTNER

### Highly efficient ultra-compact pulley

Working load 5 kN, breaking strength 15 kN

**Standard:** CE EN 12278



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P52A	7-11	25	56	45204400 015013

## MINI

### Lightweight Prusik pulley with rotatable side plates

Working load 5 kN, breaking strength 23 kN

**Standard:** CE EN 12278, NFPA 1983 Technical Use



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P59A	7-11	25	80	45204400 015016

## MOBILE

### Versatile ultra-compact pulley

Working load 5 kN, breaking strength 15 kN

**Standard:** CE EN 12278



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P03A	7-13	21	75	45204400 015007

## FIXE

### Pulley with fixed side plates

Working load 5 kN, breaking strength 23 kN

Standard: CE EN 12278



P05W



P05WN

Type	Colour	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P05W	yellow	7-13	21	90	45204400 015008
P05WN	black	7-13	21	90	45204400 015009

## GEMINI

### Lightweight double Prusik pulley

Working load 6 kN, breaking strength 23 kN

Standard: CE EN 12278, NFPA 1983 Technical Use



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P66A	7-11	25	135	45204400 015019

## TANDEM

### Double pulley for Tyrolean traverses on rope

- The aluminium sheaves are mounted on self-lubricating bushings for efficiency
- Holds up to three karabiners
- Working load: 10 kN

Standard: CE EN 12278



Type	Rope-Ø in mm	Weight in g	Item no.
P21	≤ 13	220	45204400 015003



## RESCUE

**Pulley with rotating side plates designed for rescue operations**

Working load 8 kN, breaking strength 36 kN

**Standard:** CE EN 12278, NFPA 1983 General Use



P50A



P50AN

Type	Colour	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P50A	yellow	7-13	38	185	45204400 015010
P50AN	black	7-13	38	185	45204400 015011

## TWIN

**Highly efficient double Prusik pulley with rotatable side plates for up to three karabiners**

Working load 12 kN, breaking strength 36 kN

**Standard:** CE EN 12278, NFPA 1983 General Use



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P65A	7-13	51	450	45204400 015018

## MINDER

**Highly efficient Prusik pulley with rotatable side plates, opening for up to three carabiners**

Working load 8 kN, breaking strength 36 kN

**Standard:** CE EN 12278, NFPA 1983 General Use



Type	Rope-Ø in mm	Sheave-Ø in mm	Weight in g	Item no.
P60A	7-13	51	295	45204400 015017

