



Access  
the  
inaccessible®







# Access the inaccessible®



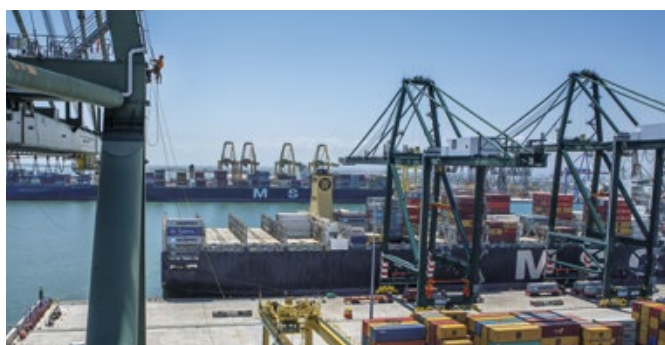
We are certain that these few words reflect some of the challenges you face in your missions, whether your profession involves work at height, rescue, or work in dark environments. They also express our reason for being, and our dedication to supplying the solutions you need in those contexts.

At Petzl, the year 2018 reflects this philosophy with some exciting new products. The ASTRO BOD FAST harness takes into account all the conditions and limitations potentially encountered by a rope access specialist. It is all about rope access. The new MAESTRO descender with integrated progress capture pulley is designed to help users face any rescue situation. Its efficiency lies in its versatility. When it comes to lighting, the new DUO has power accompanied by the FACE2FACE anti-glare function, a major advantage when working in a team.

All are products that we hope will earn your trust.

Happy reading.

Petzl's expertise	2
The Petzl Foundation	7



## VERTICALITY

General principles of working at height	10
Rope access and confined space	12
Tree care	18
Energy and networks	22
Framing and roofing	26
General rescue principles	30
Self-rescue	32
On-site rescue	34
Technical rescue	38
Ski lift evacuation	42

<b>Harnesses</b>	<b>46</b>
<b>Helmets</b>	<b>68</b>
<b>Lanyards and energy absorbers</b>	<b>76</b>
<b>Mobile fall arresters</b>	<b>86</b>
<b>Connectors</b>	<b>92</b>
<b>Descenders</b>	<b>100</b>
<b>Rope clamps</b>	<b>108</b>
<b>Pulleys</b>	<b>114</b>
<b>Anchors</b>	<b>120</b>
<b>Ropes</b>	<b>126</b>
<b>Packs and accessories</b>	<b>134</b>
<b>Kits</b>	<b>140</b>



## LIGHTING

Making an informed choice	150
Environments and standards	154
<b>Performance headlamps</b>	<b>160</b>
<b>Compact, rugged headlamps</b>	<b>166</b>
<b>Ultra-compact headlamps</b>	<b>172</b>
Product index	178
From the deep: the Petzl adventure	180



## Access the inaccessible®

Petzl's mission is to create innovative tools and services that allow men and women to progress, to position, and to protect themselves in vertical environments, as well as to light their way in the dark. We continually look for the best solutions for user needs in terms of performance, ergonomics, comfort, and reliability. The demands, commitment, and willingness of users are what guide our approach to supporting them in their pursuit of the inaccessible. We have stood right by their side for the last forty years.

**Paul Petzl**

### At the service of every user

The Petzl adventure began with Fernand Petzl's passion for caving, a passion to which he dedicated his talents as a craftsman. Petzl expertise began to grow in the design and crafting of solutions for ascending, descending, belaying and moving about in the dark.

In 1970, the first "Fernand Petzl" brand products were produced in a workshop in Saint-Nazaire-Les-Eymes, Isère, France.

Since then, the Petzl company, established in 1975, has grown into an international enterprise, all the while preserving its personal feel and the passion that drove Fernand Petzl.

At Petzl, offering solutions to users starts with a conversation, to better understand their needs and to provide the things they may need across different phases of a project: technical advice, training, tools, equipment. And, through innovation, allowing them to imagine other projects.

### Solutions for sports enthusiasts and professionals

Today, Petzl's solutions are present across numerous sectors:

- outdoor activities: climbing, mountaineering, ski mountaineering, trail running, via ferrata, canyoning...
- work at height: rope access, tree care, energy and networks, framing and roofing...
- rescue: technical rescue, self-rescue, evacuation on mechanical lifts
- personal lighting for the workshop, for maintenance, for industrial worksites
- equipment for tactical operations units







Fernand Petzl



Pierre, Catherine, Fernand and Paul Petzl



Special tactical forces



Trail running

## Timeline

1936: Fernand Petzl starts exploring the Dent de Crolles in France

1950: Fernand Petzl and others explore the Gouffre Berger in France, the first 1000-meter cave descent

1968: Our first rope ascenders and descenders (BASIC, SIMPLE) are brought to market under the name Produits Fernand Petzl (Fernand Petzl Products)

1973: The first Petzl mountaineering headlamp is invented

1975: Founding of the Petzl company in Crolles, France

1977: The first Petzl harnesses are produced

1990: First products designed specifically for the professional market

1991: GRIGRI, the first self-braking belay device, is invented

1998: The TIBLOC, an ultra-compact rope ascender

1999: Our US subsidiary is founded in Salt Lake City

2000: The first TIKKA LED headlamp is introduced. Acquisition of ice axe and crampon manufacturer Charlet Moser

2004: ASAP mobile fall arrester

2006: Creation of the Petzl Foundation. Introduction of the EXO personal escape system for New York City firefighters

2008: Creation of Petzl Solutions for training and experimentation

2010: Opening of Petzl Manufacturing in Malaysia

2012: The NAO headlamp with REACTIVE LIGHTING technology

2013: ZIGZAG mechanical Prusik for tree care

2014: Petzl's subsidiaries in Spain and Germany are founded

2017: New FALCON harness

2018: New MAESTRO descender and new versions of DUO headlamps



## Expertise and dedication to quality

For over 40 years, Petzl has built on its expertise in the design and manufacture of products for verticality and lighting. Today, Petzl designs, produces and distributes millions of products around the world.

Building a Petzl product requires expertise in a wide range of materials--textiles, metals, plastics--as well as with specific technologies: plastics processing, sewing, injection molding, forging, LEDs, electronics... This expertise allows us to design equipment that fully meets the technical requirements for its use: resistance to impacts, abrasion, extreme temperatures...



Crolles, France



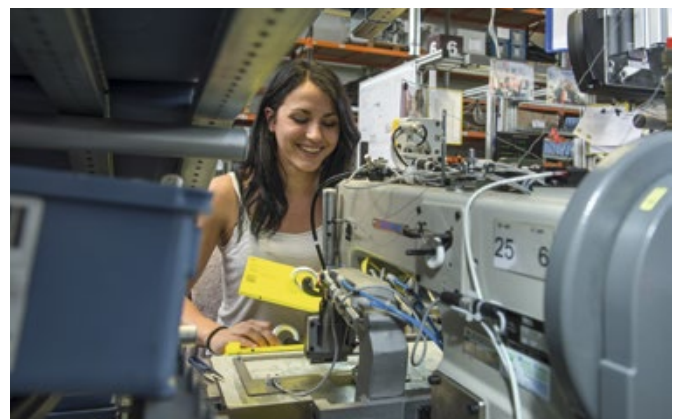
Eybens, France



Rotherens, France



Rawang, Malaysia





## Design

The Petzl research department in Crolles, France, integrates all the disciplines related to the design of a product: mechanical, textile, electronic, optic and computing. Starting at the design and prototype phases, the reliability of the product and user safety are continually evaluated with a strong focus on risks to the user.

## Testing

In Crolles, Petzl has labs dedicated to testing verticality products and headlamps. These tests often go above and beyond the required standards to help validate the reliability of products and safety for the user: dynamic fall tests, impact resistance, cyclic testing, performance, headlamp beam quality and burn times. They are complemented by testing in the field, controlled or not, in terms of ergonomics and reliability.

## Production and inspection

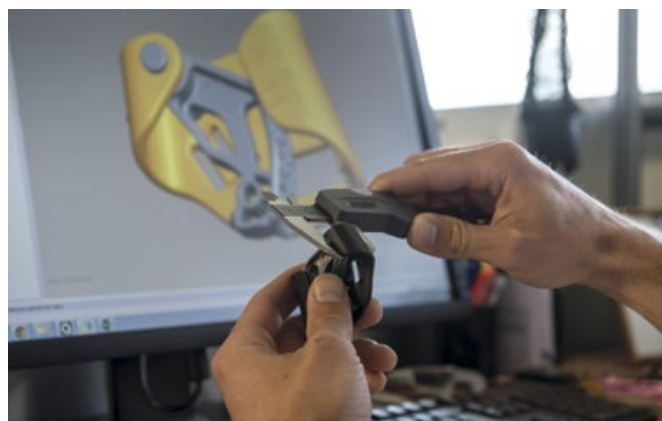
Petzl's production sites are based in Crolles, Eybens, and Rotherens, France, and in Rawang, Malaysia.

This component is complemented by long-term partnerships with key suppliers in Europe and Asia. Our buying and quality control teams work closely with suppliers to guarantee a standard of product reliability and quality that meets our requirements.

During manufacture, quality control is found throughout the production chain: auto-inspection of operations by machines, human inspection at key points, reinforced by error-proof systems, final individual inspection of each product.

## Distribution

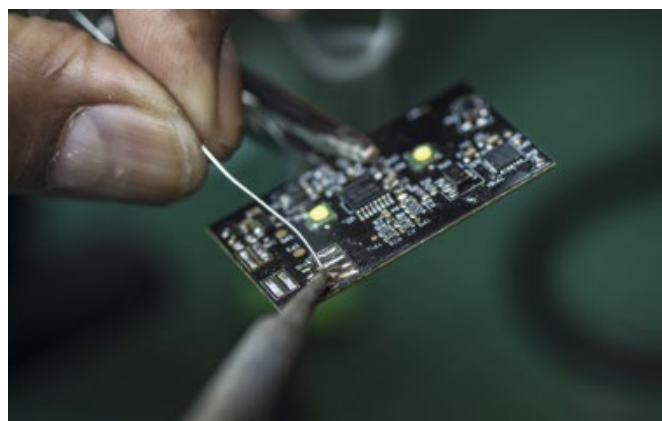
Petzl distributes products to more than fifty countries via a distribution network and subsidiaries in the US, Germany, Spain, Italy.



Design work, Research Department in Crolles, France



Petzl harness stitching



Electronic headlamp circuit board test



Distribution



## Petzl Solutions: knowing, understanding, sharing

The goal of Petzl Solutions is to share Petzl's expertise in terms of training, experimentation and design of technical solutions on an international scale. This department works to train people involved in verticality in the sales, use and management of Personal Protective Equipment (PPE). Petzl Solutions is also a space for discussion on the uses and techniques associated with our products. Our tools allow us to provide technical responses to specific problems. Our clients include the Petzl sales force, retailers, training centers, rescue and intervention teams, inter-professional groups.

### Petzl Solutions' expertise

The expertise of Petzl Solutions is based on:

- the knowledge of Petzl products, their use and their complementarity
- the technical knowledge that exists at Petzl
- great competence in risk analysis
- availability of unique testing methods
- a set of training modules
- true pedagogical skills and a passion for sharing experience from the ground

### Training modules devoted to expertise

Each of the modules deals with a specific problem. They are based on experimentation in concrete situations and provide:

- product knowledge and skills development
- an understanding of interactions between products
- ways to adapt behavior and equipment usage to the specifics of certain vertical environments

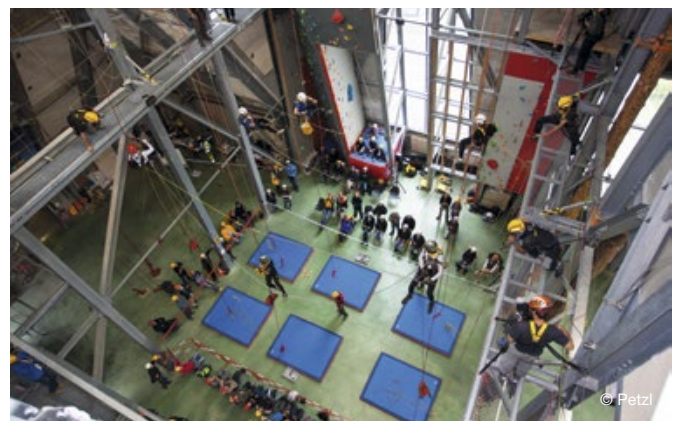
To learn more about Petzl Solutions, go to [www.petzl.com](http://www.petzl.com)



Training



PPE management



Gathering of rope specialists



## Finding new directions



Climbing towards a summit or progressing in the vertical world gives birth to passions that make women and men grow, push, rejoice and dream. For over 10 years, the Petzl Foundation's mission has been to support or initiate projects for the greater good through its activities in the mountain and vertical spheres, projects that help bring balance to humankind's place in its natural, cultural, and economic environments.

### The Petzl Foundation:

- encouraging learning and risk management to avoid accidents
- promoting the preservation of hard-to-access ecosystems
- contributing to enhanced understanding of current practices and their environments



Example of funded project

### Better understanding workplace injuries of rope access workers

Rope work tends to lead to musculo-skeletal problems that are directly related to work conditions, difficulty of worksite access, and suspension in the harness. To better understand the causes of injuries to workers at height, the Petzl Foundation supports a multidisciplinary research team which conducted a study of rope access workers in 2016 and 2017.

Even though falls appear to be the number one risk facing rope work professionals, injuries that present little immediate effect or any musculo-skeletal issues can place these workers at risk and negatively affect the companies that employ them.

The objective of the study, supported by the Petzl Foundation and socio-professionals in the sector, was to better understand the profile of rope access workers and to determine the different factors at the root of their workplace injuries and illnesses. The research team was interested not only in trauma, but also in over-use injuries and other issues related to the specifics of the profession.

To carry out the study, a questionnaire was distributed to 500 rope access workers in the Rhône-Alpes region, representing approximately 10 % of French rope access workers. The rope workers themselves filled in the questionnaires anonymously, for privacy reasons. After tabulation, the fieldwork produced 478 usable questionnaires, a sample size that approached the stated requirement for providing reliable information.

In a research report made public in June 2017 and available free of charge in English and French on the Petzl Foundation website, the researchers lay out their results:

- a description of the population (working conditions, living conditions, careers, injuries)
- the nature of their injuries
- profiles of the rope access workers in relation to the types of injuries
- directions for prevention and research perspectives.

The purpose of this study was to identify new directions for prevention to improve the health of rope access workers, whose careers are too often cut short because of injury.

This study was carried out:

- by the Laboratoire Interuniversitaire de Biologie de la Motricité (LIBM) and the Laboratoire sur les Vulnérabilités et l'innovation dans le Sport (L-Viss), at the University of Lyon I
- in partnership with the OPPBTP, the SFETH, the GRETA from Die, the DPMC, and the SYFFORAH

Petzl Foundation's contribution to the research team in 2016 and 2017: 20,000 €

Read about all Petzl Foundation projects at [www.fondation-petzl.org](http://www.fondation-petzl.org)









Petzl's expertise in vertical terrain is expressed by its line of products specifically designed for work at height and rescue professionals. These products address all of the issues faced by professionals every day: repeated and intensive use of equipment, weather, diverse terrain... They maximize usability, simplicity and ease of use, while meeting the highest quality standard.



#### Equipment inspection and individual identification code

To ensure that your equipment is in good condition throughout its useful lifetime, it is necessary to inspect it regularly. Depending on the product's date of manufacture, the individual identification code can be structured in two ways, with 11 or 13 characters.

For more information, please see [www.petzl.com](http://www.petzl.com)



#### Special products in black

Certain products are also available in black; they are designed for professions where stealth is essential.



#### Product customization and adaptation

The Petzl Customization service is for professionals who have specific needs, outside of the standard product offering: product marking and adaptation...

For more information: contact your Petzl distributor.



#### Petzl solutions for workers over 100 kg

For workers weighing between 100 and 140 kg (with their equipment), Petzl offers suitable solutions (ASAP, ABSORBICA, RIG...).

For more information: see technical tips at [www.petzl.com](http://www.petzl.com)

## Warning

- You must have understood and retained the information from your products' Instructions for Use to be able to apply the techniques presented in this document
- Learning appropriate techniques and methods of protection is your own responsibility. Petzl solutions are given for information only, with no guarantee of their effectiveness in your specific working situation. The relevance of these solutions varies by context, so always do your own risk analysis in the field
- Mastering the techniques presented here requires specific training and practice; work with a specialized organization for all training activities

## General information on falls

The risk of falling is a key concept to master when working at height. The severity of a fall depends on independent factors:

### • The weight of the user, including equipment:

The greater the weight, the more energy to be dissipated during the fall.

### • The length of the fall:

The longer the fall, the more energy to be dissipated during the fall. The risk of hitting an obstacle is also greater.

### • The position relative to the anchor:

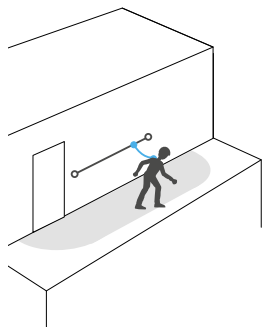
When the worker moves above his/her anchor, the severity of the potential fall increases. The fall factor concept is sometimes used to describe the worker's position relative to the anchor and the severity of the fall. This concept applies to climbing, restraint, or work positioning situations, when a dynamic rope lanyard is used.

### Precautions for the type of system used:

The Instructions for Use specify the limitations for use of equipment, particularly in terms of fall distance and the worker's position relative to the anchor.

## Restraint

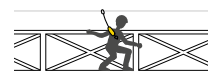
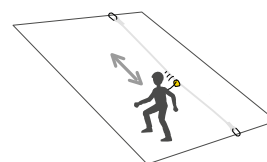
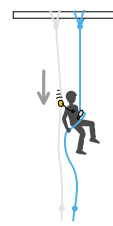
A restraint system limits the work zone, keeping the worker from entering an area that may present a risk of falling. This system is not designed to arrest a fall from height.



## Fall arrest

The fall arrest system is a belay system that is independent of the means of progression or work positioning.

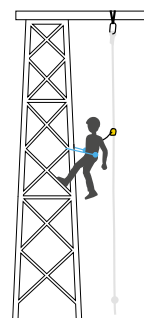
The fall arrest system prevents the user from falling to the ground in case of a fall. Its role is to arrest the fall while limiting the impact force experienced by the user. It must therefore be used with enough clearance to allow for a free fall.



## Work positioning

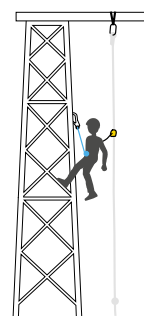
A work positioning system supports the user and allows him/her to be precisely positioned with weight on his/her feet. This system is not designed to arrest a fall; the user must keep his/her body weight on the positioning system.

The work positioning system must be supplemented with a fall arrest system.



## Suspension

The user is working in suspension when s/he no longer has weight on his/her feet, but is supported primarily by the harness. The load is thus shared between the waistbelt and the leg loops/seat.





## Impact force

A fall arrest system allows the impact force experienced by the user to be limited.

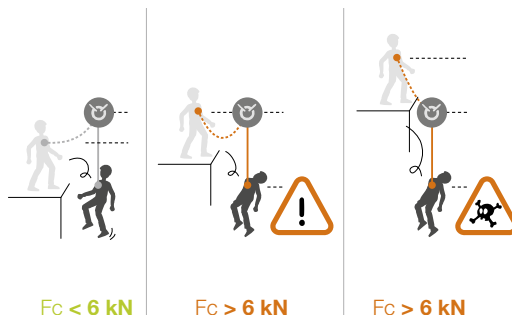
It is typically composed of an energy absorber that tears in order to limit the forces over a specific stopping distance.

A dynamic rope lanyard has a low capacity for energy absorption. Its use requires great precautions: reducing the potential fall distance and staying in a work position below the anchor.

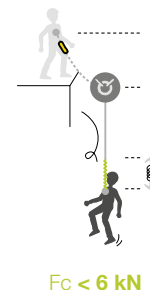
A webbing lanyard or a cable, with no capacity for energy absorption, can not be used to arrest a fall.

Example for 80 kg

**JANE or PROGRESS lanyard without energy absorber**



**Lanyard with ABSORBICA-I or Y energy absorber**



## Clearance

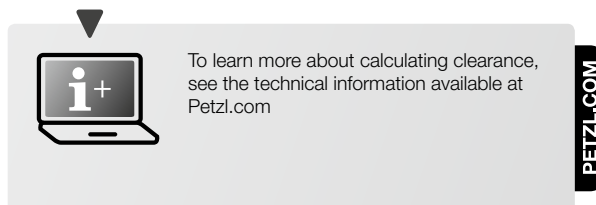
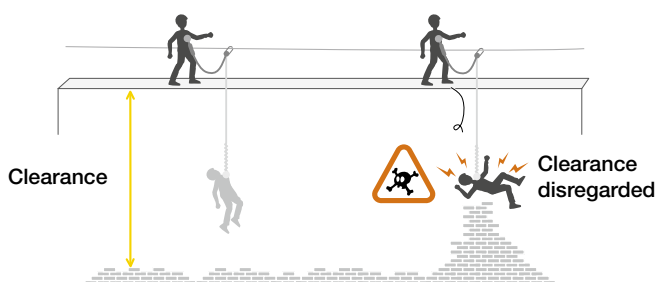
Clearance is the minimum amount of clear space below the user that prevents the user from hitting an obstacle in case of a fall.

Clearance takes into account:

- the user's weight
- the length of the fall
- the tearing length of the energy absorber
- the average height of the user
- a safety margin of 1 meter

### Clearance value

The tearing length of the energy absorber, depending on the the fall, can only be known based on the manufacturer's information; this is why a clearance estimate is suggested in the Instructions for Use for each fall arrest device.



## Anticipating the means of rapid evacuation

### • Limiting the effects of inert suspension:

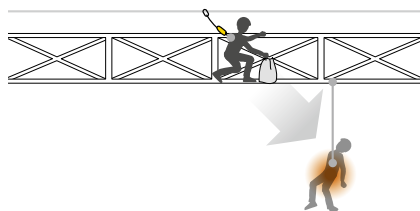
In case of a fall where the worker loses consciousness or is incapacitated, inert suspension in the harness presents a mortal danger requiring an urgent response. Work teams must be equipped and trained to quickly evacuate an injured team member.

### • Evacuating a victim without assistance:

Procedures for evacuating workers should be determined whenever a new worksite is established.

Releasable systems can be created during installation of working ropes to allow evacuation from below.

Working alone must be prohibited: a worker may find him/herself alone at height, but at least one person trained in evacuations should be present and equipped on site.



Rope access work situations often involve environments at significant height. They can be inside or outside, even confined, and are not suited for the use of collective protection. Work done in confined spaces carries additional difficulties related to the lack of space, and to the lack of means of autonomous progression.

## Examples of operations:

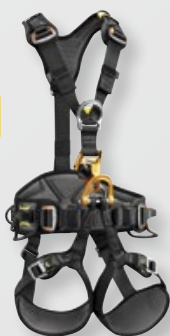
- placement of rockfall or stabilization nets over a road
- structural inspection (bridge pilings...)
- exterior window cleaning on skyscrapers
- inspection of tanks

## Technical specifics:

- the work area is accessed with ropes by specialized workers trained in rope access techniques
- access from above is preferred as it is safer and simpler to set up



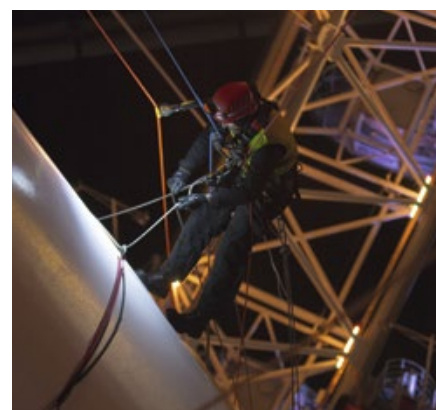
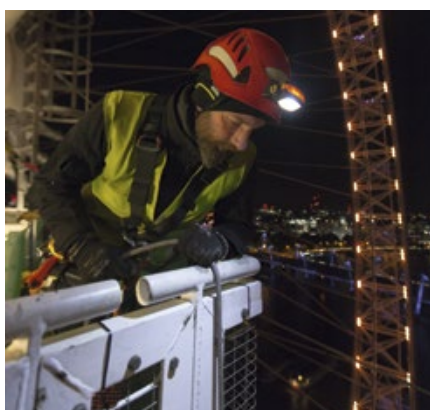
NEW  
2018



## ASTRO BOD FAST

With an integrated CROLL ventral rope clamp, the ASTRO BOD FAST harness is designed for greater efficiency and comfort during rope ascents. The gated ventral attachment point allows optimal integration of equipment (rope clamp, lanyard, seat...). Wide, semi-rigid waistbelt and leg loops give excellent support. They are contoured and lined with breathable foam padding for comfort when suspended.

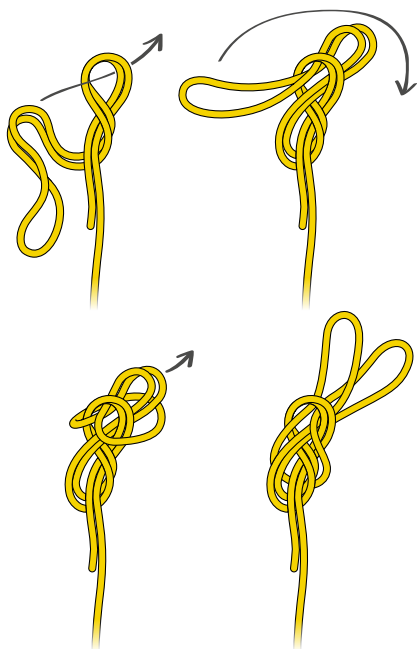




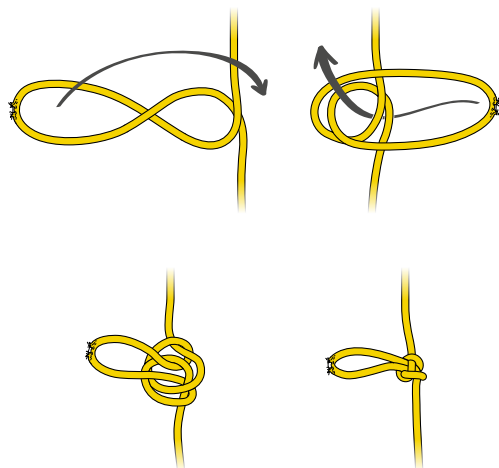
## Installing ropes

Load-sharing anchors with the rope.

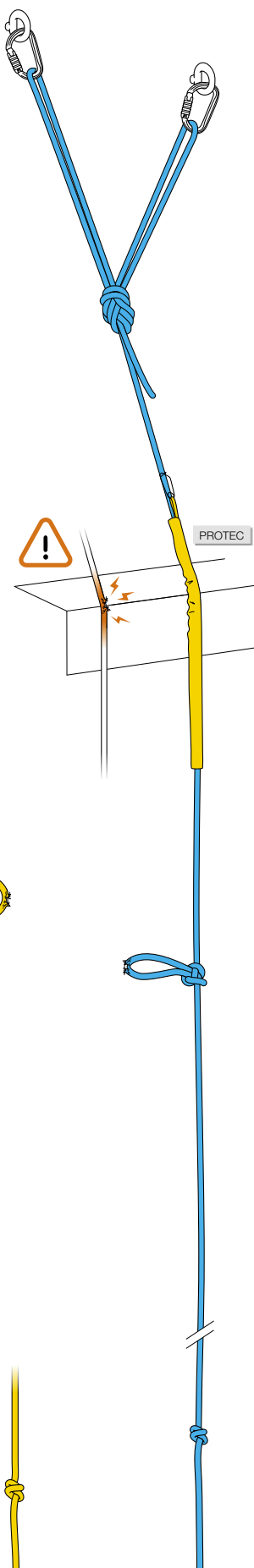
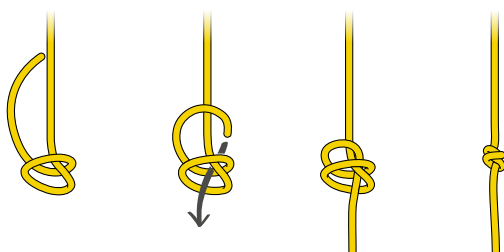
Bunny knot (for load-sharing anchors).



Special case: isolate a section of damaged rope with a butterfly knot.

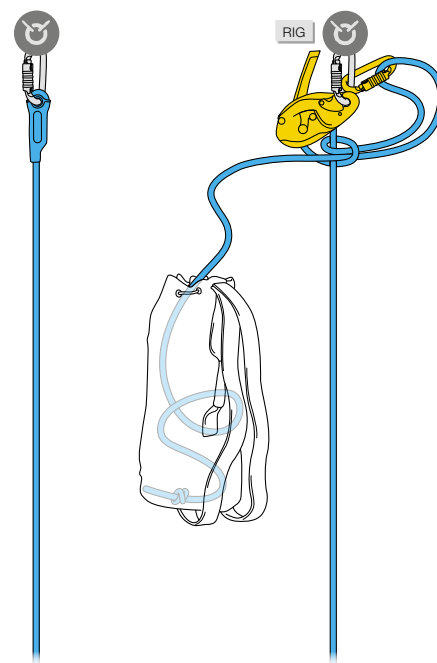


Double overhand knot (for the end of the rope, or to make a rope loop).

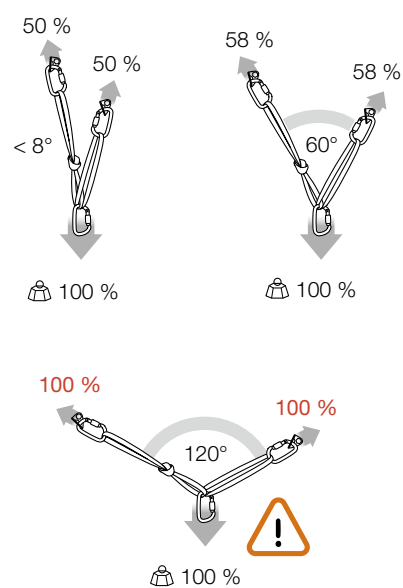


Fixed anchor.

Releasable anchor.

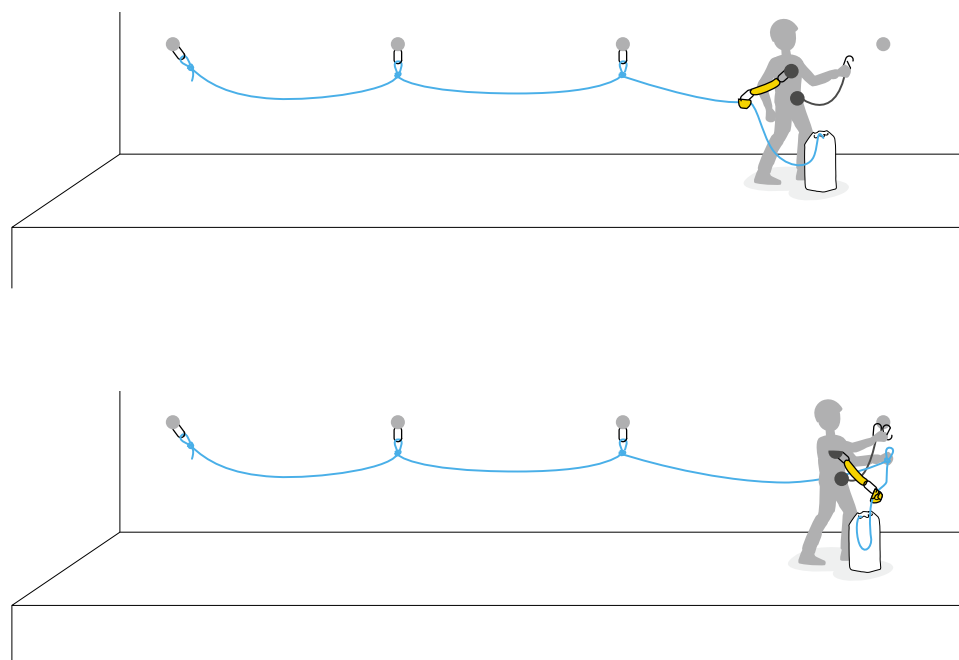


Load-sharing anchors with a sling:  
effect of the angle on a load-sharing anchor.





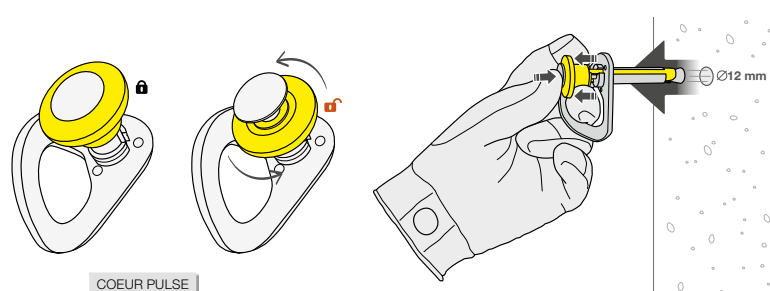
## Installing a lifeline with the ASAP.



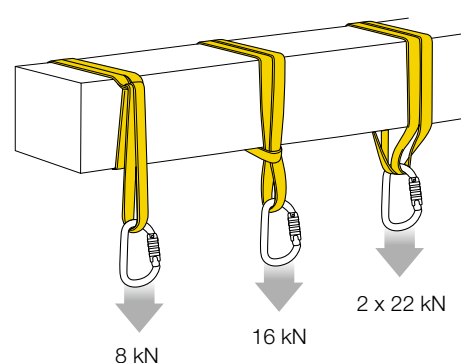
To set up a lifeline with the ASAP, see technical information available at [Petzl.com](https://www.petzl.com)

PETZL.COM

## Temporary anchor.



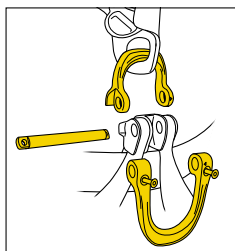
## Anchor on a beam.



## Choice of anchor material based on the environment.

	STEEL	STAINLESS	HCR
Inside or temporary use	★★★	★	★
Outside	!	★★★	★
Ultra-corrosive environment	☠	☠	★★★

## Gated ventral attachment point on ASTRO harnesses

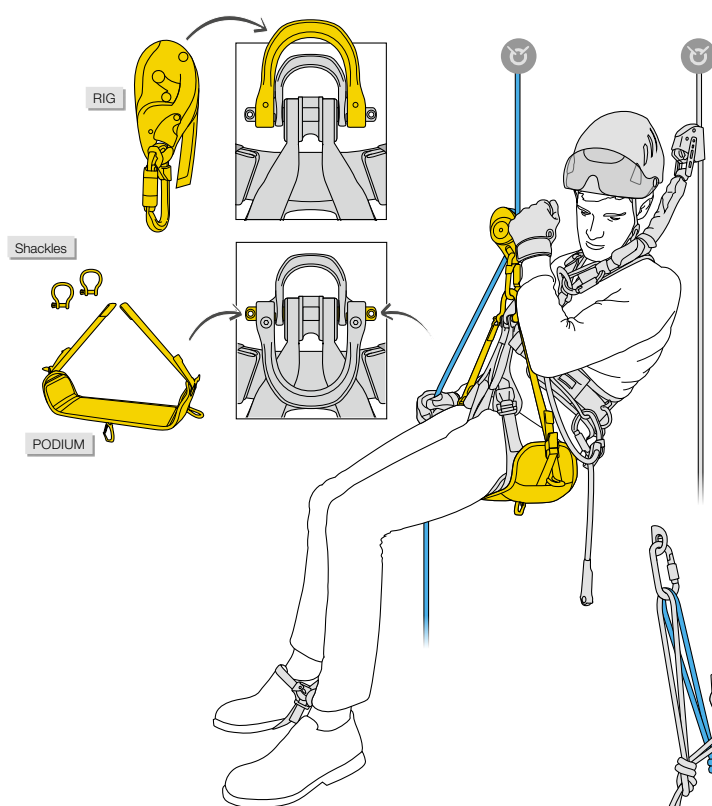


The ventral attachment point on ASTRO harnesses is gated for optimal integration of equipment.

### Descent

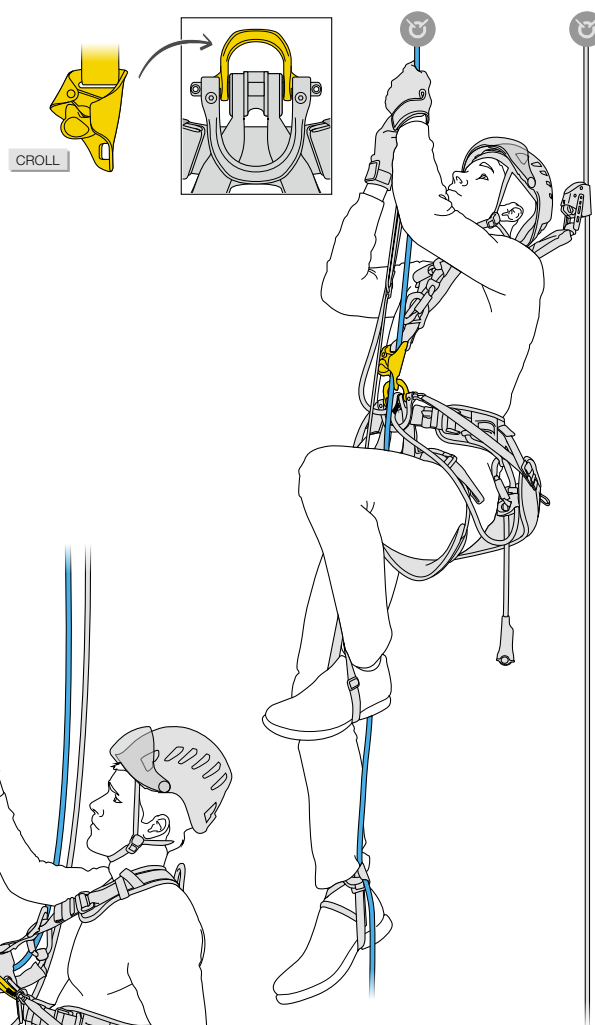
The RIG descender attaches to the large metal D.

The PODIUM seat connects to the pin with shackles, allowing a direct connection to the descender while preserving ventral attachment point mobility.



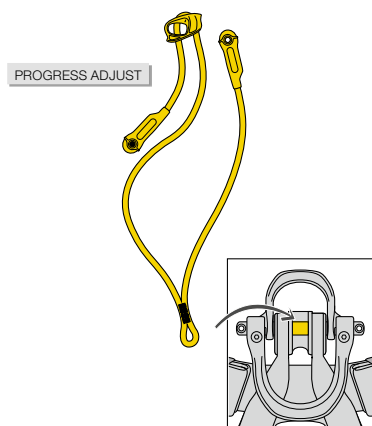
### Ascent

The CROLL ventral rope clamp connects to the small metal D for greater efficiency on rope ascents.



### Passing intermediate anchors

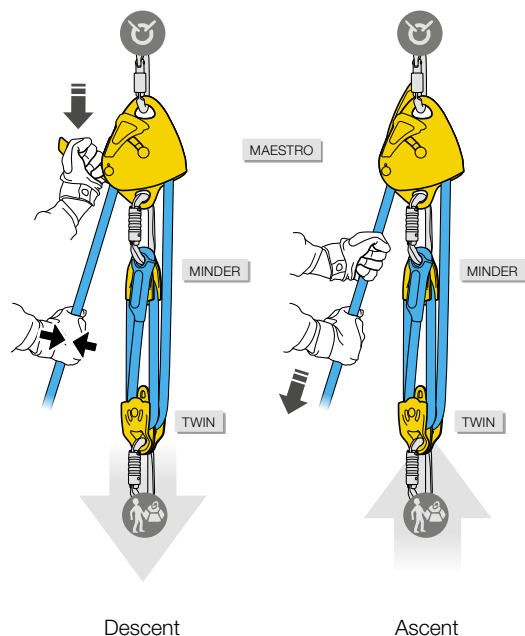
The PROGRESS lanyard connects directly to the pin, removing the need for a connector.





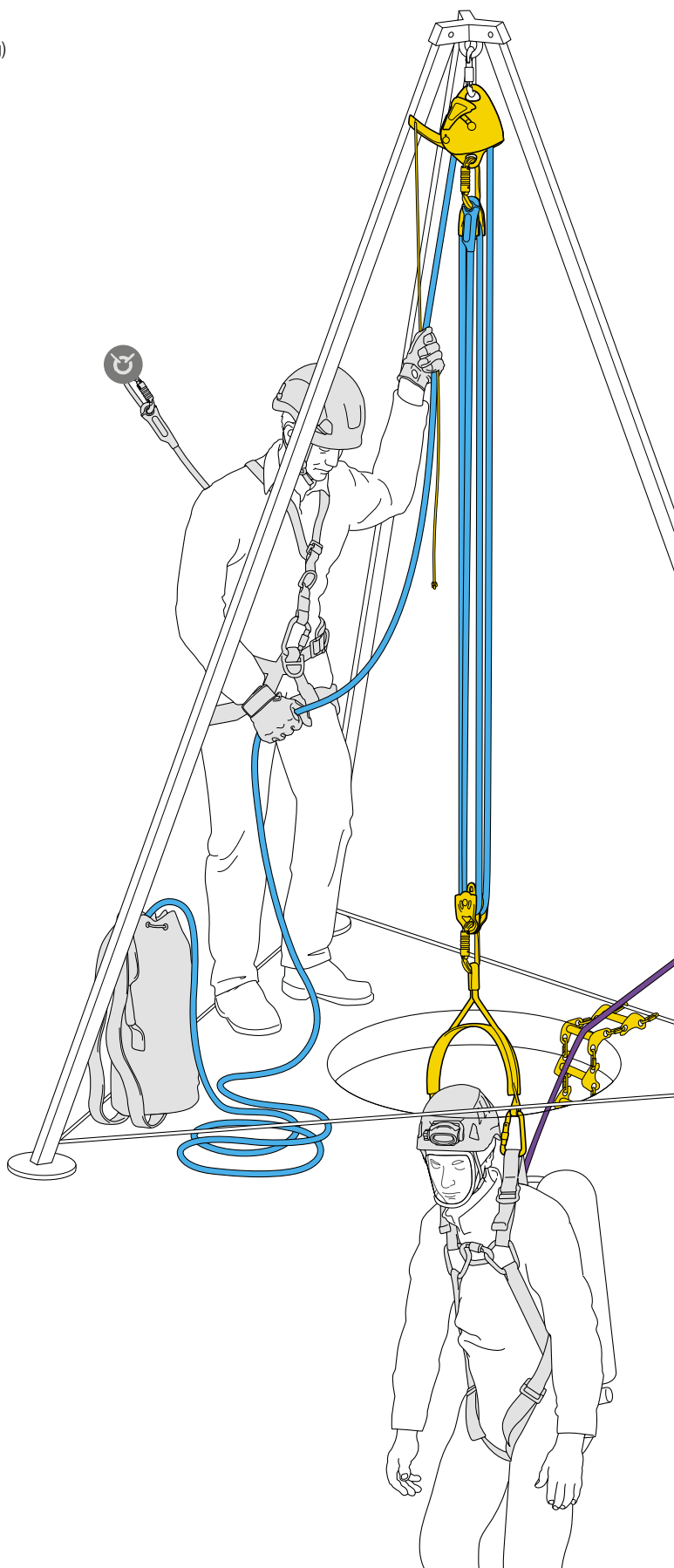
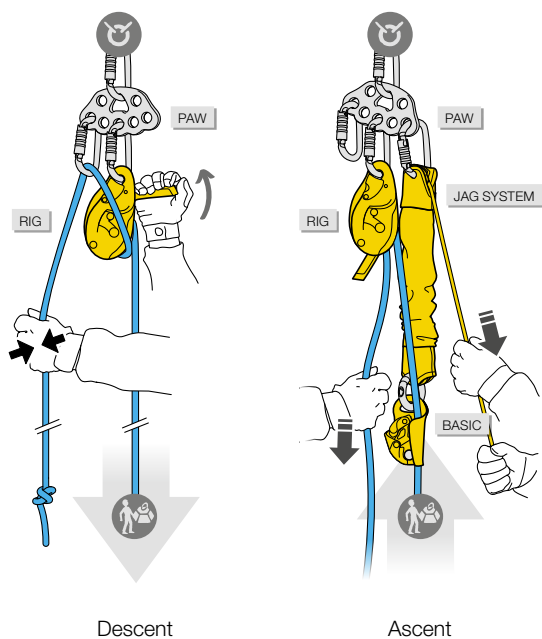
## 1. Combined lowering/raising system

- Advantage: quick transitions between modes (lowering/raising)
- Disadvantage: rope length is four times the travel distance



## 2. Independent lowering/raising systems

- Advantage: the length of the rope equals the travel distance
- Disadvantage: rigging is required to transition between lowering and raising





Not all tree work can be done using exterior means such as elevated platforms or ladders. In this case, to move and work, the arborist uses rope progression techniques.

#### Examples of operations:

- ornamental tree trimming, to adapt the tree to its environment or to change its overall aesthetic
- maintenance trimming to remove dead wood and dying branches
- tree removal (progressive cutting of the trunk from the top) if diseased or presenting a hazard...

#### Technical specifics:

- access from the base of the tree generally starts by throwing a weighted bag with line attached. This line is used to install the access rope on an anchor up in the tree
- while moving about on the branches, the arborist keeps his/her weight on the work rope, for greater stability and to reduce the potential fall distance
- when using any cutting tool (hand saw, chainsaw), the arborist must use two independent belay systems



#### ROLLCLIP Z

The ROLLCLIP Z pulley-carabiner (TRIACT-LOCK version) has the gate opening on the non-pulley end, to facilitate installation on devices. It can be used to attach the ZIGZAG to the attachment bridge on the SEQUOIA harness, for improved lateral mobility.





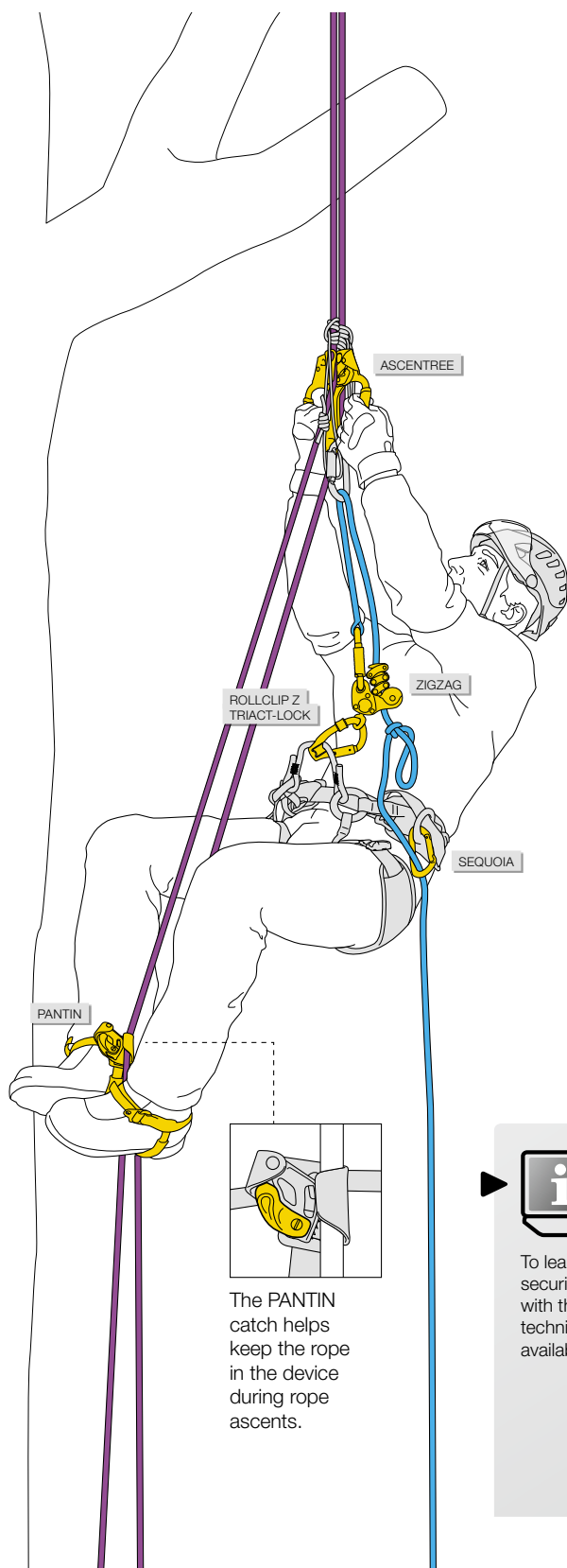


## Tree access

Doubled rope ascent technique.