## KOOTENAY

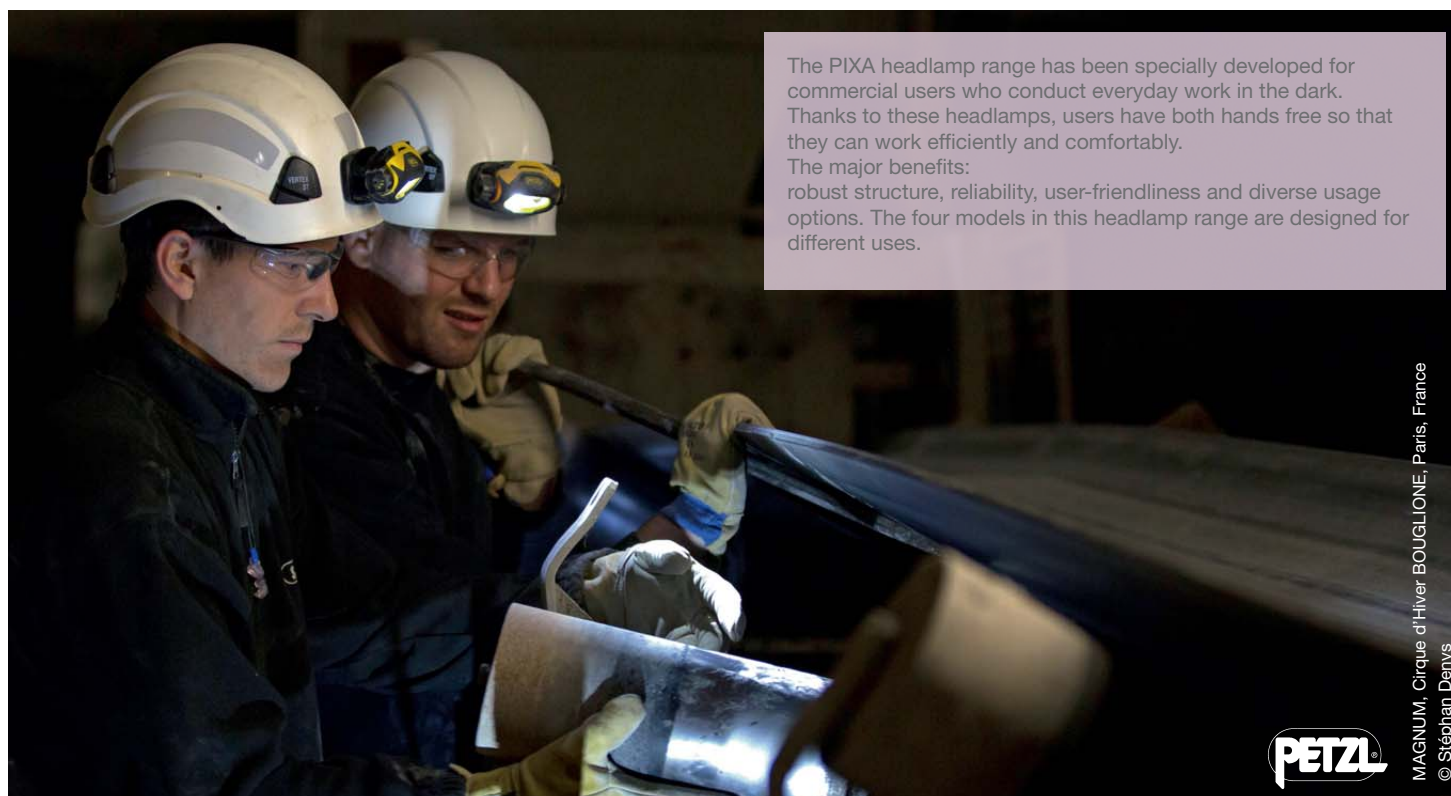
**Knot-passing pulley**

Working load 5 kN x 2 = 10 kN

**Standard:** CE EN 12278



Type	Rope-Ø in mm	Sheave-Ø in mm	Height in mm	Weight in g	Item no.
P67	8-19	76	260	1390	45204400 015020



The PIXA headlamp range has been specially developed for commercial users who conduct everyday work in the dark. Thanks to these headlamps, users have both hands free so that they can work efficiently and comfortably. The major benefits: robust structure, reliability, user-friendliness and diverse usage options. The four models in this headlamp range are designed for different uses.

MAGNUM, Cirque d'Hiver BOUGLIONE, Paris, France  
© Stéphan Denys



## Compact headlamps

### PIXA 1 E78AHB 2

**Rugged headlamp for the visibility in close range, with CONSTANT LIGHTING technology**

- Headlamp keeps hands free for work.  
The headlamp can be worn:
  - on the head with the headband
  - attached to the helmet with a mounting plate (included)
  - or placed on the ground.
- Headlamp with CONSTANT LIGHTING technology: brightness does not decrease gradually as the batteries are drained.
- Lighting for professionals that is reliable, practical and durable
- Two lighting modes (low and high).
- Proximity lighting mode: wide, comfortable beam for close work.
- Automatically switches to reserve mode when batteries are almost drained (signaled by blinking light).
- Ergonomic knob is easy to use, even with gloves on.
- Storage position helps protect the headlamp lens and prevents inadvertently turning it on.
- May be used in explosive atmospheres (ATEX: Zone 2/22).
- Excellent resistance to falls (2 m), impacts and crushing (80 kg).
- Comfortable and washable elastic headband.
- Resistant to chemicals  
(see [www.petzl.com/PIXA](http://www.petzl.com/PIXA)).



Wide beam for close work.

#### Specifications:

- Beam pattern: wide
- Energy: 2 AA/LR6 batteries (included)
- Battery compatibility: rechargeable Ni-MH and lithium
- Certifications: CE, ATEX: Zone 2/22, HAZLOC: Class 1 div II, Class 2 div II, ANSI/NEMA FL1
- Watertightness: IP 67 (waterproof to -1 meter for 30 minutes, no maintenance required after immersion)

Type	Weight in kg	Item no.
E78AHB2	0.160	45204000 015001

#### Lighting performance

Type	Lighting technology	Lighting modes	Brightness in lm	Distance in m	Burn time in hours	Reserve brightness in lm	Reserve distance in m	Reserve burn time in hours	Total battery life in hours
E78AHB2	CONSTANT LIGHTING	Mode 1 (wide)	20	10	5	20	5	15	27
		Mode 2 (wide)	50	15	3				18

## PIXA 2 E78BHB 2

Rugged headlamp for the visibility in close range and movement, with **CONSTANT LIGHTING** technology

Equipment as PIXA 1 E78AHB2, difference:

- Several lighting modes adapt to each situation:
  - low mode adapted for close range work: mixed beam with a wide, uniform flood
  - high mode adapted for movement: mixed beam with focused component allows user to move around comfortably



Mixed beam: The headlamp has several lighting modes for close range vision and movement.