The arborist ascends the access rope (purple). In case of a hornet attack (or other problem) s/he can self-evacuate with the work rope (blue). A mule knot, or releasable knot, secures the ZIGZAG.

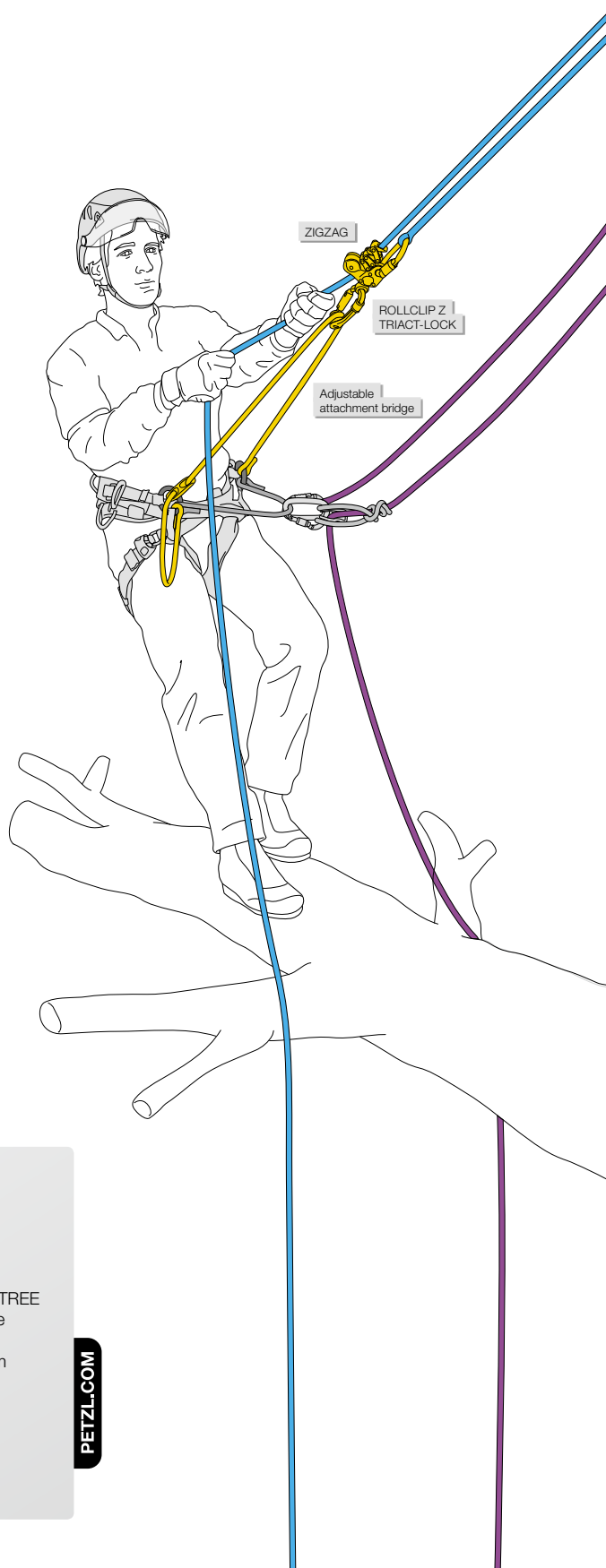
This ascent technique is very efficient.



## Movement within the tree: returning to the trunk

The ZIGZAG is installed on an adjustable attachment bridge.

The bridge is extended, allowing improved ergonomics when returning to the trunk. The space created between the ZIGZAG and the harness allows pulling with both hands on the free end of the rope.



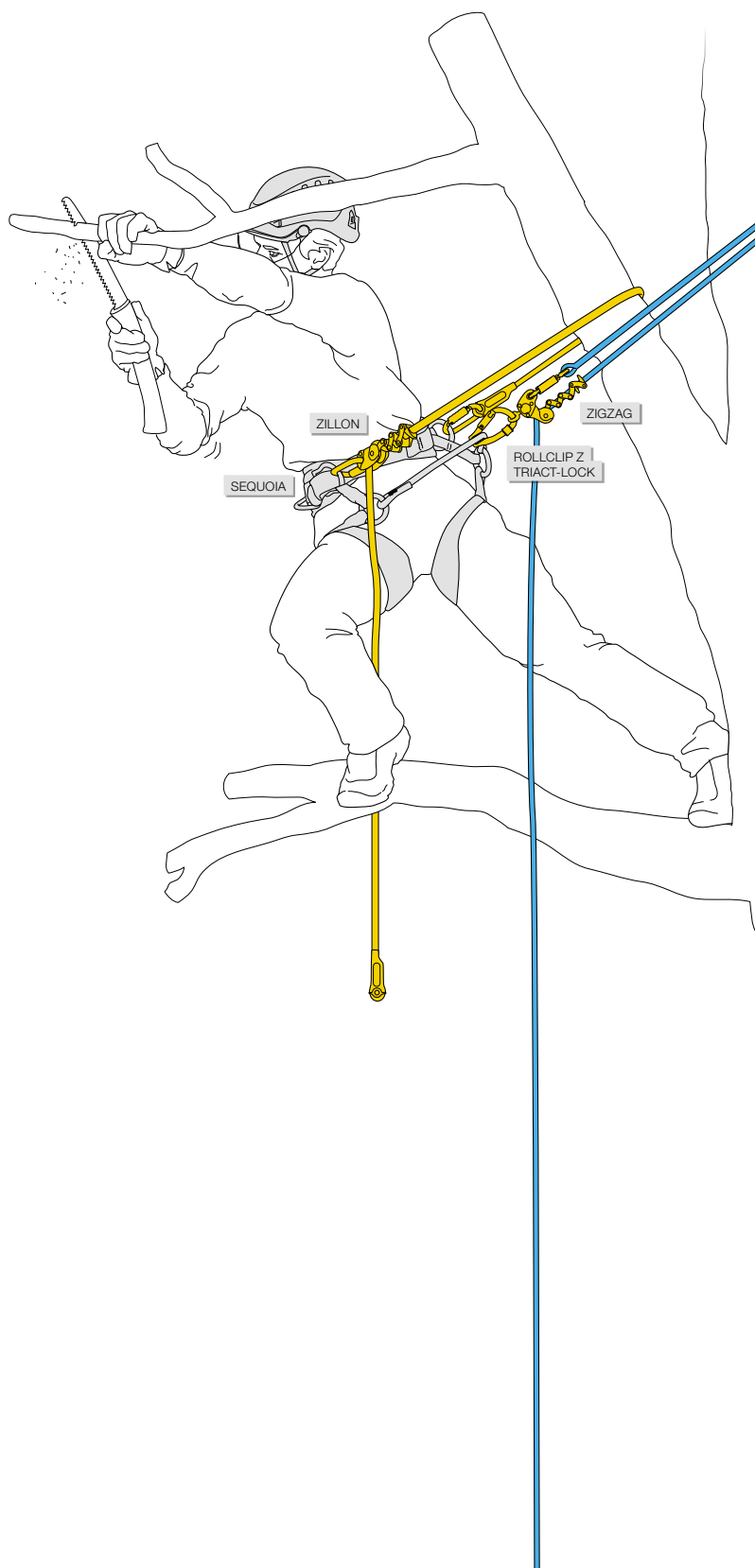
To learn more about securing the ASCENTREE with the ZIGZAG, see technical information available at [Petzl.com](http://Petzl.com)

PETZL.COM



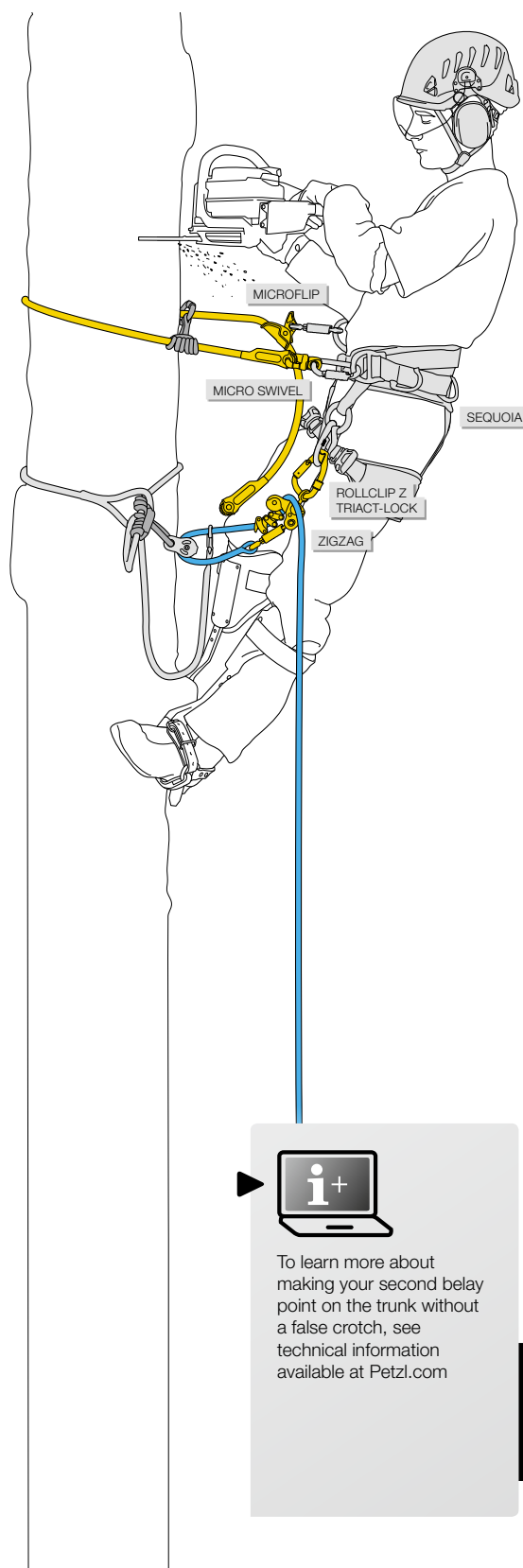
## Work positioning: double point

Stabilization using the ZIGZAG on the working rope and an adjustable ZILLON lanyard on a supplementary anchor.



## Dismantling on the trunk

Cutting operation with a second belay system. The ZIGZAG allows for a second system and the option to evacuate in case of a problem.



**i+**

To learn more about making your second belay point on the trunk without a false crotch, see technical information available at [Petzl.com](https://www.petzl.com)

These fields are characterized by structures such as towers, antennas and windmills. The modes of progression are varied, and directly related to the structure itself.

#### Examples of operations:

- work on high tension lines
- tower construction
- maintenance operations in wind farms...

#### Technical specifics:

- the user generally progresses using lifeline, cable or rail type permanent fall arrest systems
- lacking these, the user must ensure his/her own safety using personal protective equipment: energy-absorbing lanyard or mobile fall arrester on rope



NEW  
2018



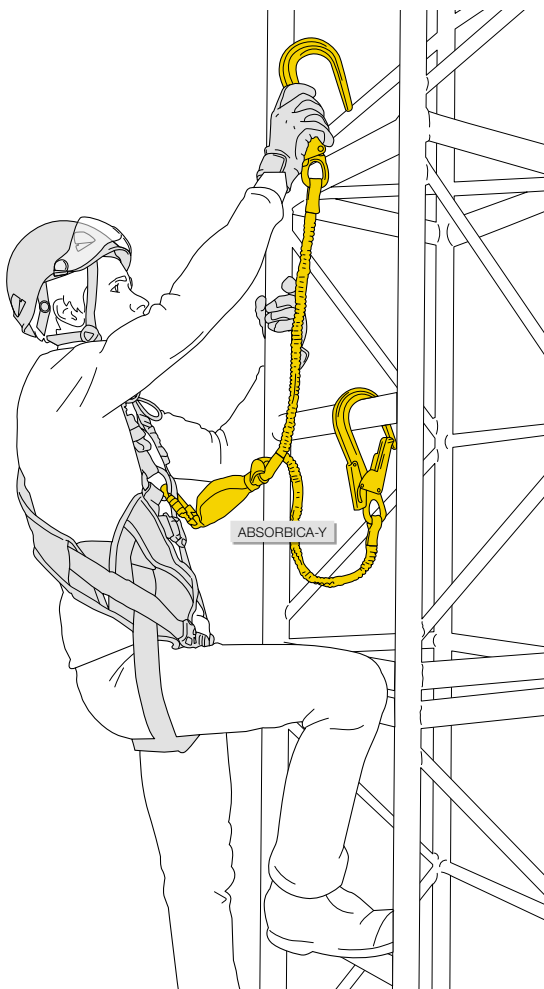
#### GRILLON

The GRILLON 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. Depending on the configuration, it can be used in single or double mode.



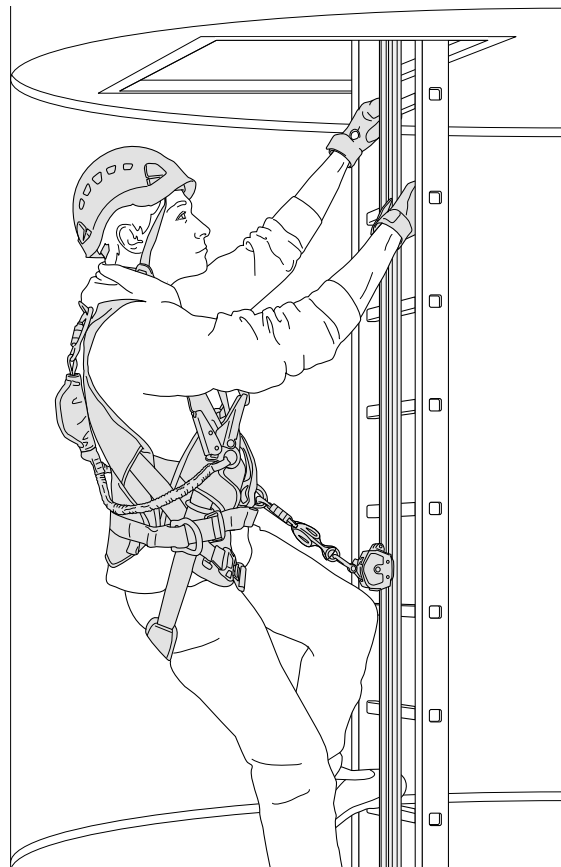


### Backed-up ascent using a double lanyard with integrated energy absorber



### Ascent protected by a fall arrest trolley attached to a rail

The trolley is fixed to the harness's ventral fall arrest attachment point (LADDER CLIMB), distributing the load on the waistbelt and ensuring optimal comfort during progression. In case of a fall, this attachment point moves upward to a sternal position to ensure a vertical post-fall body position.

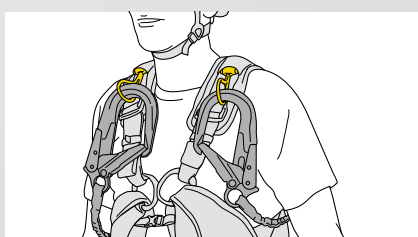


### Backed-up progression using a double lanyard with integrated energy absorber

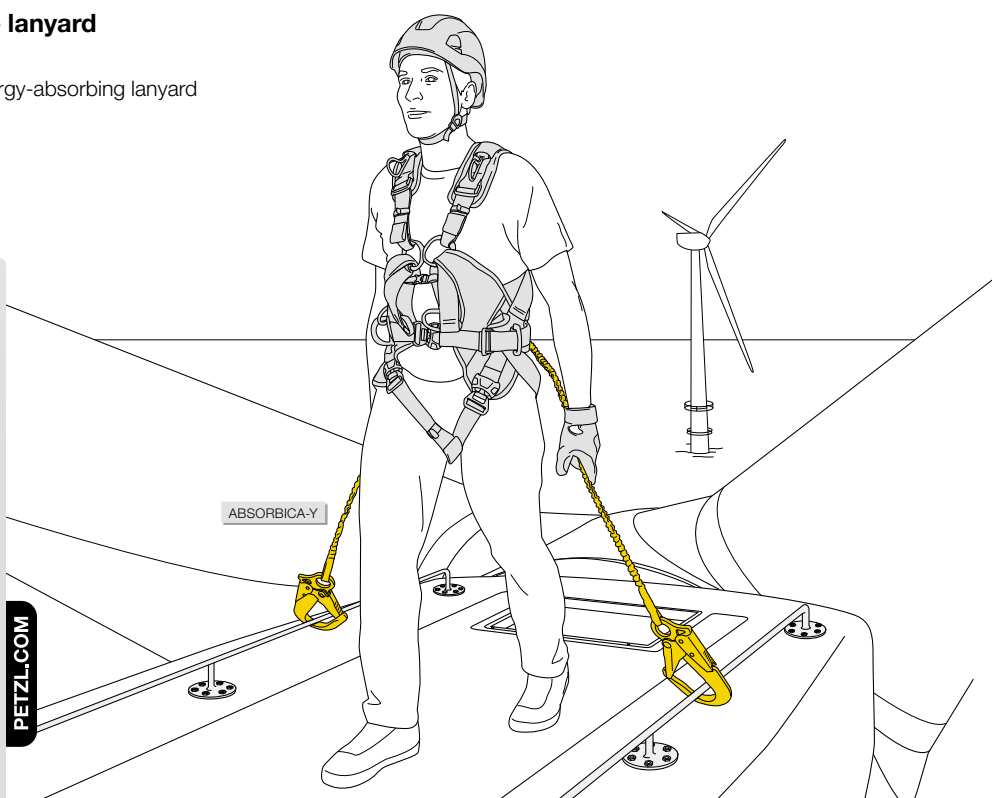
To reduce the risk of a fall, the two arms of the energy-absorbing lanyard are attached on both sides of the user.



To learn more about using the lanyard connector storage points on your harness, see technical information available at [Petzl.com](https://www.petzl.com)



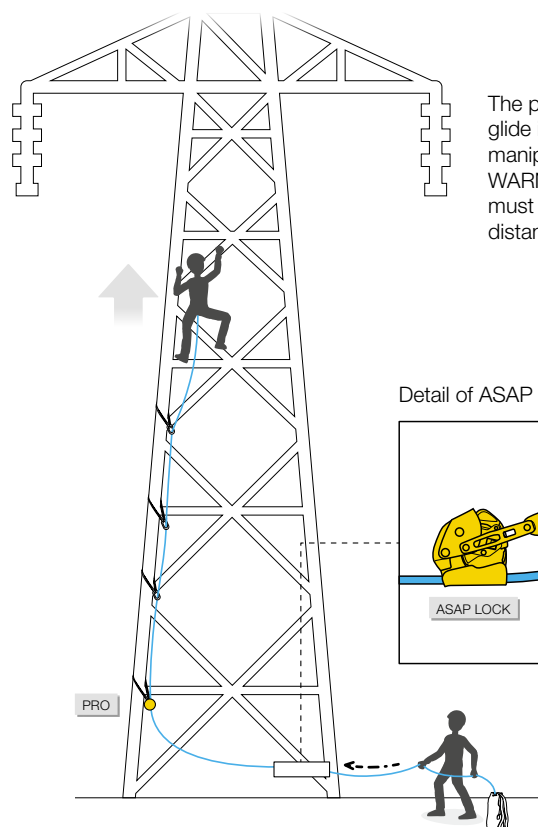
PETZL.COM





## Belaying with the ASAP LOCK for tower access

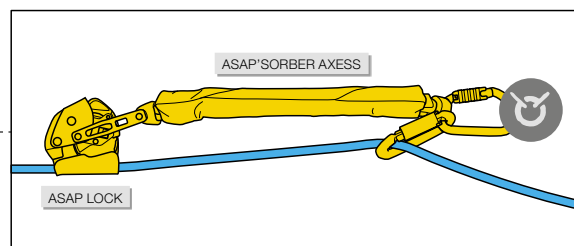
Belaying the climber's ascent



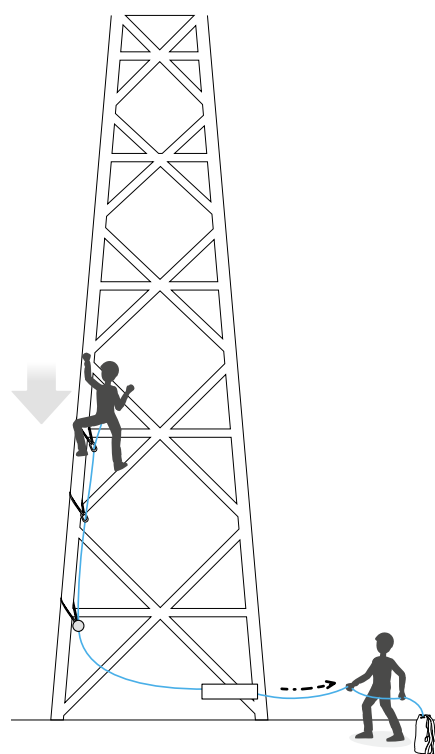
The person on the ground ensures good rope glide in the ASAP LOCK; there is no need to manipulate the device.

**WARNING:** when lead climbing, the anchor points must be closely spaced, to limit the potential fall distance.

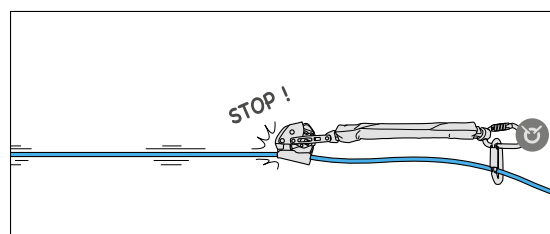
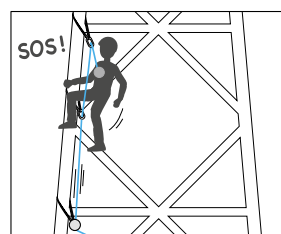
Detail of ASAP LOCK setup



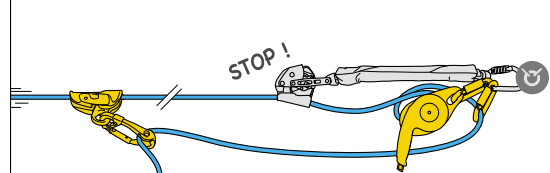
Belaying the descent



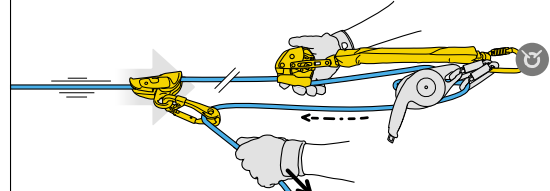
Evacuation technique in case the climber falls



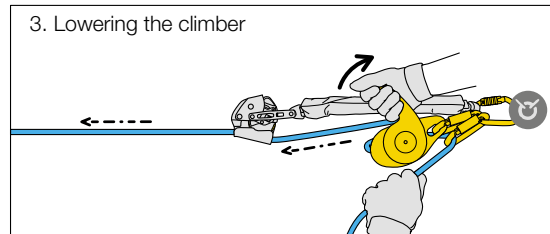
1. Installing a haul system



2. Unlocking the ASAP LOCK



3. Lowering the climber



In this type of work situation, the risk of slipping and falling is higher. A safety device must be installed to guard against these hazards.

## Examples of operations:

- framing a building under construction
- roof repair or waterproofing
- roof inspection on industrial sites...

## Technical specifics:

- when the situation allows, accessing the work area is done using an elevated work platform. The worker secures him/herself with an energy-absorbing lanyard
- lacking collective protection, the worker is required to use a fall arrest system
- fall arrest systems are also required when installing collective protection



NEW  
2018



## AVAO BOD FAST

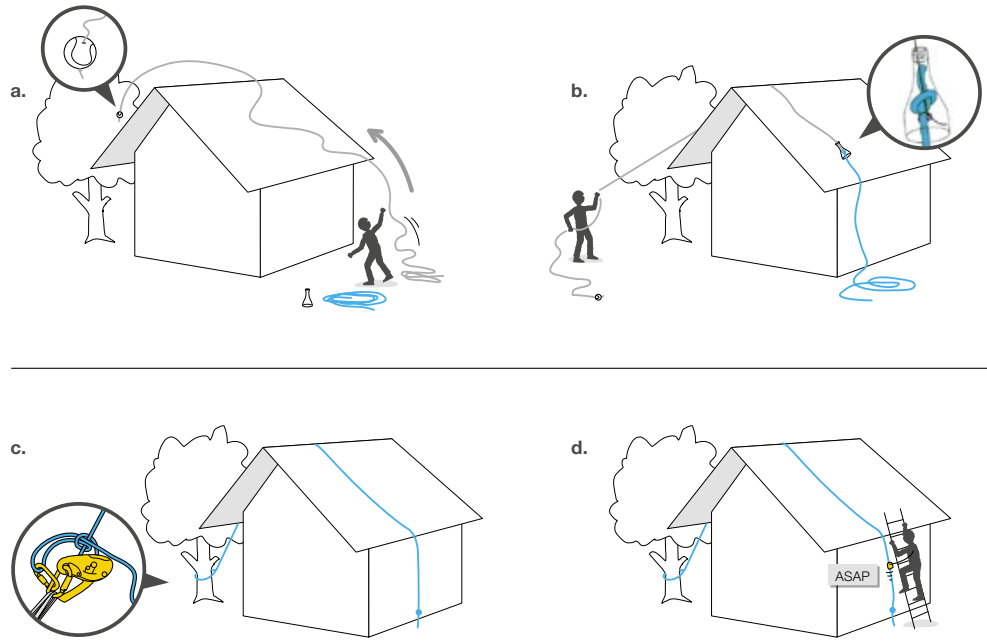
The AVAO BOD FAST fall arrest, work positioning and suspension harness is designed for greater comfort in all situations. Wide, semi-rigid waistbelt and leg loops give excellent support. The lightweight, breathable construction maximizes air flow. The shoulder straps have a system for stowing the fall arrest lanyard connectors and keeping them within reach.





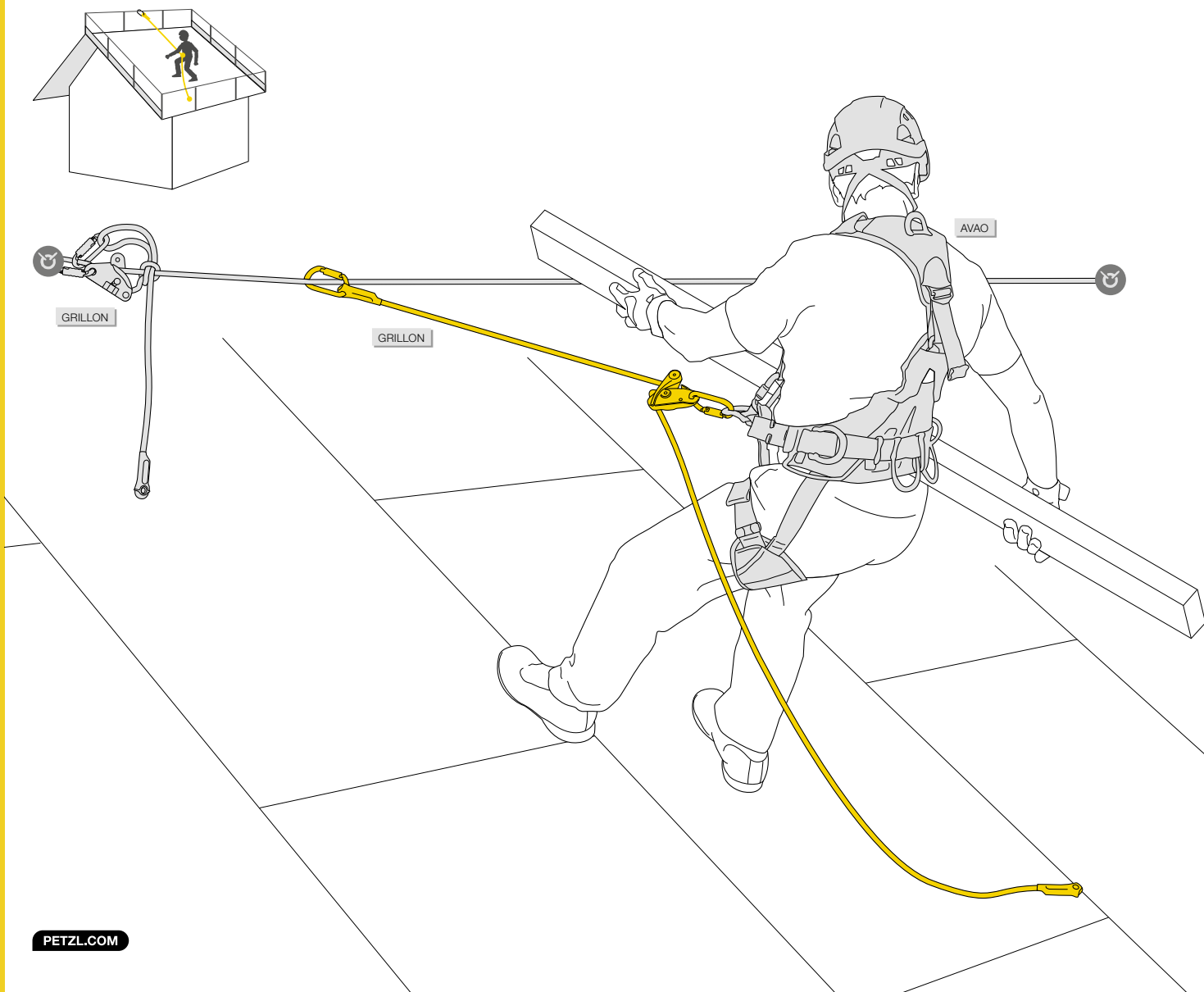
### 1. Roof access

Installing a rope with releasable anchor; backed up ascent with the ASAP.



### 2. Long-term use

With individual positioning system and collective protection.

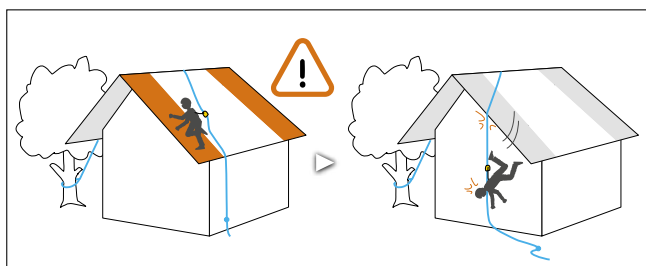
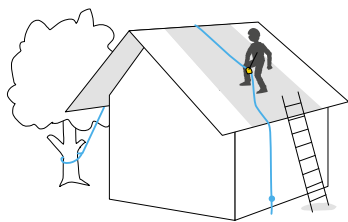




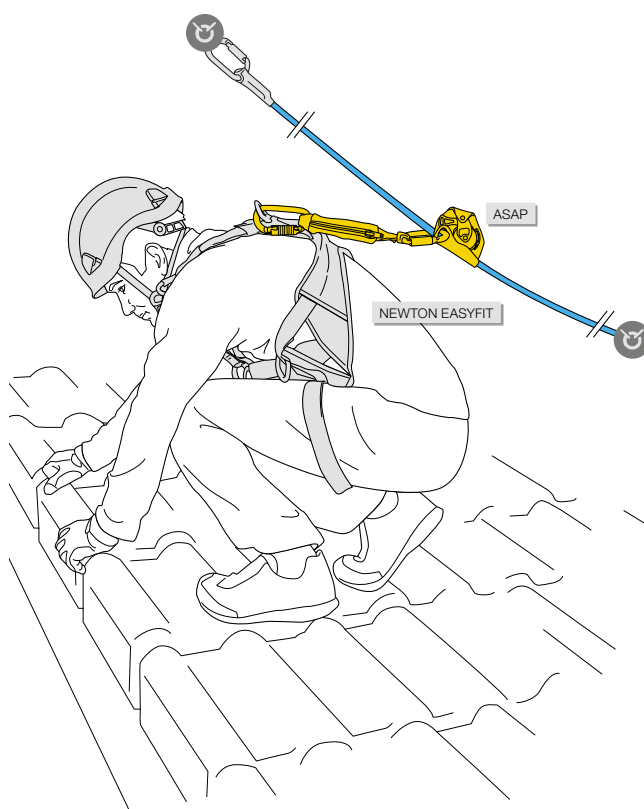
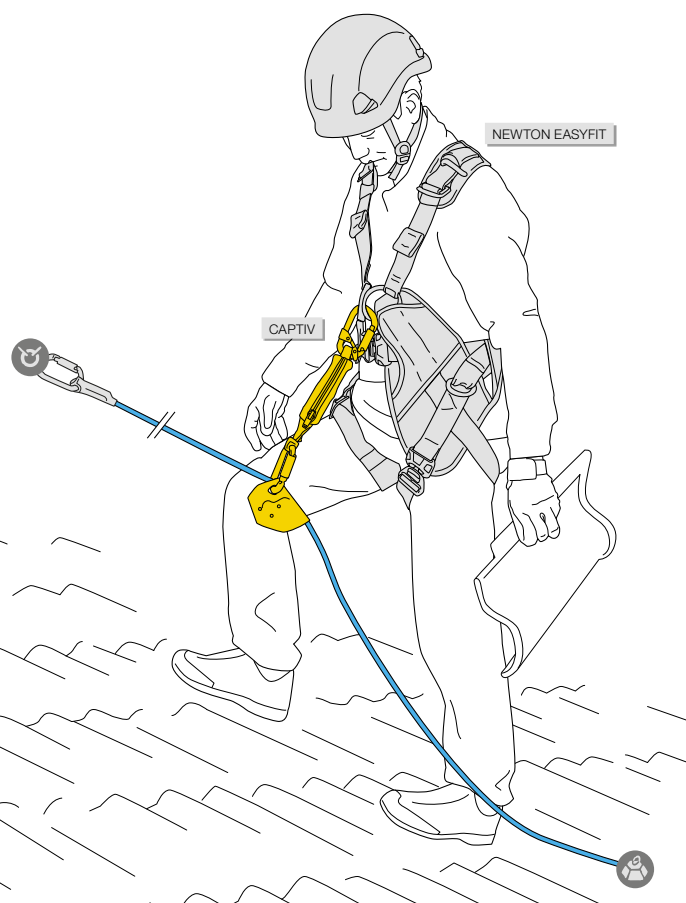
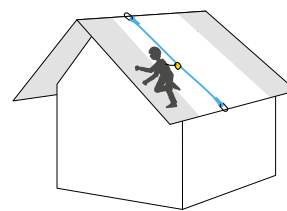
### 3. Occasional use

With individual fall arrest system.

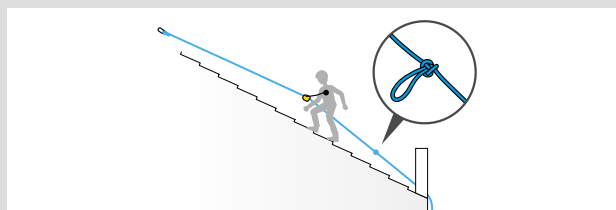
- Working in the center of the roof (limited access zone)



- Working at the edges



To learn more about using the ASAP on an incline, see technical information available at [Petzl.com](https://www.petzl.com)



Inert suspension in a harness, even for a short time, can cause serious physiological harm. In case of an accident, it is important to respond quickly with the appropriate technique.

## Self-rescue

On sites where the main access could be cut off by fire, people must be ready to quickly evacuate the building. They have evacuation kits. These kits are either portable or installed permanently on the structure. Where there is no identified anchor possibility, a hook-based system can be used. In both cases, teams must be regularly trained so as not to panic in case of a fire.

## On-site rescue

When a worksite is being set up, the company must establish a risk prevention plan (inventory of risk situations):

1. It must protect the personnel from falls from height. The solutions chosen, whether collective or individual, must protect the team members while they work.
2. In the case of an incident, the company must be prepared with rescue systems for accessing, releasing and evacuating the victim.

These solutions are established with:

- ready-to-use rescue kits, adaptable to many situations and simple to use
- personal equipment for the worker at height (solution requiring experienced and well-trained teams)

In both cases, the teams undergo regular training so they can respond quickly in case of an accident.

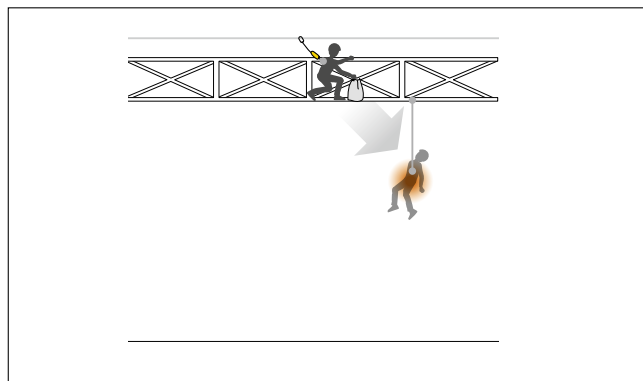
## Technical rescue

Technical rescue teams must be able to respond quickly in any situation. They must choose the quickest, most effective way to access the victim.

- When access is easy or possible by motorized means, they can easily transport the rescue equipment
- In more difficult access situations, they may use rope access techniques, from above or below. They thus have lightweight, versatile equipment
- Finally, the helicopter can be a means that is used when victim access is complicated and/or remote, for example in the mountains

## Ski lift evacuation

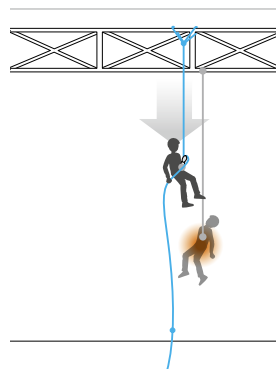
Ski lift evacuation operations follow an evacuation plan. Rescue kits are put together to meet the specific needs of each ski center.



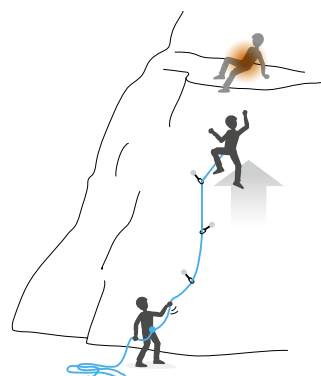
## 1. Accessing the victim

Accessing the victim can sometimes be complicated. Rope access techniques are used in such a case. When access is possible from above, rescuers use rope descent techniques. If an access rope is in place, rescuers can ascend the rope using ventral rope clamp techniques. In other situations, rescuers are obliged to use climbing techniques to reach the victim.

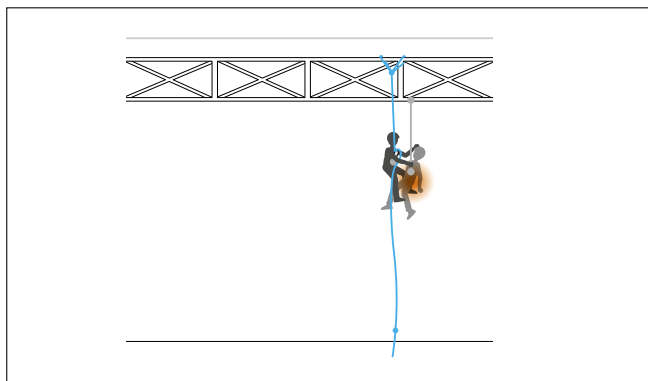
Example of access from above



Example of access from below







## 2. Releasing the victim

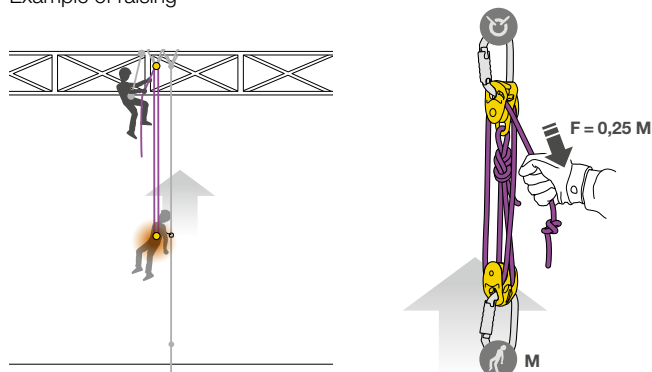
### Raising

This involves using a mechanical advantage pulley system in order to easily raise the victim. A rescuer working alone uses a mechanical advantage system to reduce effort. The disadvantage is that a long rope is required. If there are enough rescuers, a lower mechanical advantage is used to speed up the operation.

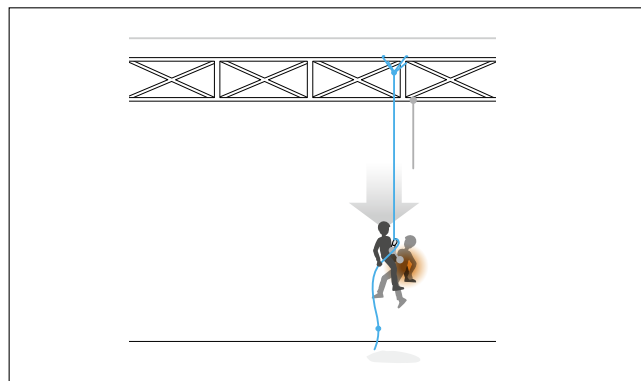
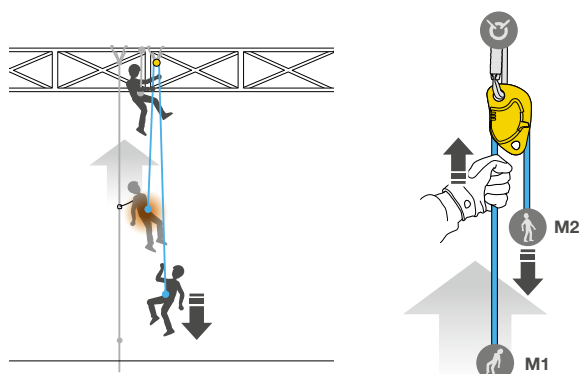
### Counterbalance technique

This is a counterweight system. The rescuer is on one side, the victim on the other. The rescuer unweights the rope on the victim's side by pulling on it. The victim ascends and the rescuer descends. The advantage of this system is that it is easy to do with little equipment. Engaging the counterweight is the step that demands the most energy. After that, it is important to be careful to keep the system under control. Be careful when there is a significant weight difference between the rescuer and the victim.

Example of raising



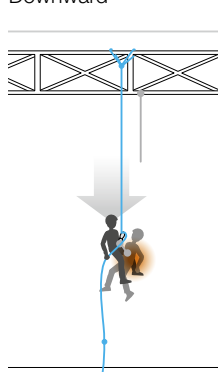
Example of counterbalance



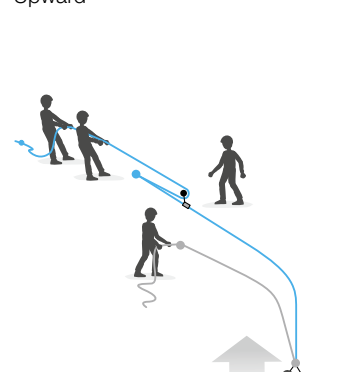
## 3. Evacuating the victim

Downward, the evacuation is carried out with a descender. This is the easiest technique currently in use. When downward evacuation is impossible, the victim is evacuated upward or horizontally. Upward, rescuers use either a counterweight or hauling technique. Horizontally, one or more ropes are tensioned. One rope is used for carriage, another is used as a back-up belay, and another to move the litter.

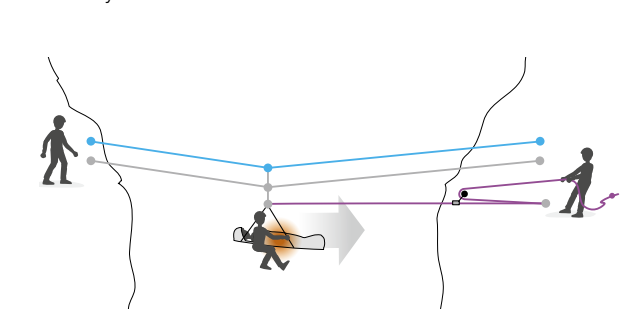
Downward



Upward



Horizontally



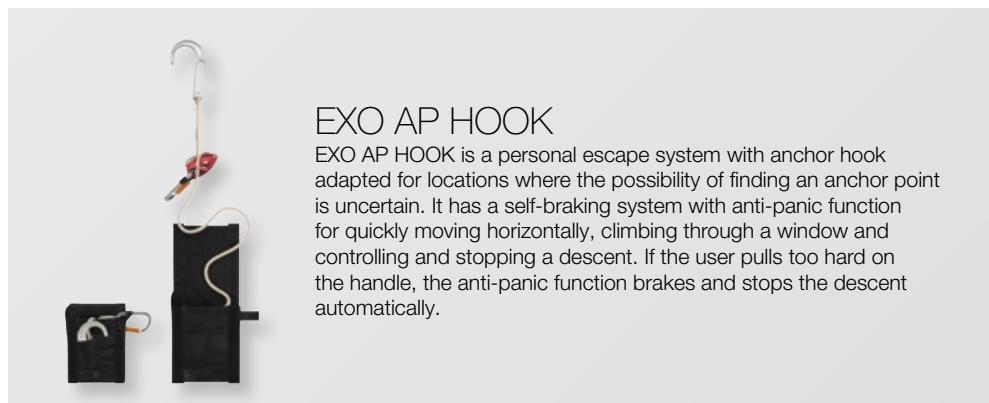
The typical scenario is of a firefighter trapped inside a burning structure. S/he needs to be able to ensure his/her own rescue and thus must have the appropriate equipment.

#### Technical specifics:

- in this situation, the firefighter must be able to take advantage of any available anchor point inside the building, or as a last resort, a window sill
- the exit generally takes place in an extremely hot, smoke-filled, and hostile environment, adding to the limitations
- the maneuvers must be as simple as possible, for quick action even under intense duress



Window evacuation training by Salt Lake City Fire Department, Utah. © Petzl / Dave Burleson

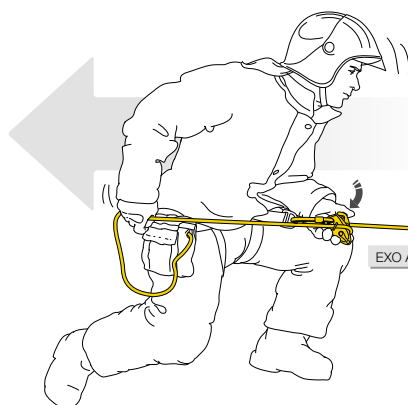


#### EXO AP HOOK

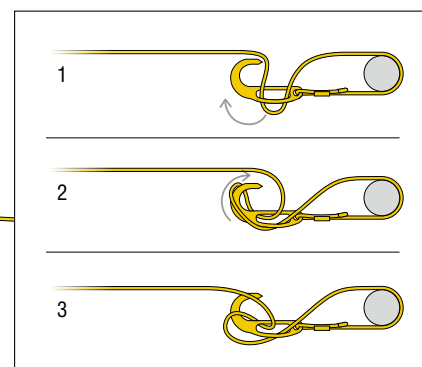
EXO AP HOOK is a personal escape system with anchor hook adapted for locations where the possibility of finding an anchor point is uncertain. It has a self-braking system with anti-panic function for quickly moving horizontally, climbing through a window and controlling and stopping a descent. If the user pulls too hard on the handle, the anti-panic function brakes and stops the descent automatically.



Rapid horizontal movement



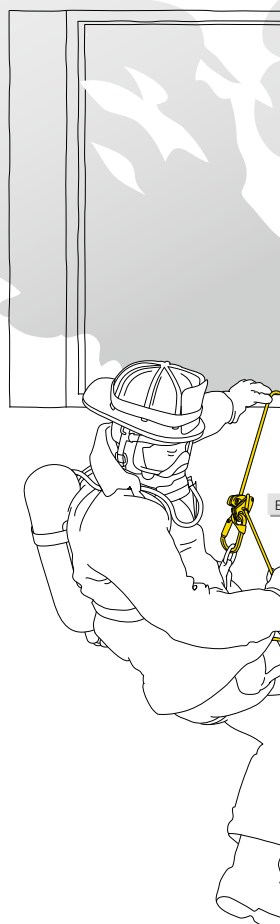
EXO AP HOOK



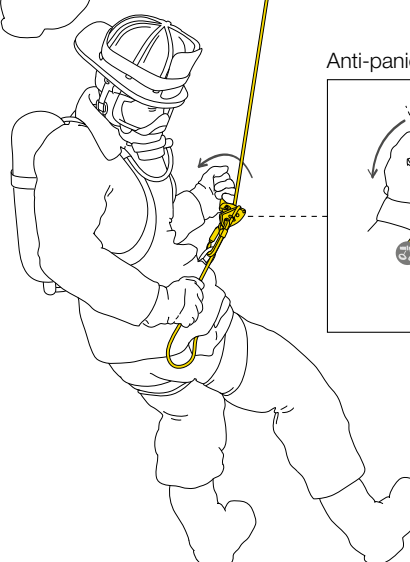
Going through a window while maintaining the anchor hook on the window sill. Locking the left leg against the interior wall to control the movement.