### Specifications:

- Beam pattern: mixed
- Others as PIXA 1 E78AHB2

Type	Weight in kg	Item no.
E78BHB2	0.160	45204000 015002

### Lighting performance

Type	Lighting technology	Lighting modes	Brightness in lm	Distance in m	Burn time in hours	Reserve brightness in lm	Reserve distance in m	Reserve burn time in hours	Total battery life in hours
E78BHB2	CONSTANT LIGHTING	Mode 1 (wide)	30	20	12	20	10	10	22
		Mode 2 (wide)	70	55	3				13

## PIXA 3 E78CHB 2

Rugged headlamp with several lighting beams for visibility in close range, movement and long-range vision, with **CONSTANT LIGHTING** technology

Equipment as PIXA 2 E78BHB2, difference:

- Several lighting modes adapt to each situation:
  - a mode adapted for close range work: wide, uniform beam
  - a mode adapted for movement: mixed beam with focused component allows user to move around comfortably
  - a mode adapted for long-range vision: focused beam
- Automatically switches to reserve mode when batteries are almost drained (signaled by blinking light and red indicator).



Several beams: The headlamp has several lighting modes for close range vision, movement and long-range vision.

### Specifications:

- Beam pattern: wide, mixed, focused
- Certifications: CE, ATEX: Zone 2/22, HAZLOC: Class 1 div II, Class 2 div II
- Others as PIXA 2 E78BHB2

Type	Weight in kg	Item no.
E78CHB2	0.160	45204000 015003

### Lighting performance

Type	Lighting technology	Lighting modes	Brightness in lm	Distance in m	Burn time in hours	Reserve brightness in lm	Reserve distance in m	Reserve burn time in hours	Total battery life in hours
E78CHB2	CONSTANT LIGHTING	Mode 1 (wide)	30	20	12	20	10	10	22
		Mode 2 (mixed)	60	50	6		20		16
		Mode 3 (focused)	100	80	3		15	18	

## PIXA 3R E78CHR 2

Rugged, rechargeable headlamp for frequent use, several lighting beams for visibility in close range, movement and long-range vision, with **CONSTANT LIGHTING** technology

Equipment as PIXA 3 E78CHB2, difference:

- For frequent use, with integrated rechargeable Lithium-Ion polymer battery and quick charging dock (3 hours).
- Battery life parameters may be used to adapt lighting performance to need (by rapidly turning the knob):
  - STANDARD: balance between brightness and burn time
  - MAX AUTONOMY: burn time prioritized
  - MAX POWER: brightness prioritized
- Charging dock for direct charging of the headlamp itself or only the battery

### Specifications:

- Energy: rechargeable Lithium-Ion Polymer battery, 930 mAh
- Recharge time: 3 hours
- Certifications: CE, ATEX: Zone 2/22, ANSI/NEMA FL1
- Others as PIXA 3 E78CHB2



Several beams: The headlamp has several lighting modes for close range vision, movement and long-range vision.



Charging station for charging the headlamp without removing the battery. The battery can be charged separately, so that the user can use the headlamp with his second battery.

Type	Weight in kg	Item no.
E78CHR2	0.145	45204000 015004

### Lighting performance

Type	Lighting technology	Configuration	Lighting modes	Brightness in lm	Distance in m	Burn time in hours	Reserve brightness in lm	Reserve distance in m	Reserve burn time in hours	Total battery life in hours
E78CHR2	CONSTANT LIGHTING	STANDARD	Mode 1 (wide)	30	20	12	20	10	20	32
			Mode 2 (mixed)	60	50	6		20	15	21
			Mode 3 (focused)	90	80	3		10	10	18
		MAX POWER	Mode 1 (wide)		30			20	13	
			Mode 2 (mixed)		50			10	15	18
			Mode 3 (focused)		80			20	15	18
		MAX AUTONOMY	Mode 1 (wide)	30	20	12		10	20	32
			Mode 2 (mixed)		30			20	15	27
			Mode 3 (focused)		50			20	15	27

## High performance headlamp

## ULTRA VARIO E54 H

Ultra-powerful multi-beam headlamp with rechargeable battery

- Headlamp keeps the hands free for work: may be worn on the head with the headband, or mounted on a ALVEO or VERTEX helmet with removable plates (included).
- Four modes adapt lighting to the situation (see illustration)
- Rugged, excellent resistance to falls, to impacts and to crushing
- **Certification:** CE
- Waterproof (to -1 meter for 30 minutes) and dustproof (IP 67).