Re-establishment below the window while holding the free end of the rope.

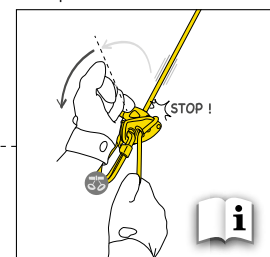
Descending, one hand uses the handle to start the descent, and the other hand holds the rope to control it.



EXO AP HOOK



Anti-panic function



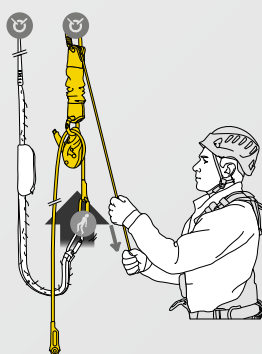
If a victim is not able to self-rescue, the on-site work team has to respond immediately and move him/her to safety.

## Examples of operations:

- a team member accesses the victim, unhooks him/her, then lowers the victim unaccompanied
- a team member accesses the victim, unhooks him/her, then rappels down with the victim
- the victim is suspended on a pre-installed evacuation system that does not require a team member to access him/her directly

## Technical specifics:

- unaccompanied evacuation can generally be done using a ready-to-use rescue kit
- accompanied descent requires proper training, as it implies a mastery of advanced rope access techniques
- in all cases, the rescue method should be as rapid as possible, in order to reduce the risk of suspension trauma, especially when the victim is unconscious



## JAG RESCUE KIT

The ready-to-use reversible JAG RESCUE KIT is designed to easily unhook and lower a victim. It contains a JAG SYSTEM haul kit, a RING OPEN gated ring, an I'D S descender, a CONNEXION FIXE 150 cm anchor strap, a BUCKET bag and an AXIS 11 mm rope with two sewn terminations.





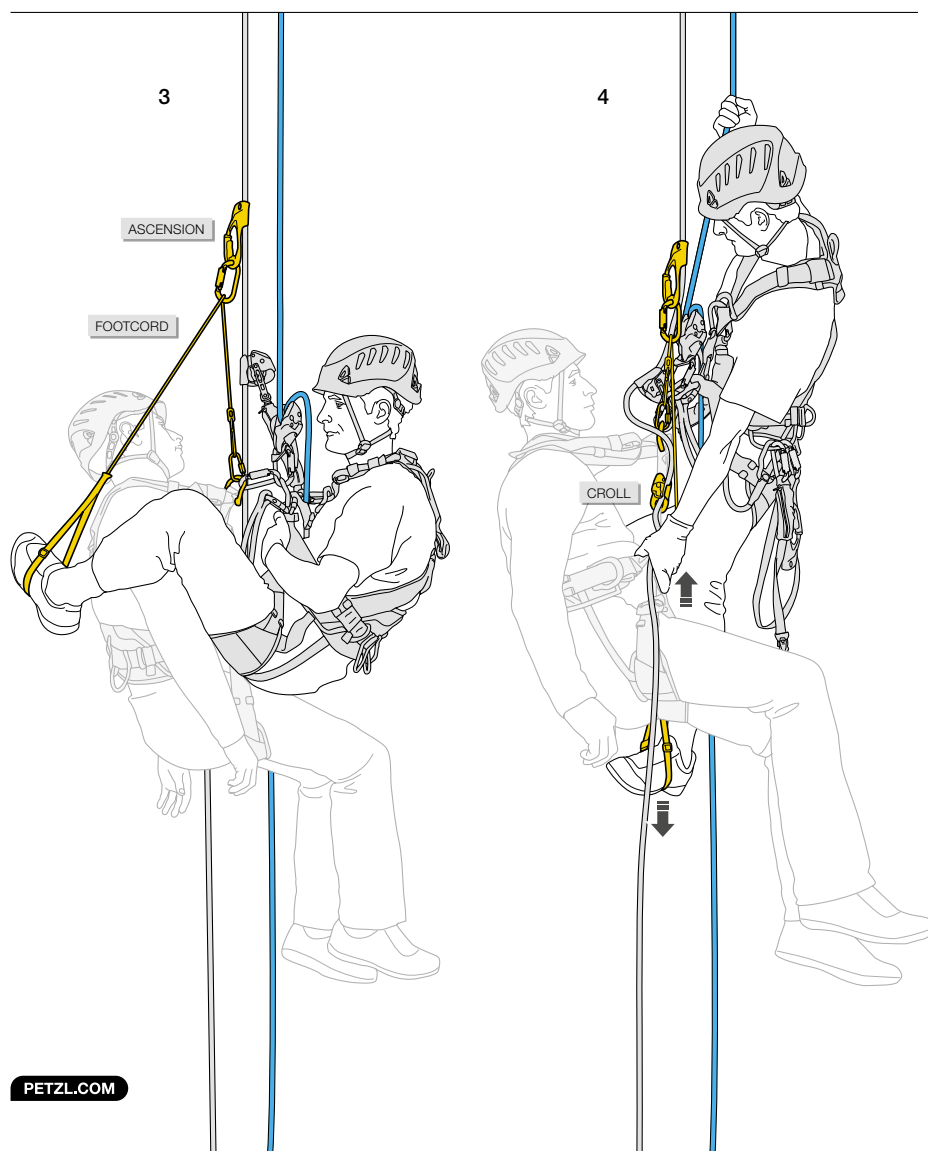
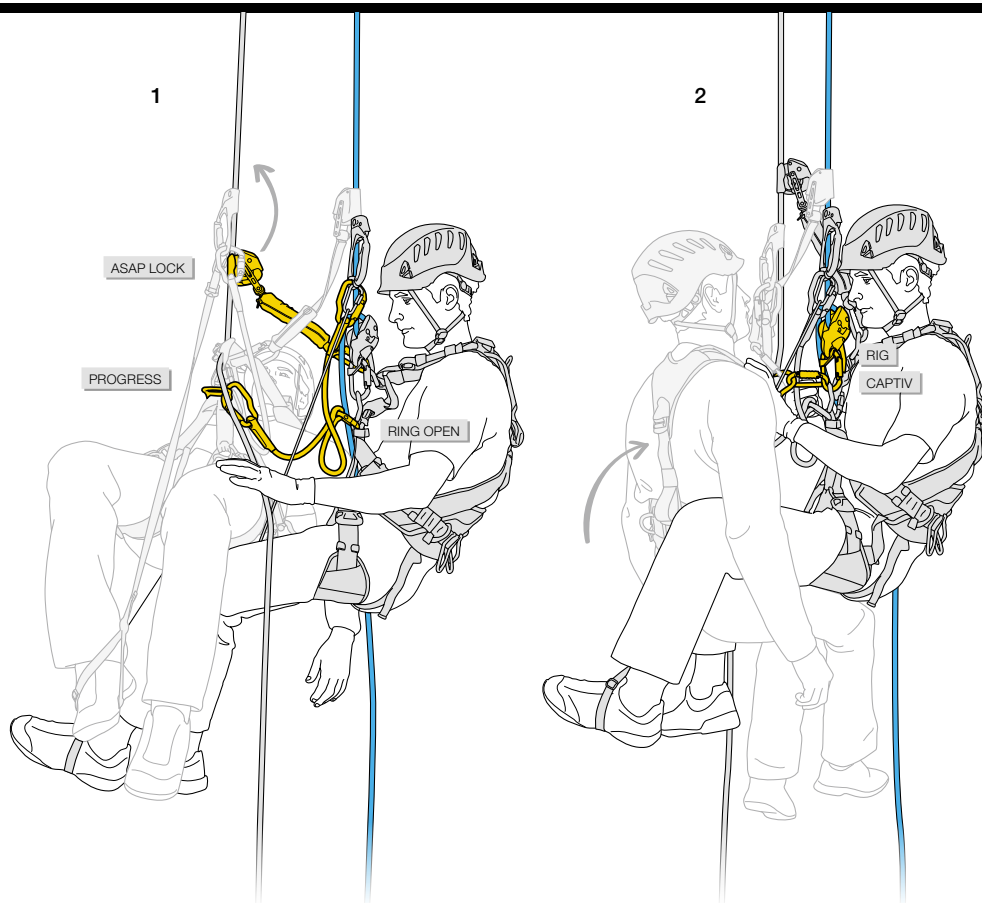
## Release and evacuation of a victim on a CROLL

Operation from below by a team member with his/her own equipment. The rescuer must do a risk assessment before responding and verify (among other things) that the victim's ropes are in good condition. The counterbalance system is used to transfer the victim onto the descender.

The rescuer ascends on the victim's safety line.

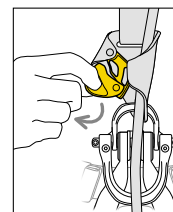
1. The rescuer transfers him/herself to the RIG descender, tethers to the victim and moves the ASAP up above the victim.

2. The rescuer puts a second connection in place. S/he can then remove the equipment that is in the victim's way.

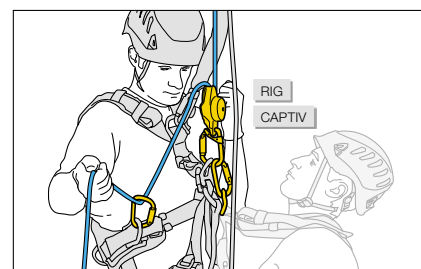


3. On the victim's rope, the rescuer installs a foot loop in counterbalance on the ASCENSION handled rope clamp.

4. In counterbalance on the foot loop, the rescuer prevents the rope from running through the CROLL and raises the victim. S/he removes the CROLL and takes up as much rope slack as possible in the RIG descender.



5. The rescuer, hanging on the RIG, recovers the ASCENSION. S/he installs a braking carabiner and accompanies the victim to the ground.

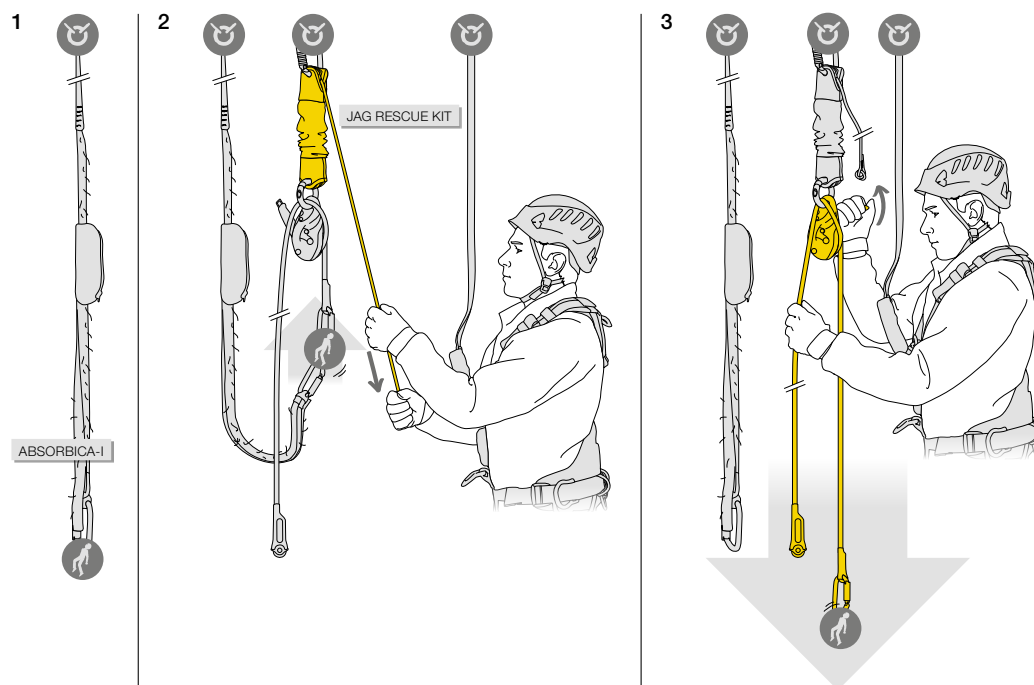




## Release and rescue using a reversible rescue kit

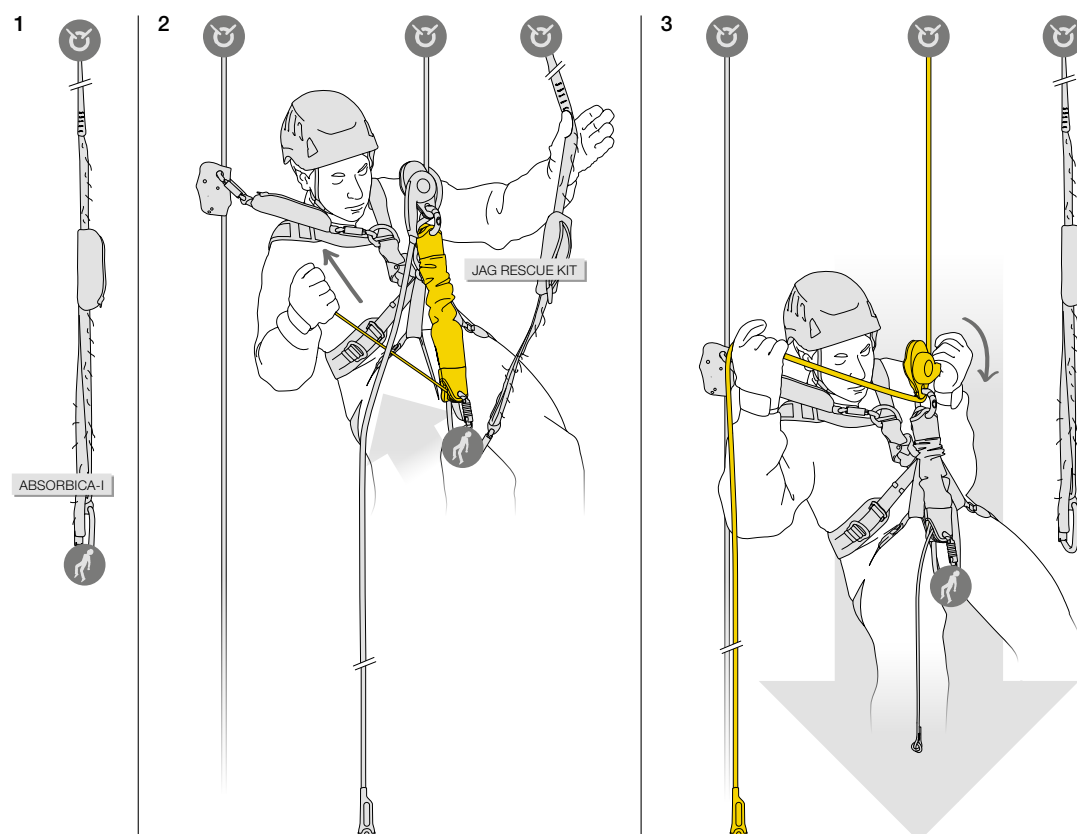
### • Unaccompanied evacuation (when victim doesn't require monitoring or for a free-hanging evacuation):

1. Victim suspended by a lanyard, with the energy absorber torn by the fall.
2. Hauling (allows the victim to be released).
3. Lowering the victim.

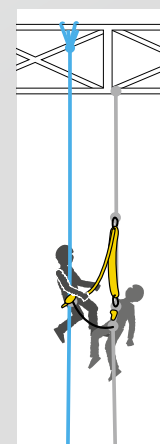


### • Accompanied evacuation (protecting and distancing the victim from the structure):

1. Victim suspended by a lanyard, with the energy absorber torn by the fall.
2. Hauling (allows the victim to be released).
3. Accompanied descent.



To learn more about using the JAG RESCUE KIT to rescue a victim suspended on a rope, see the technical information available at [Petzl.com](http://Petzl.com)



Technical rescue teams respond when the situation is especially difficult and requires significant resources to be deployed.

## Examples of rescues:

- following a vehicle roll-over into a ravine, the victims are rescued via motorized means
- evacuation of an injured worker from a location that is difficult to access
- helicopter rescue operations in mountainous terrain...

## Technical specifics:

- technical rescue teams operate in any terrain. They have complete mastery of all progression and belay techniques on rope
- when the terrain allows, downward evacuation is preferred because of the gravity-assist
- upward evacuation is a team effort that requires perfect coordination by everyone involved. It demands techniques which are sometimes particularly complex: raising systems, creating a hauling system using lightweight pulleys, counterweight techniques...



## MAESTRO

MAESTRO S and MAESTRO L are descenders designed for technical rescue operations. They facilitate the manipulation of heavy loads, in lowering or hauling, and can be used in the primary system or in a back-up belay. This versatility allows rescuers to adapt to any situation they may encounter on the rescue scene.



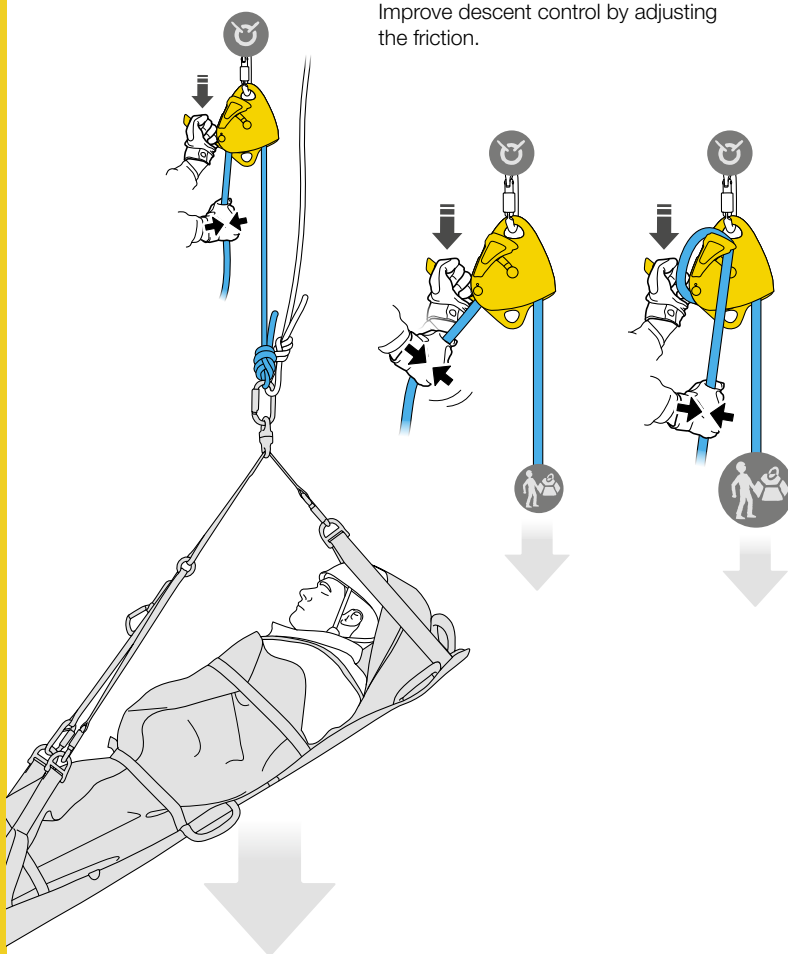


## Using the MAESTRO

The MAESTRO enables controlled lowering of loads up to 250 kg (MAESTRO S) and 280 kg (MAESTRO L).

### Different braking positions

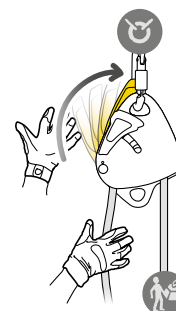
Improve descent control by adjusting the friction.



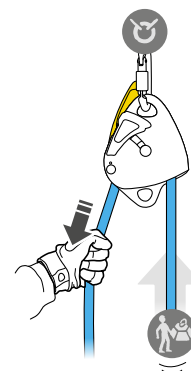
## AUTO-LOCK

The AUTO-LOCK system locks the load automatically and returns the handle to the stop position.

The user may then let go of the rope if needed.

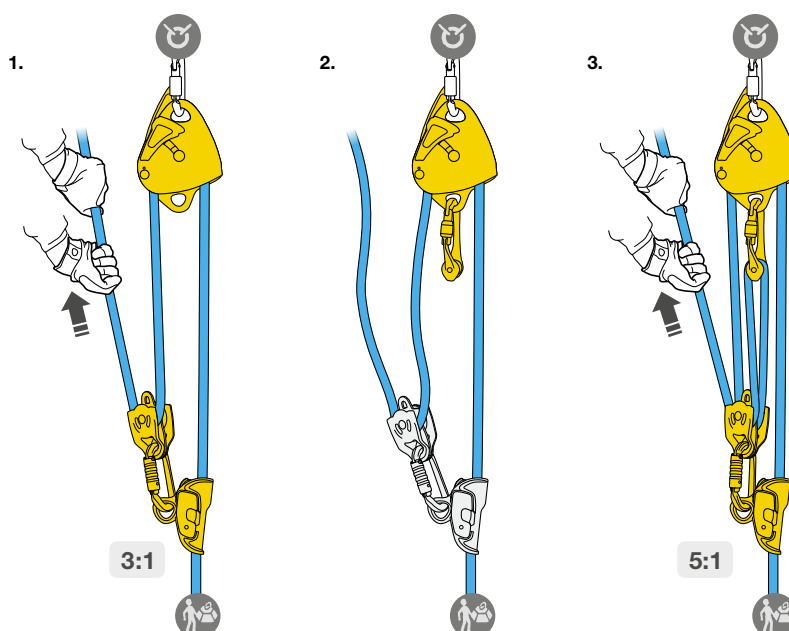


Hauling is possible at any time, without manipulating the handle.

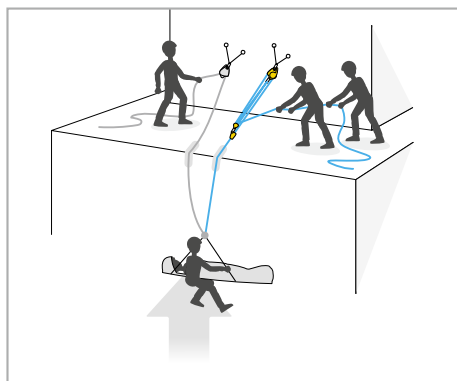


## Easy transition to a higher-efficiency haul system

The MAESTRO has an auxiliary attachment hole for setting up a redirect in a 5:1 haul system.



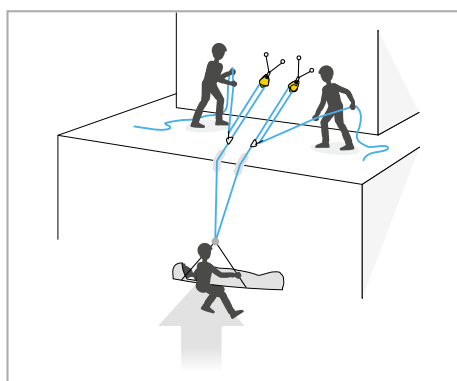
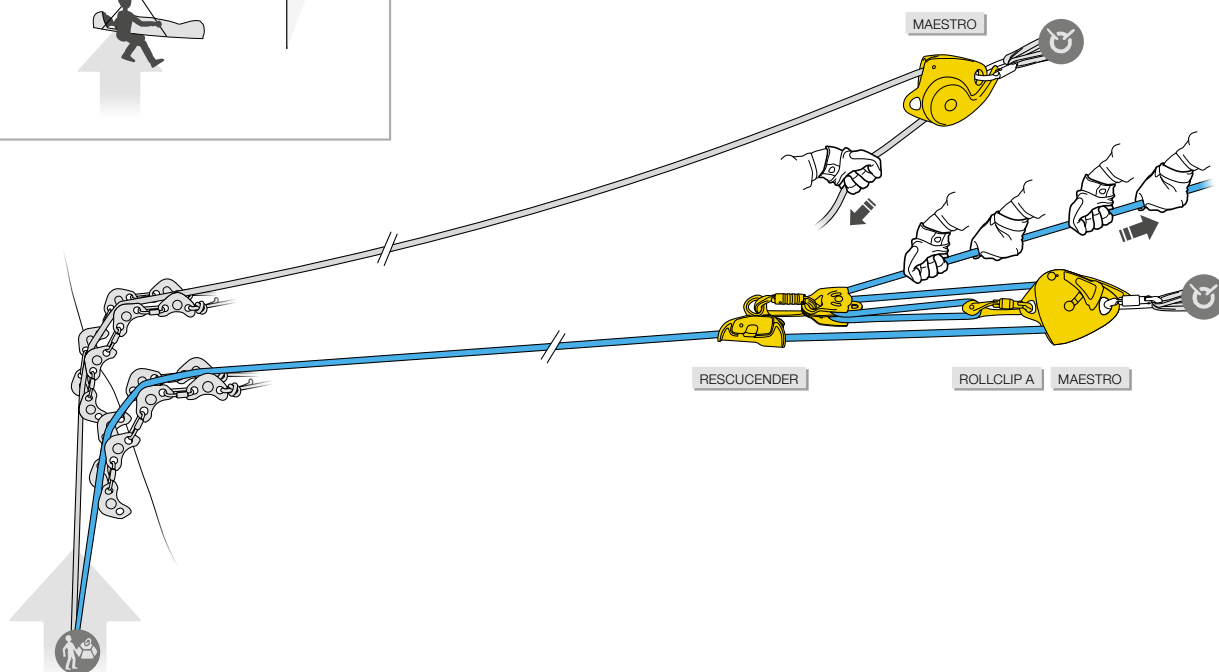




## Upward evacuation with a haul line and a belay line

The haul line supports the entire load.

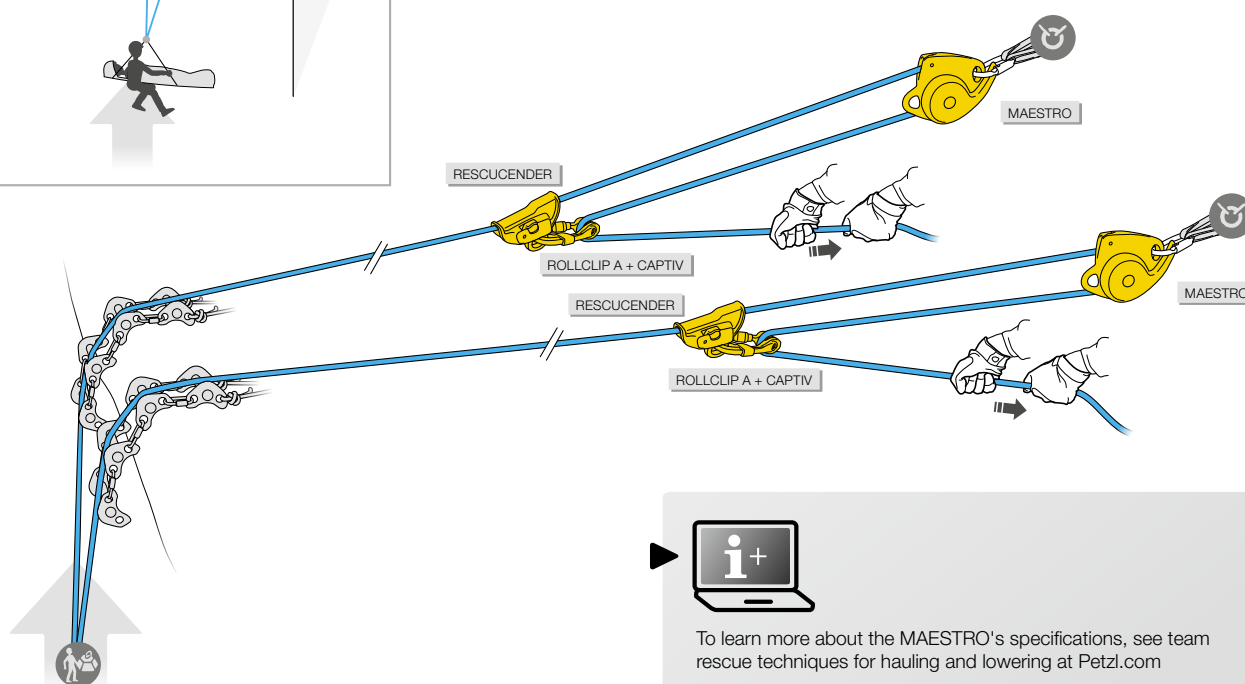
No slack is allowed in the belay rope, so that the load locks instantly in case of haul line failure.



## Upward evacuation with two haul lines

Each rope supports half the load

The MAESTRO's excellent pulley efficiency allows the operation to be done using simple haul systems (3:1).



To learn more about the MAESTRO's specifications, see team rescue techniques for hauling and lowering at [Petzl.com](https://www.petzl.com)

If ski lift equipment fails, the person in charge must evacuate passengers according to the evacuation plan.

This evacuation must be done within a predefined time frame, and is generally conducted by the operations staff.

#### Technical specifics:

- accessing the passengers is done by moving along the cable, from the towers
- these operations are managed simultaneously by multiple autonomous teams, generally composed of:
  - a person suspended on the cable who evacuates passengers and whose movements are protected by a team member on the tower
  - a person on the ground who receives passengers and guides the movement of the team member on the cable
- the success of these operations hinges largely on the instruction, training and practice of the operations staff (at least once a year)



NEW  
2018

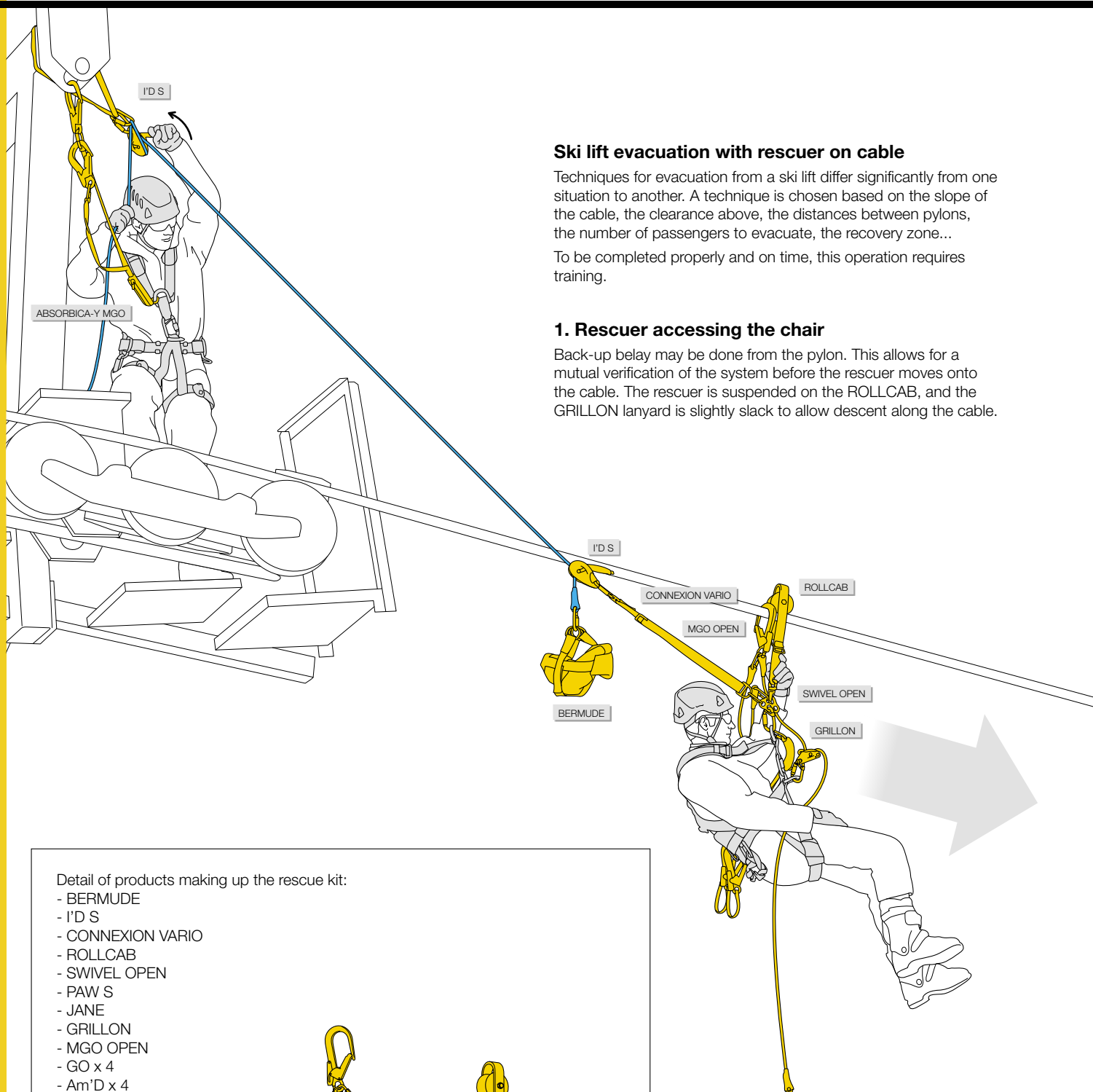


#### AVAO BOD FAST

The AVAO BOD FAST fall arrest, work positioning and suspension harness is designed for greater comfort in all situations. Wide, semi-rigid waistbelt and leg loops give excellent support. The lightweight, breathable construction maximizes air flow. The shoulder straps have a system for stowing the fall arrest lanyard connectors and keeping them within reach.







### Ski lift evacuation with rescuer on cable

Techniques for evacuation from a ski lift differ significantly from one situation to another. A technique is chosen based on the slope of the cable, the clearance above, the distances between pylons, the number of passengers to evacuate, the recovery zone...

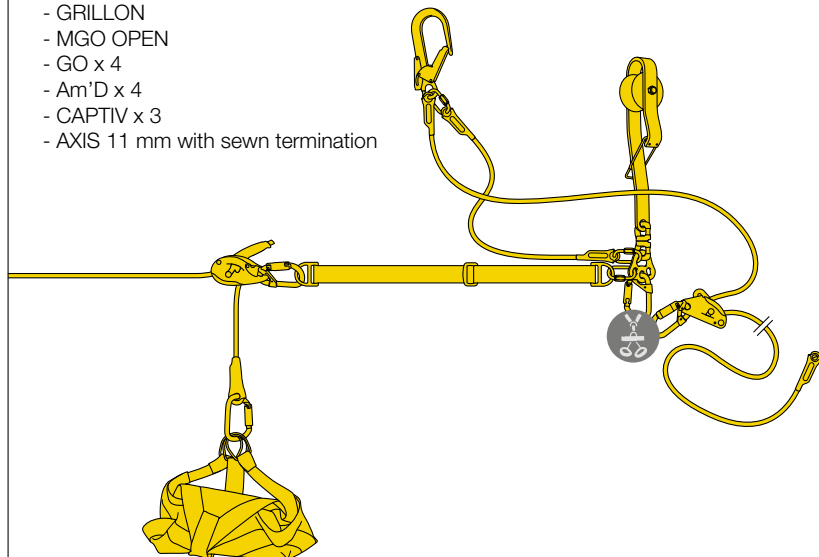
To be completed properly and on time, this operation requires training.

#### 1. Rescuer accessing the chair

Back-up belay may be done from the pylon. This allows for a mutual verification of the system before the rescuer moves onto the cable. The rescuer is suspended on the ROLLCAB, and the GRILLON lanyard is slightly slack to allow descent along the cable.

Detail of products making up the rescue kit:

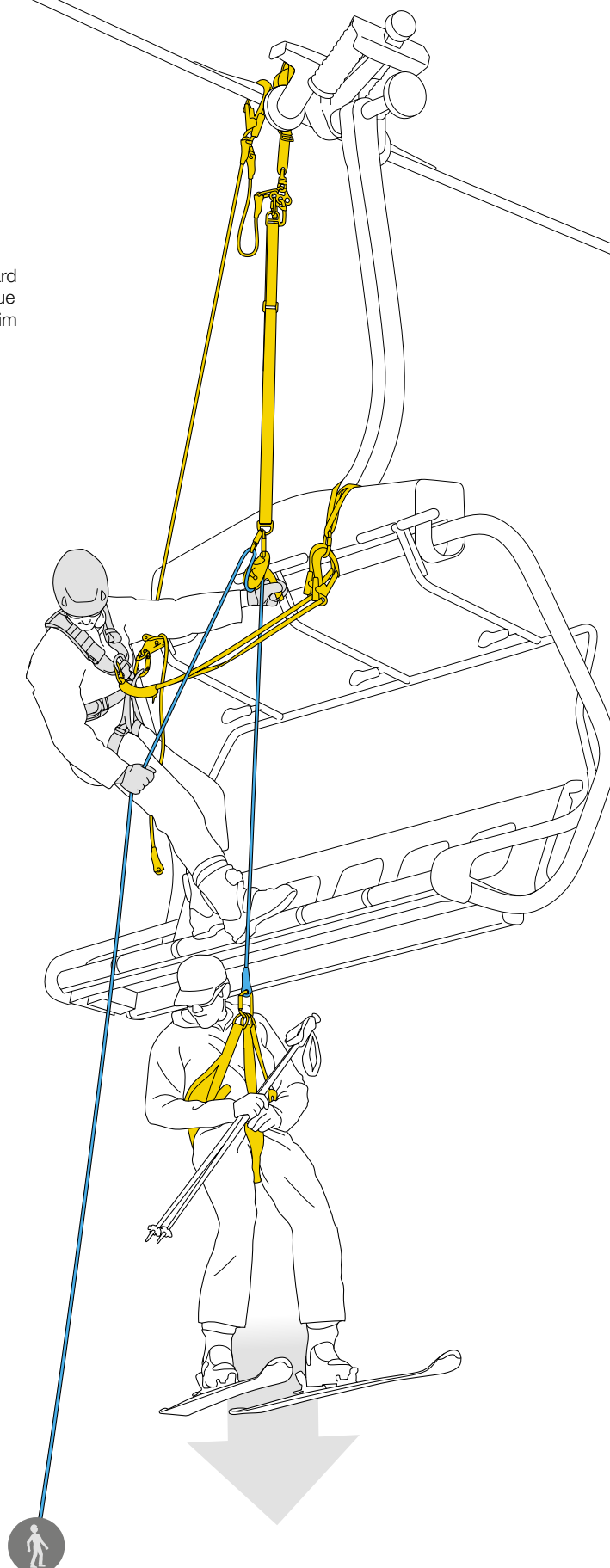
- BERMUDE
- I'D S
- CONNEXION VARIO
- ROLLCAB
- SWIVEL OPEN
- PAW S
- JANE
- GRILLON
- MGO OPEN
- GO x 4
- Am'D x 4
- CAPTIV x 3
- AXIS 11 mm with sewn termination





## 2. Evacuating the passenger

The rescuer descends on the GRILLON lanyard to the chair. S/he installs the BERMUDE rescue triangle on the victim, then evacuates the victim with an I'D S descender.





Paint job for the cranes in the merchant harbor of Valencia, Spain. © Petzl / vuedici.org / Vertice Vertical™

To give each user the best possible fit, Petzl harnesses are adjustable at the waist, shoulders and leg loops. They are equipped with different types of buckles:



#### Automatic buckles

Automatic buckles open and close simply and quickly, even when wearing gloves, without loss of adjustment.



#### Self-locking buckles

These buckles do not require re-threading to be locked: they adjust easily in seconds.



## General purpose harnesses

### Fall arrest harnesses

Fall arrest harnesses with a simple, lightweight design.



NEWTON



NEWTON EASYFIT



NEWTON EASYFIT HI-VIZ

### Fall arrest and work positioning harnesses

Fall arrest and work positioning harnesses that are comfortable and easily donned.



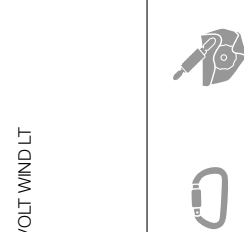
VOLT



VOLT LT



VOLT WIND



VOLT WIND LT

### Harnesses for fall arrest, work positioning and suspension

Versatile and very comfortable harnesses for fall arrest, work positioning and suspension.



NEW 2018

AVAO BOD / AVAO BOD FAST European version



NEW 2018

AVAO SIT / AVAO SIT FAST



NEW 2018

TOP



AVAO BOD / AVAO BOD FAST International version

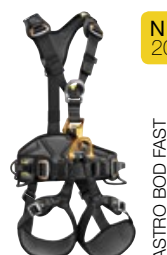
## Specialized harnesses

### Rope access harnesses

Very comfortable harnesses, with integrated ventral rope clamp to facilitate ascending a rope.



AVAO BOD CROLL FAST International version



NEW 2018

ASTRO BOD FAST



NEW 2018

ASTRO SIT FAST



NEW 2018

TOP CROLL S



NEW 2018

TOP CROLL L

### Tree care harnesses

Very comfortable harnesses, with attachment bridge for greater freedom of movement in the trees.



SEQUOIA SRT



SEQUOIA

### Rescue harnesses

Lightweight harnesses suitable for various rescue environments.



FALCON



FALCON ASCENT



FALCON MOUNTAIN

### Litter and evacuation triangles

Equipment designed for rope rescue (confined space, ski lifts...).



NEST / STEF



PITAGOR



BERMUDE

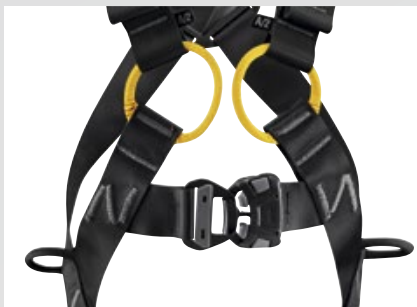


These harnesses are designed specifically for fall arrest. In particular, they allow for the attachment of ABSORBICA energy-absorbing lanyards or an ASAP mobile fall arrester.

## • Comfort for all work phases

NEWTON harnesses are designed to not interfere with the worker's movements. The anatomical and lightweight design is close-fitting, while giving optimal freedom of movement.

## • Ease of use



### Harness is easy to open and close

The sternal FAST automatic buckle allows the harness to be opened and closed simply and quickly.

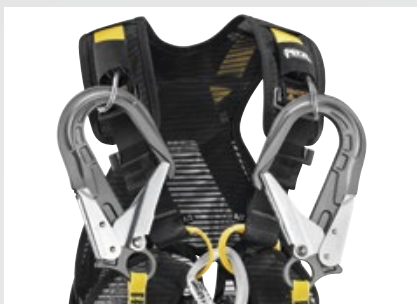


### Immediate access to tools

The equipment loops simplify tool organization and the keepers allow a TOOLBAG pouch to be added.

## • Available in international versions

The NEWTON harnesses that are certified to all North American, European and Russian standards have additional features.



### Stowage for connectors and lanyards

The harnesses have a 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.



### Easy harness inspection

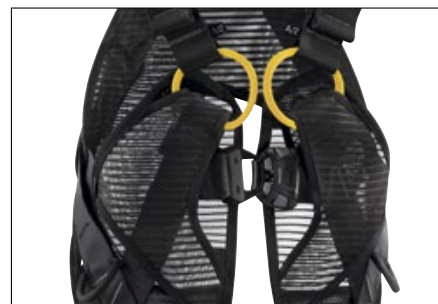
The sternal and dorsal attachment points are equipped with fall indicators: a red strap appears after a fall to indicate that the harness must be retired.

## • Great simplicity



NEWTON harnesses have color-coded straps (yellow/black) that allow rapid identification of the upper and lower parts of the harness before donning.

## • Quick donning



The NEWTON EASYFIT harness is quick-donning, thanks to a vest that helps keep its shape. It is equipped with FAST automatic buckles on the leg loops, allowing the harness to be easily donned with both feet on the ground.

## • For high visibility



The NEWTON EASYFIT HI-VIZ harness has a fluorescent-colored vest with reflective strips, making the worker highly visible. It makes the worker more visible on a worksite, road or industrial site regardless of the lighting conditions.





## NEWTON European version

### Fall arrest harness

The NEWTON fall arrest harness is comfortable for work and easy to use. It is certified to European and Russian standards.



## NEWTON International version

### Fall arrest harness

The NEWTON fall arrest harness is comfortable for work and easy to use. It offers ergonomic stowage of MGO connectors and has fall indicators. It is certified to North American, European and Russian standards.



## NEWTON EASYFIT European version

### Easy-to-don fall arrest harness

The NEWTON EASYFIT fall arrest harness is easily donned thanks to its EASYFIT design: a vest ensures the harness keeps its shape and the FAST automatic buckles (sternal and leg loop) allow the harness to be donned with both feet on the ground. It is certified to European and Russian standards.



## NEWTON EASYFIT International version

### Easy-to-don fall arrest harness

The NEWTON EASYFIT fall arrest harness is easily donned thanks to its EASYFIT design: a vest ensures the harness keeps its shape and the FAST automatic buckles (sternal and leg loop) allow the harness to be donned with both feet on the ground. It offers ergonomic stowage of MGO connectors and has fall indicators. It is certified to North American, European and Russian standards.



## NEWTON EASYFIT HI-VIZ

### Fall arrest harness with high-visibility vest that is easy to don

The NEWTON EASYFIT HI-VIZ fall arrest harness has a fluorescent-colored vest with reflective strips, making the worker highly visible. It is easily donned thanks to its EASYFIT design. A vest ensures the harness keeps its shape, and the FAST automatic buckles (sternal and leg loop) allow the harness to be donned with both feet on the ground. It offers ergonomic stowage of MGO connectors and has fall indicators. It is certified to North American, European and Russian standards.



# Fall arrest and work positioning harnesses

These harnesses help provide fall protection for the worker and enable him/her to position him/herself at a work station, with a GRILLON lanyard, for example. Additionally, they are specifically designed to facilitate vertical progression on rail or cable-based fall protection systems (only VOLT and VOLT WIND harnesses).

## • Quick and easy donning



### EASYFIT design

The VOLT harnesses are quick-donning, thanks to a vest that helps them keep their shape. They have FAST automatic buckles on the waistbelt and leg loops, making the harness very easy to don with both feet on the ground.

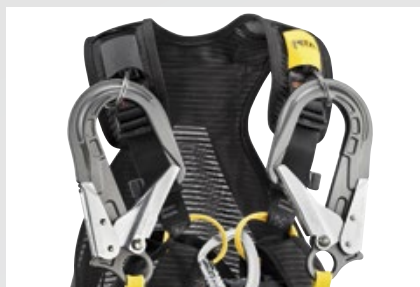
## • Optimal comfort



### Comfortable work positioning

The wide, semi-rigid waistbelt offers excellent lumbar support in work positioning situations. Additionally, its lightweight, breathable construction maximizes air flow.

## • Ease of use



### Stowage for connectors and lanyards

The harnesses have a 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.



### Easy harness inspection

The sternal and dorsal attachment points are equipped with fall indicators: a red strap appears after a fall to indicate that the harness must be retired.



### Folding side attachment points

Side attachment points can be folded down to prevent them snagging accidentally when not in use.

## • For work on towers and antennas



The VOLT and VOLT LT harnesses have a wide waistbelt with equipment loops on the back for easy organization of work tools.

## • For work inside wind turbine towers



The VOLT WIND and VOLT WIND LT harnesses have dorsal wear protectors, to reduce wear on the straps when moving about inside a wind turbine tower.





## VOLT®

### Fall arrest and work positioning harness with attachment point for vertical progression on rail or cable

The VOLT fall arrest and work positioning harness is very easily donned, thanks to its EASYFIT design: a vest ensures the harness keeps its shape, and the FAST automatic buckles on the waistbelt and leg loops allow the harness to be donned with both feet on the ground. The VOLT harness' anatomical design and wide, semi-rigid waistbelt ensure comfort throughout the workday. Its LADDER CLIMB attachment point allows for ventral attachment of the fall-arrest trolley, thus ensuring optimal comfort during progression. It is certified to European and Russian standards (also available in a model certified to European and Canadian standards; comes with OXAN connector).



## VOLT® LT

### Fall arrest and work positioning harnesses

The fall arrest and work positioning VOLT LT harness is very easily donned thanks to its EASYFIT design: a vest ensures the harness keeps its shape and the FAST automatic buckles on the waistbelt and leg loops allow the harness to be donned with both feet on the ground. The VOLT LT harness' anatomical design and wide, semi-rigid waistbelt ensure comfort throughout the workday. It is certified to U.S. and European standards.



## VOLT® WIND

### Fall arrest and work positioning harness for the wind power industry with attachment point for vertical progression on rail or cable

The fall arrest and work positioning VOLT WIND harness is very easily donned thanks to its EASYFIT design: a vest ensures the harness keeps its shape and the FAST automatic buckles on the waistbelt and leg loops allow the harness to be donned with both feet on the ground. The VOLT WIND harness' anatomical design and wide, semi-rigid waistbelt ensure comfort throughout the workday. Its LADDER CLIMB attachment point allows for ventral attachment of the fall-arrest trolley, thus ensuring optimal comfort during progression. It has wear protectors on the waistbelt and below the dorsal point to limit wear when moving about inside the wind turbine tower. It is certified to European and Russian standards (also available in a model certified to European and Canadian standards; comes with OXAN connector).