### Scope of delivery:

ACCU 2 ULTRA: 2600 mAh  
Battery charger: 100/240 V  
Exchangeable plug EUR/US  
Removable controls



Type	Weight * in kg	Item no.
E54 H	0.375	45204000 015005

\*incl. batteries

### Lighting performance

Type	Lighting technology	Lighting modes	Brightness in lm	Distance in m	Burn time in hours
E54H	CONSTANT LIGHTING	low-intensity	45	20	40
		close-range work	200	40	10
		movement	520	65	2.3
		distance vision	330	210	4



## Ultra-compact headlamp

### TACTIKKA E93ACA **NEW!**

Ultra-compact headlamp for visibility in close range and movement and occasional use

Designed for occasional use, the multi-beam TACTIKKA headlamp offers 200 lumens of power and versatile lightning: comfortable proximity lightning for close-range work, focused lightning for distance vision when moving around, and red lightning to ensure stealth and preserve night vision. TACTIKKA is a HYBRID headlamp compatible with the CORE rechargeable battery.

- Long burn time
- Continuous red light combines visual comfort and stealth; red strobe light
- Easy to use:
  - Ergonomic button, even with gloves
  - Headband can be undone for easy donning

#### Specifications:

- Beam pattern: wide
- Energy: Three AAA/LR03 batteries (included) or CORE rechargeable battery (available on request), Ni-MH rechargeable battery
- Standard: CE
- Watertightness: IP X4 (weather resistant)



**Hybrid**  
CONCEPT



Wide, homogenous beam for close-range visibility. White or dimmed red light.



Adjustable, elastic headband with alarm whistle.



Compact headlamp.

Ident-Nr.	Weight * in kg	Item no.
E93ACA	0.126	45204000 035040

\*incl. batteries

#### Lighting performance

Type	Lighting colour	Lighting modes	Brightness in lm	Distance in m	Burn time in hours
E93ACA	white	MAX AUTONOMY	5	10	240
		STANDARD	100	40	60
		MAX POWER	200	60	
	red	proximity	2	5	100
		strobe	visible at 400 m for 400 h		

## KIT ADAPT

### Kit for mounting a TACTIKKA type headlamp onto a helmet

The KIT ADAPT allows the user to mount or unmount a TACTIKKA headlamp on a helmet any time, and keeps the option of adjusting the tilt of the headlamp.

- Allows the user to easily mount a TACTIKKA headlamp on a helmet.
- Maintains the option of adjusting the tilt of the headlamp.
- Kit composed of two parts:
  - an adhesive disk to mount on the helmet
  - an attachment plate for joining the headlamp to the disk



Type	Weight in kg	Item no.
E93001	0.030	45204815 035002

## PIXADAPT

### Kit for mounting a PIXA type headlamp onto a helmet

The PIXADAPT is a piece that allows the user to mount or unmount a PIXA headlamp on a helmet any time, and still keep the option of adjusting the tilt of the headlamp. PIXADAPT is compatible with Petzl helmets with or without eye shield. For other helmets, verify the compatibility of your glue with the helmet manufacturer.

- For mounting a PIXA headlamp on a helmet:
  - Compatible with the PIXA 1, 2, 3 and 3R headlamps.
  - Maintains the option of adjusting the tilt of the headlamp.
- Consists of one piece:
  - Adhesive backing allows the PIXADAPT to remain attached, while the headlamp is easily removed.



Type	Weight in kg	Item no.
E78005	0.020	45204815 035095

## AXIS

Semi-static polyamide kernmantle rope with sewn termination on one end for work at height.



- Standard diameter ensures a good grip for easier handling.
- EverFlex construction with nylon core and polyester sheath, with specific weave.
- This construction ensures great flexibility over time, under any conditions (water, dust, mud...), which allows it to maintain excellent handling and optimal functioning with devices.
- Comes with sewn termination on one end that allows it to meet the EN 353-2 standard for use with an ASAP mobile fall arrester, or to be part of a rescue kit that includes an I'D S descender. This termination has a protective sheath that keeps the carabiner in position and facilitates handling.