## VOLT® WIND LT

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

The VOLT WIND LT fall arrest and work positioning harness is very easily donned, thanks to its EASYFIT design: a vest ensures the harness keeps its shape, and the FAST automatic buckles on the waistbelt and leg loops allow the harness to be donned with both feet on the ground. The VOLT WIND LT harness' anatomical design and wide, semi-rigid waistbelt ensure comfort throughout the workday. It has wear protectors on the waistbelt and below the dorsal point to limit wear when moving about inside the wind turbine tower. VOLT WIND LT is certified to U.S. and European standards.

## Accessory



## Seat for VOLT® harnesses

### Seat for VOLT and VOLT LT harnesses for more comfort in suspension

The seat for VOLT harnesses installs in the two side slots of the harness, for increased comfort during prolonged suspension.



## European version

Certified to European and Russian standards, these harnesses are used for fall protection, for positioning at a work station, and especially for working comfortably in suspension.

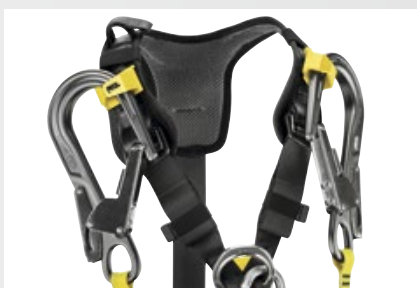
### • Comfort



#### Excellent support

Wide, semi-rigid waistbelt and leg loops give excellent support. The lightweight, breathable construction maximizes air flow.

### • Convenient adjustment



#### Stowage for connectors and lanyards

The harnesses have a stowage system for the MGO connectors on fall arrest lanyards on each shoulder strap. In case of a fall, this system releases the MGO connector and allows the absorber to be deployed.



#### Easy to adjust

The AVAO harnesses can be adjusted at the waistbelt and shoulder straps. These adjustment points are equipped with self-locking DoubleBack buckles. These do not require re-threading to be locked: the harness adjusts easily in seconds.



#### Available in easier donning version

To facilitate donning the harness with both feet on the ground or with large footwear, AVAO harnesses are also available with FAST LT automatic buckles on the leg loops. Adjusted once and for all, these buckles open and close quickly and easily: the harness can be put on without re-adjusting the buckles.

### • Optimal organization of work tools



#### Equipment loops and retainers

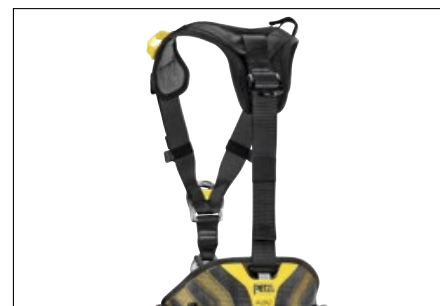
AVAO harnesses are equipped with six equipment loops on the sides and at the rear of the waistbelt. They are shaped to facilitate clipping carabiners. Each harness also has retainers designed for the CARITOOL tool holder and the TOOLBAG pouch.

### • A complete solution, with dorsal attachment point



The AVAO BOD and AVAO BOD FAST full-body harnesses are equipped with a dorsal attachment point for attaching a fall arrest system. In case of a fall on this attachment point, a shortened adjustment of the waistbelt to leg loop length means the load is taken up on the leg loops, allowing the user to remain suspended longer while awaiting rescue.

### • A lightweight and flexible solution



Combining a seat harness with a separate chest harness is a more lightweight solution, if the user does not need a dorsal attachment point. It is also a solution for hard-to-fit body types, as it allows combining different seat and chest harness sizes.





NEW  
2018



## AVAO® BOD / AVAO® BOD FAST European version

### Comfortable harness for fall arrest, work positioning and suspension

The AVAO BOD fall arrest, work positioning and suspension harness is designed for greater comfort in all situations. Wide, semi-rigid waistbelt and leg loops give excellent support. The lightweight, breathable construction maximizes air flow. The shoulder straps have a system for stowing the fall arrest lanyard connectors and keeping them within reach. The DoubleBack self-locking buckles at the rear of the harness, between the waistbelt and the leg loops, allow for a shorter adjustment when the dorsal attachment point is used. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITool tool holders and TOOLBAG tool-holder pouches. The harness is fastened by a SCREW-LOCK locking carabiner and is certified to European and Russian standards. AVAO BOD features leg loops with DoubleBack self-locking buckles; AVAO BOD FAST has leg loops with FAST automatic buckles.

NEW  
2018



## TOP

### Chest harness for seat harness

The TOP chest harness transforms AVAO SIT, AVAO SIT FAST, FALCON, FALCON MOUNTAIN and SEQUOIA SRT seat harnesses into fall arrest harnesses. The foam shoulder straps are widely spaced to reduce neck chafing. When the waistbelt is loaded, they help distribute the load over the shoulders. They also have a system for stowing the fall-arrest lanyard connectors and keeping them within reach.

NEW  
2018



## AVAO® SIT / AVAO® SIT FAST

### Comfortable seat harness for fall arrest, work positioning and suspension

The AVAO SIT work positioning and suspension seat harness is designed for greater comfort in all situations. Wide, semi-rigid waistbelt and leg loops give excellent support. Its lightweight, breathable construction maximizes air flow. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITool tool holders and TOOLBAG tool-holder pouches. This seat harness is designed to be converted into a fall arrest harness when combined with a TOP chest harness, or into a rope access harness when combined with a TOP CROLL S or L chest harness. The AVAO SIT has leg loops with DoubleBack self-locking buckles; AVAO SIT FAST leg loops have FAST automatic buckles.

## International version

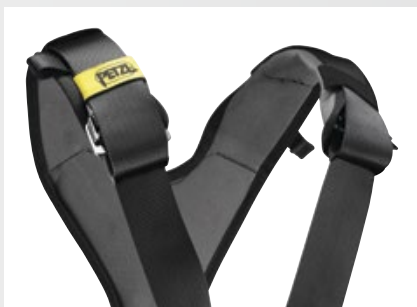
Certified to North American and European standards, these harnesses are used for fall protection, for positioning at a work station, and especially for working comfortably in suspension.

### • Comfort



#### Semi-rigid, wide waistbelt and leg loops

The waistbelt and the leg loops are semi-rigid and wide in order to limit pressure points and ensure effective support. These two zones are sculpted and lined with breathable foam padding for a more comfortable feel and good ventilation. This construction also facilitates harness donning.



#### Foam-padded shoulder straps

The foam-padded shoulder straps are widely spaced to reduce neck chafing.

### • Ergonomics



#### Easy to adjust

The AVAO harnesses can be adjusted at the waistbelt and shoulder straps. These adjustment points are equipped with self-locking DoubleBack buckles. These do not require re-threading to be locked: the harness adjusts easily in seconds.



#### Optimal organization of work tools

AVAO harnesses are equipped with six equipment loops on the sides and at the rear of the waistbelt. They are shaped to facilitate clipping carabiners. Each harness also has retainers designed for the CARITOOL tool holder and the TOOLBAG pouch.



#### Available in easier donning version

To facilitate donning the harness with the feet on the ground or with large footwear, the AVAO BOD FAST harness is available with FAST automatic buckles on the leg loops. Adjusted once and for all, these buckles open and close quickly and easily: the harness can be put on without re-adjusting the buckles.



## AVAO® BOD / AVAO® BOD FAST International version

### Comfortable harness for fall arrest, work positioning and suspension

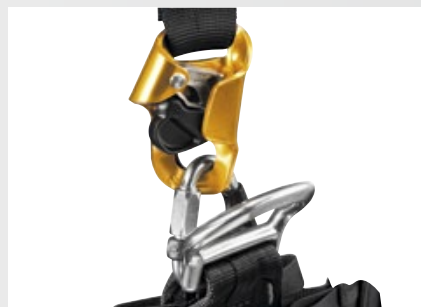
The AVAO BOD fall arrest, work positioning and suspension harness is designed for greater comfort in all situations. The X-shaped dorsal construction wraps to reduce pressure points during prolonged suspension. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITOOL tool holders and TOOLBAG tool-holder pouches. The AVAO BOD harness has a specific architecture that allows the user to hang from the dorsal attachment point for a longer time in case of a fall. The harness has an integrated fall indicator on the dorsal attachment point and is fastened with a TRIACT-LOCK automatic locking carabiner. It is certified to North American, European and Russian standards. AVAO BOD features leg loops with DoubleBack self-locking buckles; AVAO BOD FAST has leg loops with FAST automatic buckles.



## International version

Certified to North American and European standards, these harnesses are designed for rope access workers: they are used for fall protection, for positioning at a work station, but especially to facilitate rope ascents and for working comfortably in suspension.

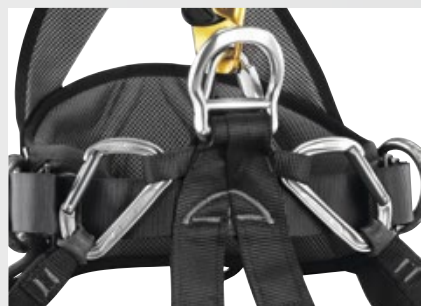
### • Designed for ascending a rope



#### Integrated ventral rope clamp

The shoulder-strap/waistbelt connector is equipped with a captive bar to prevent it rotating.

### • Comfort



#### Attachment points for connecting a seat harness

Two attachment points allow a PODIUM seat to be attached, for greater comfort during prolonged suspension.



#### Semi-rigid, wide waistbelt and leg loops

The waistbelt and the leg loops are semi-rigid and wide in order to limit pressure points and ensure effective support. These two zones are sculpted and lined with breathable foam padding for a more comfortable feel and good ventilation. This construction also facilitates harness donning.

### • Ergonomics



#### Optimal organization of work tools

The AVAO BOD CROLL FAST harness is equipped with six equipment loops on the sides and at the rear of the waistbelt. They are shaped to facilitate clipping carabiners. The harness also has retainers designed for the CARITool tool holder and the TOOLBAG pouch.



#### Easy to put on

To facilitate donning the harness with the feet on the ground or with large footwear, the AVAO BOD CROLL FAST harness is equipped with FAST automatic buckles on the leg loops. Adjusted once and for all, these buckles open and close quickly and easily: the harness can be put on without re-adjusting the buckles.



## AVAO® BOD CROLL FAST International version

### Comfortable harness for rope access

With an integrated CROLL ventral rope clamp, the AVAO BOD CROLL FAST harness is designed for greater comfort during rope ascents. The X-shaped dorsal construction wraps to reduce pressure points during prolonged suspension. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITool tool holders and TOOLBAG tool-holder pouches. The AVAO BOD CROLL FAST harness has a specific construction that allows the user to hang from the dorsal attachment point for a longer time in case of a fall. It has a fall indicator on the dorsal attachment point and is certified to North American and European standards.

NEW  
2018



## PODIUM

### Seat designed for prolonged suspension

Find a description of the PODIUM seat on page 57.



## European version

Certified to European and Russian standards, these harnesses are designed for rope access workers: they are used for fall protection, for positioning at the work station, but especially to facilitate rope ascents and for working comfortably in suspension.

### • Optimal integration of equipment



#### Gated ventral attachment point can be opened for optimal integration of equipment:

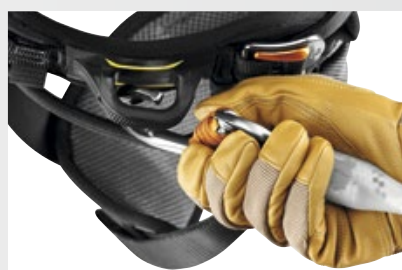
- connection of PROGRESS lanyards directly on the attachment point without need for a connector
- CROLL ventral rope clamp is connected on the ventral point for greater efficiency on rope ascents
- connection of the PODIUM seat on the attachment point allows direct connection to the descender, while guaranteeing mobility at the ventral attachment point

### • Ultra-comfortable design



#### Excellent level of comfort during suspension

The waistbelt and the leg loops of ASTRO harnesses are semi-rigid and wide in order to limit pressure points and ensure effective support. These two zones are sculpted and lined with breathable foam padding for a more comfortable feel and good ventilation. This construction also facilitates harness donning.



#### Side attachment points

Textile side attachment points with plastic insert ensure easy connection of equipment with limited weight and bulk.

### • Convenient adjustment



#### Easy to put on

To facilitate donning the harness with both feet on the ground or with large footwear, ASTRO harnesses are equipped with FAST LT automatic buckles on the leg loops. Adjusted once and for all, these buckles open and close quickly and easily: the harness can be put on without re-adjusting the buckles.



#### Easy to adjust

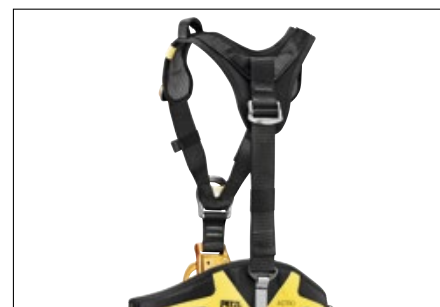
The waistbelt and shoulder straps are equipped with self-locking DoubleBack PLUS buckles for quick and easy adjustment.

### • A complete solution, with dorsal attachment point



The ASTRO BOD FAST full-body harness is equipped with a dorsal attachment point for attaching a fall arrest system. In case of a fall on this attachment point, a shortened adjustment of the waistbelt to leg loop length means the load is taken up on the leg loops, allowing the user to remain suspended longer while awaiting rescue.

### • A lightweight and flexible solution



Combining a seat harness with a separate chest harness is a more lightweight solution, if the user does not need a dorsal attachment point. It is also a solution for hard-to-fit body types, as it allows combining different seat and chest harness sizes.





NEW  
2018



## ASTRO® BOD FAST

### Ultra-comfortable rope access harness

With an integrated CROLL L ventral rope clamp, the ASTRO BOD FAST harness is designed for greater efficiency and comfort during rope ascents. The gated ventral attachment point allows optimal integration of equipment (rope clamp, lanyard, seat...). Wide, semi-rigid waistbelt and leg loops give excellent support. They are contoured and lined with breathable foam padding for comfort when suspended. The DoubleBack self-locking buckles at the rear of the harness, between the waistbelt and the leg loops, allow for a shorter adjustment when the dorsal attachment point is used. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITool tool holders and TOOLBAG tool-holder pouches. It is certified to European and Russian standards.

NEW  
2018



## TOP CROLL® S

### Chest harness for seat harness, with integrated CROLL S ventral rope clamp

The TOP CROLL S integrates a CROLL S ventral rope clamp to transform ASTRO SIT FAST, AVAO SIT, AVAO SIT FAST, FALCON and FALCON ASCENT harnesses into rope access harnesses. The textile sternal attachment point allows optimal weight and bulk reduction. The foam shoulder straps are widely spaced to reduce neck chafing. When the waistbelt is loaded, they help distribute the load over the shoulders. The rear connection, on each side of the waistbelt, offers excellent stability.

NEW  
2018



## TOP CROLL® L

### Chest harness for seat harness, with integrated CROLL L ventral rope clamp

The TOP CROLL L integrates a CROLL L ventral rope clamp to transform ASTRO SIT FAST, AVAO SIT, AVAO SIT FAST, FALCON, FALCON ASCENT and SEQUOIA SRT harnesses into rope access harnesses. The foam shoulder straps are widely spaced to reduce neck chafing. When the waistbelt is loaded, they help distribute the load over the shoulders.

NEW  
2018



## ASTRO® SIT FAST

### Ultra-comfortable rope access seat harness

The ASTRO SIT FAST rope access seat harness features a gated ventral attachment point that allows optimal integration of equipment (rope clamp, lanyard, seat...). Wide, semi-rigid waistbelt and leg loops give excellent support. They are contoured and lined with breathable foam padding for comfort when suspended. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITool tool holders and TOOLBAG tool-holder pouches. This seat harness is designed to be converted into a full-body harness, when combined with a TOP CROLL S or L chest harness.

## Accessory

NEW  
2018



## PODIUM

### Seat designed for prolonged suspension

The PODIUM provides optimal comfort during prolonged suspension. The wide sitting position offers excellent stability. Rigid sides prevent the webbing straps from cutting into the thighs. The easy-to-use seat has two equipment loops and a rear hook, making it easier to store in order to facilitate movement. It connects to ASTRO BOD FAST and ASTRO SIT FAST harnesses with two shackles (reference C087AA00).

These harnesses are designed for arborists: they ensure great mobility in the tree and optimally distribute the load between the waistbelt and the leg loops. They also provide excellent lumbar support in the many work phases where the arborist has his/her weight on the harness.

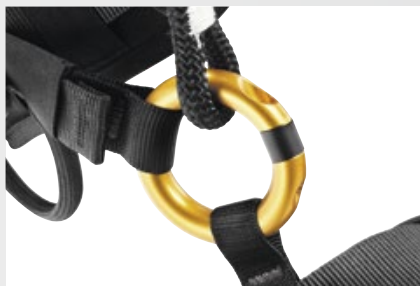
### • Comfort



#### Semi-rigid and extra-wide waistbelt

The waistbelt design ensures excellent support for the user. It is also sculpted and lined with foam padding for improved comfort when suspended.

### • Ergonomics



#### Gated rings

The gated rings allow changing the attachment bridge (adjustable or fixed) and the installation of accessories, like RING attachment rings or SWIVELS, directly on the attachment bridge.

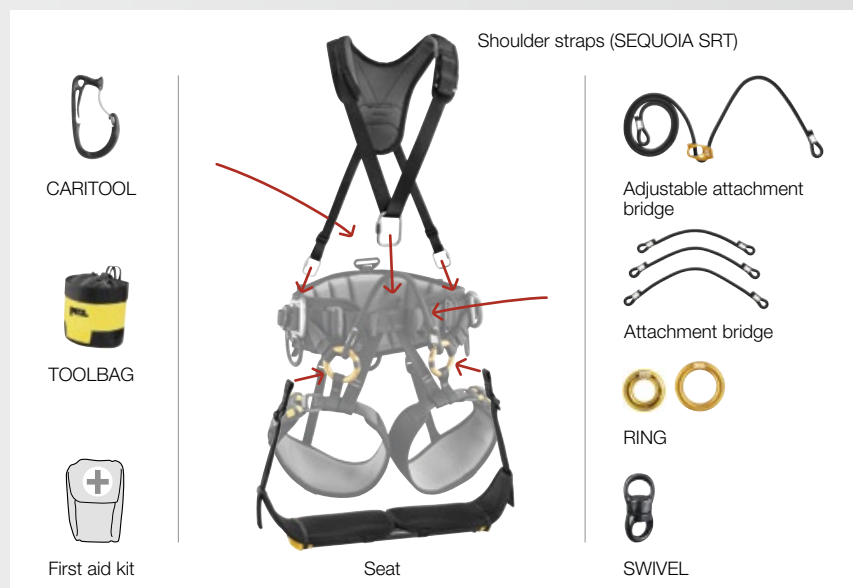


#### Easier carrying and organization of tools

The waistbelt is designed to facilitate the carrying and organization of work tools. It has seven pre-shaped equipment loops with protective sheath. Slots can accept the CARITOOL tool holder, a chainsaw-holder carabiner or a hand saw. A first aid kit can also be attached to the waistbelt.

### • Accessories

Accessories for the SEQUOIA line of harnesses allow each user to adapt the equipment to his/her needs.



### • For single rope ascent techniques



The SEQUOIA SRT harness has a ventral attachment point and a rear buckle, to install a CROLL rope clamp with SECUR shoulder straps, a chest harness with fall arrest attachment point, or comfort straps for the shoulders.

### • For doubled rope ascent techniques



The SEQUOIA harness waistbelt is equipped with a FAST automatic buckle for quick and simple opening and closing, without loss of adjustment, even while wearing gloves.





## SEQUOIA SRT

### Tree care seat harness for single rope ascent techniques

The SEQUOIA SRT is a tree care seat harness for ascents on a single rope. It has a ventral attachment point and a rear buckle for installing a CROLL ventral rope clamp with SECUR shoulder straps. The SEQUOIA SRT is designed for the arborist's comfort. The extra-wide, semi-rigid waistbelt and leg loops give excellent support. The attachment bridge is linked to two gated rings, allowing its length to be adjusted and accessories to be installed directly on the bridge. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITOOL tool holders.



## SEQUOIA

### Tree care seat harness for doubled rope ascent techniques

The SEQUOIA is a tree care seat harness for doubled rope ascent techniques. It is designed for the arborist's comfort. The SEQUOIA harness waistbelt is equipped with a FAST automatic buckle for quick and simple opening and closing, without loss of adjustment, even while wearing gloves. The extra-wide, semi-rigid waistbelt and leg loops give excellent support. The attachment bridge is linked to two gated rings, allowing its length to be adjusted and accessories to be installed directly on the bridge. The harness also facilitates the carrying and organizing of work tools, with multiple equipment loops and retainers for attaching CARITOOL tool holders.

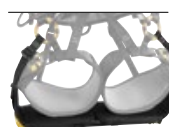


## Accessories



### Shoulder straps (only for SEQUOIA SRT)

Shoulder straps for SEQUOIA SRT seat harness designed for taking the load from the waistbelt and redistributing it to the shoulders for improved comfort. These straps connect to the ventral attachment point of the harness and to the two slots at the rear of the waistbelt.



### Seat

Wide seat for a comfortable working position during suspension. Adjustable width to reduce bulk and facilitate movement within the tree. Connects to the two gated rings on the SEQUOIA and SEQUOIA SRT arborist seat harnesses.



### Adjustable attachment bridge

Adjustable attachment bridge for SEQUOIA and SEQUOIA SRT harnesses allows quick and precise adjustment of the position of progression tools installed on the bridge.



### Attachment bridge

Attachment bridge for connection to the two gated rings of the SEQUOIA and SEQUOIA SRT arborist seat harnesses, to improve lateral mobility.



### RING

The RING connection ring can be used to create multiple anchors or be installed directly onto the SEQUOIA and SEQUOIA SRT harnesses' attachment bridges to improve the arborist's lateral mobility.



These harnesses, designed for rescuers, are lightweight for increased mobility and rapid movement during operations. The choice of several models allows adaptation to the different types of environments that can be encountered.

- **Comfortable, ultra-lightweight design**



- Thin, lightweight construction**

The semi-rigid, slim waistbelt and leg loops on FALCON harnesses ensure optimal comfort/weight ratio.



- Compact, lightweight side attachment points**

The textile side attachment points are designed for occasional use and limit bulk and weight.

- **Ergonomics**



- Easy adjustment**

The waistbelt and leg loops are equipped with two self-locking DoubleBack buckles for quick and easy adjustment.



- Movable leg loops**

The foam on the leg loops of the FALCON harness can be adjusted for perfect positioning.

- **Optimal organization of equipment and work tools**



- Equipment loops and retainers**

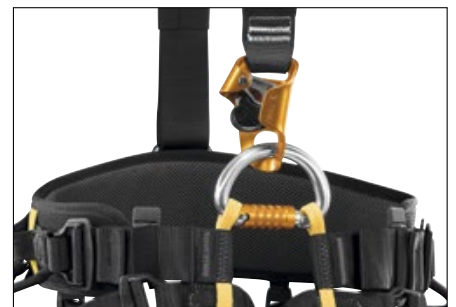
FALCON harnesses are equipped with equipment loops on the sides and at the rear of the waistbelt. Each harness also has retainers designed for the CARITOOL tool holder and the TOOLBAG pouch.

- **For work in suspension**



The metal ventral attachment point on the FALCON harness distributes the load between the waistbelt and the leg loops during suspension.

- **For efficiency when ascending a rope**



The two-part ventral attachment point of the FALCON ASCENT harness increases the efficiency of rope ascents when using a CROLL ventral rope clamp.

- **For operations using climbing techniques**



The textile bridge construction of the FALCON MOUNTAIN harness favors progression with climbing techniques and makes for comfortable walking.





## FALCON

### Lightweight seat harness for suspended rescue

FALCON is a lightweight seat harness with a metal ventral attachment point that distributes the load between the waistbelt and the leg loops during suspended rescue. It has a waistbelt and leg loops that are semi-rigid for comfort and equipped with self-locking DoubleBack buckles for quick and easy adjustment. The rear buckle allows a TOP or TOP CROLL chest harness, or a CROLL rope clamp to be attached.



## FALCON ASCENT

### Lightweight seat harness for rescue operations involving rope ascent

FALCON ASCENT is a lightweight seat harness featuring a two-part ventral attachment point that fastens with an OMNI carabiner. This attachment point makes it more efficient during rescue operations involving rope ascent. The FALCON ASCENT harness features a semi-rigid waistbelt and leg loops for maximum comfort and self-locking DoubleBack buckles for quick and easy adjustment. The rear buckle allows a TOP CROLL chest harness or a CROLL rope clamp to be attached.



## FALCON MOUNTAIN

### Very lightweight seat harness for rescue operations involving technical climbing

FALCON MOUNTAIN is a very lightweight seat harness for rescue operations involving technical climbing. It features a bridge construction that favors progression with climbing techniques and makes it comfortable when walking. It has a waistbelt and leg loops that are semi-rigid for comfort and equipped with self-locking DoubleBack buckles for quick and easy adjustment. The rear buckle allows a TOP chest harness to be attached.



## Accessory



## CHEST'AIR

### Chest harness for seat harnesses

The CHEST'AIR chest harness transforms FALCON, FALCON MOUNTAIN, AVAO SIT and SEQUOIA SRT seat harnesses into fall arrest harnesses. Connects simply to the harness ventral attachment point for rapid installation. It adapts easily to all body types with its DoubleBack self-locking buckles on the shoulder straps and ventral strap.



## Rescue litter



### NEST

#### Litter for confined spaces

The NEST litter was developed in partnership with the French national caving rescue organization. It allows a victim to be transported horizontally, vertically or at an angle. It is therefore suitable for all technical rope rescue, particularly in confined spaces.

### STEF

#### Tilting device for NEST litter

The STEF device joins the three connection points of the NEST litter and allows it to be easily tilted according to the terrain.



#### Accessory

Bag for NEST litter

## Evacuation triangles

Evacuation triangles are mainly used for rescue on ski lifts and by firefighters. They allow unequipped people to be evacuated in minimal time.



### PITAGOR

#### Evacuation triangle with shoulder straps

The PITAGOR is an evacuation triangle with shoulder straps that are easily donned and adjusted thanks to the DoubleBack self-locking buckles.



### BERMUDE

#### Evacuation triangle without shoulder straps

The BERMUDE is an evacuation triangle without shoulder straps that is easily put on and adapts without adjustment to different sizes.





## LIFT

### Spreader for NEWTON harness

Spreader for NEWTON harness (European version) allows upright descent (for confined spaces).



## CARITool

### Harness tool holder

The CARITool tool holder mounts to the harness waistbelt slots or webbing and allows one-handed access, organization and sorting of tools. It is available in two sizes.



## TOOLBAG

### Tool pouch

The TOOLBAG tool pouch allows the user to organize his/her tools during suspended work. Cordlock allows the pouch to be closed easily during transport or when moving about. The pouch attaches easily to any type of harness. It is available in two versions: S (small) and L (large).









## RING OPEN

### Multidirectional gated ring

See page 98 for details on the RING OPEN gated ring.



## General purpose harnesses

			European versions		International versions	
			References	Certifications	References	Certifications
Fall arrest harness						
NEWTON		NEWTON	C73AAA 1	CE EN 361 EAC	C73AAA 1U	CE EN 361 EAC ANSI Z359.11 CSA Z259.10
			C73AAA 2		C73AAA 2U	
		NEWTON EASYFIT	C73JFA 0		C73JFA 0U	
			C73JFA 1		C73JFA 1U C73JFN 1U (1)	
			C73JFA 2		C73JFA 2U C73JFN 2U (1)	
		NEWTON EASYFIT HI-VIZ	-		-	
					C73JFV 2U	
Fall arrest and work positioning harnesses						
VOLT		VOLT	C72AFA 0	CE EN 361 EN 358 EAC	C72AFA 0C	CE EN 361 EN 358 CSA Z259.10
			C72AFA 1		C72AFA 1C	
			C72AFA 2		C72AFA 2C	
		VOLT WIND	C72WFA 0		C72WFA 0C	
			C72WFA 1		C72WFA 1C	
			C72WFA 2		C72WFA 2C	
		VOLT LT	-	-	C72AFA 0U	CE EN 361 EN 358 ANSI Z359.11
					C72AFA 1U	
					C72AFA 2U	
		VOLT WIND LT	-	-	C72WFA 0U	
					C72WFA 1U	
					C72WFA 2U	
Seat for VOLT harnesses		C72100	CE EN 358 (3)	-	-	
Harnesses for fall arrest, work positioning and suspension						
NEW 2018 AVAO BOD European version		AVAO BOD	C071AA00	CE EN 361 EN 358 EN 813 EAC	-	-
			C071AA01			
			C071AA02			
		AVAO BOD FAST	C071BA00 C071BA03 (1)			
			C071BA01 C071BA04 (1)			
			C071BA02 C071BA05 (1)			
NEW 2018 TOP			C081AA00 C081AA01 (1)	CE EN 361 (2) EAC	-	-
NEW 2018 AVAO SIT		AVAO SIT	C079AA00 C079AA02 (1)	CE EN 358 EN 813 EAC	-	-
			C079AA01 C079AA03 (1)			
			C079BA00			
		AVAO SIT FAST	C079BA01			
			C079BA02			
AVAO BOD international version		AVAO BOD	-	-	C71AAA 0U	CE EN 361 EN 358 EN 813 ANSI Z359.11 CSA Z259.10 NFPA 1983 Class III
					C71AAA 1U	
					C71AAA 2U	
					C71AFA 0U C71AFN 0U (1)	
		AVAO BOD FAST	-		C71AFA 1U C71AFN 1U (1)	
					C71AFA 2U C71AFN 2U (1)	












	Attachment points				Sizes				Weight
	dorsal	sternal	ventral	side	Size	Waistbelt	Leg loops	Height	
	●	●	-	-	1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1050 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1080 g
	●	●	-	-	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1240 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1300 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1350 g
	●	●	-	-	1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1360 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1410 g
	●	●	-	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1955 g (4)
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	2000 g (4)
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	2080 g (4)
	●	●	-	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	2055 g (4)
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	2100 g (4)
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	2180 g (4)
	●	●	-	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1850 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1895 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	2000 g
	●	●	-	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1965 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	2010 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	2115 g
	-	-	-	-		-	-	-	1045 g
	●	●	●	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	2045 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	2090 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	2170 g
	●	●	●	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	2000 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	2045 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	2125 g
	-	●	-	-	-	-	-	160 - 200 cm	660 g
	-	-	●	●	1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1175 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1190 g
	-	-	●	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1115 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1130 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1145 g
	●	●	●	●	0	60 - 90 cm	45 - 65 cm	160 - 180 cm	2055 g
					1	70 - 110 cm	45 - 65 cm	165 - 185 cm	2100 g
					2	80 - 130 cm	60 - 75 cm	175 - 200 cm	2180 g
	●	●	●	●	0	60 - 90 cm	45 - 65 cm	160 - 180 cm	2145 g
					1	70 - 110 cm	45 - 65 cm	165 - 185 cm	2190 g
					2	80 - 130 cm	60 - 75 cm	175 - 200 cm	2270 g

(1) black harness, (2) with AVAO SIT harness, (3) with VOLT harness, (4) not including weight of OXAN connector for CSA certified versions.



## Specialized harnesses

		European versions		International versions			
		References	Certifications	References	Certifications		
Rope access harnesses							
AVAO BOD CROLL FAST international version		-	-	C71CFA 0U C71CFN 0U (1)	CE EN 361 EN 358 EN 813 EN 12841 type B ANSI Z359.11 CSA Z259.10		
				C71CFA 1U C71CFN 1U (1)			
				C71CFA 2U C71CFN 2U (1)			
<b>NEW 2018</b> ASTRO BOD FAST		C083AA00 C083AA01 C083AA02	CE EN 361 EN 358 EN 813 EN 12841 type B EAC	-	-		
<b>NEW 2018</b> TOP CROLL S		C081BA00	CE EN 361 (2) EN 12841 type B EAC	-	-		
<b>NEW 2018</b> TOP CROLL L		C081CA00	CE EN 361 (3) EN 12841 type B EAC	-	-		
<b>NEW 2018</b> ASTRO SIT FAST		C085AA00	CE EN 358 EN 813 EAC	-	-		
		C085AA01					
		C085AA02					
PODIUM <b>NEW 2018</b>		S071AA00	-	-	-		
Tree care harnesses							
SEQUOIA		SEQUOIA SRT	C69BFA 1 C69BFA 2	-	-		
		SEQUOIA	C69AFA 1 C69AFA 2			CE EN 358 EN 813	
		Shoulder straps				C69B	-
Seat		S69	-	-	-		
Adjustable attachment bridge		C69R	CE EN 358, EAC	-	-		
Attachment bridge	25 cm	C69F 25	-	-	-		
	30 cm	C69F 30					
	35 cm	C69F 35					
Rescue harnesses							
FALCON		FALCON	C038AA00 C038AA01 C038AA03 (1) C038AA02 C038AA04 (1)	-	-		
			FALCON ASCENT			C038BA00 C038BA01	CE EN 358 EN 813 EAC
			FALCON MOUNTAIN			C038CA00 C038CA01	CE EN 358, EN 813 EN 12277 type C EAC
		CHEST'AIR		C98A	CE EN 361 (4) EN 12277 type D	-	-
		Litter and evacuation triangles					
		NEST		S61	-	-	-
STEF		S62	-	-	-		
Bag for NEST litter		S59	-	-	-		
PITAGOR		C80 BR	EN 1497, EN 1498	-	-		
BERMUDE		C80	EN 1498	-	-		
Accessories							
LIFT		L54	CE	-	-		
CARITool		P42	-	-	-		
		P42 L					
TOOLBAG		S47Y S	-	-	-		
		S47Y L					
RING OPEN		P28	CE EN 362	-	-		



	Attachment points				Sizes				Weight
	dorsal	sternal	ventral	side	Size	Waistbelt	Leg loops	Height	
	●	●	●	●	0	60 - 90 cm	45 - 65 cm	160 - 180 cm	2330 g
					1	70 - 110 cm	45 - 65 cm	165 - 185 cm	2375 g
					2	80 - 130 cm	60 - 75 cm	175 - 200 cm	2455 g
	●	●	●	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1855 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1900 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1980 g
	-	●	-	-	-	-	-	160 - 200 cm	515 g
	-	●	-	-	-	-	-	160 - 200 cm	600 g
	-	-	●	●	0	65 - 80 cm	44 - 59 cm	160 - 180 cm	1025 g
					1	70 - 93 cm	47 - 62 cm	165 - 185 cm	1040 g
					2	83 - 120 cm	50 - 65 cm	175 - 200 cm	1055 g
	-	-	-	-	-	-	-	-	1060 g
	-	-	●	●	1	70 - 100 cm	50 - 65 cm	-	1530 g
					2	85 - 120 cm	60 - 75 cm	-	1590 g
	-	-	-	●	1	65 - 100 cm	50 - 65 cm	-	1390 g
					2	85 - 120 cm	60 - 75 cm	-	1450 g
	-	-	-	-	-	-	-	-	280 g
	-	-	-	-	-	-	-	-	950 g
	-	-	-	-	-	-	-	-	220 g
	-	-	-	-	-	-	-	-	43 g
									45 g
									46 g
	-	-	●	●	0	65 - 80 cm	44 - 59 cm	-	840 g
					1	70 - 93 cm	47 - 62 cm	-	855 g
					2	83 - 120 cm	50 - 65 cm	-	885 g
	-	-	●	●	1	70 - 93 cm	47 - 62 cm	-	765 g
					2	83 - 120 cm	50 - 65 cm	-	795 g
	-	-	●	●	1	70 - 93 cm	47 - 62 cm	-	810 g
					2	83 - 120 cm	50 - 65 cm	-	840 g
	-	●	-	-	-	-	-	160 - 200 cm	495 g
	-	-	-	-	-	-	-	-	12800 g
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	600 g
	-	-	-	-	-	-	-	-	1290 g
	-	-	-	-	-	-	-	-	795 g
	-	-	-	-	-	-	-	-	520 g
	-	-	-	-	-	-	-	-	25 g
					L				60 g
	-	-	-	-	S	-	-	-	170 g
					L				240 g
	-	-	-	-	-	-	-	-	70 g

(1) black harness, (2) with an ASTRO SIT FAST, AVAO SIT, AVAO SIT FAST, FALCON, FALCON ASCENT harness,  
(3) with an ASTRO SIT FAST, AVAO SIT, AVAO SIT FAST, FALCON, FALCON ASCENT, SEQUOIA SRT harness







## Comfortable helmets

### • For work at height and rescue

Helmets with mesh headband for optimal comfort, and a strong chinstrap.



VERTEX BEST



VERTEX VENT

### • For industrial use

Helmet with mesh headband for optimal comfort and a strong chinstrap designed to release when snagged.



VERTEX ST

## Lightweight helmets for work at height and rescue

Helmets with expanded polystyrene liner for reduced weight, and with a strong chinstrap.



ALVEO BEST



ALVEO VENT

## Protective eye shields



VIZIR



VIZIR SHADOW



VIZEN

## Hats and balaclava

NEW  
2018



LINER

NEW  
2018



BEANIE

NEW  
2018



BALACLAVA

## Accessories



Absorbent foam



Replacement foam



Transparent stickers



Reflective stickers



Anti-fog spray

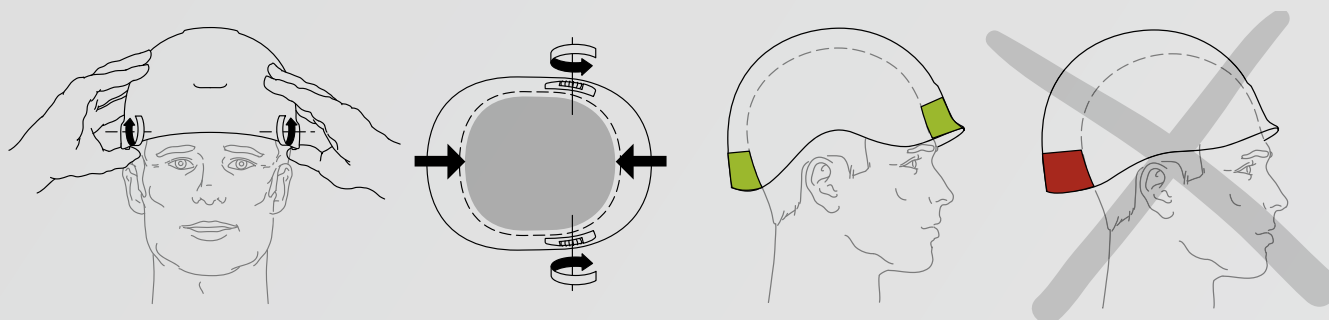


Essential for work at height and certain industrial activities, helmets give the user effective protection from falling objects, or if the person him/herself falls.

### CenterFit adjustment

The headband is adjusted by simultaneously operating the two CenterFit adjustment wheels. The adjustment wheels are easy to manipulate while wearing gloves.

The CenterFit system allows the helmet to be perfectly centered on the head for a better fit.

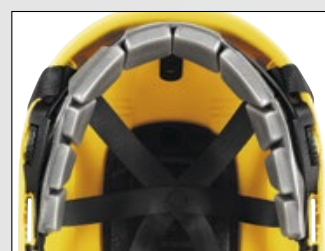
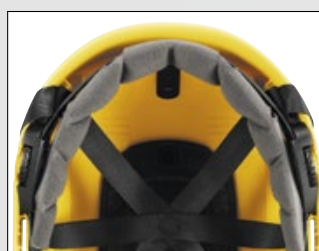


© Petzl / Lafouche

### Standard customization

Each user can adapt his/her VERTEX or ALVEO helmet according to his/her needs:

- **sheet of transparent stickers:** allows the user to display a personal marking on the helmet
- **page of reflective stickers:** provides better visibility in the dark
- **absorbent foam:** textile foam ensures better absorption of perspiration, needs regular maintenance
- **replacement foams:** foams similar to those provided with each helmet. They do not absorb perspiration





## Adding accessories

VERTEX and ALVEO helmets adapt to your lighting needs and additional protection requirements in seconds.

For self-protection: the user can install a protective VIZIR, VIZIR SHADOW or VIZEN eye shield using the two side inserts, and can add hearing protection with the two side slots.

For lighting: each helmet has a front and rear mounting slot for attachment of a PIXA or DUO headlamp, and four positioning hooks for mounting a headlamp with an elastic headband.



© Petzl / Marc Daviet

## Customization by request












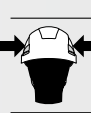

The Petzl Customization service can personalize your VERTEX and ALVEO helmets with:

- a logo or specific marking
- specifically created reflective stickers

To learn more, please contact your Petzl distributor.



In the absence of specific European helmet standards for work at height, Petzl applies different existing standards to develop its line of helmets suited to the needs of professionals.

		 VERTEX BEST	 ALVEO BEST	 VERTEX VENT	 ALVEO VENT	 VERTEX ST
 Protection against mechanical impacts	EN 397	•		•		•
	EN 12492	•		•		•
 Ventilation	EN 12492	-		•		-
 Protection against electrical hazards	EN 397	•		-		•
	EN 50365	•		-		•
 Reduced risk of choking in case of helmet snagging	EN 397	-		-		• (1)
 Reduced risk of the helmet coming off in a fall	EN 12492	• (2)		• (2)		-
 Protection against molten metal splash	EN 397	•		-		•
 Protection against lateral deformation	EN 397	•		•	-	•
 Use at low temperatures	EN 397	•		•	-	•
European certifications:	CE	CE EN 12492 (4)			CE EN 397, CE EN 50365	
U.S. certifications:	ANSI Z89.1-2009 Type I Class E	ANSI Z89.1-2009 Type I Class C (4)			ANSI Z89.1- 2009 Type I Class E	
Canadian certification:	CSA Z94.1-15 Type 1 Class E (3)	-		-		-
Russian certification:	EAC					

(1) Chinstrap designed to release if snagged when the user is at ground level (strength lower than 25 daN).

(2) Strong chinstrap limits risk of helmet coming off in a fall (strength greater than 50 daN).

(3) See relevant references in the table on page 75.

(4) ALVEO VENT is also UIAA certified.

### • Comfortable construction



VERTEX helmets have a six-point webbing suspension system, conforming to the shape of the head for maximum comfort. Shock absorption is achieved through deformation of the shell.

Weight: 455 g

### • Lightweight construction



ALVEO helmets have an internal expanded polystyrene foam liner for reduced weight. Shock is absorbed by deformation of the expanded polystyrene liner.

Weight: 350 g



## VERTEX® BEST

### Comfortable helmet for work at height and rescue

With its strong chinstrap, the VERTEX BEST helmet sets the standard in head protection for workers at height. Its unventilated shell protects against electrical hazards and molten metal splash. Its six-point textile suspension ensures maximum comfort, and its CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head. The VERTEX BEST is designed for optimal attachment of a PIXA or DUO headlamp, a VIZIR, VIZIR SHADOW or VIZEN protective shield, and hearing protection.



## VERTEX® VENT

### Comfortable ventilated helmet for work at height and rescue

With its strong chinstrap, the VERTEX VENT helmet sets the standard in head protection for workers at height. It has ventilation holes with sliding shutters to allow the ventilation to be adjusted as needed. Its six-point textile suspension ensures maximum comfort, and its CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head. The VERTEX VENT is designed for optimal attachment of a PIXA or DUO headlamp, a VIZIR, VIZIR SHADOW or VIZEN protective shield, and hearing protection.



## VERTEX® ST

### Comfortable helmet for industry

The VERTEX ST helmet is designed for protection against impacts and falling objects during ground level work. Its unventilated shell protects against electrical hazards and molten metal splash. Its six-point textile suspension ensures maximum comfort, and its CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head. The VERTEX ST is designed for optimal attachment of a PIXA or DUO headlamp, a VIZIR, VIZIR SHADOW or VIZEN protective shield, and hearing protection.



## ALVEO BEST

### Lightweight helmet for work at height and rescue

Featuring a strong chinstrap, the ALVEO BEST helmet is a very lightweight helmet for workers at height. Its unventilated shell protects against electrical hazards and molten metal splash. It is built to be lightweight and its CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head. The ALVEO BEST is designed for optimal attachment of a headlamp, a protective shield, and hearing protection.

Contains Alveolen® of Sekisui Alveo AG.



## ALVEO VENT

### Ventilated helmet for work at height and rescue

Featuring a strong chinstrap, the ALVEO VENT helmet is a very lightweight helmet for workers at height. It has ventilation holes to allow the ventilation to be adjusted as needed. It is built to be lightweight and its CenterFit adjustment system adjusts the headband and keeps the helmet centered on the head. The ALVEO VENT is designed for optimal attachment of a headlamp, a protective shield, and hearing protection.

Contains Alveolen® of Sekisui Alveo AG.





## Protective eye shields



## VIZIR

**Protective eye shield for VERTEX and ALVEO helmets**

The VIZIR eye shield ensures eye protection and integrates perfectly into VERTEX and ALVEO helmets. It installs easily with the two inserts on these helmets. It also has scratch-resistant and anti-fog coatings.



## VIZIR SHADOW

**Tinted eye shield for VERTEX and ALVEO helmets**

The VIZIR SHADOW eye shield ensures eye protection and integrates perfectly into VERTEX and ALVEO helmets. It installs easily with the two inserts on these helmets. This eye shield has a level 2.5 solar protection filter. It also has scratch-resistant and anti-fog coatings.



## VIZEN

**Face shield with electrical protection for VERTEX and ALVEO helmets**

The VIZEN face shield should be used when there is risk of electric arc. Its ultra-wrap shield offers complete face protection and preserves peripheral vision. Mounting inserts make it easy to install on VERTEX and ALVEO helmets.

## Hats and balaclava



Buff® is a trademark and property of Original Buff®

NEW  
2018



## LINER

**Breathable cap for wicking perspiration**

LINER is a breathable cap for wicking perspiration and drying quickly. The seamless fitted design makes it comfortable to wear under a helmet, without getting in the way.

NEW  
2018



## BEANIE

**Protective cap for cold and wind**

BEANIE is a cap that protects the head on cold and windy days. The design, specific to each zone, optimizes thermal insulation and regulates humidity. The seamless fitted design and side vents make it comfortable to wear under a helmet, without getting in the way.

NEW  
2018



## BALACLAVA

**Balaclava for protection against cold and wind**

BALACLAVA protects the head, the face and the neck on cold, windy days. The design, specific to each zone, optimizes thermal insulation and regulates humidity. The seamless fitted design and multiple side vents make it comfortable to wear under a helmet, without getting in the way.

## Accessories



## Absorbent foam

Foam for VERTEX and ALVEO: absorbs perspiration and is machine washable.



## Replacement foam

Easy maintenance, standard replacement foam for VERTEX and ALVEO helmets.



## Transparent stickers

Transparent stickers allow VERTEX and ALVEO helmets to be marked using a permanent marker or laser printer.






## Reflective stickers

Reflective stickers for increased visibility of VERTEX and ALVEO helmets.

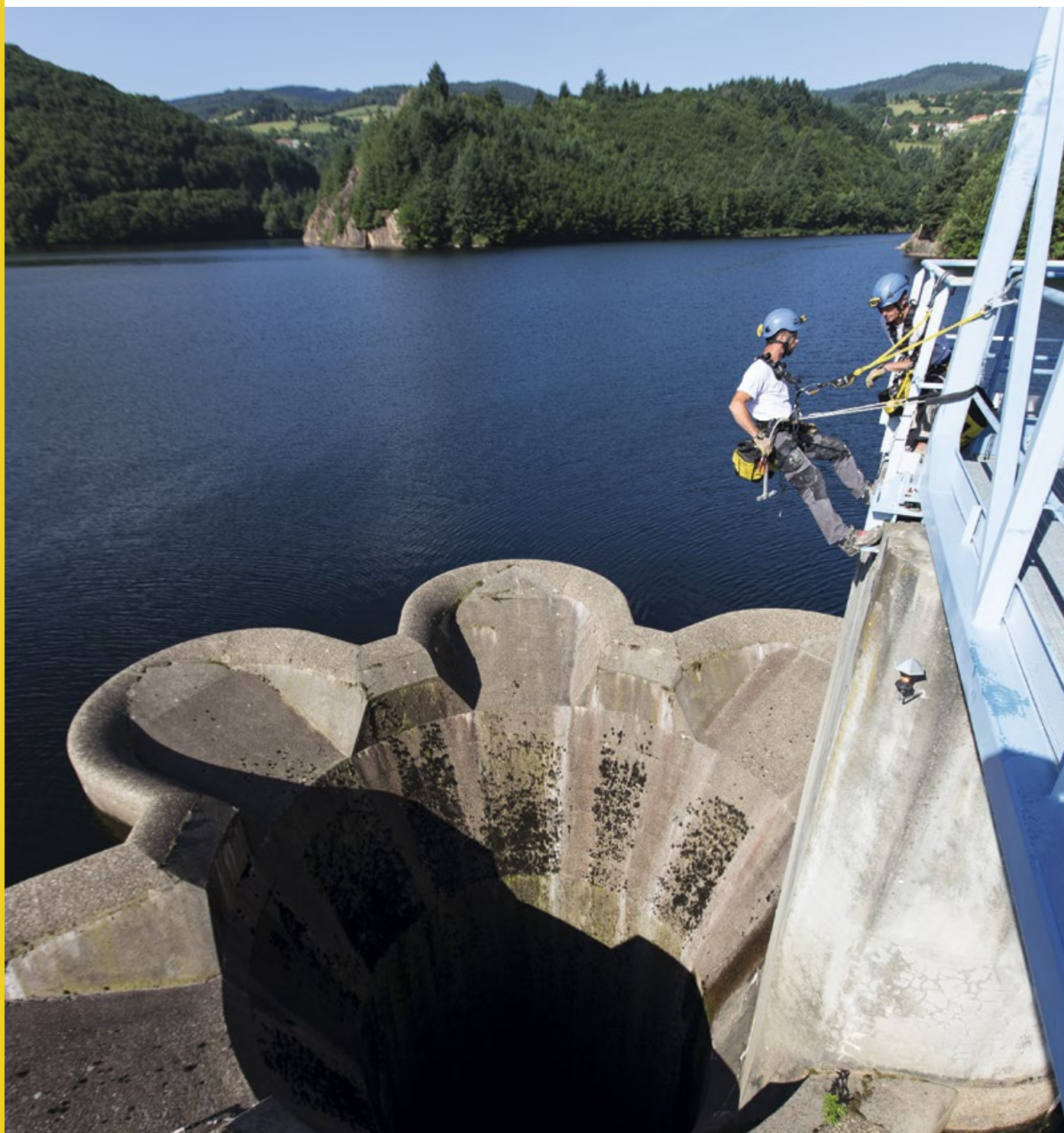


## Anti-fog spray

Anti-fog spray for VIZIR and VIZEN eye shields (pack of 10).

	References	Color	European certifications	U.S. certifications	Canadian certification	Russian certification	Head circumference	Weight
Helmets								
VERTEX BEST 	A10BYA	yellow	CE	ANSI Z89.1-2009 Type I Class E	-	EAC	53-63 cm	455 g
	A10BWA	white						
	A10BRA	red						
	A10BNA	black						
	A10BYA HV	high-visibility yellow						
	A10BOA	orange						
	A10BBA	blue						
	A10BYC	yellow	CE	ANSI Z89.1-2009 Type I Class E	CSA Z94.1-15 Type 1 Class E	-	53-63 cm	455 g
	A10BWC	white						
	A10BRC	red						
	A10BNC	black						
	A10BOC	orange						
	A10BBC	blue						
	VERTEX VENT 	A10VYA	yellow	CE EN 12492	ANSI Z89.1-2009 Type I Class C	-	EAC	53-63 cm
A10VWA		white						
A10VRA		red						
A10VNA		black						
A10VYA HV		high-visibility yellow						
A10VOA		orange						
A10VBA		blue						
VERTEX ST 	A10SWA	white	CE EN 397 CE EN 50365	ANSI Z89.1-2009 Type I Class E	-	EAC	53-63 cm	455 g
	A10SRA	red						
ALVEO BEST 	A20BYA	yellow	CE	ANSI Z89.1-2009 Type I Class E	-	EAC	53-63 cm	350 g
	A20BWA	white						
	A20BRA	red						
ALVEO VENT 	A20VYA	yellow	CE EN 12492	ANSI Z89.1-2009 Type I Class C UIAA	-	EAC	53-63 cm	340 g
	A20VWA	white						
	A20VRA	red						
Eye shields								
VIZIR	A15A	-	CE EN 166, 1B	ANSI Z87.1-2010	-	-	-	65 g
VIZIR SHADOW	A15AS	-	CE EN 166, 1B CE EN 172, 5-2,5	ANSI Z87.1-2010	-	-	-	65 g
VIZEN	A14	-	CE EN 166, 1BT8 CE EN 170, 2C-1,2 GS ET-29, Class 1	ANSI Z87.1-2010	-	-	-	180 g
References					Size	Head circumference		Weight
Hats and balaclava								
LINER 	A016AA00 / A016AA01			M-L / L-XL	56-59 cm / 59-63 cm		15 g	
BEANIE 	A016BA00 / A016BA01			M-L / L-XL	56-59 cm / 59-63 cm		25 g	
BALACLAVA 	A016CA00 / A016CA01			M-L / L-XL	56-59 cm / 59-63 cm		60 g	
Accessories								
Absorbent foam	A10200 (VERTEX) / A20200 (ALVEO)			-	-		15 g	
Replacement foam	A10210 (VERTEX) / A20210 (ALVEO)			-	-		15 g	
Transparent stickers	A10100			-	-		-	
Reflective stickers	A10110 (VERTEX) / A20110 (ALVEO)			-	-		-	
Anti-fog spray	A13			-	-		30 g	





Maintenance work on the Rouchain dam, Loire, France. © Petzl / vuedici.org / L. Moretton / RDE

Depending on the model, the ends of Petzl lanyards are equipped with plastic sheaths, or with STRINGS. These items help keep the connector positioned on the major axis, and facilitate clipping. They also protect the ends from abrasion due to repeated rubbing.



Plastic sheath



STRING



## General purpose lanyards

### Work positioning lanyards

Adjustable lanyards used to make work positioning systems, to complement a fall-arrest system. Their length can be very easily and precisely adjusted as necessary for comfortable positioning at a specific work station.

NEW  
2018



GRILLON

NEW  
2018



GRILLON PLUS

NEW  
2018



GRILLON HOOK  
European version

NEW  
2018



GRILLON HOOK  
international version

NEW  
2018

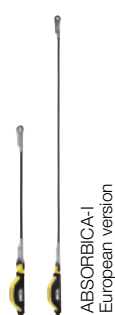


GRILLON MGO

### Fall arrest lanyards

Lanyards with an energy absorber, used when there is a fall hazard. Petzl offers three types of lanyards with an absorber:

- single (ABSORBICA-I) or double (ABSORBICA-Y) lanyards with a compact, integrated energy absorber. In case of a fall, the absorber's progressive tearing reduces the deceleration on lightweight users
- lanyards that can be combined with an ABSORBICA energy absorber to create a single or double energy-absorbing lanyard with a maximum length of two meters



ABSORBICA-I  
European version



ABSORBICA-I  
international version



ABSORBICA-I VARIO



ABSORBICA-Y  
European version



ABSORBICA-Y  
international version



ABSORBICA-Y TIE-BACK



JANE

NEW  
2018



ABSORBICA

## Specialized lanyards

### Rope access lanyards

Fixed-length or adjustable progression lanyards, available in single or double versions.



PROGRESS ADJUST

PROGRESS ADJUST I

PROGRESS

### Tree care lanyards

Adjustable positioning lanyards that allow comfortable positioning for tree care work.



ZILLON

MICROFLIP

MICROGRAB

### Helivac lanyards

Lanyards for helicopter drop-off and recovery.



LEZARD

IGUANE

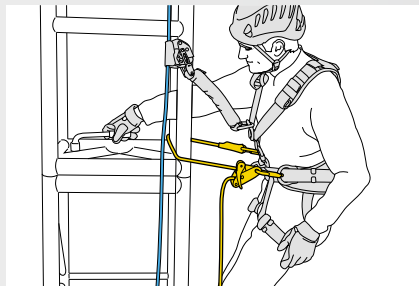
NEW  
2018



# Work positioning lanyards

Positioning lanyards allow the user to position him/herself precisely at a work station, with feet supported on the structure. They can adapt to different anchoring configurations.

## • Versatile



### Double mode use

The GRILLON lanyard can be used in double mode (on the harness side attachment points) when the user works with weight on his/her feet. This type of attachment ensures better load distribution on the belt. The user precisely adjusts his/her position by pressing on the lanyard's pivoting cam.



### Single mode use

When the anchor is located above the user, the GRILLON lanyard is connected to the harness ventral attachment point, so that the load is comfortably distributed between the belt and leg loops. The user adjusts his/her position by operating the handle, while holding the free end of the lanyard.

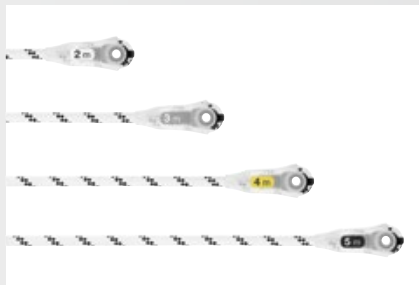
## • Easy handling



### Sewn terminations with plastic sheaths

Sewn terminations increase strength (compared to a knotted termination) while reducing bulk. These plastic sheaths protect the stitching from friction and facilitate handling by holding the connector in position.

## • Differentiation of lanyard lengths



Lanyard length is immediately identified by a color-coded label at the connector end.

## • Replacement ropes available



GRILLON lanyard ropes are also available individually.

## • Without connector



GRILLON lanyards are sold without connectors, so that they can be combined with any type of connector, depending on the user's requirements.

## • With HOOK connector



GRILLON HOOK lanyards are equipped with a HOOK auto-locking connector, ideal for connections using the harness side attachment points.

## • With MGO connector



GRILLON lanyards, in combination with an MGO auto-locking connector, are ideal for connection to metal structures or to large-diameter cables and bars.

NEW  
2018



## GRILLON

### Adjustable lanyard for work positioning

The GRILLON 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. Depending on the configuration, it can be used in single or double mode. GRILLON is available in four lengths (2, 3, 4 and 5 m) and also in black. It is certified to North American, European and Russian standards.

NEW  
2018



## GRILLON PLUS

### Adjustable work positioning lanyard with excellent abrasion resistance

The GRILLON PLUS 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. The aramid fiber rope provides excellent abrasion resistance. Depending on the configuration, it can be used in single or double mode. GRILLON PLUS is available in two lengths: 2 and 3 m, and is certified to North American, European and Russian standards.

NEW  
2018



## GRILLON HOOK European version

### 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. GRILLON HOOK European version is available in four lengths (2, 3, 4 and 5 m) and is certified to European and Russian standards.

NEW  
2018



## GRILLON HOOK international version

### 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. GRILLON HOOK international version is available in four lengths (2, 3, 4 and 5 m) and is certified to North American and European standards.

NEW  
2018



## GRILLON

### Adjustable lanyard for work positioning

## MGO OPEN 60

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

See page 97 for details on the MGO OPEN 60 connector.

NEW  
2018



## GRILLON MGO

### Adjustable work positioning lanyard with MGO connector

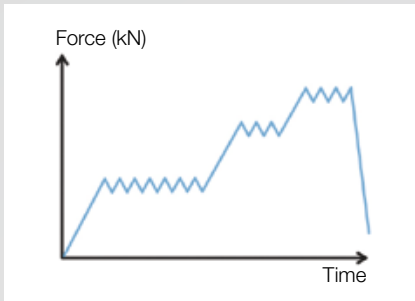
The GRILLON MGO lanyard is used to make work positioning systems, to complement a fall-arrest system. Its length can be very easily and precisely adjusted as necessary for comfortable positioning at the work station. Connector with very large gate opening is ideal for connection to metal structures or to large-diameter cables and bars. GRILLON MGO is available in two lengths: 2 and 3 m, and is certified to North American and European standards.





These lanyards are used when there is a fall hazard and are connected to the sternal or dorsal attachment point on the harness. The integrated absorber provides energy absorption in a fall and thus limits the impact force on the user.

- **Progressive energy absorption adapted to the user's weight**



In case of a fall, the tearing of the energy absorber webbing limits the impact force on the user. The lanyards are designed for users who weigh between 50 and 130 kg. The progressive tearing of the webbing reduces the deceleration on lightweight users.

- **Compact and abrasion resistant energy absorber**



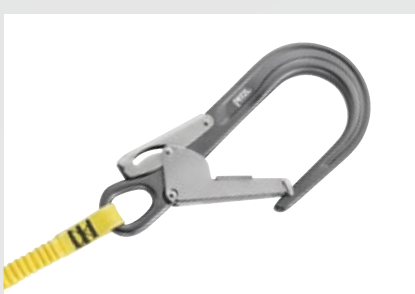
The energy absorber is very compact to avoid hindering the user's movements, or interfering with handling. A durable fabric pouch helps protect the energy absorber from abrasion and potential contaminants.

- **Different connectors depending on the type of structure**



**MGO OPEN large-opening connectors**

Lanyards without connectors can be equipped with MGO OPEN auto-locking connectors for connection to metal structures or to large-diameter cables and bars. These connectors can be re-used if the lanyard is damaged.



**MGO large-opening connectors**

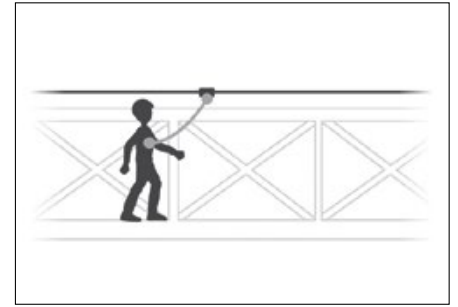
Lanyards equipped with MGO connectors allow for connection to metal structures or to large-diameter cables and bars.



**Classic connectors**

The ABSORBICA-I and ABSORBICA-Y lanyards can also be equipped with classic aluminum OK and Am'D connectors, or captive steel versions. They enable connection to lifelines or to single anchor points.

- **For continuous protection without passage of intermediate anchors**



ABSORBICA-I single lanyards are designed particularly for protection on a horizontal lifeline or on an elevated platform.

- **For continuous protection when passing intermediate anchors**



The ABSORBICA-Y lanyards with two arms allow for continuous protection when passing an intermediate anchor, by successively detaching and re-attaching the two arms.



## ABSORBICA-I European version

### Single lanyard with integrated energy absorber

Single lanyard with a compact, integrated energy absorber designed for protection on a horizontal lifeline (rope or cable) or on an elevated platform. It is available in 80 or 150 cm versions (without connectors). It can accept different types of connectors on the lanyard end and is certified to European and Russian standards.

## ABSORBICA-I International version

### Single lanyard with integrated energy absorber and captive carabiners

Single lanyard with a compact, integrated energy absorber designed for protection on a horizontal lifeline (rope or cable) or on an elevated platform. It is available in 80 or 150 cm versions (without connectors). Equipped with two captive carabiners, it is certified to U.S. and European standards.

## ABSORBICA-I VARIO

### Adjustable single lanyard with integrated energy absorber

Adjustable single lanyard with a compact, integrated energy absorber designed for protection on a horizontal lifeline (rope or cable) or on an elevated platform. This lanyard features the VARIO adjustment system, allowing the lanyard length to be adjusted in order to reduce the potential fall height. ABSORBICA-I VARIO is certified to European and Russian standards.



## ABSORBICA-Y European version

### Double lanyard with integrated energy absorber

Double lanyard with a compact, integrated energy absorber, for continuous protection when passing intermediate anchors. It is available in 80 or 150 cm versions (without connectors). The 150 cm version has elasticated arms, to avoid hindering progression. Available with or without MGO large-opening connectors, it is certified to European and Russian standards.

## ABSORBICA-Y International version

### Double lanyard with integrated energy absorber, captive carabiner and MGO connectors

Double lanyard with a compact, integrated energy absorber, for continuous protection when passing intermediate anchors. It is available in 80 or 150 cm versions (without connectors). The 150 cm version has elasticated arms, to avoid hindering progression. Equipped with a captive carabiner and two MGO large-opening connectors, it is certified to U.S. and European standards.

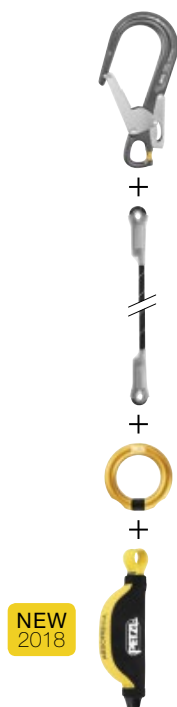
## ABSORBICA-Y TIE-BACK

### Double lanyard with integrated intermediate tie-back rings and energy absorber, captive carabiner and MGO connectors

Double lanyard with integrated intermediate tie-back rings and compact energy absorber. Designed for continuous protection on very large structures and when passing intermediate anchor points. The TIE-BACK system allows the lanyard ends to be reconnected to fit around structures with a very large cross-section. The arms are elasticated to avoid hindering progression. Equipped with a captive carabiner and two MGO large-opening connectors, it meets U.S., European and Russian standards.



## Fall arrest lanyards - assembly required

**MGO OPEN 60**

**Auto-locking directional connector with large gate opening, and a gated connection point**

See page 97 for details on the MGO OPEN 60 connector.

**JANE**

**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 the ends.

**RING OPEN**

**Multidirectional gated ring**

See page 98 for details on the RING OPEN gated ring.

**ABSORBICA**

**Compact energy absorber**

ABSORBICA is a compact energy absorber, for use in combination with a JANE lanyard to make a fall arrest lanyard. Equipped with tear-webbing inside a zippered fabric pouch, the energy absorber is protected from abrasion while allowing for regular inspection. It has two options for installation on the harness, according to the frequency of manipulation.

## Rope access lanyards

**PROGRESS ADJUST**

**Double adjustable progression lanyard**

PROGRESS ADJUST is a double adjustable progression lanyard that enables continuous connection for all types of progression (rope ascent, movement along a lifeline...). Thanks to the ADJUST rope adjuster, the length of the adjustable arm can be quickly and easily adjusted. The connectors are held in the correct position for ease of clipping.

**PROGRESS ADJUST-I**

**Single adjustable progression lanyard**

PROGRESS ADJUST-I is a single adjustable progression lanyard that allows, when combined with another lanyard, continuous connection for all types of progression (rope ascent, movement along a lifeline...). Thanks to the ADJUST rope adjuster, the length can be quickly and easily adjusted. The connector is held in the correct position for easy clipping.



The PROGRESS ADJUST lanyards adjust very quickly and precisely thanks to the ADJUST rope adjuster, which releases with a simple turn and handles easily due to its ergonomic shape.

**PROGRESS**

**Progression lanyard**

The PROGRESS progression lanyard allows continuous connection during rope ascents. The connectors are held in the correct position for ease of clipping.

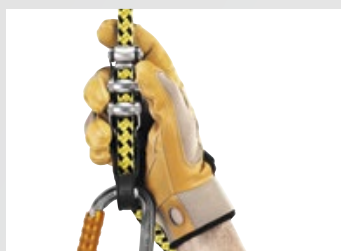


## Tree care lanyards

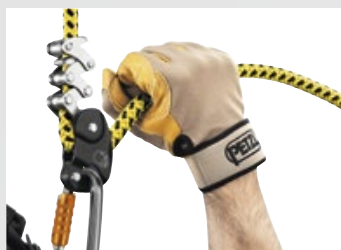
### ZILLON

#### Adjustable work positioning lanyard for tree care

The ZILLON work positioning lanyard for tree care adjusts easily with only one hand, even when loaded. It is designed for use in double mode on the harness side attachment points, or in single mode on the ventral attachment point with the hand on the free end. Yellow color for excellent visibility.



Easily adjusted with one hand thanks to the progressive locking/unlocking action of the device.

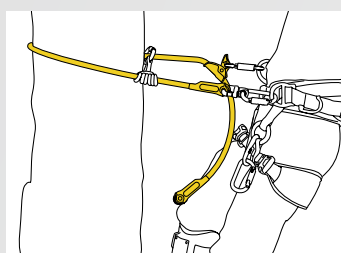


Pulley mounted on sealed ball bearings allows slack to be taken up easily.

### MICROFLIP

#### Reinforced adjustable positioning lanyard for tree care work

MICROFLIP is a reinforced adjustable lanyard designed for positioning in tree care work. Its cable core reduces the risk of severing the lanyard and facilitates moving about on the trunk. Yellow color for excellent visibility.



Designed to be used in double mode on the harness side attachment points.



### MICROGRAB

#### Replacement cam-loaded rope clamp for MICROFLIP

Replacement rope clamp for MICROFLIP, featuring an ergonomic cam and integrated cam spring.



## Helivac lanyards



## LEZARD

**Helivac lanyard with securing of the drop-off/recovery phases**

The LEZARD lanyard is designed for helivac at altitude. It allows the drop-off/recovery phases to be secured thanks to an adjustable arm that can be instantly ejected to free the victim, the rescuer and the helicopter if the latter needs to suddenly leave its stationary position. Manipulating the LEZARD helivac lanyard is easy thanks to the instant identification of the color-coded attachment elements and the very quick and precise adjustment of the adjustable arm with the ADJUST rope adjuster.

NEW  
2018

## IGUANE

**Helivac lanyard for ground drop-off/recovery**

The IGUANE lanyard is designed for ground helivac. Manipulation is easy thanks to the instant identification of the attachment elements by color coding. Lanyard available in two lengths.



The lower ends are equipped with STRING, allowing the carabiner to be held in position and protecting the webbing from wear.

## Lanyard end connectors

NEW  
2018

## EASHOOK OPEN

**Carabiner with gated connection point for double lanyard and work positioning lanyard**

See page 97 for details on the EASHOOK OPEN carabiner.



## VERTIGO TWIST-LOCK

**Carabiner for progression lanyard**

See page 97 for details on the VERTIGO TWIST-LOCK carabiner.



## MGO OPEN 60

**Auto-locking directional connector with large gate opening, and a gated connection point**

See page 97 for details on the MGO OPEN 60 connector.



## MGO 110

**Auto-locking directional connector with very large gate opening**

See page 97 for details on the MGO 110 connector.







Paint job for the cranes of the merchant harbor of Valencia, Spain. © Petzl / Jan Novak photography / Vertice Vertical™

## Mobile fall arresters

Installed on a safety rope, mobile fall arresters will lock in the case of shock or sudden acceleration.

### • For protection against falls

Mobile fall arresters.



ASAP  
European version



ASAP  
international version

NEW  
2018

### • For rope access

Mobile fall arrester with locking function.



ASAP LOCK

NEW  
2018

## Absorbers for mobile fall arresters

Energy absorbers are connected to mobile fall arresters to limit the impact force on the user in case of a fall.



ASAP'SORBER  
European version



ASAP'SORBER  
international version

NEW  
2018



ASAP'SORBER AXESS

NEW  
2018

## Ropes for mobile fall arresters

Ropes with sewn termination, allowing the ASAP / ASAP LOCK to meet the requirements of the EN 353-2 or ANSI Z359.15 standard.



AXIS 11 mm  
with sewn termination



RAY 12 mm  
with sewn termination

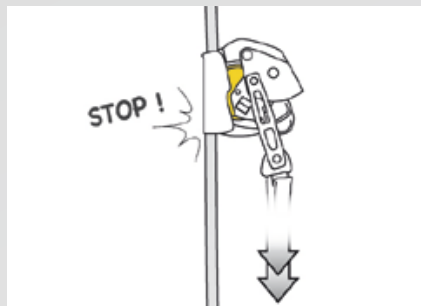
NEW  
2018





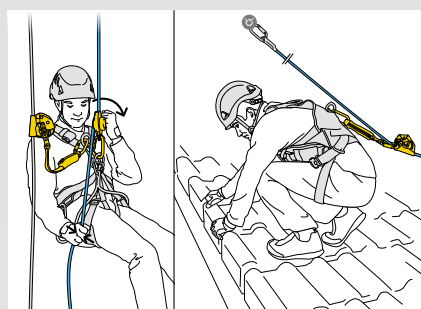
Installed on a safety rope, the ASAP and ASAP LOCK mobile fall arresters connect to the harness sternal or dorsal attachment point. They follow the user in his or her movements, and, in case of a shock load or sudden acceleration, they lock and stop the fall.

### • Constant fall protection



#### Integrated locking

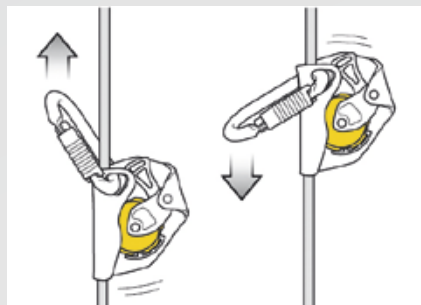
In case of a sudden movement due to a fall, slide or uncontrolled descent, the ASAP and ASAP LOCK mobile fall arresters lock on the rope and stop the worker's fall, even if s/he grabs the device with his/her hands.



#### Effective in any situation

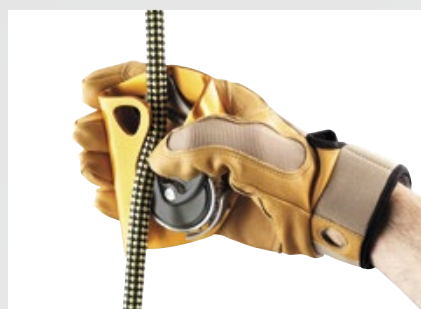
These mobile fall arresters work equally well on vertical or angled ropes, to adapt to any worksite situation.

### • Simple to use



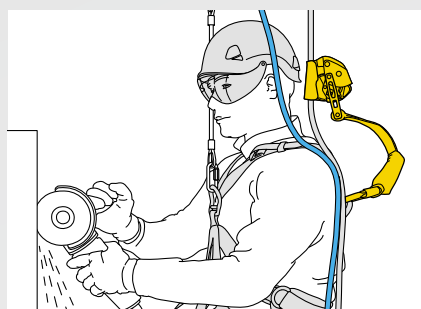
#### No user action required

The ASAP and ASAP LOCK mobile fall arresters follow the worker in all his/her movements, without the need for any manual operation. S/he can therefore focus completely on his/her task.



#### Rapid installation

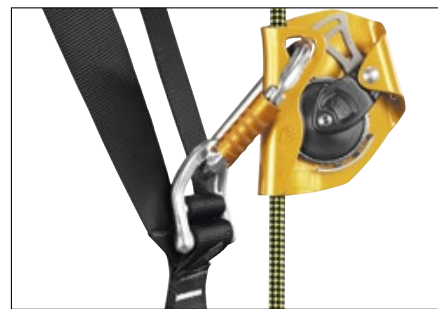
These mobile fall arresters may be quickly and easily installed anywhere on the rope by simply retracting the locking wheel.



#### Keeping the safety rope at a distance

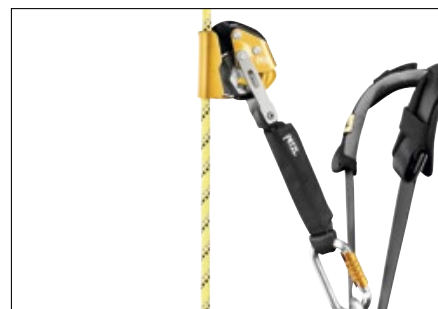
The ASAP'SORBER energy-absorber allows the user to keep the rope at a distance, freeing the work space and protecting the rope (from sharp tools, molten metal splash...).

### • For protection against falls



The ASAP mobile fall arrester can be combined (or not) with an ASAP'SORBER energy-absorber.

### • For rope access



The ASAP LOCK has a locking function to reduce the length of a fall. Additionally, it is drop-resistant when passing intermediate anchors. It is used with an ASAP'SORBER energy-absorber.





## ASAP® European version

### Mobile fall arrester with OK carabiner

With its unique locking system, the ASAP sets the standard in fall protection for workers at height. In normal use, the device moves freely along the rope without any manual intervention and follows the user in all his/her movements. In case of shock or sudden acceleration, the ASAP locks on the rope and stops the user. The ASAP may also be combined with an energy absorber to work at a distance from the rope. Equipped with an OK TRIACT-LOCK carabiner, it is certified to European and Russian standards.



NEW  
2018

## ASAP® international version

### Mobile fall arrester with OXAN carabiner

With its unique locking system, the ASAP sets the standard in fall protection for workers at height. In normal use, the device moves freely along the rope without any manual intervention and follows the user in all his/her movements. In case of shock or sudden acceleration, the ASAP locks on the rope and stops the user. The ASAP may also be combined with an energy absorber to work at a distance from the rope. Equipped with an OXAN TRIACT-LOCK carabiner, it is certified to U.S. and European standards.



NEW  
2018

## ASAP® LOCK

### Mobile fall arrester with locking function

The ASAP LOCK mobile fall arrester is designed to facilitate handling during rope ascents. In normal use, the device moves freely along the rope without any manual intervention and follows the user in all his/her movements. In case of shock or sudden movement, the fall arrester locks on the rope and stops the user. The integrated locking function allows the user to immobilize the device in order to reduce the length of a fall. The connection arm makes the system drop-resistant when passing intermediate anchors. The ASAP LOCK is used with an energy absorber to work at a distance from the rope. It is certified to U.S., European, and Russian standards.



## Absorbers for mobile fall arresters



## ASAP'SORBER European version

**Energy absorber for ASAP European version or ASAP LOCK**

The ASAP'SORBER energy absorber connects to the ASAP (European version) or ASAP LOCK mobile fall arrester to allow the user to work at a distance from the rope, in order to protect it during certain work phases. Equipped with tear-webbing inside an openable pouch, the absorber is protected from abrasion while allowing for regular inspection. It is available in two lengths, to provide the best balance between distance from the rope and reducing fall length. It is certified to European and Russian standards.



## ASAP'SORBER international version

**Energy absorber for ASAP international version or ASAP LOCK**

The ASAP'SORBER energy absorber connects to the ASAP (international version) or ASAP LOCK mobile fall arrester to allow the user to work at a distance from the rope, in order to protect it during certain work phases. Equipped with tear-webbing inside a pouch that opens on each end, the absorber is protected from abrasion while allowing for regular inspection. It is available in two lengths, to provide the best balance between distance from the rope and reduced fall length. It is certified to U.S. and European standards.



## ASAP'SORBER AXESS

**Energy absorber for ASAP or ASAP LOCK**

The ASAP'SORBER AXESS energy absorber connects to the ASAP or ASAP LOCK mobile fall arrester to allow the user to work at a distance from the rope, in order to protect it during certain work phases. Equipped with tear-webbing inside a pouch that opens on each end, the absorber is protected from abrasion while allowing for regular inspection. It can be used in two-person rescue situations for a maximum load of 250 kg. It is certified to U.S., European, and Russian standards.

## Ropes for mobile fall arresters



## AXIS 11 mm with sewn termination

**Low stretch kernmantel rope with sewn termination and good handling, for work at height**

See page 129 for details on the AXIS 11 mm rope with sewn termination.






## RAY 12 mm with sewn termination




**Static rope with sewn termination for ASAP (international version) or ASAP LOCK**

The RAY 12 mm static rope with sewn termination is designed for use with an ASAP (international version) or ASAP LOCK mobile fall arrester. The standard diameter ensures a good grip for easier handling. It has low stretch when put under tension, allowing it to meet the requirements of U.S. fall protection standards. The sewn termination with protective sheath helps keep the connector in position and facilitates handling. Rope available in five lengths.


## Mobile fall arresters

	References	Certifications	Weight
 <p>ASAP European version</p>	B71AAA	<p><b>CE EN 12841 type A</b> when used with an ASAP'SORBER (European version) or ASAP'SORBER AXESS energy absorber, and an EN 1891 type A 10 to 13 mm rope.</p> <p><b>CE EN 353-2</b> when used with an ASAP'SORBER (European version) energy absorber and an AXIS 11 mm or PARALLEL 10.5 mm rope with a sewn termination.</p> <p><b>EAC</b> when used with an ASAP'SORBER (European version) or ASAP'SORBER AXESS energy absorber, and an EN 1891 type A 10 to 13 mm rope.</p>	370 g
 <p><b>NEW 2018</b> ASAP international version</p>	B071AA00	<p><b>ANSI Z359.15</b> when used with OXAN TRIACT-LOCK (international version) carabiners, an ASAP'SORBER (international version) or ASAP'SORBER AXESS energy absorber, CAPTIV positioning bars, and a RAY 12 mm rope with a sewn termination.</p> <p><b>CE EN 12841 type A</b> when used with OXAN TRIACT-LOCK (international version) carabiners, an ASAP'SORBER (international version) or ASAP'SORBER AXESS energy absorber, CAPTIV positioning bars, and an EN 1891 type A 10 to 13 mm rope.</p>	525 g
 <p><b>NEW 2018</b> ASAP LOCK</p>	B071BA00	<p><b>ANSI Z359.15</b> when used with an ASAP'SORBER (international version) or ASAP'SORBER AXESS energy absorber, an OXAN TRIACT-LOCK (international version) carabiner, CAPTIV positioning bars, and a RAY 12 mm rope with a sewn termination.</p> <p><b>CE EN 12841 type A</b> when used with an ASAP'SORBER (European or international version) or ASAP'SORBER AXESS energy absorber, and an EN 1891 type A 10 to 13 mm rope.</p> <p><b>CE EN 353-2</b> when used with an ASAP'SORBER (European or international version) energy absorber and an AXIS 11 mm or PARALLEL 10.5 mm rope with a sewn termination.</p> <p><b>EAC</b> when used with an ASAP'SORBER (European version) or ASAP'SORBER AXESS energy absorber, and an EN 1891 type A 10 to 13 mm rope.</p>	425 g

## Absorbers for mobile fall arresters

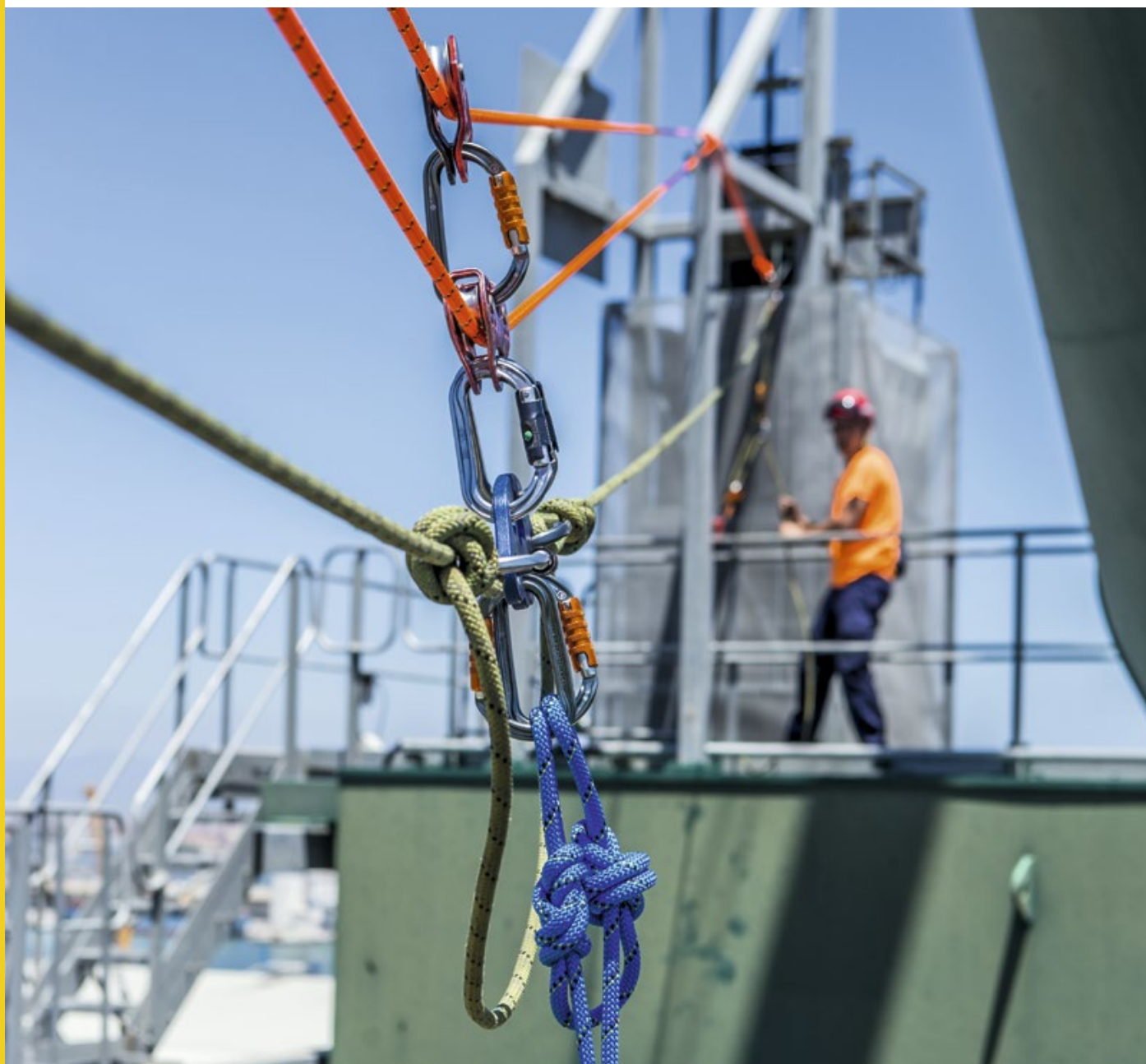
	References	Length	Certifications	Weight
 <p>ASAP'SORBER European version</p>	L71AA 20	20 cm	<b>CE EN 12841 type A and CE EN 353-2</b> when used with an ASAP (European version) or ASAP LOCK mobile fall arrester.	75 g
	L71AA 40	40 cm	<b>CE EN 355</b> <b>EAC</b>	105 g
 <p><b>NEW 2018</b> ASAP'SORBER international version</p>	L071BA00	20 cm	<p><b>ANSI Z359.13 6 feet</b> when used with OXAN TRIACT-LOCK (international version) carabiners and CAPTIV positioning bars.</p> <p><b>CE EN 12841 type A</b> when used with an ASAP (international version) or ASAP LOCK mobile fall arrester.</p>	125 g
	L071BA01	40 cm	<b>CE EN 353-2</b> when used with an ASAP LOCK mobile fall arrester.	145 g
 <p><b>NEW 2018</b> ASAP'SORBER AXESS</p>	L071CA00	40 cm	<p><b>ANSI Z359.13 6 feet</b> when used with OXAN TRIACT-LOCK (international version) carabiners and CAPTIV positioning bars.</p> <p><b>CE EN 12841 type A</b> when used with an ASAP (European or international version) or ASAP LOCK mobile fall arrester.</p> <p><b>CE EN 353-2</b> when used with an ASAP LOCK mobile fall arrester.</p>	205 g

## Rope for mobile fall arresters

	References	Length	Certifications	Weight per meter
 <p><b>NEW 2018</b> RAY 12 mm with sewn termination</p>	R091AA00	25 ft	<b>ANSI Z359.15</b> when used with an ASAP (international version) or ASAP LOCK mobile fall arrester.	106 g
	R091AA01	50 ft		
	R091AA02	75 ft		
	R091AA03	100 ft		
	R091AA04	200 ft		

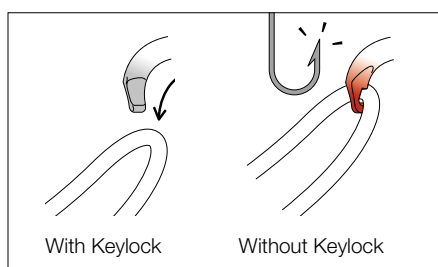






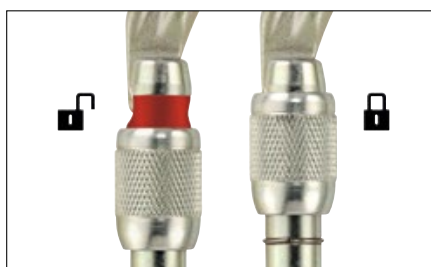
New paint for the cranes of the merchant harbor of Valencia, Spain. © Petzl / Jan Novak photography / Vertice Vertical™

To simplify connection and disconnection, Petzl connectors have functionalities that simplify their use.



#### Avoids the risk of snagging

To ensure optimal efficiency, all Petzl carabiners use the Keylock system: the body/gate interface does not have a hook that could snag on anchors, ropes, harness equipment loops...



#### Visual unlocked indicator

To facilitate equipment checks, SCREW-LOCK manual locking carabiners have a red band that is visible only when the carabiner is not locked.

## Lightweight carabiners

Aluminum carabiners designed for workers at height.



## Ultra-lightweight carabiners

Compact aluminum carabiners for workers at height looking to reduce weight to a minimum.



## High-strength carabiners

Steel carabiners suitable for difficult environments, primarily used for setting up anchors and for connecting to metal structures.



## Lanyard end connectors

Connectors designed for lanyard ends



## Special lightweight carabiners

Aluminum carabiners designed for specific uses: with groups, at the end of a lanyard, for additional braking on a descender, and for harness fastening.



## Semi-permanent connectors

Connectors designed for semi-permanent connection of equipment.



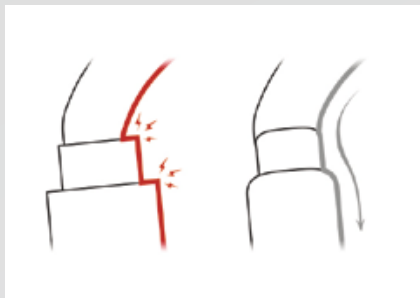
## Connector positioning accessories

Accessories that keep the carabiner correctly positioned in devices and at the end of a lanyard.

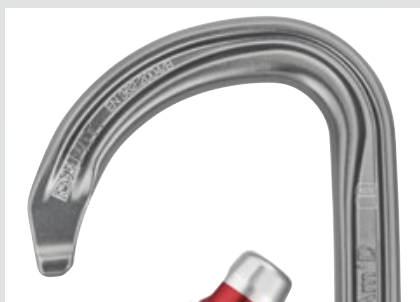


## Lightweight carabiners

- Design facilitates handling

**Fluid interior design**

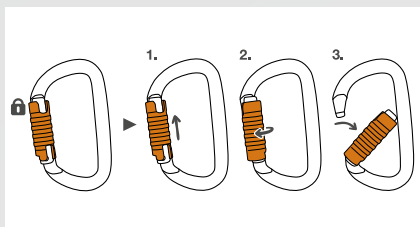
Fluid interior design limits the risk of having a catch point and facilitates rotation of the carabiner.

**Optimal strength/weight ratio**

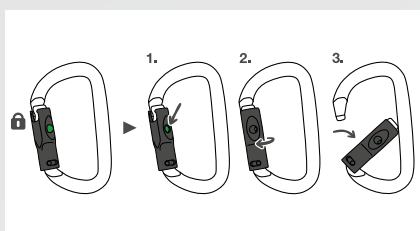
The H cross-section ensures an optimal strength/weight ratio and protects the markings from abrasion.

- Multiple locking systems depending on the intensity of use:

- for frequent handling:

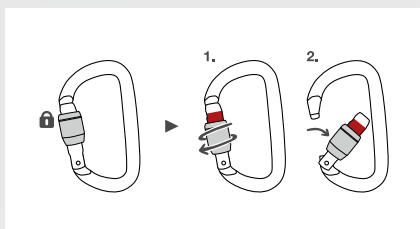
**TRIACT-LOCK automatic system:**

Unlocking is accomplished by raising, then turning the sleeve.

**BALL-LOCK automatic system:**

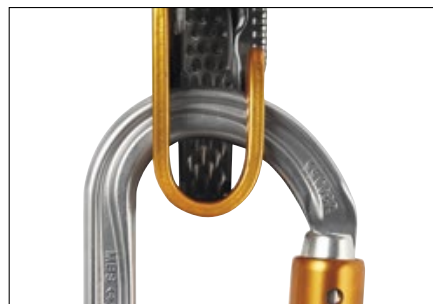
Unlocking is accomplished by pressing on the green indicator, then turning the sleeve. The green visual indicator is visible only when the gate is locked.

- for occasional handling:

**SCREW-LOCK manual system:**

This system is suitable for difficult environments where contaminants (mud, ice) could cause an automatic locking system to jam. The red visual indicator is visible when the carabiner is unlocked.

- For connecting to equipment having a wide cross-section



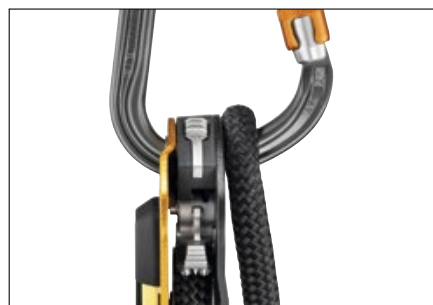
The OK carabiner has a symmetrical oval shape for optimal loading of devices with a wide cross-section, such as pulleys, rope clamps or mobile fall arresters.

- For connection to equipment such as descenders or positioning lanyards



The Am'D carabiner has an asymmetric D shape that is ideal for attaching equipment such as descenders or positioning lanyards.

- For connection of multiple items



The WILLIAM has an asymmetric pear shape, with a large capacity for attaching multiple elements, and a large gate opening to facilitate their installation.





CAPTIV  
COMPATIBLE

## OK

### Lightweight oval carabiner

The lightweight OK carabiner is made of aluminum. It has an oval shape that allows optimal loading of devices with a wide cross-section, such as pulleys, rope clamps, and mobile fall arresters. Its fluid interior design and Keylock system facilitate handling. It is available in three locking systems: automatic TRIACT-LOCK or BALL-LOCK system, or the manual SCREW-LOCK system. OK can be connected to the CAPTIV bar to favor positioning of the carabiner along the major axis, to limit the risk of it flipping and to keep it integrated with the device.



CAPTIV  
COMPATIBLE

## Am'D

### Lightweight asymmetrical carabiner

The Am'D lightweight asymmetrical carabiner is made of aluminum. It has a D shape particularly suited for connection to diverse equipment such as descenders or positioning lanyards. Its fluid interior design and Keylock system facilitate handling. The Am'D carabiner is available in three locking systems: automatic TRIACT-LOCK or BALL-LOCK system, or the manual SCREW-LOCK system. Am'D 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.



CAPTIV  
COMPATIBLE

## WILLIAM

### Lightweight asymmetrical large-capacity carabiner

The lightweight WILLIAM large-capacity asymmetrical carabiner is made of aluminum. It has a pear shape that is practical for easily connecting multiple items. Its fluid interior design and Keylock system facilitate handling. The WILLIAM carabiner is available in three locking systems: automatic TRIACT-LOCK or BALL-LOCK system, or the manual SCREW-LOCK system. WILLIAM can be connected to the CAPTIV bar to favor positioning of the carabiner along the major axis, to limit the risk of it flipping and to keep it integrated with the device.

## Ultra-lightweight carabiners



## Sm'D

**Ultra-lightweight asymmetrical carabiner**

The compact Sm'D asymmetrical aluminum carabiner is recommended for workers at height looking to reduce weight to a minimum. D shape makes it especially suitable for attaching devices. It is available in two locking systems (automatic TRIACT-LOCK system or manual SCREW-LOCK system), or without a locking system.

## High-strength carabiners



## OXAN

**High-strength oval carabiner**

OXAN is a high-strength steel carabiner designed for use in difficult environments. The oval, symmetrical shape allows optimal loading of the carabiner when setting up anchors or connecting to metal structures. It is available in two locking systems: automatic TRIACT-LOCK system or manual SCREW-LOCK system. OXAN TRIACT-LOCK is available in European or international versions. OXAN can be connected to the CAPTIV bar to favor positioning of the carabiner along the major axis, to limit the risk of it flipping and to keep it integrated with the device.



CAPTIV  
COMPATIBLE



The oval, symmetrical shape allows optimal loading of the carabiner when setting up anchors.

Usage with the CAPTIV positioning bar favors loading of the carabiner along the major axis, limits flipping and keeps it attached to the device or lanyard.



## VULCAN

**High-strength asymmetrical carabiner with large capacity**

VULCAN is a high-strength steel carabiner designed for use in difficult environments. The large-capacity asymmetrical shape is ideal for setting multiple anchors. The VULCAN carabiner is available in two locking systems: automatic TRIACT-LOCK system or manual SCREW-LOCK system. VULCAN TRIACT-LOCK is available in European or international versions.

## Lanyard end connectors

NEW  
2018



### EASHOOK OPEN

#### Carabiner with gated connection point for double lanyard and work positioning lanyard

The EASHOOK OPEN carabiner is designed for use at the ends of a double lanyard or work positioning lanyard. The gated connection point allows for direct attachment of the carabiner to the lanyards. If the lanyard is damaged, the connector can thus be reused. The excellent grip and automatic locking system facilitate handling when passing intermediate anchors.



The EASHOOK OPEN carabiner is easy to integrate with a lanyard with an ABSORBICA-Y energy absorber, thanks to the gated connection point.