Standard: CE EN 1891 Type A



Type	Colour	Rope-Ø in mm	Breaking load rope in kN	Length in m	Breaking load with sewn termination in kN	Weight in kg	Item no.
R074BA00	white	11	30	10	22	1.28	45202810 035100
R074BA01	white	11	30	20	22	2.14	45202810 035103
R074BA02	white	11	30	30	22	3.05	45202810 035105
R074BA05	white	11	30	60	22	5.77	45202810 035107

## AXIS

Semi-static polyamide kernmantle rope for work at height as bulk ware (200 m reel)



Type	Colour	Rope-Ø in mm	Breaking load rope in kN	Length in m (reel)	Weight in kg	Item no.
R074AA23	black	11	30	200	16.00	45202930 035020

## PARALLEL

Low-stretch, semi-static polyamide kernmantle rope, flexible and lightweight for rope access as bulk ware (200 m reel)



- Thin diameter ensures very good performance in terms of flexibility and weight.
- Low stretch when loaded, increasing efficiency at the start of a rope ascent.
- EverFlex construction with nylon core and polyester sheath, with specific weave.
- This construction ensures great flexibility over time, under any conditions (water, dust, mud...), which allows it to maintain excellent handling and optimal functioning with devices.

Standard: CE EN 1891 Type A



Type	Colour	Rope-Ø in mm	Breaking load rope in kN	Length in m (reel)	Weight in kg	Item no.
R077AA22	yellow	10.5	30	200	16.00	45202930 035021

## Rope accessories

### **PETZL** SET CATERPILLAR P68

#### Modular rope protection

- To protect moving ropes from abrasion
- The modules are connected with quick links: the number of modules can be varied as necessary
- Each module can be positioned independently to adapt to the terrain
- Kit includes: 4 modules + 6 quick links.



Type	Weight in kg	Item no.
P68	1.055	45204815 015026

### **PETZL** PROTEC C45N

#### Flexible rope protection

- To protect ropes from abrasion
- Lightweight, durable PVC sheath
- Velcro® closure and clip for easy and quick installation



Type	Weight in g	Item no.
C45N	95	45204815 015030

### **PETZL** CORDEX PLUS K53

#### Belay/rappel gloves

- Made from natural, high-quality leather with reinforced palms
- Durable double layer of leather (fingertips, palm, between thumb and index finger)
- Back is made of durable leather with abrasion-resistant stretch nylon in the joint areas



Type	Colour	Size	Weight in g	Item no.
K53SN	black	S	150	45204815 015084
K53MN	black	M	150	45204815 015082
K53LN	black	L	150	45204815 015080
K53XLN	black	XL	150	45204815 015086
K53XST	beige	XS	150	45204815 015088
K53ST	beige	S	150	45204815 015085
K53MT	beige	M	150	45204815 015083
K53LT	beige	L	150	45204815 015081
K53XLT	beige	XL	150	45204815 015087

Available from second quarter 2017

### **BEAL** Hybrid glove

#### Gloves for rope-based work, descending

- Hybrid glove with leather on the inside and breathable stretch material on the outside.
- Thin leather on the inside fingers for greater dexterity.
- The stretch textile on the back of the hand aids breathability and avoids sweating.
- Loop to clip the gloves to the harness.



**Standard:** CE EN EN420 (2003), EN388 (2003)

Type	Colour	Size	Weight in g	Item no.
GRT.M	brown	M	103	45204815 035491
GRT.L	brown	L	110	45204815 035476
GRT.S	brown	S	94	45204815 035490
GRT.XL	brown	XL	110	45204815 035493
GRT.XXL	brown	XXL	110	45204815 035494

## PVC carrying bag Transportation bag

- High-quality
- High wearing comfort
- Easy to handle

PVC  
Carrying bag



Transportation bag



Nylon  
carrying  
bag  
AK043



Type	Size (h x Ø) in cm	Capacity in litres	Weight in kg	Item no.
PVC-Carrying bag, black	60 x 30	45	0.60	45204600 015011
Transportation bag	WxLxH (30x45x35)	45	0.96	90151000 015001
Carrying bag AK043	50 x 30	35	0.40	45204600 015003