### VERTIGO TWIST-LOCK

#### Carabiner for progression lanyard

The VERTIGO TWIST-LOCK carabiner is designed for use on progression lanyards. The excellent grip and automatic locking system facilitate handling when passing intermediate anchors. The wide opening and the Keylock system allow the carabiner to be easily connected.



### MGO OPEN 60

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

MGO OPEN 60 is an auto-locking directional connector with 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.



### MGO 110

#### Auto-locking directional connector with very large gate opening

MGO 110 is an auto-locking directional connector with very large gate opening for connection to metal structures or to very large-diameter cables and bars.

## Special carabiners



CAPTIV  
COMPATIBLE



### Am'D PIN-LOCK

#### Asymmetrical aluminum carabiner, unlocks with a tool

The Am'D PIN-LOCK asymmetrical aluminum carabiner is designed for use with groups. It secures the connection of the user thanks to its PIN-LOCK system, which can only be opened by the operator with a specific unlocking tool.



### FREINO

#### Carabiner with friction spur for descenders

The FREINO is ideal for adding or adjusting friction during the descent.



### OMNI

#### Multidirectional semi-circle carabiner

Multidirectional semi-circle OMNI carabiner for fastening the FALCON ASCENT harnesses and for attaching a CROLL ventral rope clamp. It is available in two locking systems: automatic TRIACT-LOCK system or manual SCREW-LOCK system.





## Semi-permanent connectors



## RING OPEN

**Multidirectional gated ring**

The RING OPEN gated ring is designed for the semi-permanent connection of equipment. Round shape ensures optimal functioning in all directions. It has a wide opening that allows installation of ropes with sewn terminations.



## DELTA

**Triangular steel quick link**

When closed with a wrench, this steel quick link becomes a semi-permanent anchor ring.



## GO

**Oval steel quick link**

When closed with a wrench, this steel quick link becomes a semi-permanent anchor ring.



## DEMI ROND

**Semi-circle aluminum alloy quick link**

When closed with a wrench, this aluminum quick link is used to close harnesses that have two attachment points that must be joined with a connector.

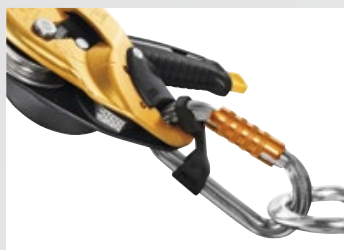
## Connector positioning accessories

NEW  
2018

## CAPTIV

**Connector positioning bar (pack of 10)**

The CAPTIV positioning bar promotes loading of the carabiner on the major axis, limits the risk of rotation and keeps it integrated with the device or lanyard. CAPTIV is compatible with OK, Am'D, WILLIAM, OXAN carabiners and the ROLLCLIP A pulley carabiner.



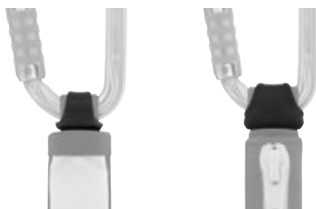
Used with the I'D descender, the CAPTIV connector positioning bar limits flipping of the carabiner and integrates it with the device.



## TANGA

**Connector positioning ring (pack of 10)**

The TANGA positioning ring helps hold the connector in the correct position.



## STRING

**Webbing protector (pack of 10)**

The STRING protector holds the connector in place and protects the webbing from abrasion. It is available in two sizes.

Locking		References					Certifications	Weight	
Lightweight carabiners									
OK		TRIACT-LOCK	M33A TL / TLN (1)	22 mm	25 kN	8 kN	7 kN	CE EN 362, EAC	75 g
		BALL-LOCK	M33A BL	23 mm					75 g
		SCREW-LOCK	M33A SL / SLN (1)	22 mm					70 g
Am'D		TRIACT-LOCK	M34A TL / TLN (1)	24 mm	27 kN	8 kN	8 kN	CE EN 362, EAC, NFPA 1983 Technical Use	75 g
		BALL-LOCK	M34A BL	25 mm					75 g
		SCREW-LOCK	M34A SL / SLN (1)	25 mm					70 g
WILLIAM		TRIACT-LOCK	M36A TL / TLN (1)	27 mm	27 kN	8 kN	8 kN	CE EN 362, EAC, NFPA 1983 Technical Use	90 g
		BALL-LOCK	M36A BL	27 mm					90 g
		SCREW-LOCK	M36A SL / SLN (1)	28 mm					85 g
Ultra-lightweight carabiners									
Sm'D		TRIACT-LOCK	M39A TL / TLN (1)	18 mm	23 kN	8 kN	7 kN	CE EN 362, CE EN 12275 type B, EAC	55 g
		SCREW-LOCK	M39A SL / SLN (1)	20 mm				CE EN 362, CE EN 12275 type B, EAC	45 g
		Non-locking	M39A S / SN (1)	23 mm				CE EN 12275 type B	40 g
High-strength carabiners									
OXAN		TRIACT-LOCK European version	M72A TL	21 mm	38 kN	16 kN	15 kN	CE EN 362, EAC, NFPA 1983 Technical Use	195 g
		TRIACT-LOCK international version	M72A TLA / TLN (1)	19 mm				CE EN 362, EAC, ANSI Z359.12 NFPA 1983 Technical Use, CSA Z259.12	230 g
		SCREW-LOCK	M72A SL / SLN (1)	22 mm				CE EN 362, EAC, NFPA 1983 Technical Use	185 g
VULCAN		TRIACT-LOCK European version	M73 TL	28 mm	40 kN	16 kN	11 kN	CE EN 362, EAC, NFPA 1983 General Use	285 g
		TRIACT-LOCK international version	M73 TLA / TLN (1)	27 mm				CE EN 362, EAC, ANSI Z359.12, NFPA 1983 General Use, CSA Z259.12	305 g
		SCREW-LOCK	M73 SL / SLN (1)	29 mm				CE EN 362, EAC, NFPA 1983 General Use	265 g
Lanyard end connectors									
<b>NEW 2018</b>		Automatic	M043AA00 / 01 (1)	25 mm	25 kN	-	10 kN	CE EN 362, EAC	160 g
VERTIGO TWIST-LOCK		TWIST-LOCK	M40A RLA	25 mm	25 kN	10 kN	8 kN	CE EN 362	100 g
MGO OPEN 60		Automatic	MGOO 60	63 mm	23 kN	-	23 kN	CE EN 362, EAC	490 g
MGO 110		Automatic	MGO 110	110 mm				CE EN 362	940 g
Special carabiners									
Am'D PIN-LOCK		PIN-LOCK	M34A PL (x 1) M34AB PL (x 10)	25 mm	27 kN	8 kN	8 kN	CE EN 362, EAC	80 g
FREINO		TWIST-LOCK	M42	15 mm	25 kN	10 kN	9 kN	CE EN 362	85 g
OMNI		TRIACT-LOCK	M37 TL	22 mm	20 kN	15 kN	7 kN	CE EN 362	90 g
		SCREW-LOCK	M37 SL						85 g
Semi-permanent connectors									
RING OPEN		Gated ring	P28	11 mm	23 kN	23 kN	-	CE EN 362	70 g
DELTA		Quick link	P11	12 mm	25 kN	10 kN	-	CE EN 362 type Q	150 g
		Quick link	P11 8, P11 8B P11 8BN (1)	10 mm					85 / 95 g
GO		Quick link	P15	16 mm					60 g
DEMI ROND		Quick link	P18	10 mm					55 g

(1) Black connectors







## Self-braking descenders

Descenders with a self-braking feature and multi-functional handle allow the user to control the descent and to get into position without having to tie off the device. These devices are primarily designed for difficult to access worksites and rescue: for positioning at a work station or for movement along low-angle or horizontal terrain.

The I'D S and I'D L descenders have an integrated anti-panic function and an anti-error catch.

The RIG descender is designed for expert users.

I'D S



I'D L



NEW  
2018



RIG



## Rescue descenders

Descenders for technical rescue with integrated progress-capture pulley to facilitate lowering and hauling of heavy loads.

NEW  
2018

MAESTRO S



NEW  
2018

MAESTRO L



## Standard descenders

Descenders with a simple design, using the friction between the rope and the device to brake a descent. The speed of the descent is regulated by varying the grip on the free end of the rope.



HUIT



RACK



## Mechanical Prusik for tree care

Mechanical Prusik that allows the user to move around efficiently in a tree while benefiting from the handling of a classic Prusik pulley system.



ZIGZAG



## Personal escape system

Rescue device that allows a single person to get him/herself out of a building or structure in case of an emergency.

It has a multi-purpose anchor hook adapted for locations where the possibility of finding an anchor point is uncertain.



EXO AP HOOK



## Self-braking descenders

**I'D S****Self-braking descender with anti-panic function**

The self-braking I'D S descender is designed for rope-access work. It has a multi-function handle that allows descent control, positioning at a work station without the need to tie off the device, and fluid movement on inclined or horizontal terrain. The integrated anti-panic function and anti-error catch limit the risk of an accident due to user error. The safety clip reduces the risk of dropping the device and facilitates passing of intermediate anchors.

**I'D L****Self-braking descender for rescue, with anti-panic function**

The I'D L self-braking descender is primarily designed for technical rescue. It has a multi-function handle that allows control of the descent speed, positioning at a work station without the need to tie off the device, and fluid movement along inclined or horizontal terrain. The integrated anti-panic function and anti-error catch limit the risk of an accident due to user error. Its rugged construction makes it particularly suited for hauling and lowering heavy loads.



Paint job for the cranes of the merchant harbor of Valencia, Spain. © Petzl / Jan Novak photography / Vertice Vertical™

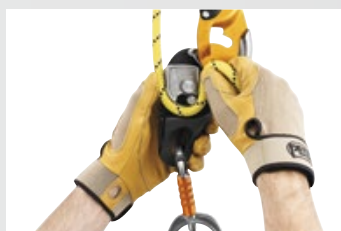
NEW  
2018



## RIG

### Compact self-braking descender

RIG is a compact self-braking descender designed for experienced rope access workers. It has an ergonomic handle that allows comfortable descent control. The AUTO-LOCK system allows users to easily position themselves at a work station without having to manipulate the handle or tie off the device. Once locked, the rope can be taken up without having to manipulate the handle. The safety gate allows the rope to be installed with the device remaining connected to the harness, facilitating passage of intermediate anchors. The stainless steel wear plate improves durability by reinforcing the rope friction zone.



Rope installation is quick and easy , thanks to the rope guide and markings.



The ergonomic handle allows the rope to be released for a comfortably controlled descent.



The AUTO-LOCK system allows users to easily position themselves at a work station without having to manipulate the handle or tie off the device: as soon as the user releases the handle, the rope is automatically locked in the device.



The cam can be manipulated for easily taking up rope or for belaying a lead using climbing techniques.

## Standard descenders



## HUIT

### Figure-8 descender

Figure-8 descender, compact and lightweight. Square shape helps reduce rope twist.



## RACK

### Variable friction descender with brake bars

The design and configuration of the RACK bars make it easy to set up and insert the rope. Compact and lightweight, the device allows the user to adjust the amount of friction during the descent, to adapt to changing conditions.

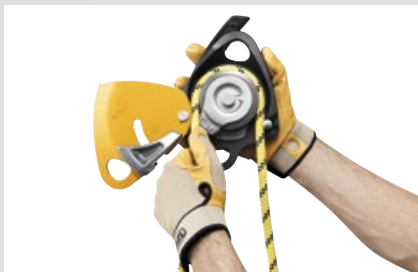




## Rescue descenders

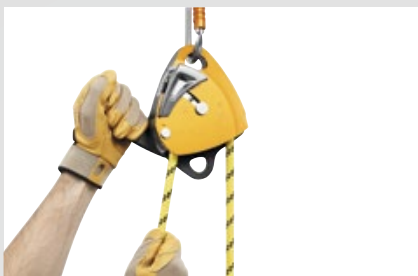
These descenders offer the versatility required for technical rescue operations: descent, hauling, handling heavy loads, use in the primary system or in a back-up belay...

- Easy rope installation



Rope installation is quick and easy, thanks to the rope guide and markings.

- Comfortable, controlled descent



#### Controlling the descent

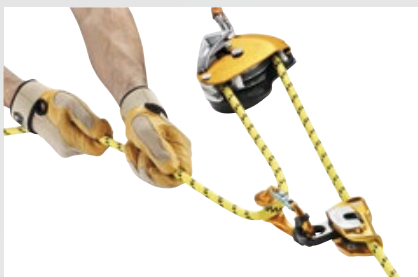
The ergonomic handle allows the rope to be released for a comfortably controlled descent.



#### Lowering heavy loads

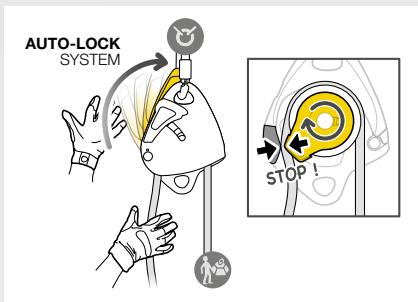
The integrated additional braking allows a redirect of the rope for better control when lowering heavy loads.

- Excellent hauling efficiency



The integrated progress-capture pulley has a very large diameter sheave mounted on sealed ball bearings, ensuring excellent hauling efficiency. The lower connection point can be used to create different types of hauling systems.

- AUTO-LOCK system: automatically locks the rope



AUTO-LOCK SYSTEM

The AUTO-LOCK system allows the rope to be locked automatically when the handle is not in use. Once locked, the rope can be taken up without having to manipulate the handle.

### MAESTRO S

Ø 10.5 to 11.5 mm

250 kg



### MAESTRO L

Ø 11.5 to 13 mm

280 kg



NEW  
2018



## MAESTRO® S

**Descender with integrated progress-capture pulley,  
compatible with 10.5 to 11.5 mm diameter ropes, for loads up to 250 kg**

MAESTRO S is a descender designed for technical rescue operations. It facilitates manipulation of heavy loads, for lowering or hauling, and may be used in both the primary system or in a back-up belay. This versatility allows rescuers to adapt to any situation they may encounter on the rescue scene. The ergonomic handle and integrated additional braking allow for comfortably controlled descent. Shifting from lowering position to hauling position is immediate, without the need to transfer the load. The integrated progress-capture pulley has a very large diameter sheave mounted on sealed ball bearings, ensuring excellent hauling efficiency. The AUTO-LOCK system automatically locks the rope when the handle is not in use. Once locked, the rope can be taken up without having to manipulate the handle. The MAESTRO S descender is compatible with 10.5 to 11.5 mm ropes and allows handling of loads up to 250 kg.

NEW  
2018



## MAESTRO® L

**Descender with integrated progress-capture pulley,  
compatible with 11.5 to 13 mm diameter ropes, for loads up to 280 kg**

MAESTRO L is a descender designed for technical rescue operations. It facilitates manipulation of heavy loads, for lowering or hauling, and may be used in both the primary system or in a back-up belay. This versatility allows rescuers to adapt to any situation they may encounter on the rescue scene. The ergonomic handle and integrated additional braking allow for comfortably controlled descent. Shifting from lowering position to hauling position is immediate, without the need to transfer the load. The integrated progress-capture pulley has a very large diameter sheave mounted on sealed ball bearings, ensuring excellent hauling efficiency. The AUTO-LOCK system automatically locks the rope when the handle is not in use. Once locked, the rope can be taken up without having to manipulate the handle. The MAESTRO L descender is compatible with 11.5 to 13 mm ropes and allows handling of loads up to 280 kg.



## Mechanical Prusik for tree care



### ZIGZAG®

#### Mechanical Prusik for tree care

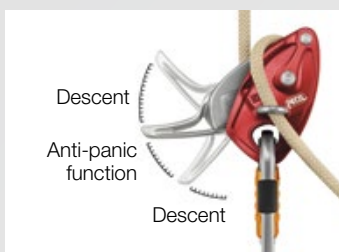
The ZIGZAG mechanical Prusik allows the user to move around efficiently in a tree using classic Prusik pulley system technique. The linked rings provide precision and fluidity when moving around. The pulley is mounted on sealed ball bearings to allow the slack to be taken up easily. The steel construction offers great durability.

## Personal escape system

### EXO® AP HOOK

#### Personal escape system with anchor hook

EXO AP HOOK is a personal escape system with anchor hook adapted for locations where the possibility of finding an anchor point is uncertain. It has a self-braking system with anti-panic function for quickly moving horizontally, climbing through a window and controlling and stopping a descent. If the user pulls too hard on the handle, the anti-panic function brakes and stops the descent automatically. EXO AP HOOK also includes a rope that resists wear and high temperatures, an Am'D connector with CAPTIV positioning bar, as well as a bag for transporting and attaching the system directly to the harness. Other rope lengths and other types of connectors (EASHOOK...) available by special order.



















If the user pulls too hard on the handle, the anti-panic function brakes and stops the descent automatically.



The anchor hook may be used around a structure, fixed with a locking hitch.

Because of the unique shape of the anchor hook, specific Petzl training for the EXO AP HOOK is mandatory.



	References	Certifications	Rope diameter compatibility	Maximum working load	Weight	
<b>Self-braking descenders</b>						
I'D S	 D200S0 (yellow) D200SN (black)	CE EN 12841 type C CE EN 341 class A ANSI Z359.4 NFPA 1983 Technical Use EAC	10 to 11.5 mm	Descending a heavy load up to 250 kg	530 g	
I'D L	 D200L0 (red) D200LN (black)	CE EN 12841 type C CE EN 341 class A ANSI Z359.4 NFPA 1983 General Use EAC	11.5 to 13 mm	Descending a heavy load up to 272 kg	530 g	
<b>NEW 2018</b> RIG	 D021AA00 (yellow) D021AA01 (black)	CE EN 12841 type C EN 341 type 2 class A CE EN 15151-1 NFPA 1983 Technical Use EAC	10 to 11.5 mm	Descending a heavy load up to 200 kg	400 g	
<b>Rescue descenders</b>						
<b>NEW 2018</b> MAESTRO S	 D024AA00	CE (1) EN 341 type 2 class A NFPA 1983 Technical Use EAC	10.5 to 11.5 mm	Descending a heavy load up to 250 kg	1000 g	
<b>NEW 2018</b> MAESTRO L	 D024BA00	CE (1) EN 341 type 2 class A NFPA 1983 General Use EAC	11.5 to 13 mm	Descending a heavy load up to 280 kg	1000 g	
<b>Standard descenders</b>						
HUIT	 D02	-	8 to 13 mm (single and half ropes)	100 kg	100 g	
RACK	 D11	-	9 to 13 mm (single rope) 8 to 11 mm (half rope)	100 kg	470 g	
<b>Mechanical Prusik for tree care</b>						
ZIGZAG	 D22A	CE	11.5 to 13 mm	140 kg	320 g	
<b>Personal escape system</b>						
EXO AP HOOK	 D30AB 015	NFPA 1983 Escape Use	7.5 mm (EXO rope only)	140 kg	1470 g	



Maintenance Moray Met Mast, Wick, Scotland. © Petzl / vuedici.org / Asaken Rope Access



#### Optimal grip

Petzl's frame-loaded rope clamps are designed to function optimally under any conditions (wet, frozen, dirty ropes, for example). They are therefore equipped with a specific stainless steel cam. Its unique design, the shape of its teeth and its self-cleaning slot allow optimal grip on the rope without damaging it, while reducing the effort required to slide the device up the rope.

## Rope clamps for progression

Frame-loaded rope clamps are easy to install and specially designed for rope ascents (handled rope clamps, ventral rope clamps and foot-mounted rope clamps).



ASCENSION



FOOTAPE



FOOTCORD



LOOPING



CROLL S



CROLL L

NEW  
2018



SECUR



ASCENTREE



PANTIN

## Versatile rope clamp

Rope clamp that can be used to ascend a fixed rope, or as progress capture in a hauling system.



BASIC

## Emergency rope clamp

Ultra-compact, lightweight rope clamp allows occasional rope ascents and hauling system set-ups.

NEW  
2018



TIBLOC

## Cam-loaded rope clamp

Rope clamp designed for use in haul systems as a tractor or progress capture device.



RESCUCENDER





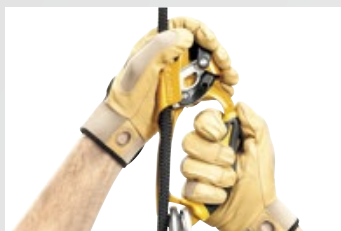
## Rope clamps for progression

ASCENSION  
left-handedASCENSION  
right-handed

## ASCENSION

**Handled rope clamp for rope ascents**

The ASCENSION handled ascender is designed for rope ascents and features an overmolded grip and ergonomic upper part for a comfortable and powerful grip when pulling with one or two hands. The ASCENSION handled rope clamp has a wide lower hole for easily attaching two carabiners for a lanyard and footloop.



The overmolded dual-density grip has an area for the index finger and a wide, supportive base to keep the hand from slipping. Ergonomic upper part maximizes power when pulling with two hands.



## PROGRESS ADJUST

**Double adjustable progression lanyard**

Find a description of the PROGRESS ADJUST lanyard on page 82.

## PROGRESS

**Progression lanyard**

Find a description of the PROGRESS lanyard on page 82.



## FOOTAPE

**Adjustable webbing foot loop**

The adjustable FOOTAPE foot loop is used with an ASCENSION or BASIC rope clamp for rope ascents. A height-adjustable elastic keeps the foot in the loop, regardless of shoe type.

## FOOTCORD

**Adjustable cord foot loop**

The adjustable FOOTCORD foot loop is used with an ASCENSION or BASIC rope clamp for rope ascents. Its 100 % Dyneema® construction increases durability. A height-adjustable elastic keeps the foot in the loop, regardless of shoe type.

## LOOPING

**Four-step etrier**

The LOOPING four-step etrier attaches to an ASCENSION rope clamp for rope ascents or directly onto an anchor for progression in overhangs.

NEW  
2018



## CROLL®

### Ventral rope clamp

Designed for rope ascents, the CROLL ventral rope clamp is simple to use, thanks to its pinch opening system, which is totally integrated in the clamp to avoid any involuntary snagging. The attachment holes ensure efficient positioning during ascents. It is available in two versions to adapt to different rope diameters.



## SECUR

### Shoulder straps for positioning the CROLL ventral rope clamp

SECUR shoulder straps position the CROLL ventral rope clamp and attach to AVAO SIT, FALCON, FALCON ASCENT and SEQUOIA SRT harnesses.



## ASCENTREE

### Double-handled rope clamp for tree care

Handled rope clamp designed for doubled rope ascents, the ASCENTREE has ergonomic handles allowing a comfortable and powerful grip when pulling. Catch/cam unit is totally integrated to prevent any involuntary snagging.



PANTIN  
left-foot

PANTIN  
right-foot

## PANTIN®

### Foot ascender

The PANTIN foot ascender is used with the CROLL, ASCENSION or ASCENTREE rope clamps to make rope ascents faster and less tiring. It is available in right- and left-foot versions.



Catch available as accessory to keep the rope in the device during rope ascents.



## Versatile rope clamp



## BASIC

**Compact, versatile ascender**

The BASIC rope clamp is very compact, making it easy to grip.

The wide lower hole allows lanyard and foot loop carabiners to be easily connected.

## Emergency rope clamp



NEW  
2018

## TIBLOC

**Emergency rope clamp**

Extremely compact and lightweight, the TIBLOC is an emergency rope clamp for ascending ropes or setting up hauling systems.



Stainless steel cam with angled teeth and evacuation slot securely grips the rope, even in muddy or icy conditions.

## Cam-loaded rope clamp



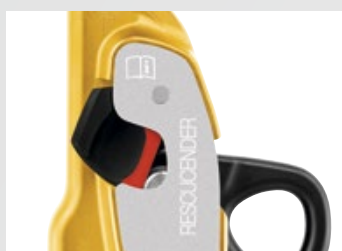
## RESCUCENDER

**Openable cam-loaded rope clamp**

Simple to use and ergonomic, the RESCUCENDER is an openable cam-loaded rope clamp designed for use in haul systems as a tractor or progress capture device.



























Openable guided cam allows easy installation or removal of the rope clamp at any point on the rope.



The safety catches are equipped with an unlocked indicator.



	References	Certifications	Rope diameter compatibility	Weight	
<b>Rope clamps for progression</b>					
ASCENSION	 <p>B17ALA (left-handed, black/yellow) B17ALN (left-handed, black) B17ARA (right-handed, black/yellow) B17ARN (right-handed, black)</p>	CE EN 567 CE EN 12841 type B NFPA 1983 Technical Use EAC	8 to 13 mm	165 g	
FOOTAPE		C47A	-	65 g	
FOOTCORD		C48A	-	40 g	
LOOPING		C25	-	145 g	
CROLL S		B16BAA	CE EN 567 CE EN 12841 type B EAC NFPA 1983 Technical Use	8 to 11 mm 85 g	
<b>NEW 2018</b> CROLL L		B016AA00	CE EN 567 CE EN 12841 type B EAC NFPA 1983 Technical Use	8 to 13 mm 140 g	
SECUR		C74A	-	- 135 g	
ASCENTREE		B19AAA	CE	8 to 13 mm 330 g	
PANTIN		B02CLA (left foot) B02CRA (right foot)	The PANTIN is not an item of PPE	8 to 13 mm 85 g	
Catch for PANTIN		B02210 (for left foot PANTIN) B02200 (for right foot PANTIN)	-	- 25 g	
<b>Versatile rope clamp</b>					
BASIC		B18BAA	CE EN 567 CE EN 12841 type B EAC	8 to 11 mm 85 g	
<b>Emergency rope clamp</b>					
<b>NEW 2018</b> TIBLOC		B01BN	CE EN 567 EAC	8 to 11 mm 35 g	
<b>Cam-loaded rope clamp</b>					
RESCUCENDER		B50A	CE EN 567 CE EN 12841 type B NFPA 1983 Technical Use EAC	9 to 13 mm (1) 10 to 13 mm (2) 260 g	

(1) for the CE EN 567 standard, (2) for the other standards.

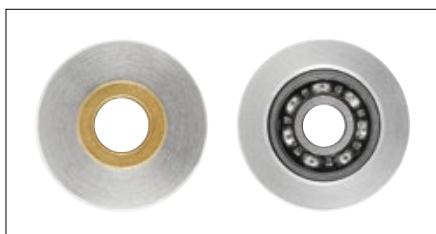




Paint job for the cranes of the merchant harbor of Valencia, Spain. © Petzl / Jan Novak photography / Vertice Vertical™

Two factors determine a pulley's efficiency:

- Sheave size: the larger the sheave diameter, the higher the efficiency
- Bushings and bearings:
  - self-lubricating bushings are efficient, but they must be regularly maintained
  - sealed ball bearings are very efficient, and they do not require any maintenance



## High-efficiency pulleys

Versatile, high-performance pulleys adapted for intensive use.



## Pulley-carabiners

Pulley-carabiners with excellent efficiency.



## Progress capture pulleys

Pulleys with an integrated progress capture system may be used to replace a traditional pulley/rope clamp set-up in hauling systems.



## Prusik pulleys

High-performance pulleys designed for use with a Prusik friction hitch to build a light progress capture system. The shape of the side plates allows the knot to be released when it comes against the pulley.



## Single pulleys

Lightweight, versatile pulleys designed for situations that do not require a high level of efficiency (redirecting the rope...).



## Transport pulleys

Pulleys for movement along a rope or cable. Extremely quick and easy to install, these pulleys have fixed side plates and ensure perfect stability with their two aligned sheaves.



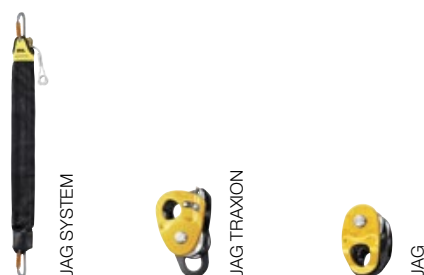
## Specialized pulleys

Specialized pulleys are designed for particular applications requiring passage of knots or movement along a mechanical lift cable.



## Haul kit

Ready-to-use kit, designed to easily pick off and lower - or simply pick off - a victim.





## High-efficiency pulleys



## PRO

**Very high-efficiency loss-resistant pulley**

Openable even when attached to the anchor, the PRO pulley is designed for maximum simplicity when setting up hauling or load deviation systems. The side plate that locks under load, the large-diameter sheave and the very high efficiency sealed ball bearings make a pulley that is well suited for handling heavy loads.



## PARTNER

**Ultra-compact, high-efficiency pulley**

The PARTNER is an ultra compact, extremely lightweight pulley. It is designed for daily tasks and on-site rescue.



## RESCUE

**High strength, very high efficiency pulley**

The very high efficiency RESCUE pulley is designed for intensive use by rescue professionals.

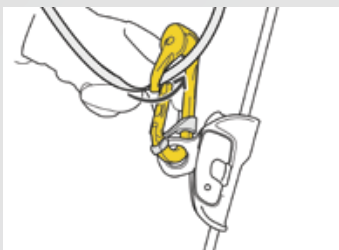
## Pulley-carabiners



## ROLLCLIP A

**Pulley-carabiner that facilitates installation of the rope when pulley is connected to the anchor**

ROLLCLIP A is a pulley-carabiner with a gate opening on the pulley side that facilitates installation of the rope when the pulley is fixed to the anchor. It is available with an automatic TRIACT-LOCK locking system, or without a locking system. ROLLCLIP A 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.



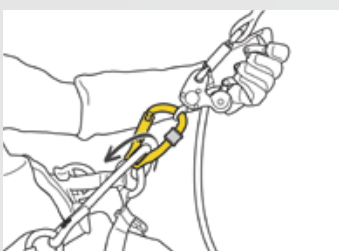
The ROLLCLIP A pulley can be used as a directional point when combined with the RESCUCENDER rope clamp.



## ROLLCLIP Z

**Pulley-carabiner that facilitates installation on anchors and devices**

ROLLCLIP Z is a pulley-carabiner with a gate opening on the non-pulley side to facilitate installation on anchors and devices. It is available in two locking systems: automatic TRIACT-LOCK system or manual SCREW-LOCK system.



The ROLLCLIP Z pulley can be used for tree care to attach the ZIGZAG descender to the attachment bridge on the SEQUOIA harness, for improved lateral mobility.

## Progress capture pulleys



### PRO TRAXION

#### Very efficient loss-resistant progress capture pulley

The PRO TRAXION progress capture pulley is designed to allow rope installation while the pulley is connected to the anchor. With its large diameter sheave and great efficiency, it is particularly appropriate for hauling heavy loads. The side plate locks when loaded and prevents opening of the pulley during use. The lower connection point can be used to create different types of hauling systems.



### MICRO TRAXION

#### High-efficiency, ultra-compact progress capture pulley

MICRO TRAXION is an ultra-compact, extremely light progress capture pulley that is exceptionally efficient. The cam can be locked in open position so the device can be used as a simple pulley.

## Prusik pulleys



### MINI

#### Highly efficient and lightweight Prusik pulley

The MINI compact pulley offers a lightweight solution for setting up progress capture systems.



### GEMINI

#### Highly efficient and lightweight double Prusik pulley

GEMINI is a compact double pulley that sets up progress capture systems of high mechanical advantage.



### MINDER

#### High strength, very high efficiency Prusik pulley

MINDER is a high-strength pulley designed for rescue professionals to set up progress capture systems.



### TWIN

#### High strength, very high efficiency double Prusik pulley

TWIN is a high-strength double pulley designed for rescue professionals. It is designed to set up progress capture systems of high mechanical advantage.

## Single pulleys



### MOBILE

#### Versatile ultra-compact pulley

Compact and extremely lightweight, the MOBILE pulley is designed for a variety of uses.



### FIXE

#### Versatile compact pulley

Versatile and compact, the FIXE pulley allows quick installation onto the rope.



## Transport pulleys



### TANDEM® / TANDEM® SPEED

#### Double pulleys for Tyrolean traverses

TANDEM and TANDEM SPEED are designed for Tyrolean traverses and can accept up to three connectors to facilitate maneuvers. TANDEM is used on a rope. TANDEM SPEED can also be used on a cable because of its wear-resistant sheaves mounted on sealed ball bearings.

## Specialized pulleys



### KOOTENAY

#### Knot-passing pulley

KOOTENAY is a knot-passing pulley that allows passage of joining knots. The large diameter sheave mounted on sealed ball bearings ensures excellent efficiency.



### ROLLCAB

#### Roller for movement along cable

ROLLCAB is a roller designed for movement and evacuation along mechanical lift cables.

## Haul kit



### JAG SYSTEM

#### Haul kit

The JAG SYSTEM haul kit is for pickoffs, making a releasable anchor, or tensioning a system, thanks to its 4:1 mechanical advantage and excellent efficiency (sheaves with sealed ball bearings). The collapsed kit is very compact, making usage possible even if the distance to the anchor is very short. The JAG SYSTEM haul kit is quick and easy to deploy: it is ready to use thanks to the flexible cover that prevents any risk of tangling. The haul end is color coded for instant identification. It is available in three lengths: 1, 2 and 5 meters.



### JAG TRAXION

#### High-efficiency double progress capture pulley

The JAG TRAXION double progress capture pulley is designed for use with the JAG pulley to make a 4:1 haul system. Sheaves mounted on sealed ball bearings for excellent efficiency.



### JAG

#### High-efficiency double pulley

The JAG double pulley is designed for use with the JAG TRAXION double progress capture pulley to make a 4:1 haul system. Sheaves mounted on sealed ball bearings for excellent efficiency.



		References	Certifications	Rope diameter compatibility	Sheave diameter	Ball bearings	Efficiency	Maximum working load	Weight
High-efficiency pulleys									
PRO		P46	CE EN 12278, NFPA 1983 Technical Use, EAC	7 to 13 mm	38 mm	●	95 %	2.5 kN x 2 = 5 kN	205 g
PARTNER		P52A	CE EN 12278	7 to 11 mm	25 mm	●	91 %	2.5 kN x 2 = 5 kN	56 g
RESCUE		P50A P50AN	CE EN 12278, NFPA 1983 General Use	7 to 13 mm	38 mm	●	95 %	4 kN x 2 = 8 kN	185 g
Pulley-carabiners									
ROLLCLIP A		P74 TL	CE EN 362, EN 12275, EN 12278, EAC	7 to 13 mm	18 mm	●	85 %	2 kN x 2 = 4 kN	115 g
		P74	CE EN 12275, EN 12278, EAC						105 g
ROLLCLIP Z		P75 TL	CE EN 362, EN 12278, EAC	7 to 13 mm	18 mm	●	85 %	2 kN x 2 = 4 kN	110 g
		P75 SL	CE EN 362, EN 12278, EAC						105 g
Progress capture pulleys									
PRO TRAXION		P51A	CE EN 567 NFPA 1983 Technical Use, EAC	8 to 13 mm	38 mm	●	95 %	Pulley: 2.5 kN x 2 = 5 kN Rope clamp: 2.5 kN	265 g
MICRO TRAXION		P53	CE EN 567, EAC	8 to 11 mm	25 mm	●	91 %	Pulley: 2.5 kN x 2 = 5 kN Rope clamp: 2.5 kN	85 g
Prusik pulleys									
MINI		P59A	CE EN 12278, NFPA 1983 Technical Use	7 to 11 mm	25 mm	●	91 %	2.5 kN x 2 = 5 kN	80 g
GEMINI		P66A	CE EN 12278, NFPA 1983 Technical Use	7 to 11 mm	25 mm	●	91 %	2 x 1.5 kN x 2 = 6 kN	135 g
MINDER		P60A	CE EN 12278, NFPA 1983 General Use	7 to 13 mm	51 mm	●	97 %	4 kN x 2 = 8 kN	295 g
TWIN		P65A	CE EN 12278, NFPA 1983 General Use	7 to 13 mm	51 mm	●	97 %	2 x 3 kN x 2 = 12 kN	450 g
Single pulleys									
MOBILE		P03A	CE EN 12278	7 to 13 mm	21 mm	-	71 %	2.5 kN x 2 = 5 kN	75 g
FIXE		P05W P05WN	CE EN 12278	7 to 13 mm	21 mm	-	71 %	2.5 kN x 2 = 5 kN	90 g
Transport pulleys									
TANDEM		P21	CE EN 12278	rope ≤ 13 mm	21 mm	-	71 %	10 kN	195 g
TANDEM SPEED		P21 SPE	CE EN 12278	rope ≤ 13 mm cable ≤ 12 mm	27.5 mm	●	95 %	10 kN	270 g
Specialized pulleys									
KOOTENAY		P67	CE EN 12278	8 to 19 mm	76 mm	●	-	5 kN x 2 = 10 kN	1390 g
ROLLCAB		P47	CE EN 1909	cable ≤ 55 mm	55 mm	-	-	5 kN	1470 g
Haul kit									
JAG SYSTEM	1 m 2 m 5 m	P044AA00 P044AA01 P044AA02	EAC	-	-	●	-	6 kN	610 g 805 g 1460 g
JAG TRAXION		P54	CE EN 567, NFPA 1983 Technical Use	8 to 11 mm	25 mm	●	91 %	2 x 1.5 kN x 2 = 6 kN	145 g
JAG		P45	CE EN 12278, NFPA 1983 Technical Use	8 to 11 mm	25 mm	●	91 %	2 x 1.5 kN x 2 = 6 kN	120 g





Temporary anchor. © Petzl / vuedici.org

## Rock and concrete anchors

Elements that allow installation of temporary or permanent fixed anchors.



COEUR BOLT STEEL



COEUR BOLT STAINLESS



COEUR BOLT HCR



NEW 2018

COEUR PULSE



COEUR STEEL



COEUR STAINLESS



COEUR HCR



COLLINOX



BATINOX

## Rigging equipment

Swivels provide a solution to the problems of twisting and tangling ropes, especially when hauling.

Rigging plates allow the work station to be organized and increase the number of anchoring options.

Connection rings allow multiple anchors to be organized.



MICRO SWIVEL



SWIVEL OPEN



SWIVEL



PAW



RING



RING OPEN

## Anchor straps

Slings designed for installation of easily transportable temporary anchors, offering adjustability, or a choice of lengths.



ANNEAU



ST'ANNEAU



PUR'ANNEAU



CONNEXION



TREESBEE



TREESBEE SCREWLINK

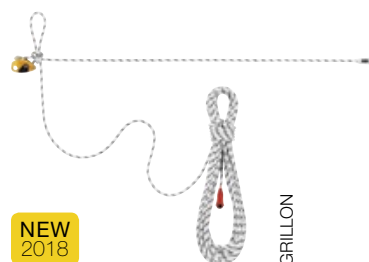
## Quick adjustment anchor



NEW 2018

GRILLON

## Temporary horizontal lifeline



NEW 2018

GRILLON





## Rock and concrete anchors



## COEUR BOLT STEEL / STAINLESS / HCR

Anchors comprised of a COEUR hanger, a nut and a bolt (pack of 20)

## Different steels suited to various environments

Petzl anchors (hangers and bolts) use different types of steels to adapt the anchor to the environment in which it is used:

- Standard steel, designed for interior uses or non-permanent installations: **COEUR BOLT STEEL**
- 316L high quality stainless steel, designed for typical exterior uses: **COEUR BOLT STAINLESS**
- HCR 904 (High Corrosion Resistance) stainless steel, designed for ultra-corrosive environments: **COEUR BOLT HCR**

Hangers (COEUR STEEL, COEUR STAINLESS and COEUR HCR) and bolts (BOLT STEEL, BOLT STAINLESS and BOLT HCR) are also available separately (pack of 20).

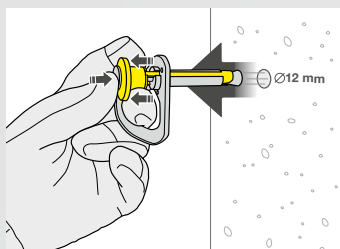


NEW  
2018

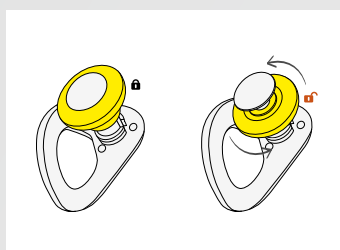
## COEUR PULSE

## Removable 12 mm anchor with locking function

The COEUR PULSE is a 12 mm removable stainless steel anchor that can be installed and removed very simply and rapidly, without tools. The locking function limits the risk of involuntary removal.



Simple, rapid installation and removal, without tools.



Manual screw-lock function limits the risk of involuntary removal.



## COLLINOX

Forged stainless steel glue-in bolt (pack of 10)



## AMPOULE COLLINOX

Resin glue for COLLINOX



## BAT'INOX

Forged stainless steel glue-in bolt (pack of 10)



## AMPOULE BAT'INOX

Resin glue for BAT'INOX

## Rigging equipment



### MICRO SWIVEL

#### Compact gated swivel

The compact, gated MICRO SWIVEL is designed for attachment to a locking carabiner. It helps prevent twisting of lanyards and allows correct positioning of devices. Its design without bearings allows it to turn freely when not loaded and to stop moving when loaded in order to maintain the devices in position.



### SWIVEL OPEN

#### Gated swivel with sealed ball bearings

The SWIVEL OPEN gated swivel features a wide opening and thus can be attached to a range of products (pulleys, lanyards...). It reduces the bulk and weight of component systems and solves the twisting and tangling problems of ropes and lanyards. Sealed ball bearings offer excellent performance and reliability.



### SWIVEL

#### Ball bearing swivel

Available in two sizes, the SWIVEL prevents the rope from twisting when the load is turning. Sealed ball bearings offer excellent performance and reliability.



### PAW

#### Rigging plate

Available in three sizes, the PAW rigging plate is for organizing the work station and creating multi-anchor systems.



### RING

#### Connection ring

The RING connection ring can be used to create multiple anchors or be installed directly onto the SEQUOIA and SEQUOIA SRT harnesses' attachment bridges to improve the arborist's lateral mobility.



### RING OPEN

#### Multidirectional gated ring

See page 98 for details on the RING OPEN multidirectional gated ring.

## Anchor straps



### ANNEAU

#### Open loop sling

ANNEAU is an open loop sling available in four lengths, color-coded for easy identification of length.



### ST'ANNEAU

#### Dyneema® webbing sling

ST'ANNEAU is a lightweight alternative to classic slings, available in three lengths, with color coding for easy identification of length.



### PUR'ANNEAU

#### Very lightweight sling in high-modulus polyethylene

PUR'ANNEAU is a very lightweight sling with exceptional durability, thanks to its high-modulus polyethylene construction. It is particularly supple, for easy handling. Available in three lengths, color-coded for easy identification of length.



## Anchor straps (cont)

**CONNEXION FIXE****Anchor strap**

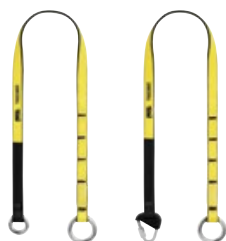
Anchor strap with forged steel D-rings on the ends.

**CONNEXION VARIO****Adjustable anchor strap**

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

**CONNEXION FAST****Rapid adjustment anchor strap**

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

**TREESBEE****False crotch for tree care**

The TREESBEE anchor strap is used to improve rope glide at the anchor while protecting the tree from abrasion. It is designed for ropes with spliced terminations (the splice goes through the small ring).

**TREESBEE SCREWLINK****False crotch for tree care**

The TREESBEE SCREWLINK anchor strap is used to improve rope glide at the anchor while protecting the tree from abrasion. It is designed for ropes with sewn terminations (the link opens to let the sewn termination through).

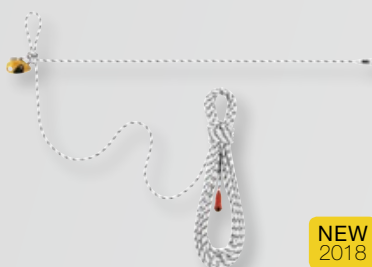
## Quick adjustment anchor

**NEW**  
2018

**GRILLON anchor****Quick adjustment anchor**

The adjustable GRILLON anchor can be used to quickly set a fixed anchor point. The length of rope required to set it is easily adjusted with the integrated self-locking device. The removable protective sheath allows smoother rope glide while protecting the rope from abrasive surfaces. It is available in four lengths.

## Temporary horizontal lifeline



**NEW**  
2018

**GRILLON lifeline****Temporary horizontal lifeline**

GRILLON allows a horizontal lifeline to be installed quickly when there is a large work surface to cover. The integrated self-locking device allows easy adjustment of length, depending on the distance between two anchor points. It is available in four lengths to adapt to any situation.



## Rock and concrete anchors

	References	Certifications	Diameter	Shear strength in 50 MPa concrete	Pull-out strength in 50 MPa concrete	Weight
COEUR BOLT STEEL	P36BA 10 P36BA 12	- EN 959	10 mm 12 mm	23 kN 25 kN	15 kN 18 kN	110 g 135 g
COEUR BOLT STAINLESS	P36BS 10 P36BS 12	EN 959	10 mm 12 mm	25 kN	15 kN 18 kN	110 g 135 g
COEUR BOLT HCR	P36BH 12	EN 959	12 mm	25 kN	18 kN	145 g
COEUR STEEL	P36AA 10 / P36AA 12	EN 795 A, EN 959 (except 10 mm)	10 mm / 12 mm	-	-	65 g / 60 g
COEUR STAINLESS	P36AS 10 / P36AS 12	EN 795 A, EN 959	10 mm / 12 mm	-	-	65 g / 60 g
COEUR HCR	P36AH 12	EN 795 A, EN 959	12 mm	-	-	60 g
<b>NEW 2018</b> COEUR PULSE	P37S 12	CE EN 795 B	12 mm	25 kN	20 kN	140 g
COLLINOX	P55	EN 959	10 mm	25 kN	15 kN	95 g
AMPOULE COLLINOX	P56	-	-	-	-	-
BAT'INOX	P57	EN 959	14 mm	25 kN	15 kN	250 g
AMPOULE BAT'INOX	P41	-	-	-	-	-

## Rigging equipment

	References	Certifications	Breaking strength	Weight
MICRO SWIVEL	P58 XSO	CE, EAC	23 kN	75 g
SWIVEL OPEN	P58 SO	CE, EAC, NFPA 1983 Technical Use	23 kN	130 g
SWIVEL S	P58 S	CE, EAC, NFPA 1983 Technical Use	23 kN	95 g
SWIVEL L	P58 L	CE, EAC, NFPA 1983 General Use	36 kN	150 g
PAW S / M / L	P63 S / P63 SN (black) P63 M / P63 MN (black) P63 L / P63 LN (black)	CE, NFPA 1983 General Use	36 kN	55 g (S) 210 g (M) 350 g (L)
RING S / L	C04620 / C04630	CE	23 kN	40 g (S) 70 g (L)

## Anchor straps

	References	Certifications	Length	Breaking strength	Weight
ANNEAU	C40A 60, C40 60N (black) C40A 80, C40 80N (black) C40A 120, C40120 N (black) C40A 150	CE EN 566, CE EN 795 B, EAC	60 cm 80 cm 120 cm 150 cm	22 kN	60 g 80 g 100 g 135 g
ST'ANNEAU	C07 24 C07 60 C07 120	CE EN 795 B	24 cm 60 cm 120 cm	22 kN	10 g 20 g 40 g
PUR'ANNEAU	G006AA00 G006AA01 G006AA02	CE EN 795 B	60 cm 120 cm 180 cm	22 kN	18 g 32 g 48 g
CONNEXION FIXE	C42 100 C42 150 C42 200	CE EN 795 B, NFPA 1983 General Use	100 cm 150 cm 200 cm	22 kN	365 g 425 g 485 g
CONNEXION VARIO	C42 V	CE EN 795 B, NFPA 1983 General Use	80 to 130 cm	22 kN	480 g
CONNEXION FAST	C42 F	CE EN 795 B, NFPA 1983 Technical Use	20 to 150 cm	18 kN	440 g
TREESBEE	C04110	CE EN 795 B	110 cm	23 kN	240 g
TREESBEE SCREWLINK	C04110 M	CE EN 795 B	110 cm	15 kN	295 g

## Quick-adjust anchor and temporary horizontal lifeline

	References	Certifications	Length	Weight
<b>NEW 2018</b> GRILLON	L052AA00, L052AA07 (black) L052AA01, L052AA08 (black) L052AA02 L052AA03 L052AA04 L052AA05 L052AA06	EN 795 B and C, EAC	2 m 3 m 4 m 5 m 10 m 15 m 20 m	480 g 560 g 640 g 720 g 1075 g 1475 g 1875 g



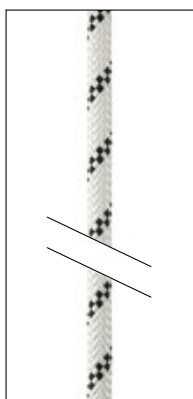


Nighttime inspection of the London Eye, United Kingdom. © vuedici.org / Line Ryder / Leisure Technical Consultants / London Eye 2017 / Marks Barfield Architects



### Customization by request

To more precisely meet the specific needs of certain professionals, Petzl offers a customization service.



### Choice of lengths

It is possible to order a rope of a specified length.



### Addition of sewn terminations

The rope can have sewn terminations manufactured on one or both ends. This makes it ready for use without adding any knots.

These terminations have a sheath that protects the stitching from friction and facilitates handling by holding the connector in position.

## Low stretch kernmantel ropes

### For work at height

Low stretch kernmantel rope with standard diameter ensures good grip for easier handling.



AXIS 11 mm



AXIS 11 mm with sewn termination

### For rope access

Low stretch kernmantel rope with small diameter to ensure very good performance in terms of flexibility and weight.



PARALLEL 10,5 mm

### For rescue

Low stretch kernmantel rope with a large diameter that ensures great strength and excellent handling when working with heavy loads.



VECTOR 12,5 mm

## Dynamic rope

For progression using rock climbing techniques.



MAMBO 10,1 mm

## Technical cord

Cord for creation of Prusik knots, anchors or haul systems.

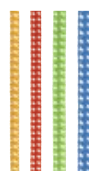


SEGMENT 8 mm

## Accessory cords

Cords for guiding a victim during rescue, or for hauling equipment.

NEW  
2018



Cords  
4, 5, 6, 7 mm

## Rope protectors

Devices that protect the rope on friction zones.



PROTEC



SET CATERPILLAR



ROLL MODULE





## Low stretch kernmantel ropes

A specific construction for each use and a choice of lengths and colors according to user needs.



### • EverFlex construction: consistent performance over time

Petzl low stretch kernmantel ropes are made with a nylon core and a specially-braided polyester sheath.

This construction ensures great flexibility over time under any conditions (water, dust, mud...). The flexibility allows it to maintain consistent handling over the long run and perform optimally with devices.



### • Multiple certifications

Petzl low stretch kernmantel ropes are certified to the following standards:

- European: CE EN 1891 type A
- American: NFPA 1983
- Russian: EAC

### • Available in several lengths and colors



Petzl low stretch kernmantel ropes come in several standard lengths, according to user needs and activities.

They are also available in six colors for easy differentiation of working ropes, safety ropes, and common access ropes.

### • For work at height



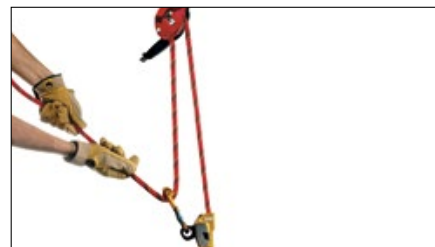
Low stretch kernmantel rope with standard diameter ensures good grip for easier handling.

### • For rope access



Low stretch kernmantel rope with small diameter to ensure very good performance in terms of flexibility and weight.

### • For rescue



Low stretch kernmantel rope with a large diameter that ensures great strength and excellent handling when working with heavy loads.



## AXIS 11 mm

### Low stretch kernmantel rope with good handling for work at height

The AXIS 11 mm low stretch kernmantel rope is designed for work at height. The standard diameter ensures a good grip for easier handling. The EverFlex construction guarantees great flexibility and consistent performance over time. Rope available in six colors and four lengths.



## AXIS 11 mm with sewn termination

### Low stretch kernmantel rope with sewn termination and good handling, for work at height

The AXIS 11 mm low stretch kernmantel rope with sewn termination is designed for work at height. The standard diameter ensures a good grip for easier handling. The EverFlex construction guarantees great flexibility and consistent performance over time. The sewn termination with protective sheath helps keep the connector in position and facilitates handling. It is suitable for use with an ASAP mobile fall arrester, or in a rescue kit with an I'D S descender. Rope available in six lengths.



## PARALLEL 10.5 mm

### Low stretch kernmantel rope, flexible and lightweight for rope access

The PARALLEL 10.5 mm low stretch kernmantel rope is designed for rope access. The small diameter ensures very good performance in terms of flexibility and weight. It has low stretch when put under tension, increasing efficiency at the start of a rope ascent. The EverFlex construction guarantees great flexibility and consistent performance over time. Rope available in six colors and four lengths.



## VECTOR 12.5 mm

### Low stretch kernmantel, high-strength rope with excellent handling, for rescue

The VECTOR 12.5 mm low stretch kernmantel rope is designed for rescue. The large diameter ensures great strength and excellent handling when manipulating heavy loads. The EverFlex construction guarantees great flexibility and consistent performance over time. Rope available in six colors and four lengths.



## Dynamic rope



### MAMBO® 10.1 mm

#### Dynamic rope for progression using climbing techniques

The 10.1 mm diameter MAMBO dynamic rope is designed for work at height professionals that use climbing techniques for progression. The thick sheath improves abrasion resistance.

## Technical cord



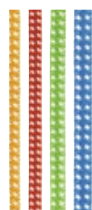
### SEGMENT 8 mm

#### Technical cord

The SEGMENT 8 mm technical accessory cord is used when creating Prusik knots, anchors or haul systems. The EverFlex construction guarantees great flexibility and consistent performance over time. Cord available in three lengths.

## Accessory cords

NEW  
2018



### Cords

#### Accessory cords

These rugged and durable cords are for guiding a victim during rescue, or for hauling equipment. Available in four diameters, in a 120 meter roll.





## Rope protectors



### PROTEC

#### Flexible protection

Flexible PROTEC protection helps protect a fixed rope from abrasion. It is quick and easy to install.



### SET CATERPILLAR

#### Articulated protector

The SET CATERPILLAR articulated protector helps protect a moving rope from abrasion. The number of modules can be adapted to the terrain.



### ROLL MODULE

#### Articulated protector with rollers

ROLL MODULE is an articulated protector with rollers designed to guide a moving rope and protect it from abrasion. It offers the possibility of adapting the number of modules to the terrain and of minimizing abrasion.




#### Rope protectors

	References	Weight
PROTEC	C45 N	95 g
SET CATERPILLAR	P68	1055 g
ROLL MODULE	P49	1330 g



Paint job for the cranes of the merchant harbor of Valencia, Spain. © Petzl / Jan Novak photography / Vertice Vertical™



	References	Color	Length	European certification	US certification	Russian certification	Weight per meter
Low stretch kernmantel ropes							
	R074AA03	white	50 m	CE EN 1891 type A	NFPA 1983 Technical Use	EAC	80 g
	R074AA04	yellow					
	R074AA05	black					
	R074AA38	blue					
	R074AA39	red					
	R074AA40	orange					
	R074AA09	white	100 m				
	R074AA10	yellow					
	R074AA11	black					
	R074AA12	blue					
	R074AA13	red					
	R074AA14	orange					
	R074AA21	white	200 m				
	R074AA22	yellow					
	R074AA23	black					
	R074AA24	blue					
	R074AA25	red					
	R074AA26	orange					
	R074AA28	white	500 m				
	R074AA00	white	150 ft				
	R074AA01	yellow					
	R074AA02	black					
	R074AA35	blue					
	R074AA36	red					
	R074AA37	orange					
	R074AA06	white	200 ft				
	R074AA07	yellow					
	R074AA08	black					
R074AA41	blue						
R074AA42	red						
R074AA43	orange						
R074AA15	white	600 ft					
R074AA16	yellow						
R074AA17	black						
R074AA18	blue						
R074AA19	red						
R074AA20	orange						
R074AA27	white	1200 ft					
	R074BA00	white	10 m	CE EN 1891 type A	NFPA 1983 Technical Use	EAC	80 g
	R074BA01		20 m				
	R074BA02		30 m				
	R074BA03		40 m				
	R074BA04		50 m				
	R074BA05		60 m				
	R077AA03	white	50 m	CE EN 1891 type A	NFPA 1983 Technical Use	EAC	73 g
	R077AA04	yellow					
	R077AA05	black					
	R077AA35	blue					
	R077AA36	red					
	R077AA37	orange					
	R077AA09	white	100 m				
	R077AA10	yellow					
	R077AA11	black					
	R077AA12	blue					
	R077AA13	red					
	R077AA14	orange					
	R077AA21	white	200 m				
	R077AA22	yellow					
	R077AA23	black					
	R077AA24	blue					
	R077AA25	red					
	R077AA26	orange					
	R077AA28	white	500 m				

AXIS  
11 mm




AXIS  
11 mm  
with sewn  
termination



PARALLEL  
10.5 mm



	References	Color	Length	European certification	US certification	Russian certification	Weight per meter	
<div>VECTOR</div> <div>12.5 mm</div> 	R078AA03	white	50 m	CE EN 1891 type A	NFPA 1983 General Use	EAC	110 g	
	R078AA04	yellow						
	R078AA05	black						
	R078AA38	blue						
	R078AA39	red						
	R078AA40	orange						
	R078AA09	white	100 m					
	R078AA10	yellow						
	R078AA11	black						
	R078AA12	blue						
	R078AA13	red						
	R078AA14	orange						
	R078AA21	white	200 m					
	R078AA22	yellow						
	R078AA23	black						
	R078AA24	blue						
	R078AA25	red						
	R078AA26	orange						
	R078AA28	white	500 m					
	R078AA00	white	150 ft					
	R078AA01	yellow						
	R078AA02	black						
	R078AA35	blue						
	R078AA36	red						
	R078AA37	orange						
	R078AA06	white	200 ft					
	R078AA07	yellow						
	R078AA08	black						
	R078AA41	blue						
	R078AA42	red						
R078AA43	orange							
R078AA15	white	600 ft						
R078AA16	yellow							
R078AA17	black							
R078AA18	blue							
R078AA19	red							
R078AA20	orange							
R078AA27	white	1200 ft						

## Dynamic rope

<b>MAMBO</b> <b>10.1 mm</b> 	R32AB 200	blue	200 m	CE EN 892	-	-	65 g
	R32AY 200	yellow					

## Technical cord

<b>SEGMENT</b> <b>8 mm</b> 	R076AA00	white	50 m	CE EN 564	NFPA 1983 Escape Use	-	43 g
	R076AA03		100 m				
	R076AA06		200 m				

## Accessory cords

<b>Cords</b> <b>NEW 2018</b>	4 mm	R044AA00	orange	120 m	CE EN 564	-	-	10 g
	5 mm	R045AA00	red					15 g
	6 mm	R046AA00	green					24 g
	7 mm	R047AA00	blue					31 g







Maintenance Moray Met Mast, Wick, Scotland. © Petzl / vuedici.org / Asaken Rope Access

## Durable packs

Solid and comfortable, these packs are designed for organizing equipment, bringing it to the worksite and carrying it in a vertical environment.



TRANSPORT 45L



PORTAGE 30L



PERSONNEL 15L



BOLT BAG



PORTO

## Upright packs

Placed on the ground, these packs keep their shape, even when empty, and thus facilitate access to their interior.



BUCKET 25L

NEW  
2018



BUCKET 35L

NEW  
2018

## Tree care accessories

Specific products that help with placing an access rope in a tree.



JET



AIRLINE



ECLIPSE

## Accessories

Gloves, crampons and knives that facilitate working and moving around.



CORDEX



CORDEX PLUS



SPATHA



CRAB 6



SPIKY PLUS



## Durable packs



## TRANSPORT 45L

**Durable large-capacity bag**

The TRANSPORT is an especially comfortable and rugged 45 liter backpack. It is made of PVC-free material, and its welded construction provides great strength. It is ideal for long-distance carries with its padded back panel, waistbelt and shoulder straps. It is made for use under difficult conditions, and also has an ID card pocket.



Waistbelt, shoulder straps and back panel are padded for comfort.



## PORTAGE 30L

**Durable medium-capacity bag**

The PORTAGE is a rugged and comfortable 30 liter backpack. It is made of PVC-free material, and its welded construction provides great strength. With its padded shoulder straps, it is comfortable during long carries. It is made for use under difficult conditions, and also has an ID card pocket.



## PERSONNEL 15L

**Durable small-capacity bag**

The PERSONNEL is a rugged and lightweight 15 liter backpack. It is made of PVC-free material, and its welded construction provides great strength. It is made for use under difficult conditions, and also has an ID card pocket.



## PORTO

**Webbing equipment loop**

Webbing equipment loop attaches to a pack's internal loop for organizing gear.



## BOLT BAG

**Gear pouch**

Gear pouch for organizing a hammer, bolting gear and other equipment. It has two pockets and exterior holster.



## Upright packs



### BUCKET

#### Fabric pack, remains upright

Simple and durable, the BUCKET bag allows the user to store a rope and any associated gear. It remains upright and keeps its shape, even when empty, for easy access to the contents of the bag. It is available in two colors and two versions: 25 and 35 liters.

## Tree care accessories



### JET

#### Throw-bag

Double-layer construction gives the JET throw-bag excellent longevity. Streamlined shape facilitates passage through tree branches. It is available in three versions: 250, 300 and 350 g.



### AIRLINE

#### Throw-line

The AIRLINE throw-line offers an excellent compromise between flexibility and rigidity, for an accurate throw without the formation of knots as it comes out of the bag. The excellent sheath-core bond maintains a round cross-section, ensuring good rope glide through the tree. It is available in two versions: 60 and 300 meters.



### ECLIPSE

#### Storage for throw-line

ECLIPSE provides easy storage for AIRLINE throw-lines and JET throw-bags. The double bottom allows two throw-lines to be stored separately. Once folded into the small bag, it all fits perfectly into the BUCKET pack.



## Accessories



## CORDEX

**Lightweight belay/rappel gloves**

These lightweight belay/rappel gloves combine the durability of a work glove with the precise fit and dexterity of a thinner glove. Double-layered leather protects the palm and other high-wear areas. The back is made of abrasion resistant, breathable stretch nylon, ensuring comfort and fit. The low profile neoprene cuff with Velcro closure features a reinforced carabiner hole for attaching the gloves to your harness.



## CORDEX PLUS

**Belay/rappel gloves**

These medium weight belay/rappel gloves offer extra protection without sacrificing dexterity. Double-layer leather and padding protect the palm from heat generated during long rappels or lowers. Fingertips and other high-wear areas are reinforced for increased durability. The back is made of leather with abrasion-resistant stretch nylon at key flex areas. The low profile neoprene cuff with Velcro closure features a reinforced carabiner hole for attaching the gloves to your harness.



## SPATHA

**Knife with carabiner hole**

The SPATHA knife is designed to accompany the worker at height during all daily tasks. The profile of the blade allows easy cutting of ropes and cords. It has a carabiner hole for easily attaching the knife to the harness. It is easy to manipulate with its textured wheel, even when wearing gloves, and can be locked in the open position.



## CRAB 6

**6-point crampons**

Six-point crampons, adaptable to all shoe sizes, used for moving over talus and snow- and ice-covered slopes.



## SPIKY PLUS

**Anti-slip soles**

Anti-slip soles, adaptable to all shoe sizes, used for moving over snow and frozen or slippery surfaces.

		References	Capacity	Weight
TRANSPORT 45L		S42Y 045	45 l	1250 g
PORTAGE 30L		S43Y 030	30 l	850 g
PERSONNEL 15L		S44Y 015	15 l	450 g
PORTO		C33	-	18 g
BOLTBAG		C11 A	-	170 g
NEW 2018 BUCKET		S41AY 025 (yellow)	25 l	575 g
		S41AR 025 (red)		
		S41AY 035 (yellow)	35 l	680 g
		S41AR 035 (red)		
JET		S02Y 250	-	250 g
		S02Y 300	-	300 g
		S02Y 350	-	350 g
AIRLINE		R02Y 060	-	2,1 g/m
		R02Y 300	-	2,1 g/m
ECLIPSE		S03Y	-	500 g

		References	Size		Hand circumference	Color	Certifications
CORDEX		K52 SN	S	8	200 mm	black	CE EN 420 CE EN 388 EAC
		K52 MN	M	8.5	215 mm		
		K52 LN	L	9	230 mm		
		K52 XLN	XL	9.5	245 mm		
		K52 XST	XS	7.5	190 mm	beige	
		K52 ST	S	8	200 mm		
		K52 MT	M	8.5	215 mm		
		K52 LT	L	9	230 mm		
K52 XLT		XL	9.5	245 mm			
CORDEX PLUS		K53 SN	S	8	200 mm	black	
		K53 MN	M	8.5	215 mm		
		K53 LN	L	9	230 mm		
		K53 XLN	XL	9.5	245 mm		
		K53 XST	XS	7.5	190 mm	beige	
		K53 ST	S	8	200 mm		
		K53 MT	M	8.5	215 mm		
		K53 LT	L	9	230 mm		
		K53 XLT	XL	9.5	245 mm		

		References	Size	Color
SPATHA		S92AN	-	black
CRAB 6		64160	-	-
SPIKY PLUS		79510	≤ 41	-
		79520	42-45	-
		79530	≥ 46	-







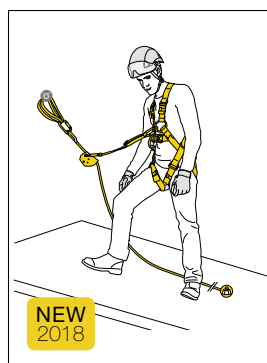
Glass panel roofing on the Stade des Alpes, Grenoble, Isère, France. © Petzl / Lafouche / Stade des Alpes / Acrosite / Barsalou

## Temporary horizontal lifelines and fall arrest kits

Temporary horizontal lifelines and ready-to-use kits designed for belaying and fall protection.



ASAP VERTICAL LIFELINE



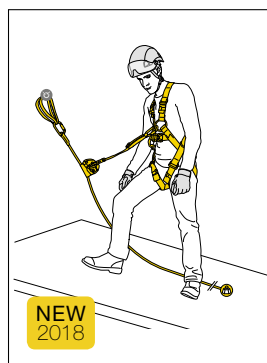
ASAP FALL ARREST KIT



ABSORBICA-Y FALL ARREST KIT



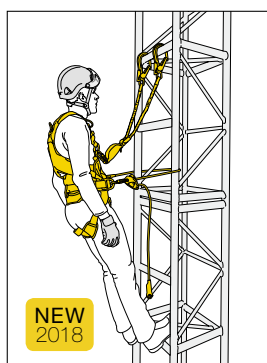
ASAP LOCK VERTICAL LIFELINE



ASAP LOCK FALL ARREST KIT

## Fall arrest and work positioning kits

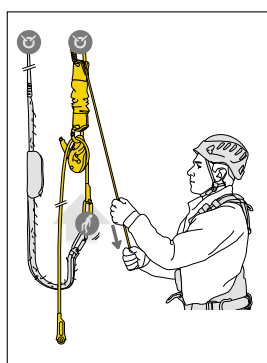
Ready-to-use kit designed to protect against falls and for positioning at a work station.



FALL ARREST AND WORK POSITIONING KIT

## Rescue kit

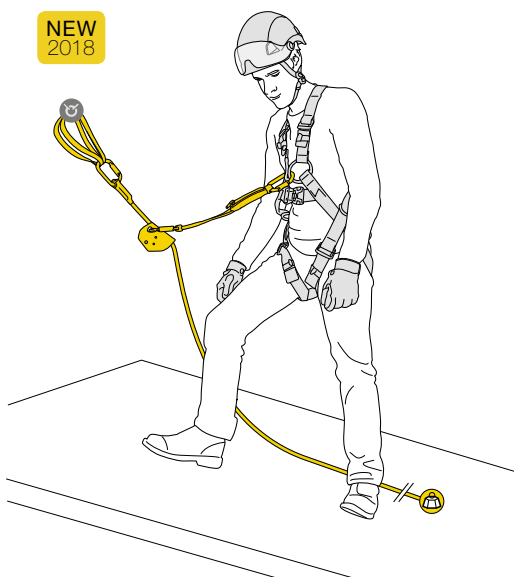
Ready-to-use kit, designed to pick off and lower a victim.



JAG RESCUE KIT



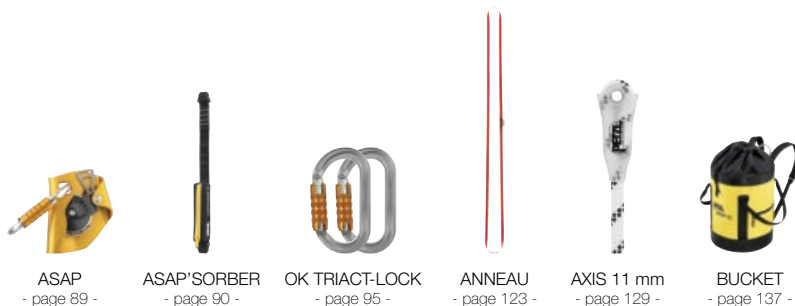
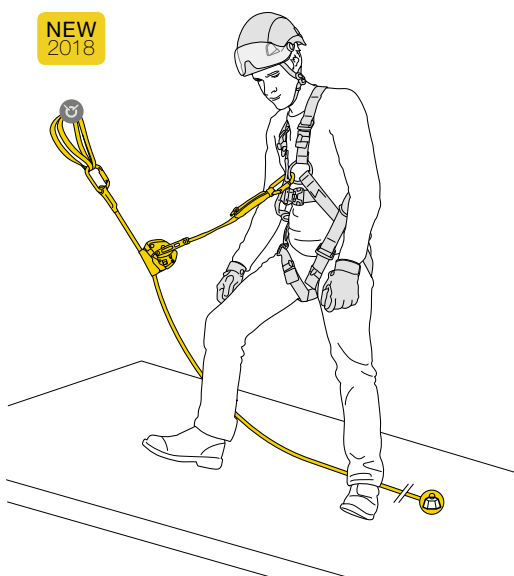
## Temporary horizontal lifelines and fall arrest kits

NEW  
2018

## ASAP® VERTICAL LIFELINE

**Vertical lifeline for protection against falls with ASAP mobile fall arrester**

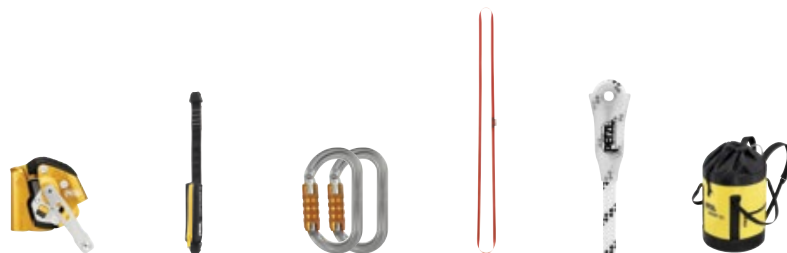
ASAP VERTICAL LIFELINE is a temporary vertical lifeline designed for belaying and to protect against falls from height. It contains an ASAP mobile fall arrester, an ASAP'SORBER energy absorber, two OK TRIACT-LOCK carabiners, an ANNEAU open sling, an AXIS 11 mm rope with sewn termination, a weight, and a BUCKET bag. It is available in two lengths.

ASAP  
- page 89 -ASAP'SORBER  
- page 90 -OK TRIACT-LOCK  
- page 95 -ANNEAU  
- page 123 -AXIS 11 mm  
- page 129 -BUCKET  
- page 137 -NEW  
2018

## ASAP® LOCK VERTICAL LIFELINE

**Vertical lifeline for protection against falls with ASAP LOCK mobile fall arrester**

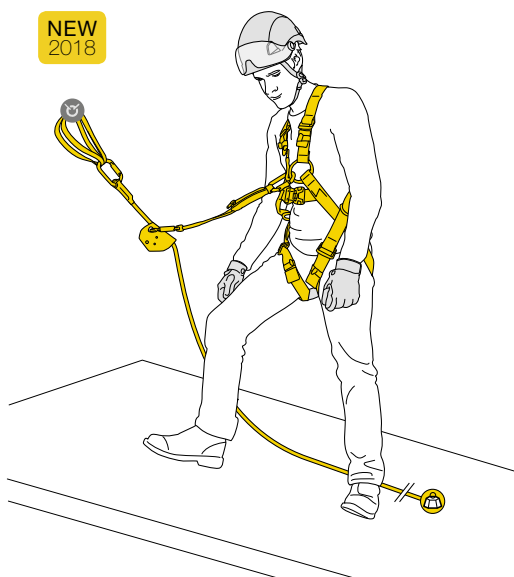
ASAP LOCK VERTICAL LIFELINE is a temporary vertical lifeline designed for belaying and to protect against falls from height. It contains an ASAP LOCK mobile fall arrester with locking function, an ASAP'SORBER energy absorber, two OK TRIACT-LOCK carabiners, an ANNEAU open sling, an AXIS 11 mm rope with sewn termination, a weight, and a BUCKET bag. It is available in two lengths.

ASAP LOCK  
- page 89 -ASAP'SORBER  
- page 90 -OK TRIACT-LOCK  
- page 95 -ANNEAU  
- page 123 -AXIS 11 mm  
- page 129 -BUCKET  
- page 137 -





NEW  
2018



## ASAP® FALL ARREST KIT

**Kit for protection against falls with NEWTON harness and ASAP mobile fall arrester**

ASAP FALL ARREST KIT is a ready-to-use kit designed to protect against falls from height. It contains a NEWTON fall arrest harness, an ASAP mobile fall arrester, an ASAP'SORBER energy absorber, two OK TRIACT-LOCK carabiners, an ANNEAU open sling, an AXIS 11 mm rope with sewn termination, a weight, and a BUCKET bag. The kit is available in two sizes and four lengths.



NEWTON  
- page 49 -



ASAP  
- page 89 -



ASAP'SORBER  
- page 90 -



OK TRIACT-LOCK  
- page 95 -



ANNEAU  
- page 123 -

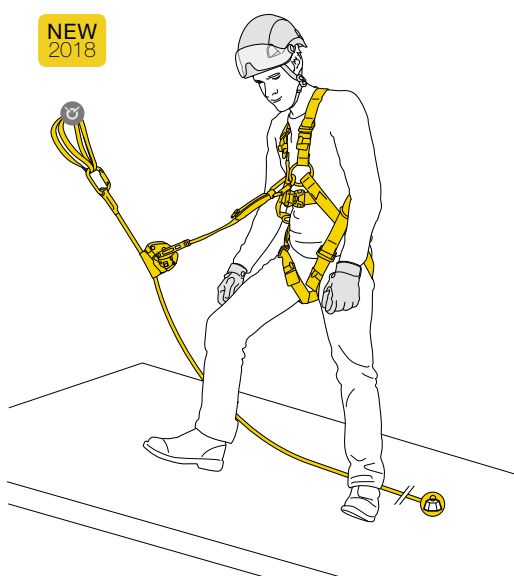


AXIS 11 mm  
- page 129 -



BUCKET  
- page 137 -

NEW  
2018



## ASAP® LOCK FALL ARREST KIT

**Kit for protection against falls with NEWTON harness and ASAP LOCK mobile fall arrester**

ASAP LOCK FALL ARREST KIT is a ready-to-use kit designed to protect against falls from height. It contains a NEWTON fall arrest harness, an ASAP LOCK mobile fall arrester with locking function, an ASAP'SORBER energy absorber, two OK TRIACT-LOCK carabiners, an ANNEAU open sling, an AXIS 11 mm rope with sewn termination, a weight, and a BUCKET bag. The kit is available in two sizes and four lengths.



NEWTON  
- page 49 -



ASAP LOCK  
- page 89 -



ASAP'SORBER  
- page 90 -



OK TRIACT-LOCK  
- page 95 -



ANNEAU  
- page 123 -

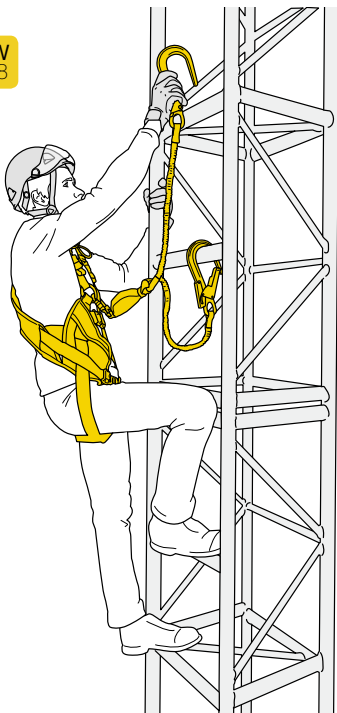


AXIS 11 mm  
- page 129 -



BUCKET  
- page 137 -

## Temporary horizontal lifelines and fall arrest kits

NEW  
2018

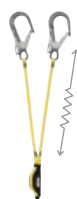
## ABSORBICA-Y FALL ARREST KIT

**Kit for protection against falls with NEWTON EASYFIT harness and ABSORBICA-Y 150 MGO lanyard**

ABSORBICA-Y FALL ARREST KIT is a ready-to-use kit designed to protect against falls. It is optimized for work at height requiring connection to metal structures or large-diameter cables and bars. The kit contains a NEWTON EASYFIT fall arrest harness, a double lanyard with a 150 cm ABSORBICA-Y energy absorber with MGO large-opening connectors, an OK TRIACT-LOCK carabiner, a CAPTIV positioning bar, and a BUCKET bag. It is available in two sizes.



NEWTON EASYFIT  
- page 49 -



ABSORBICA-Y  
150 MGO  
- page 81 -



OK TRIACT-LOCK  
- page 95 -

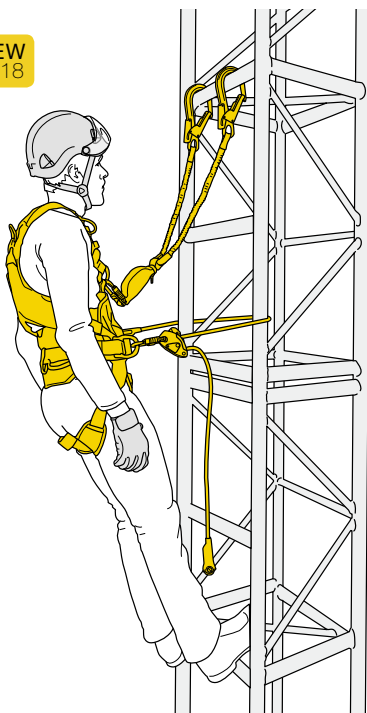


CAPTIV  
- page 98 -



BUCKET  
- page 137 -

## Fall arrest and work positioning kit

NEW  
2018

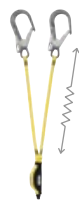
## FALL ARREST AND WORK POSITIONING KIT

**Fall arrest and work positioning kit with VOLT harness, ABSORBICA-Y 150 MGO lanyard, and GRILLON HOOK**

FALL ARREST AND WORK POSITIONING KIT is a ready-to-use kit designed to protect against falls and for positioning at a work station. It is optimized for work at height requiring connection to metal structures or large-diameter cables and bars. The kit contains a VOLT fall arrest and work positioning harness, a double lanyard with a 150 cm ABSORBICA-Y energy absorber with MGO large-opening connectors, a 2-meter GRILLON HOOK adjustable work positioning lanyard, two OK TRIACT-LOCK carabiners, two CAPTIV positioning bars, and a BUCKET bag. It is available in two sizes.



VOLT  
- page 51 -



ABSORBICA-Y  
150 MGO  
- page 81 -



GRILLON HOOK  
- page 79 -



OK TRIACT-LOCK  
- page 95 -



CAPTIV  
- page 98 -



BUCKET  
- page 137 -

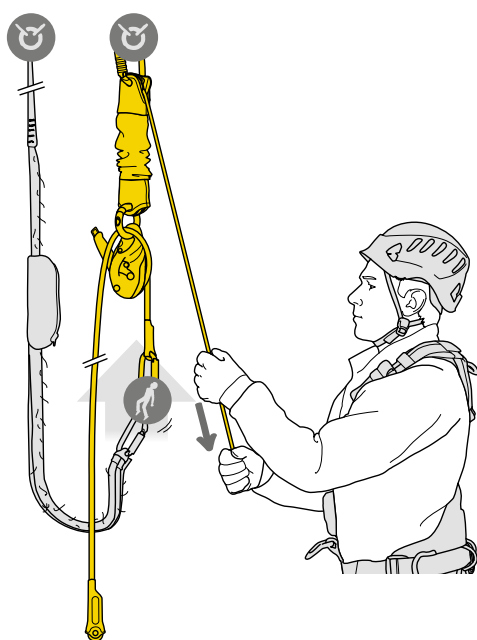


Rigging at Musilac Festival, Aix les Bains, Savoie, France. © Petzl / Lafouche / RPO





## Rescue kits



## JAG RESCUE KIT

**Reversible rescue kit with JAG SYSTEM haul kit and I'D S descender**

The JAG RESCUE KIT is a ready-to-use reversible rescue kit designed to easily pick off and lower a victim. It contains a JAG SYSTEM haul kit, a RING OPEN gated ring, an I'D S descender, a 150 cm CONNEXION FIXE anchor strap, an AXIS 11 mm rope with two sewn terminations and a BUCKET bag. It is available in three lengths: 30, 60 and 120 m.



JAG SYSTEM  
- page 118 -



RING OPEN  
- page 98 -



I'D S  
- page 102 -



CONNEXION FIXE  
- page 124 -



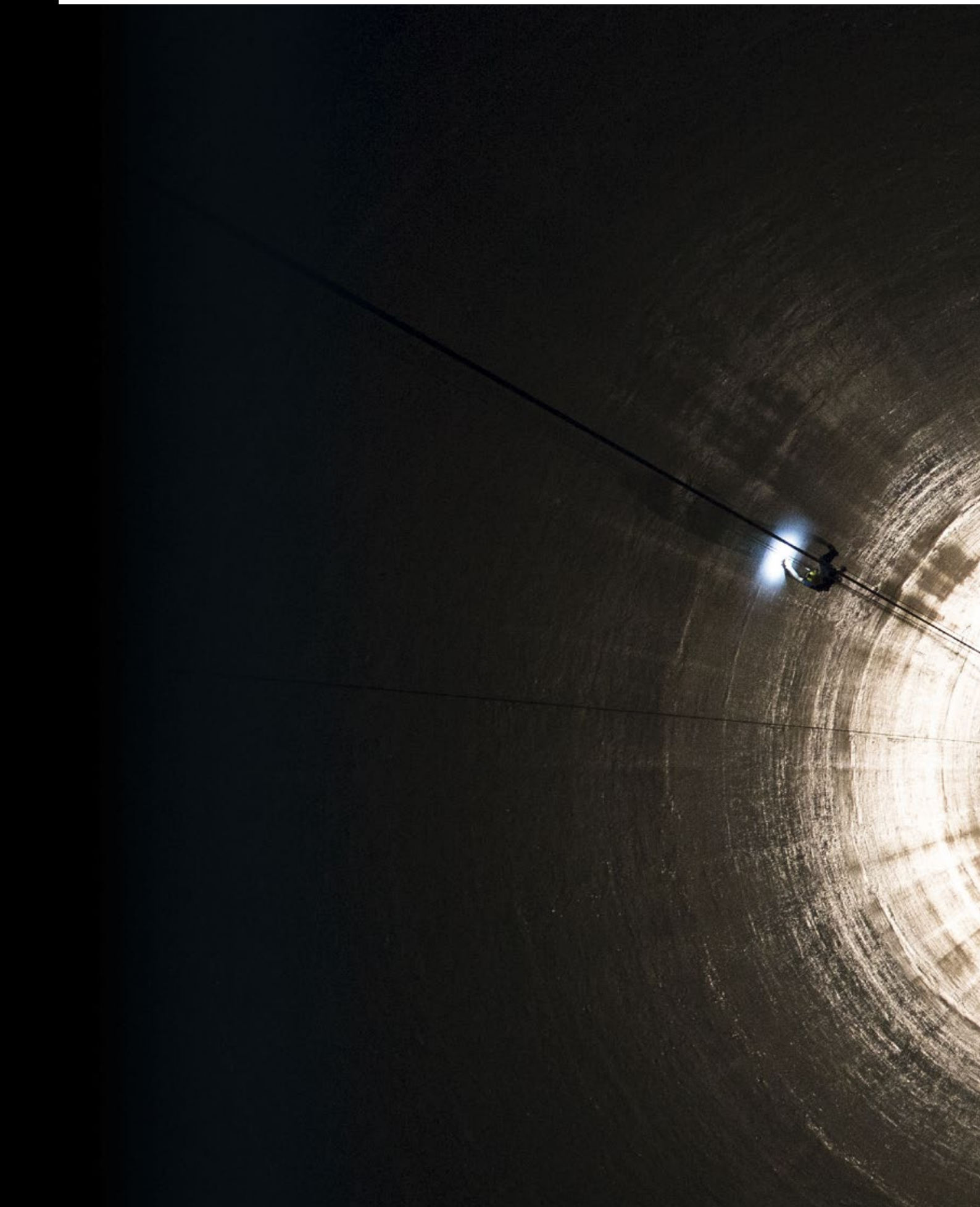
AXIS 11 mm  
- page 129 -



BUCKET  
- page 137 -

References		Contents of kit	Harness size	Rope length	Rope color	Weight
Temporary horizontal lifelines and fall arrest kits						
NEW 2018 ASAP VERTICAL LIFELINE	K091AA00	ASAP European version ASAP'SORBER 40 cm European version OK TRIACT-LOCK (x 2) ANNEAU 150 cm AXIS 11 mm with sewn termination BUCKET 25 liters	-	10 m	-	2325 g
	K091AA01			20 m		3125 g
NEW 2018 ASAP LOCK VERTICAL LIFELINE	K092AA00	ASAP LOCK ASAP'SORBER 40 cm European version OK TRIACT-LOCK (x 2) ANNEAU 150 cm AXIS 11 mm with sewn termination BUCKET 25 liters	-	10 m	-	2455 g
	K092AA01			20 m		3255 g
NEW 2018 ASAP FALL ARREST KIT	K093AA00	NEWTON European version ASAP European version ASAP'SORBER 40 cm European version OK TRIACT-LOCK (x 2) ANNEAU 150 cm AXIS 11 mm with sewn termination BUCKET 25 liters	1	10 m	-	3375 g
	K093AA01		2	10 m		3405 g
	K093AA02		1	20 m		4175 g
	K093AA03		2	20 m		4205 g
NEW 2018 ASAP LOCK FALL ARREST KIT	K094AA00	NEWTON European version ASAP LOCK ASAP'SORBER 40 cm European version OK TRIACT-LOCK (x 2) ANNEAU 150 cm AXIS 11 mm with sewn termination BUCKET 25 liters	1	10 m	-	3505 g
	K094AA01		2	10 m		3535 g
	K094AA02		1	20 m		4305 g
	K094AA03		2	20 m		4335 g
NEW 2018 ABSORBICA-Y FALL ARREST KIT	K095AA00	NEWTON EASYFIT international version ABSORBICA-Y European version 150 cm MGO OK TRIACT-LOCK (x 1) CAPTIV (x 1) BUCKET 25 liters	1	-	-	3390 g
	K095AA01		2			3440 g
Fall arrest and work positioning kit						
NEW 2018 FALL ARREST AND WORK POSITIONING KIT	K096AA00	VOLT ABSORBICA-Y European version 150 cm MGO GRILLON HOOK European version 2 m OK TRIACT-LOCK (x 2) CAPTIV (x 2) BUCKET 25 liters	1	-	-	4810 g
	K096AA01		2			4890 g
Rescue kit						
JAG RESCUE KIT	K90030	JAG SYSTEM RING OPEN I'D S CONNEXION FIXE 150 cm AXIS 11 mm rope with two sewn terminations BUCKET 25 or 35 liters	-	30 m	-	4300 g
	K90060			60 m		6600 g
	K90120			120 m		11300 g



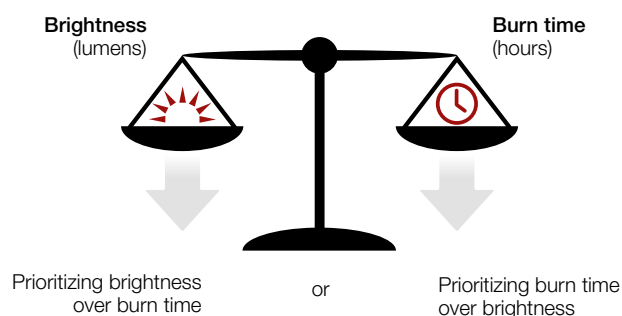






## Brightness or burn time: a question of balance

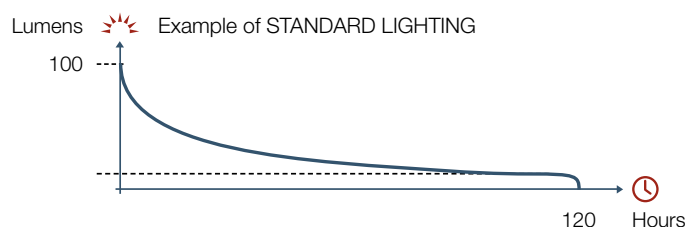
Brightness and burn time are two inextricably linked parameters of any headlamp, regardless of its lighting technology. For a given quantity of energy, increasing the brightness automatically decreases burn time, and vice versa.



The different lighting technologies used in Petzl headlamps make it possible to meet your needs, depending on what you want:

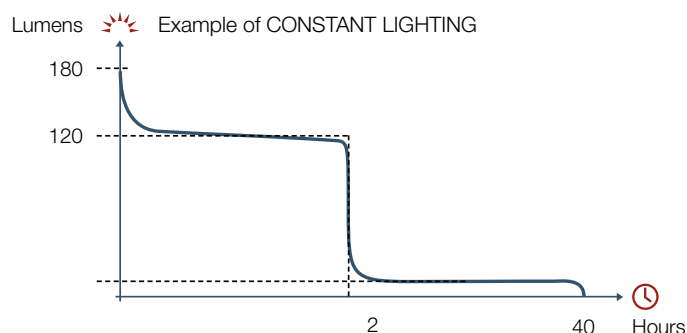
### • Prioritizing the burn time: **STANDARD LIGHTING**

Brightness decreases gradually as the batteries are drained. It is the most common technology.



### • Prioritizing guaranteed brightness over time: **CONSTANT LIGHTING**

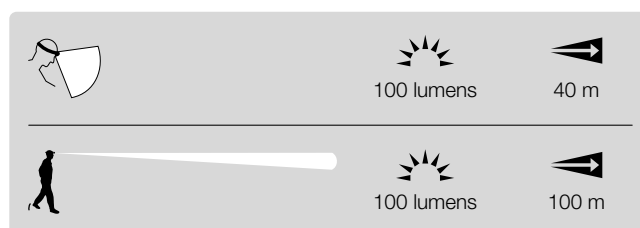
Brightness stays constant as the batteries drain. When the batteries are almost drained, the headlamp switches automatically to reserve mode, with weaker output that prolongs lighting time.



## Brightness: the shape of the beam directly affects lighting distance













Lighting distance depends directly on brightness, but mainly on the shape of the beam. In fact, given the same brightness, lighting distance will vary depending on the shape of the beam.

Petzl indicates the different lighting modes available for each headlamp. These modes correspond to specific conditions of use: close-range work, moving around, seeing at a distance.



## Petzl headlamps: a model for every use

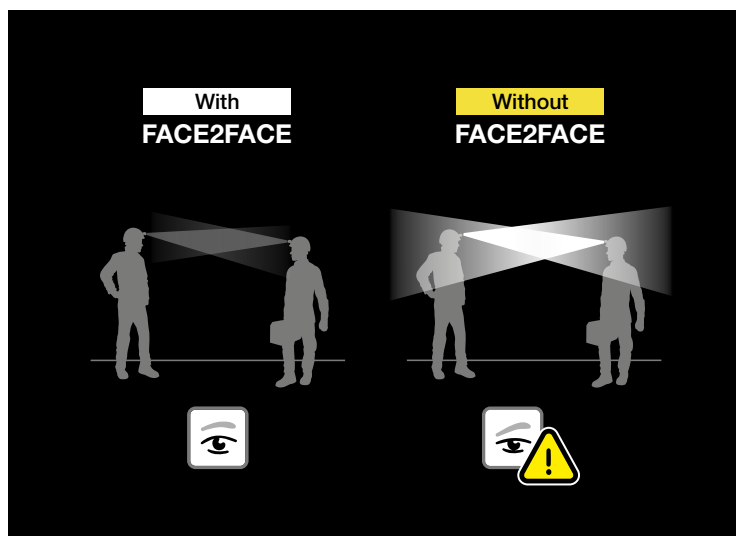
The Petzl headlamp range covers the full spectrum of professional needs, from intensive to occasional use, with different work environments requiring varying degrees of brightness.

Professions	Industrial, maintenance, work at height and inspection	Energy and networks, construction, maintenance	Concerts and shows, artisans, small maintenance jobs
Frequency of use	Intensive	Frequent	Occasional
User needs	<ul style="list-style-type: none"> <li>- CONSTANT LIGHTING</li> <li>- ATEX certification (except DUO S)</li> <li>- Very strong brightness</li> <li>- Very long burn time</li> <li>- Rugged</li> <li>- Water resistant</li> </ul>	<ul style="list-style-type: none"> <li>- CONSTANT LIGHTING</li> <li>- Long burn time</li> <li>- ATEX or HAZLOC certification</li> <li>- Rugged</li> <li>- Water resistant</li> </ul>	<ul style="list-style-type: none"> <li>- STANDARD LIGHTING</li> <li>- Lightweight and compact</li> <li>- Very long burn time</li> <li>- Multiple lighting colors</li> <li>- Resistant to water spray</li> </ul>
Petzl solutions	<b>Performance headlamps</b> <div>  <p>NEW 2018</p> <p>DUO Z1</p> </div> <div>  <p>NEW 2018</p> <p>DUO Z2</p> </div> <div>  <p>NEW 2018</p> <p>DUO S</p> </div>	<b>Compact, rugged lamps</b> <div>  <p>PIXA 3R</p> </div> <div>  <p>PIXA 3</p> </div> <div>  <p>PIXA 2</p> </div> <div>  <p>PIXA 1</p> </div>	<b>Ultra-compact headlamps</b> <div>  <p>TACTIKKA CORE</p> </div> <div>  <p>TACTIKKA +RGB</p> </div> <div>  <p>TACTIKKA +</p> </div> <div>  <p>TACTIKKA</p> </div> <div>  <p>e+LITE</p> </div>



## The Petzl difference

Face-to-face without blinding, for better teamwork

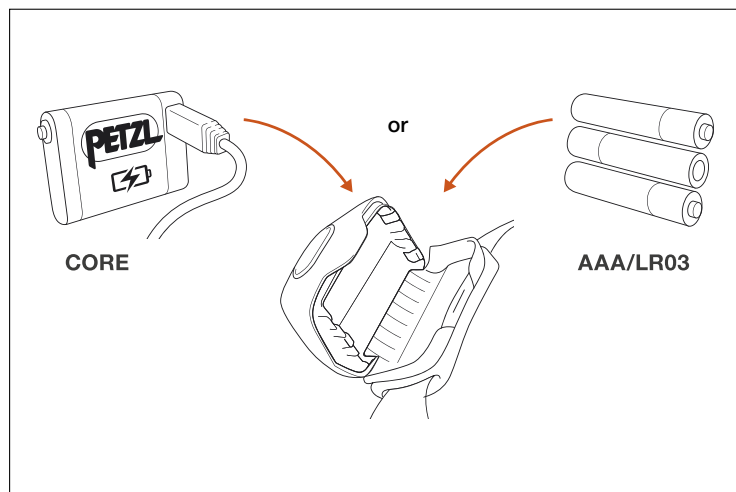


**Face2Face**  
FUNCTION

Once activated, the FACE2FACE function triggers a sensor that detects other DUO headlamps within 8 meters and automatically dims the lighting if they come face-to-face. The light returns to its original intensity once the other headlamp is no longer in its line of sight.

*This function is available on DUO Z1, DUO Z2 and DUO S headlamps.*

Choosing the energy source to fit the need, with hybrid headlamps



**hybrid**  
CONCEPT

The HYBRID CONCEPT construction allows most of Petzl's compact headlamps to run on either the CORE rechargeable battery or three AAA/LR03 batteries, without an adapter.

- CORE rechargeable battery for frequent to intensive use: an economical and sustainable solution
- AAA/LR 03 batteries for occasional use, with very long burn time

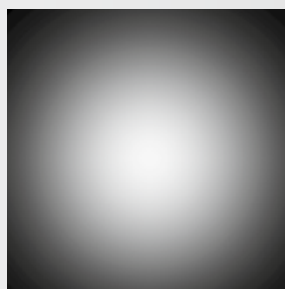
*Available on all TACTIKKA CORE, TACTIKKA +RGB, TACTIKKA + and TACTIKKA headlamps.*

## Petzl quality

Choosing a Petzl headlamp means selecting a work tool designed to withstand the most severe conditions of use, while ensuring maximum reliability.