## Carry bags PERSONNEL, PORTAGE, TRANSPORT

- Padding on the shoulder straps, back and waistbelt with added comfort
- Carrying handles on the sides and the carry bag



S44Y015



S43Y030



S42Y045

Type	Capacity in litres	Weight in kg	Item no.
S44Y 015	15	0.45	45204600 015017
S43Y 030	30	0.85	45204600 015016
S42Y 045	45	1.25	45204600 015015

## Carry bag PRO WORK 35, 45

HF welding technology: no stitching and extremely hard-wearing and waterproof thanks to the use of high-frequency welding technology. Ultra-resistant biface PVC

- Reinforced base
- Ergonomically designed back
- Comfortable hand straps
- Metal adjustment buckles
- Transparent window for identification
- Waterproof outer pocket
- Side hand strap



Type	Capacity in litres	Weight in kg	Item no.
PRO WORK 35	35	1.08	45204600 015021
PRO WORK 45	45	1.53	45204600 015022

## Carry bag PRO WORK 60

HF welding technology: no stitching and extremely hard-wearing and waterproof thanks to the use of high-frequency welding technology. Ultra-resistant biface PVC

- Large rigid opening
- HF welding technology
- Comfortable waistbelt and shoulder straps
- Ergonomically designed back
- Metal adjustment buckles
- Transparent window for identification



Type	Capacity in litres	Weight in kg	Item no.
PRO WORK 60	60	1.825	45204600 015023



As there is no standard for fall protection for tools, over 100 items from this 3M Fall Protection product line have been tested by an independent test institute. These dynamic and static tests ensure that the used tools cannot fall down and hurt other people.

### Tool D-rings

- Tool D-rings can be attached to almost every tool weighing less than 2.3 kg or 0.9 kg (with the Python Safety Quick Wrap Tape).
- Attachment in less than a minute.
- Double tool D-rings ensure a 100% tool safety during transport.
- Non-conductive
- Delivery 1 Set = 10 pieces.



1500003



1500007



Type	Description	Material	Load capacity in kg	Measurements in mm	Weight in kg	Item no.
1500003	Tool D-ring	Polyester/Metal	0.9	14 x 57	0.13	45204815 035110
1500007	Tool D-ring	Polyester/Metal	2.3	27 x 90	0.26	45204815 035128

### Quick Wrap Tape

- Adapts to every surface shape.
- Quick attachment together with the Python Safety D-Ring and the Tool Cinch-fixings to almost every tool.
- From self-vulcanized silicon rubber, without leaving glue or residues.
- Inside fibre glass fabrics increase the strength of the tape and make it resistant against sharp edged objects.
- Delivery 1 Set = 10 pieces (Type 1500036, 150045) or as single piece (Type 1500038)



1500045



1500036



Type	Description	Material	Width in cm	Length in cm	Weight in kg	Item no.
1500036	Quick Wrap Blue Heavy Duty	Fibre glass fabric	2.5	274	0.56	45204815 035135
1500045	Quick Wrap Yellow Heavy Duty	Fibre glass fabric	2.5	274	0.56	45204815 035136
1500038	Quick Wrap Blue Heavy Duty	Fibre glass fabric	2.5	548	0.112	45204815 035588

With a 274 cm long tape approx. 3-4 tool protections and with a 548 cm long tape approx. 6-8 tool protections can be attached.

## D-Ring with loop

- Easy to latch into tools weighing up to 2.3 kg.
- To create an attachment point, simply slide the end of the loop-eyellet through the hole of the tool handle or around a handle.
- Extremely resistant and reusable.
- Delivery 1 Set = 10 pieces.

1500009



### Applications



Type	Description	Material	Load capacity in kg	Weight in kg	Item no.
1500009	D-ring with loop	Polyester/Metal	2.3	0.28	45204815 035129

## Adjustable wristband

- The adjustable Python-Safety-wristband can be adjusted to every wrist with a hook-eyellet-system.
- An elastic tape ensures comfortable wearing.
- May be combined with double-spiral rope (Type 1500068)
- Delivery 1 Set = 10 pieces



1500083



1500068

Type	Description	Material	Load capacity in kg	Weight in kg	Item no.
1500083	Adjustable wristband	polyester	2.3	0.40	45204815 035146

## Double spiral-rope

- May be combined with adjustable wristband (Type 1500083).
- Delivery 1 Set = 10 pieces



1500068

Type	Description	Material	Load capacity in kg	Weight in kg	Item no.
1500068	Double spiral-rope	polyester/stainless steel	2.3	0.90	45204815 035145





# EVITA

QUALITY TRAINING  
WORLDWIDE

### Carl Stahl Evita - Quality Training Worldwide

Carl Stahl Evita has been providing industry benchmarked essential training for a number of years and the Evita name has become recognised throughout the world as 'the standard' when associated with wire rope and lifting gear inspection/examination.

Evita have developed an enviable reputation in all major industries; our consultants are among the most qualified and experienced in the world.

All courses are carried out in association with or in accordance with relevant professional trade associations, lead bodies and codes of practice and to National, International, US or European standards.

### Height Safety

Customers can be assured that their safety is always our number one priority and that all aspects of the training activities undertaken are fully insured.

Our professionally qualified instructors have extensive experience in height safety training and cover the whole of the UK and parts of mainland Europe.

### Health and Safety

Are you and your staff aware of the current Health and Safety regulations?

Knowing and abiding by the Health and Safety regulations can save lives, time and money. These courses aim to make delegates increasingly more aware of their responsibilities within a working environment.

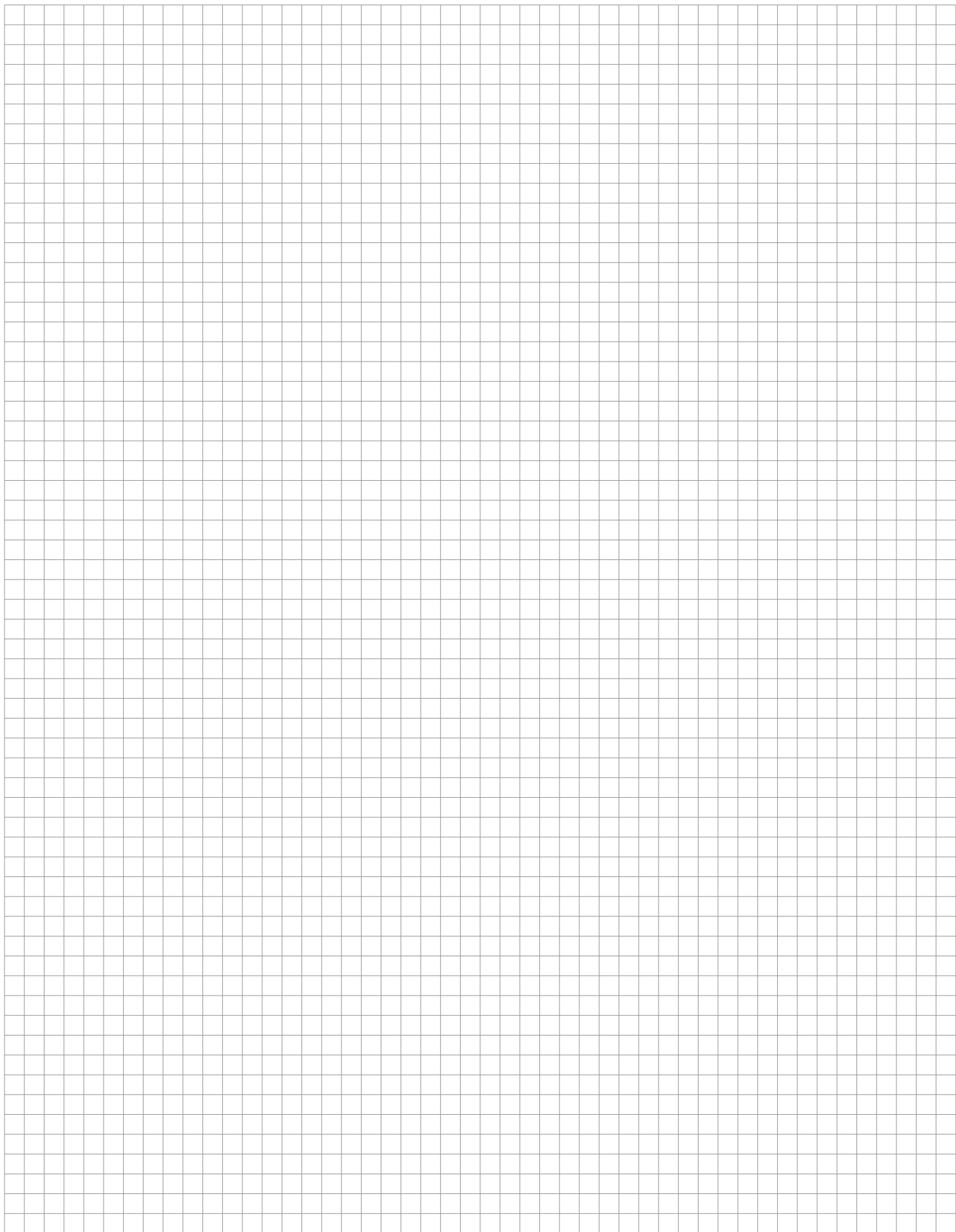
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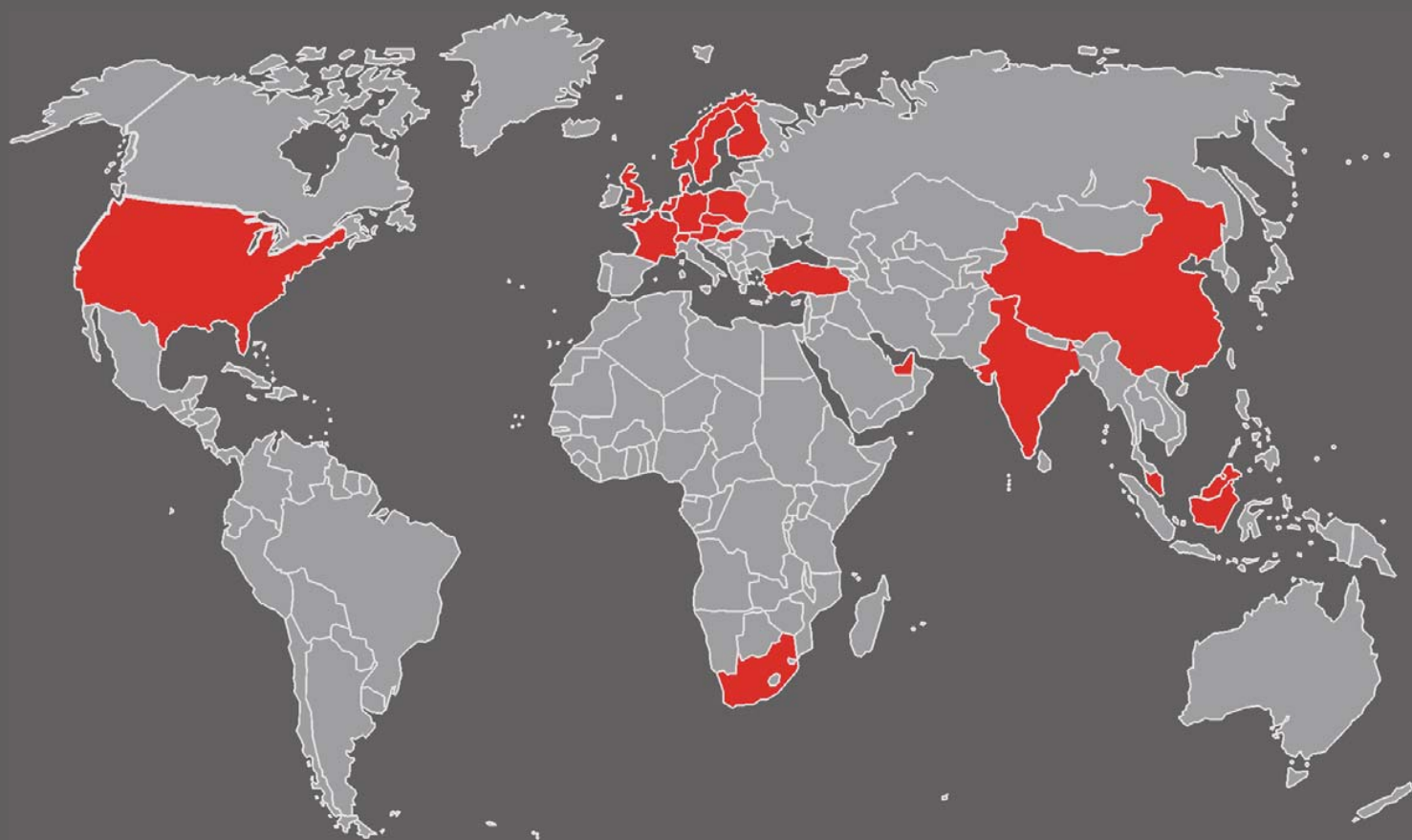












 Countries with Carl Stahl locations