### Optical quality for optimal visual comfort

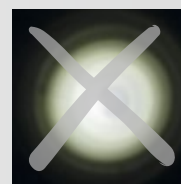
Petzl headlamps ensure maximum visual comfort for the user: lighting is uniform and has no bright point in the center, no spotting, no dark areas. Each batch of LEDs is tested and selected according to proper color homogeneity, low energy consumption, and high luminous flux. Each Petzl headlamp is individually inspected before leaving the factory. These operations include a test to measure lighting performance and beam homogeneity with the help of a digital camera.



Perfectly uniform beam:  
comfort of use



Presence of a  
central bright spot:  
blinding



Presence of  
visual defects:  
lack of precision,  
discomfort, fatigue

### Individual test of each lamp

Each model must pass particularly stringent tests:

- for shock resistance, fall resistance and crushing (including at low temperatures)
- for functional reliability (mechanical endurance)
- individual inspection and test at the end of the assembly line (final quality check)
- for watertightness



### Consideration of photobiological risk

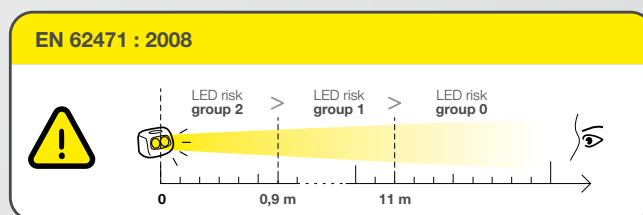
Petzl has chosen to present information in its product instructions about the risks to the eyes associated with LED lighting. For this, the company uses the EN 62471: 2008 standard, photobiological safety of lamps and devices using lamps, though it is not mandatory. This standard classifies lamps according to risk groups.

The risk groups are as follows:

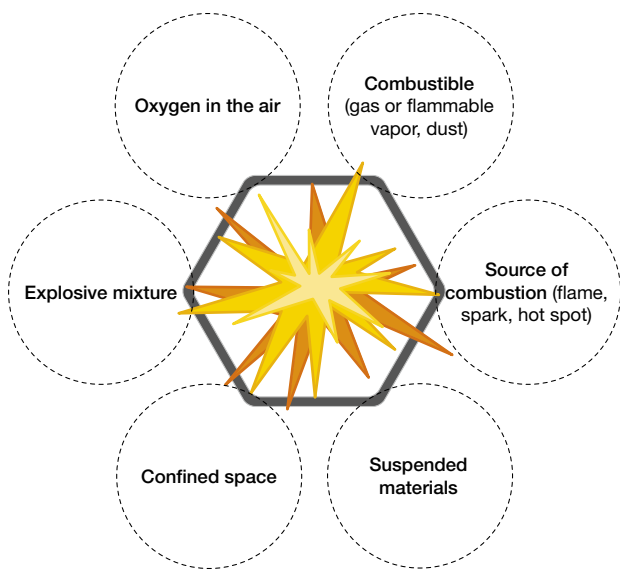
- Risk group 0: no risk
- Risk group 1: low risk. The product presents no risk related to exposure limits under normal usage conditions
- Risk group 2: moderate risk. The reflex to look away from the lamp suffices to reduce the risk
- Risk group 3: high risk. The product can present a risk even with a momentary or short exposure



To learn more about photobiological safety and the information given in the Instructions for Use, see the technical information on LED lighting available at [Petzl.com](http://Petzl.com)



Hazardous environments



There is a risk of explosion when six conditions are simultaneously met:

- presence of an oxidant: the oxygen in air, for example
- presence of a combustible: gas, vapor, dust or powder
- presence of an ignition source
- suspended materials (gas, dust, aerosol...), propagation factors
- confined space: for example a vehicle, work space...
- an explosive mixture, which means having attained a concentration of the combustible in the air sufficient to make an explosion possible

If an explosion hazard is identified in an environment, the hazardous locations are classified as areas at risk. All of the materials used in these zones must conform with current regulations for this type of zone (ATEX and/or HAZLOC).

How to choose a lamp suitable for an area with an explosion hazard?

It is possible to apply different regulations:

- ATEX regulations: European directive
- HAZLOC regulations: North American directive

Both aim to control the risks related to the explosion of certain environments. For this, they define:

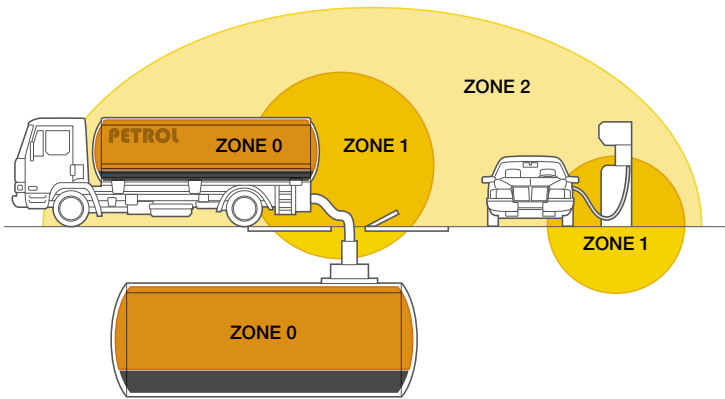
- types of hazardous locations depending on the type of combustible and the presence of the hazard (permanent, occasional, accidental)
- equipment categories to be used depending on the type of location
- tests to be done for evaluating the equipment category
- product markings. These markings contain all the information necessary to determine the locations in which the product may be used
- security procedures to implement in hazardous locations (defining location boundaries, staff training, inspection visit...)

Thus, lamp choice is determined by the type of location where the lamp is to be used.

Classification of ATEX / HAZLOC locations

Hazardous environments	Gas type combustible		Dust type combustible	
	ATEX	HAZLOC	ATEX	HAZLOC
Permanent or long-term	ZONE 0	Class I Div 1	ZONE 20	Class II Div 1
Occasional	ZONE 1	Class I Div 1	ZONE 21	Class II Div 1
Accidental	ZONE 2	Class I Div 2	ZONE 22	Class II Div 2

Example of ATEX location (gas type combustible)














For more information on ATEX and HAZLOC regulations, see [Petzl.com](http://Petzl.com)

PETZL.COM



## Choosing your Petzl headlamp for hazardous areas in conformity to regulations

References		ATEX regulation		HAZLOC regulation	Energy source	
		 ATEX	 ATEX	 HAZLOC	 BATTERIES INCLUDED	 RECHARGEABLE
<b>NEW 2018</b> DUO Z1 	E80BHR	•	-	-	-	•
<b>NEW 2018</b> DUO Z2 	E80AHB	-	•	-	•	-
PIXA 3R 	E78CHR 2	-	•	-	-	•
PIXA 3 	E78CHB 2	-	•	-	•	-
	E78CHB 2UL	-	-	•	•	-
PIXA 2 	E78BHB 2	-	•	-	•	-
	E78BHB 2UL	-	-	•	•	-
PIXA 1 	E78AHB 2	-	•	-	•	-
	E78AHB 2UL	-	-	•	•	-

## The IP Protection Index



The IP Protection Index is an international standard. This index classifies the level of protection offered by equipment against intrusions by solids (e.g. dust) and liquids (e.g. water, oil).

### How do you read the protection index?

Example: IP 67

The first number indicates protection against solid objects.

The second number indicates protection against liquids.

The IP 67 notation therefore corresponds to a completely dustproof product that is protected against the effects of immersion in liquid.

Note: When a criterion has not been tested, the number is replaced by X (e.g., IP X6 indicates that the product has not been tested for solids).

The first number indicates protection against solid objects:

X = Not measured	—
0 = Not protected	—
1 = Protected against projection of solids $\geq 50$ mm in diameter	
2 = Protected against projection of solids $\geq 12.5$ mm in diameter	
3 = Protected against projection of solids $\geq 2.5$ mm in diameter	
4 = Protected against projection of solids $\geq 1$ mm in diameter	
5 = Protected against dust (limited ingress, no harmful deposits)	
6 = Completely protected against dust	

The second number indicates protection against liquids:



















X = Not measured	—
0 = Not protected	—
1 = Protected against vertically falling water drops	
2 = Protected against water drops (15° from vertical)	
3 = Protected against rain (60° from vertical)	
4 = Protected against splashing water	
5 = Protected against water jets	
6 = Protected against powerful water jets	
7 = Temporary immersion (-1 meter for 30 minutes)	
8 = Prolonged immersion (deeper than 1 meter for period defined by manufacturer)	
9 = Prolonged immersion (deeper than 1 meter) and protection against pressure-washing	

## Understanding the characteristics of Petzl headlamps

 <p>MAX BRIGHTNESS</p>	<p>Brightness is the total quantity of light emitted by a lamp. It is expressed in lumens. The greater the quantity of light, the better you see. The value indicated is that of the most powerful lighting mode.</p>	 <p>LOCK UNLOCK</p>	<p>LOCK function to avoid accidentally turning it on during transit or storage.</p>
 <p>MAX DISTANCE</p>	<p>Lighting distance is linked to light output and beam pattern. It is expressed in meters and indicates the range of usable lighting. The value indicated is the maximum value.</p>	 <p>WHISTLE</p>	<p>A whistle is integrated in the rear of the headlamp's elastic headband and allows the user to signal an emergency.</p>
 <p>MAX AUTONOMY</p>	<p>Burn time expresses the length of time a headlamp functions with power sufficient for carrying out an activity. It is expressed in hours. The value indicated is the maximum value.</p>	 <p>RECHARGEABLE</p>	<p>Petzl headlamps that work with rechargeable batteries.</p>
 <p>RESERVE MODE</p>	<p>When the battery is almost drained, the headlamp switches automatically to reserve mode to guarantee minimum lighting for several hours.</p>	 <p>HYBRID CONCEPT</p>	<p>Headlamp works with the rechargeable CORE battery or regular batteries.</p>
 <p>LARGE</p>	<p>Flood beam designed for proximity lighting, to see up close or around the feet. The wide angle provides a very wide and comfortable field of vision.</p>	 <p>BATTERIES INCLUDED</p>	<p>Petzl headlamps that work with regular batteries (included).</p>
 <p>MIXED</p>	<p>Mixed beam consists of a flood beam and a focused component, allowing both proximity lighting and longer-range vision for moving around.</p>	 <p>FACE 2 FACE FACE2FACE FUNCTION</p>	<p>Function allows users to be face-to-face without blinding one another.</p>
 <p>FOCUSED</p>	<p>Narrow beam allows focused lighting on a target in order to see objects or people at a distance.</p>	 <p>IPX4 WATER RESISTANT</p>	<p>Water-spray and weather resistant.</p>
 <p>RED LIGHTING</p>	<p>Red lighting for more comfortable night vision. This lighting allows good vision without blinding the user or other members in the group.</p>	 <p>IPX7 -1m WATER- PROOF</p>	<p>IP X8: resistant to prolonged immersion (deeper than 1 meter for period defined by manufacturer). IP 67: resistant to dust and temporary immersion (to 1 meter for 30 minutes).</p>
 <p>RGB LIGHTING</p>	<p>Red, green and blue lighting allows the user to better see contrasts within the lit object in certain situations.</p>	 <p>WEIGHT</p>	<p>The weight indicated is that of the headlamp with its energy source (regular or rechargeable batteries).</p>
 <p>WHITE / RED STROBE</p>	<p>Red and/or white strobe lighting allows you to signal and be more easily located, for example in an emergency.</p>	 <p>2m 2 m FALL</p>	<p>Resistance to falls (2 m).</p>
 <p>CHEMICAL RESISTANT</p>	<p>Better resistance to chemicals.</p>	 <p>80kg 80 kg CRUSHING</p>	<p>Resistance to crushing (80 kg).</p>
 <p>ATEX</p>	<p>Headlamp meeting ATEX certification requirements for work in hazardous environments.</p>	 <p>Hazloc Class 1 div II Class 2 div II HAZLOC</p>	<p>Headlamp meeting HAZLOC certification requirements for work in hazardous environments.</p>



## Summary table

												
Performance headlamps												
<b>NEW 2018</b> DUO Z1		-	●	360 lm	115 m	23 h	10 lm 1 h 30	●	●	●	-	
<b>NEW 2018</b> DUO Z2		-	●	430 lm	120 m	15 h 30	10 lm 1 h	●	●	●	-	
<b>NEW 2018</b> DUO S		-	●	1100 lm	200 m	23 h	20 lm 45 min	●	●	●	-	
Compact, rugged lamps												
PIXA 3R		-	●	90 lm	90 m	11 h 30	10 lm 1 h 30	●	●	●	-	
PIXA 3		-	●	100 lm	90 m	26 h	10 lm 13 h	●	●	●	-	
PIXA 2		-	●	80 lm	55 m	26 h	10 lm 13 h	●	●	-	-	
PIXA 1		-	●	60 lm	15 m	16 h	10 lm 6 h 30	●	-	-	-	
Ultra-compact headlamps												
TACTIKKA CORE		●	-	350 lm	95 m	160 h	5 lm 2 h	●	●	-	●	
TACTIKKA +RGB		●	-	250 lm	70 m	260 h	-	-	●	-	●	
TACTIKKA +		●	-	250 lm	70 m	260 h	-	-	●	-	●	
TACTIKKA		●	-	200 lm	60 m	240 h	-	●	-	-	●	
e+LITE		●	-	50 lm	10 m	12 h	-	●	-	-	●	

RGB LIGHTING	WHITE / RED STROBE	FACE2FACE FUNCTION	LOCK UNLOCK	WHISTLE	HYBRID CONCEPT	RECHARGEABLE	BATTERIES INCLUDED	ATEX	HAZLOC	WATER RESISTANT	WATER-PROOF	WEIGHT

-	-	•	•	-	-	• wall	-	ATEX Zone 1/21	-	-	•	370 g
-	-	•	•	-	-	-	4 x AA LR06	ATEX Zone 2/22	-	-	•	360 g
-	-	•	•	-	-	• wall	-	-	-	-	•	370 g

-	-	-	•	-	-	• wall	-	ATEX Zone 2/22	HAZLOC Class 1 Div II and Class 2 Div II	-	•	145 g
-	-	-	•	-	-	-	2 x AA LR06	ATEX Zone 2/22	HAZLOC Class 1 Div II and Class 2 Div II	-	•	160 g
-	-	-	•	-	-	-	2 x AA LR06	ATEX Zone 2/22	HAZLOC Class 1 Div II and Class 2 Div II	-	•	160 g
-	-	-	•	-	-	-	2 x AA LR06	ATEX Zone 2/22	HAZLOC Class 1 Div II and Class 2 Div II	-	•	160 g

-	• red	-	-	•	•	• USB	-	-	-	•	-	82 g
•	• RGB	-	-	-	•	-	3 x AAA LR03	-	-	•	-	85 g
-	• red	-	-	-	•	-	3 x AAA LR03	-	-	•	-	85 g
-	• red	-	-	•	•	-	3 x AAA LR03	-	-	•	-	85 g
-	• white / red	-	•	•	-	-	2 x lithium CR2032	-	-	-	•	26 g

# Performance headlamps

Headlamps for intensive use and maximum lighting power



Replacement and maintenance of the lighting system inside a cement mine. © Petzl / Lafouche / Vicat



## DUO Z1

Powerful rechargeable multi-beam headlamp with FACE2FACE anti-glare function, certified for use in ATEX zone 1/21 hazardous areas. 360 lumens



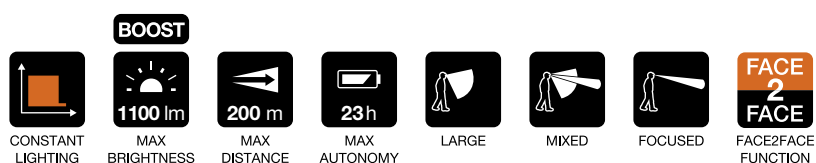
## DUO Z2

Powerful multi-beam headlamp that runs on standard batteries, with FACE2FACE anti-glare function, for use in ATEX zone 2/22 hazardous areas. 430 lumens



## DUO S

Ultra-powerful, rechargeable multi-beam headlamp, featuring the FACE2FACE anti-glare function. 1100 lumens



## Accessories



# Performance headlamps

DUO headlamps are designed for use in demanding environments, such as ATEX zone 1/21 or zone 2/22 hazardous areas. Featuring the FACE2FACE function, they enable users to face each other without blinding one another. Rugged, powerful and mountable on a helmet, they are designed for intensive use in industry, maintenance and inspection.

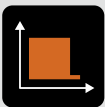
## • ATEX certified lamps for use in hazardous areas



ATEX

Designed to withstand the harshest environments, DUO headlamps can be used in hazardous areas. Depending on the model, they are certified ATEX zone 1/21 or zone 2/22 (except DUO S).

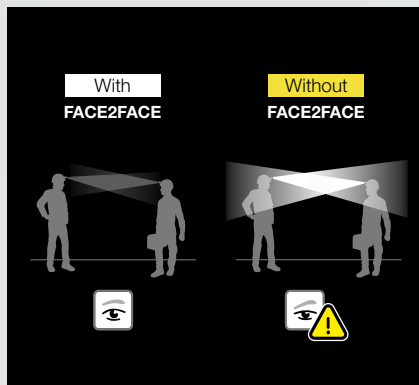
## • Guaranteed lighting over time



CONSTANT LIGHTING

CONSTANT LIGHTING technology allows lighting to remain stable as the batteries drain. When the batteries are almost drained, the headlamp switches automatically to reserve mode, with weaker output that prolongs lighting time.

## • Efficiency and comfort when working in a group



**FACE  
2  
FACE**

FACE2FACE  
FUNCTION

The FACE2FACE function allows users to be face to face without blinding one another. Once activated, it triggers a sensor that detects other DUO headlamps within 8 meters and automatically dims the lighting if they come face-to-face. The light returns to its original intensity once the other headlamp is no longer in its line of sight.

## • Powerful multi-beam lamps



DUO headlamps have a multi-beam with several lighting modes, to adapt to any situation: convenient lighting for proximity, movement and long-range vision. BOOST mode allows temporary access to maximum brightness.

## • Comfort, ergonomics and durability



The headlamps are balanced, thanks to the remote battery pack worn on the back of the helmet. DUO headlamps adapt to fit on any helmet using the plates (included) or the PRO ADAPT (accessory). They are rugged and perfectly suited for work in severe industrial environments, under difficult conditions (rain, snow, mud, ice...).

## • Run on a rechargeable battery and are certified for use in ATEX zone 1/21 hazardous areas



## • Runs on standard batteries and is certified for use in ATEX zone 2/22 hazardous areas



## • Runs on rechargeable battery for long burn time



NEW  
2018



## DUO Z1

**Powerful rechargeable multi-beam headlamp with FACE2FACE anti-glare function, certified for use in ATEX zone 1/21 hazardous areas. 360 lumens**

DUO Z1 is a headlamp with a maximum 360 lumens of lighting in BOOST mode that runs on a rechargeable battery. It is multi-beam, and has four lighting modes, making it adaptable to every situation: close-range work, proximity, movement and long-range vision. Featuring the FACE2FACE anti-glare function, the DUO Z1 headlamp allows those working in a group to face each other without blinding one another, enabling them to work more effectively together. It can be worn on VERTEX and ALVEO helmets, thanks to the included mounting plates. It meets ATEX zone 1/21 certification requirements for work in hazardous areas.

NEW  
2018



x5

## Pack of 5 DUO Z1

**Pack of 5 DUO Z1 headlamps with charging rack**

Pack of five DUO Z1 headlamps - comes with charging rack that allows simultaneous charging of five batteries.

NEW  
2018



## DUO Z2

**Powerful multi-beam headlamp that runs on standard batteries, with FACE2FACE anti-glare function, for use in ATEX zone 2/22 hazardous areas. 430 lumens**

The DUO Z2 headlamp provides a powerful 430 lumens in BOOST mode, and runs on regular batteries. It is multi-beam, and has four lighting modes, making it adaptable to every situation: close-range work, proximity, movement and long-range vision. Featuring the FACE2FACE anti-glare function, the DUO Z2 headlamp allows those working in a group to face each other without blinding one another, enabling them to work more effectively together. It can be worn on VERTEX and ALVEO helmets, thanks to the included mounting plates. It meets ATEX zone 2/22 certification requirements for work in hazardous areas.

NEW  
2018



## DUO S

**Ultra-powerful, rechargeable multi-beam headlamp, featuring the FACE2FACE anti-glare function. 1100 lumens**

Ultra-powerful with 1100 lumens in BOOST mode, the DUO S is the most powerful rechargeable headlamp in the Petzl line. It is multi-beam, and has five lighting modes, making it adaptable to every situation: close-range work, proximity, movement, rapid movement and long-range vision. Featuring the FACE2FACE anti-glare function, the DUO S headlamp allows those working in a group to face each other without blinding one another, to work together more effectively. It can be worn on VERTEX and ALVEO helmets, thanks to the included mounting plates.





## Accessories

NEW  
2018

## ACCU 2 DUO Z1

**Rechargeable battery for the DUO Z1 headlamp, usable in ATEX zone 1/21**

Very high capacity rechargeable battery, 23.68 Wh, designed for the DUO Z1 headlamp. Durable and ATEX zone 1/21 certified, it also features quick connection to the headlamp and an energy gauge for monitoring the battery's charge level.

NEW  
2018

## ACCU 2

**Rechargeable battery for DUO S headlamp**

High-performance rechargeable battery designed for the DUO S headlamp. It is durable, and features quick connection to the headlamp and an energy gauge for monitoring the battery's charge level.

NEW  
2018

## 5 DUO Z1 charging rack

**Charging rack, which allows simultaneous charging of five DUO Z1 headlamp batteries**

EUR/US/UK compatible charging rack allows simultaneous charging of up to five ACCU 2 DUO Z1 rechargeable batteries.

NEW  
2018

## ACCU 2 DUO Z1 charger

**Wall charger for ACCU 2 DUO Z1 rechargeable battery**

EUR/US compatible quick wall charger for ACCU 2 DUO Z1 rechargeable battery.



## Quick charger

**Quick wall charger for ACCU 2 and ACCU 4 rechargeable batteries**

EUR/US compatible quick wall charger for ACCU 2 and ACCU 4 rechargeable batteries.

NEW  
2018

## PRO ADAPT

**Adhesive accessory for mounting a DUO headlamp on any type of helmet**

PRO ADAPT consists of two adhesive plates for mounting a DUO Z1, DUO Z2, or DUO S headlamp on a helmet, and allows for tilting of the headlamp. The system is especially resistant to impact and moisture.

References	Certifications	CONSTANT LIGHTING	Lighting modes	MAX BRIGHTNESS	MAX DISTANCE	MAX AUTONOMY	WEIGHT
 <b>DUO Z1</b> NEW 2018	E80BHR E80DHR (Pack of 5 DUO Z1)	CE ATEX: zone 1/21		Close-range work	70 lm	20 m	23 h
				Proximity	170 lm	35 m	12 h
				Movement	300 lm	90 m	7 h
				Distance vision	140 lm	100 m	17 h
				BOOST mode	360 lm	115 m	-
				Reserve	10 lm for 1 h 30		
 <b>DUO Z2</b> NEW 2018	E80AHB	CE ATEX: zone 2/22		Close-range work	50 lm	17 m	15 h 30
				Proximity	120 lm	30 m	5 h
				Movement	220 lm	80 m	2 h
				Distance vision	180 lm	120 m	2 h 45
				BOOST mode	430 lm	100 m	-
				Reserve	10 lm for 1 h		
 <b>DUO S</b> NEW 2018	E80CHR	CE		Close-range work	80 lm	20 m	23 h
				Proximity	180 lm	35 m	12 h 30
				Movement	330 lm	70 m	6 h
				Rapid movement	700 lm	160 m	3 h 30
				Distance vision	450 lm	190 m	4 h 30
				BOOST mode	1100 lm	200 m	-
				Reserve	20 lm for 45 min		

(\*1) Certifications guaranteed only with alkaline batteries

## Accessories

	References	Weight
<b>NEW 2018</b> ACCU 2 DUO Z1	E80001	168 g
<b>NEW 2018</b> ACCU 2	E80002	168 g
<b>NEW 2018</b> 5 DUO Z1 charging rack	E80003	1440 g
<b>NEW 2018</b> ACCU 2 DUO Z1 charger	E080AA00	170 g
Quick charger	E55800	145 g
<b>NEW 2018</b> PRO ADAPT	E80004	48 g



# Compact, rugged headlamps

Headlamps for daily use



Topography check in the underground network of Paris. © Petzl / Lafouche / Ville de Paris / IGC



## PIXA 3R

Rechargeable, multi-beam headlamp for frequent use, suitable for proximity lighting, movement and long-range vision, with CONSTANT LIGHTING technology. 90 lumens



## PIXA 3

Multi-beam headlamp suitable for proximity lighting, movement and long-range vision, with CONSTANT LIGHTING technology. 100 lumens



## PIXA 2

Headlamp suitable for proximity lighting and movement, with CONSTANT LIGHTING technology. 80 lumens



## PIXA 1

Headlamp suitable for proximity lighting, with CONSTANT LIGHTING technology. 60 lumens



## Accessories



PIXADAPT



RUBBER



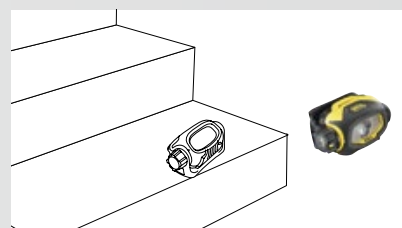
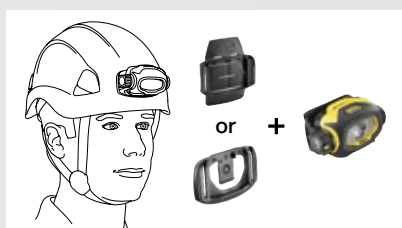
Rechargeable battery for PIXA 3R



POCHE PIXA

## Three ways to wear them

To meet the specific needs of each work situation, PIXA headlamps may be worn on the head, mounted on a helmet, or placed directly on the ground.



Headlamps designed for frequent use, for the energy, networks, building, and maintenance markets.

• Lamps for use in hazardous areas:  
ATEX or HAZLOC certification



ATEX



HAZLOC

Designed to withstand the harshest environments, PIXA headlamps can be used in hazardous areas. Depending on the model, they are certified ATEX zone 2/22 or HAZLOC Class 1 Div II and Class 2 Div II.

• Guaranteed lighting over time



CONSTANT  
LIGHTING

CONSTANT LIGHTING technology allows lighting to remain stable as the batteries drain. When the batteries are almost drained, the headlamp switches automatically to reserve mode, with weaker output that prolongs lighting time.

• Rugged, durable construction



**Rotating and locking selector knob**

Easy to use, even when wearing gloves. May be locked to prevent inadvertently turning on the light, with a storage position that protects the lens.



**Great mechanical strength**

Shocks, falls, crushing: these lamps endure the daily rigors of a professional work site.



**Waterproof and chemical resistant**

PIXA headlamps are waterproof (IP 67) and have been tested to resist various chemicals.

• For close-range work, moving around, and long-range vision



ATEX 2/22 zone

ATEX 2/22 or HAZLOC Class 1 Div II  
and Class 2 Div II zones

• For close-range work and movement



ATEX 2/22 or HAZLOC Class 1 Div II  
and Class 2 Div II zones

• For close-range work



ATEX 2/22 or HAZLOC Class 1 Div II  
and Class 2 Div II zones



## PIXA® 3R

**Rechargeable headlamp for use in ATEX zone 2/22 hazardous areas, suitable for proximity lighting, movement and long-range vision. 90 lumens**

The PIXA 3R headlamp is a rugged, rechargeable headlamp suitable for frequent use by professionals. The multi-beam adapts to all situations: close-range work, movement, and long-range vision. CONSTANT LIGHTING technology: brightness does not gradually decrease as the batteries are drained. It meets ATEX zone 2/22 certification requirements for work in hazardous areas.



Rechargeable with its own charging dock. A practical, sustainable solution that is more economical over time.



## PIXA® 3

**Headlamp for proximity lighting, movement and long-range vision. Available in ATEX or HAZLOC versions. 100 lumens**

The PIXA 3 headlamp is rugged and versatile. The multi-beam adapts to all situations: close-range work, movement, and long-range vision. CONSTANT LIGHTING technology: brightness does not decrease gradually as the batteries are drained. Available in two versions: ATEX zone 2/22 or HAZLOC Class 1 Div II and Class 2 Div II.



## PIXA® 2

**Headlamp suitable for proximity lighting and movement. Available in ATEX or HAZLOC versions. 80 lumens**

The PIXA 2 is a rugged headlamp offering lighting that allows the user to work comfortably on tasks close at hand or to move around safely. CONSTANT LIGHTING technology: brightness does not decrease gradually as the batteries are drained. Available in two versions: ATEX zone 2/22 or HAZLOC Class 1 Div II and Class 2 Div II.



## PIXA® 1

**Headlamp suitable for proximity lighting. Available in ATEX or HAZLOC versions. 60 lumens**

The PIXA 1 is a rugged headlamp offering lighting that allows the user to work comfortably on tasks close at hand. CONSTANT LIGHTING technology: brightness does not decrease gradually as the batteries are drained. Available in two versions: ATEX zone 2/22 or HAZLOC Class 1 Div II and Class 2 Div II.





## Accessories



### PIXADAPT

#### Accessory for mounting a PIXA headlamp on 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 keeps the option of adjusting the tilt of the headlamp. PIXADAPT is compatible with Petzl helmets with or without eye shield. For other helmets, verify compatibility with the helmet manufacturer.



### RUBBER

#### Rubber headband for PIXA headlamp, compatible with all helmet types

The RUBBER headband adapts to all helmets on the market and holds the PIXA headlamp securely in position.



### Rechargeable battery for PIXA® 3R

#### Rechargeable Lithium-Ion polymer battery, 930 mAh

Rechargeable Lithium-Ion polymer battery, 930 mAh, recharges separately or on the headlamp, for quick charge.



### POCHE PIXA®

#### Carry pouch for PIXA headlamp

The POCHE PIXA pouch allows the PIXA headlamp to be carried and protected any time. The headlamp is thus always readily accessible on the waistbelt.

References	Certifications	 CONSTANT LIGHTING	Lighting modes	 MAX BRIGHTNESS	 MAX DISTANCE	 MAX AUTONOMY	 WEIGHT
<div></div> <div>E78CHR 2</div> <div></div> <div>PIXA 3R</div>	CE ATEX: zone 2/22	●	STANDARD setting				145 g
			Close-range work	20 lm	15 m	11 h 30	
			Movement	55 lm	45 m	5 h	
			Distance vision	90 lm	90 m	3 h 30	
			Reserve	1 h 30 at 10 lm			
			MAX AUTONOMY setting				
			Close-range work	20 lm	15 m	11 h 30	
			Movement	20 lm	30 m	11 h 30	
			Distance vision	20 lm	50 m	11 h 30	
			Reserve	1 h 30 at 10 lm			
			MAX POWER setting				
			Close-range work	90 lm	25 m	3 h	
			Movement	90 lm	55 m	3 h	
			Distance vision	90 lm	90 m	3 h 30	
			Reserve	1 h 30 at 10 lm			
<div></div> <div>PIXA 3</div>	E78CHB 2	●	Close-range work	20 lm	15 m	26 h	160 g
	E78CHB 2UL		Movement	60 lm	45 m	6 h 30	
			Distance vision	100 lm	90 m	3 h 30	
			Reserve	13 h at 10 lm			
<div></div> <div>PIXA 2</div>	E78BHB 2	●	Close-range work	20 lm	25 m	26 h	160 g
	E78BHB 2UL		Movement	80 lm	55 m	3 h 30	
			Reserve	13 h at 10 lm			
			Distance vision	100 lm	90 m	3 h 30	
<div></div> <div>PIXA 1</div>	E78AHB 2	●	Close-range work	20 lm	10 m	16 h	160 g
	E78AHB 2UL		Movement	60 lm	15 m	3 h 30	
			Reserve	6 h 30 at 10 lm			
			Distance vision	100 lm	90 m	3 h 30	

(\*1) Certifications guaranteed only with alkaline batteries

## Accessories

	References	Weight
PIXADAPT	E78005	20 g
RUBBER	E78002	-
Rechargeable battery for PIXA 3R	E78003	37 g
POCHE PIXA	E78001	-

# Ultra-compact headlamps

Headlamps for occasional use



Electrical maintenance inside the mont Pèlerin pylon, Lausanne, Switzerland. © Petzl / Lafouche / Swisscom



## TACTIKKA CORE

Compact multi-beam headlamp with red lighting and CORE rechargeable battery. 350 lumens



MAX  
BRIGHTNESS



MAX  
DISTANCE



MAX  
AUTONOMY



RED  
LIGHTING



LARGE



MIXED



HYBRID  
CONCEPT



## TACTIKKA +RGB

Compact headlamp with white or red/green/blue lighting to preserve night vision and ensure stealth. 250 lumens



MAX  
BRIGHTNESS



MAX  
DISTANCE



MAX  
AUTONOMY



RGB  
LIGHTING



MIXED



HYBRID  
CONCEPT



## TACTIKKA +

Compact headlamp with white or red lighting to preserve night vision and ensure stealth. 250 lumens



MAX  
BRIGHTNESS



MAX  
DISTANCE



MAX  
AUTONOMY



RED  
LIGHTING



MIXED



HYBRID  
CONCEPT



## TACTIKKA

Compact headlamp with white or red lighting to preserve night vision and ensure stealth. 200 lumens



MAX  
BRIGHTNESS



MAX  
DISTANCE



MAX  
AUTONOMY



RED  
LIGHTING



LARGE



HYBRID  
CONCEPT



## e+LITE

Ultra-compact emergency headlamp. 50 lumens



MAX  
BRIGHTNESS



MAX  
DISTANCE



MAX  
AUTONOMY



RED  
LIGHTING



LARGE



## Accessories



CORE



FIXATION  
TACTIKKA



KIT ADAPT



POCHE



# Ultra-compact headlamps

Ultra-compact headlamps, practical and lightweight for occasional use. Ideal for concerts and shows, the workshop, and for small maintenance jobs.

## • Long burn time



STANDARD  
LIGHTING

STANDARD LIGHTING technology offers an ideal compromise between power and burn time. Ultra-compact headlamps thus provide maximum burn time of 240 hours.

## • Simple to use



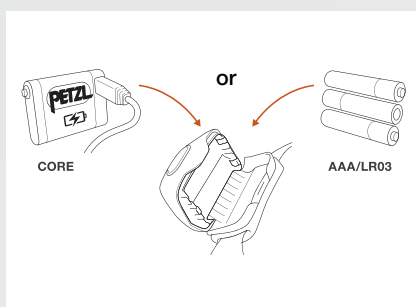
Ultra-compact headlamps are simple to use, thanks to the ergonomic button that allows quick and easy selection of lighting mode, even while wearing gloves (except e+LITE).

## • Several beam types and lighting modes



Ultra-compact headlamps have different beam types: wide for close-range work or focused for movement. The lighting modes allow power and burn time to be adjusted as needed.

## • Choose your energy source



HYBRID  
CONCEPT

Ultra-compact headlamps work equally well with the CORE rechargeable battery and with three AAA/LR03 batteries, without an adapter. A practical and flexible solution for managing energy requirements (except e+LITE).

## • Very powerful, with rechargeable battery



TACTIKKA CORE

## • To preserve night vision and stealth



With red, green, blue lighting:  
TACTIKKA +RGB



With powerful red lighting: TACTIKKA +



With red lighting: TACTIKKA

## • For emergencies: e+LITE





## TACTIKKA® CORE

**Compact multi-beam headlamp with red lighting and CORE rechargeable battery. 350 lumens**

The TACTIKKA CORE headlamp offers 350 lumen brightness. It is ideal for close-range work, as well as for moving around. Featuring a mixed beam, it ensures wide, focused or red stealth lighting. A HYBRID headlamp that comes with CORE, a battery that is rechargeable via standard USB port. It is compatible with standard AAA/LR03 batteries (not included) without the need for an adapter.



## TACTIKKA® +RGB

**Compact headlamp with white or red/green/blue lighting to preserve night vision and ensure stealth. 250 lumens**

Designed for occasional use, the multi-beam TACTIKKA +RGB headlamp offers 250 lumens of power and versatile lighting: comfortable proximity lighting for close-range work, focused lighting for distance vision when moving around, and red, green or blue lighting to ensure stealth and preserve night vision. TACTIKKA +RGB is a HYBRID headlamp that is also compatible with the CORE rechargeable battery.



## TACTIKKA® +

**Compact headlamp with white or red lighting to preserve night vision and ensure stealth. 250 lumens**

Designed for occasional use, the multi-beam TACTIKKA + headlamp offers 250 lumens of power and versatile lighting: comfortable proximity lighting for close-range work, focused lighting for distance vision when moving around, and red lighting to ensure stealth and preserve night vision. TACTIKKA + is a HYBRID headlamp that is also compatible with the CORE rechargeable battery.



## TACTIKKA®

**Compact headlamp with white or red lighting to preserve night vision and ensure stealth. 200 lumens**

Designed for occasional use, the multi-beam TACTIKKA headlamp offers 200 lumens of power and versatile lighting: comfortable proximity lighting for close-range work, focused lighting for distance vision when moving around, and red lighting to ensure stealth and preserve night vision. TACTIKKA is a HYBRID headlamp that is also compatible with the CORE rechargeable battery.



## e+LITE®

**Ultra-compact emergency headlamp. 50 lumens**

Ultra-lightweight and very compact, the e+LITE emergency headlamp should always be with you. Thanks to its carry case, it is always ready to use and can be stored with its batteries for ten years in a backpack, a vest, or an emergency kit, or used as a back-up headlamp. Its white or red, continuous 50-lumen lighting or strobe lighting helps you to be seen. The whistle integrated in the elastic headband allows the user to signal an emergency. Weighing only 26 grams, e+LITE is an ideal emergency headlamp.





## Accessories



## CORE

**Rechargeable battery compatible with Petzl HYBRID headlamps**

Large capacity Lithium-Ion 1250 mAh rechargeable battery guarantees high performance for HYBRID headlamps: TACTIKKA CORE, TACTIKKA, TACTIKKA + and TACTIKKA +RGB, even at low temperatures. It recharges directly with the integrated USB port. The CORE rechargeable battery offers an economical and sustainable solution as the main power supply, or as a back-up battery.



## FIXATION TACTIKKA®

**Kit for mounting a TACTIKKA, TACTIKKA +, TACTIKKA +RGB or TACTIKKA CORE type headlamp on an ALVEO or VERTEX helmet**

FIXATION TACTIKKA is a kit that allows the user to mount or unmount a TACTIKKA, TACTIKKA +, TACTIKKA +RGB or TACTIKKA CORE headlamp on a helmet any time, and keeps the option of adjusting the tilt of the headlamp. The system is especially resistant to impact and moisture.



## KIT ADAPT

**Kit for mounting a TIKKA type headlamp onto a helmet**















The KIT ADAPT allows the user to mount or unmount a TIKKA headlamp on a helmet any time, and keeps the option of adjusting the tilt of the headlamp.



## POCHE

**Carrying case for ultra-compact headlamps**

The POCHE case is for transport and protection of TACTIKKA, TACTIKKA +, TACTIKKA +RGB and TACTIKKA CORE headlamps in any situation. The headlamp is thus always readily accessible on the waistbelt.

References	Certifications	Lighting color	Lighting mode	 MAX BRIGHTNESS	 MAX DISTANCE	 MAX AUTONOMY	 WEIGHT	
 E99ADA TACTIKKA CORE	CE	white	Close-range work	5 lm	10 m	80 h	82 g	 
			Movement	100 lm	45 m	12 h		
			Distance vision	350 lm	85 m	2 h		
		red	Close-range work	2 lm	6 m	40 h		
			Strobe	2 lm	1000 m	350 h		
		reserve	5 lm for 30 min					
 E89ABA TACTIKKA +RGB	CE	white	Low-intensity	5 lm	10 m	200 h	85 g	 
			Close-range work	100 lm	45 m	50 h		
			Movement	250 lm	65 m	50 h		
		red green blue	Close-range work	2 lm	6 m	50 h		
			Strobe	2 lm	1000 m	450 h		
		 E89AAA TACTIKKA +	CE	white	Low-intensity	5 lm		
Close-range work	100 lm				45 m	50 h		
Movement	250 lm				65 m	50 h		
red	Close-range work			2 lm	6 m	70 h		
	Strobe			2 lm	1000 m	450 h		
 E93ACA TACTIKKA	CE			white	Low-intensity	5 lm	10 m	240 h
		Close-range work	100 lm		40 m	80 h		
		Movement	200 lm		60 m	60 h		
		red	Close-range work	2 lm	5 m	45 h		
			Strobe	2 lm	1000 m	450 h		
		 E02 P4 e+LITE	CE	white	Close-range work	15 lm	6 m	12 h
Movement	50 lm				10 m	9 h		
Strobe	Visible at 100 m for 95 h							
red	Proximity			2 lm	100 m	15 h		
	Strobe			Visible at 100 m for 70 h				

## Accessories

	References	Weight
CORE	E99ACA	23 g
FIXATION TACTIKKA	E093CA00	30 g
KIT ADAPT	E93001	30 g
POCHE	E93990	33 g



Product	Reference	Page
<b>A</b>		
ABSORBICA <small>NEW 2018</small>	L064AA	82
ABSORBICA-I	L64IA / L64IU	81
ABSORBICA-I VARIO	L64IAR	81
ABSORBICA-Y	L64YA / L64YAM / L64YUM	81
ABSORBICA-Y FALL ARREST KIT <small>NEW 2018</small>	K095AA	144
ABSORBICA-Y TIE-BACK	L64YUT	81
ACCU 2 <small>NEW 2018</small>	E80002	164
ACCU 2 DUO Z1 <small>NEW 2018</small>	E80001	164
AIRLINE	R02Y	137
ALVEO BEST	A20B	73
ALVEO VENT	A20V	73
Am'D	M34A	95
Am'D PIN-LOCK	M34A PL	97
AMPOULE BAT'INOX	P41	122
AMPOULE COLLINOX	P56	122
ANNEAU	C40	123
ASAP <small>NEW 2018</small>	B71AAA / B071AA00	89
ASAP FALL ARREST KIT <small>NEW 2018</small>	K093AA	143
ASAP VERTICAL LIFELINE <small>NEW 2018</small>	K091AA	142
ASAP LOCK <small>NEW 2018</small>	B071BA00	89
ASAP LOCK FALL ARREST KIT <small>NEW 2018</small>	K094AA	143
ASAP LOCK VERTICAL LIFELINE <small>NEW 2018</small>	K092AA	142
ASAP'SORBER <small>NEW 2018</small>	L71AA / L071BA	90
ASAP'SORBER AXESS <small>NEW 2018</small>	L071CA00	90
ASCENSION	B17A	110
ASCENTREE	B19AAA	111
ASTRO BOD FAST <small>NEW 2018</small>	C083AA	57
ASTRO SIT FAST <small>NEW 2018</small>	C085AA	57
AVAO BOD <small>NEW 2018</small>	C071 / C71	53
AVAO BOD FAST <small>NEW 2018</small>		54
AVAO BOD CROLL FAST	C71CFA / C71CFN	55
AVAO SIT <small>NEW 2018</small>	C079AA C079BA	53
AVAO SIT FAST <small>NEW 2018</small>		
AXIS 11 mm	R074AA / R074BA	90/129

<b>B</b>		
BALACLAVA <small>NEW 2018</small>	A016CA	74
BASIC	B18BAA	112
BAT'INOX	P57	122
BEANIE <small>NEW 2018</small>	A016BA	74
BERMUDE	C80	62
BOLTBAG	C11 A	136
BUCKET <small>NEW 2018</small>	S41AY / S41AR	137

<b>C</b>		
CAPTIV <small>NEW 2018</small>	M093AA00	98
CARITool	P42 / P42 L	63
CHEST'AIR	C98A	61
COEUR	P36AA / P36AS / P36AH	122
COEUR BOLT	P36BA / P36BS / P36BH	122
COEUR PULSE <small>NEW 2018</small>	P37S	122
COLLINOX	P55	122
CONNEXION FAST	C42 F	124

Product	Reference	Page
CONNEXION FIXE	C42	124
CONNEXION VARIO	C42 V	124
CORDEX	K52	138
CORDEX PLUS	K53	138
CORE	E99ACA	176
CRAB 6	64160	138
CROLL S / L <small>NEW 2018</small>	B16BAA / B016AA00	111

<b>D</b>		
DELTA	P11	98
DEMI ROND	P18	98
DUO S <small>NEW 2018</small>	E80CHR	163
DUO Z1 <small>NEW 2018</small>	E80BHR E80DHR	163
DUO Z1 (x5) <small>NEW 2018</small>		
DUO Z2 <small>NEW 2018</small>	E80AHB	163

<b>E</b>		
e+LITE	E02 P4	175
ECLIPSE	S03Y	137
EASHOOK OPEN <small>NEW 2018</small>	M043AA	84/97
EXO AP HOOK	D30AB 015	106

<b>F</b>		
FALCON	C038AA	61
FALCON ASCENT	C038AB	61
FALCON MOUNTAIN	C038CA	61
FALL ARREST AND WORK POSITIONING KIT <small>NEW 2018</small>	K096AA	144
FIXATION TACTIKKA	E093CA00	176
FIXE	P05W / P05WN	117
FOOTAPE	C47A	110
FOOTCORD	C48A	110
FREINO	M42	97

<b>G</b>		
GEMINI	P66A	117
GO	P15	98
GRILLON <small>NEW 2018</small>	L052AA	79
GRILLON HOOK <small>NEW 2018</small>	L052BA / L052CA	79
GRILLON MGO <small>NEW 2018</small>	L052DA	79
GRILLON PLUS <small>NEW 2018</small>	L052EA	79

<b>H</b>		
HUIT	D02	103

<b>I</b>		
I'D L	D200LO / D200LN	102
I'D S	D200SO / D200SN	102
IGUANE <small>NEW 2018</small>	L001AA	84

<b>J</b>		
JAG	P45	118
JAG RESCUE KIT	K90	146
JAG SYSTEM	P044AA	118
JAG TRAXION	P54	118
JANE	L50	82
JET	S02Y	137

<b>K</b>		
KIT ADAPT	E93001	176
KOOTENAY	P67	118



Product	Reference	Page
<b>L</b>		
LEZARD	L01	84
LIFT	L54	63
LINER <small>NEW 2018</small>	A016AA	74
LOOPING	C25	110

<b>M</b>		
MAESTRO S / L <small>NEW 2018</small>	D024AA00 / D024BA00	105
MAMBO 10,1 mm	R32AB 200 / R32AY 200	130
MGO 110	MGO 110	84/97
MGO OPEN 60	MGOO 60	79/82/84/97
MICRO SWIVEL	P58 XSO	123
MICRO TRAXION	P53	117
MICROFLIP	L33	83
MICROGRAB	B53A	83
MINDER	P60A	117
MINI	P59A	117
MOBILE	P03A	117

<b>N</b>		
NEST	S61	62
NEWTON	C73AAA	49
NEWTON EASYFIT	C73JFA	49
NEWTON EASYFIT HI-VIZ	C73JFV	49

<b>O</b>		
OK	M33A	95
OMNI	M37	97
OXAN	M72A	96

<b>P</b>		
PANTIN	B02CLA / B02CRA	111
PARALLEL 10,5 mm	R077AA	129
PARTNER	P52A	116
PAW	P63	123
PERSONNEL 15L	S44Y 015	136
PITAGOR	C80 BR	62
PIXA 1	E78AHB 2	169
PIXA 2	E78BHB 2	169
PIXA 3	E78CHB 2	169
PIXA 3R	E78CHR 2	169
PIXADAPT	E78005	170
POCHE	E93990	176
POCHE PIXA	E78001	170
PODIUM <small>NEW 2018</small>	S071AA00	55/57
PORTAGE 30L	S43Y 030	136
PORTO	C33	136
PRO	P46	116
PRO ADAPT <small>NEW 2018</small>	E80004	164
PRO TRAXION	P51A	117
PROGRESS	L44A	82/110
PROGRESS ADJUST	L44R	82/110
PROGRESS ADJUST-I	L44IR	82
PROTEC	C45 N	131
PUR'ANNEAU	G006AA	123

<b>R</b>		
RACK	D11	103
RAY 12 mm <small>NEW 2018</small>	R091AA	90
RESCUCENDER	B50A	112
RESCUE	P50A / P50AN	116
RIG <small>NEW 2018</small>	D021AA	103

Product	Reference	Page
RING	C04	58/123
RING OPEN	P28	63/82/98/123
ROLL MODULE	P49	131
ROLLCAB	P47	118
ROLLCLIP A	P74 TL / P74	116
ROLLCLIP Z	P75 TL / P75 SL	116
RUBBER	E78002	170

<b>S</b>		
SECUR	C74A	111
SEGMENT 8 mm	R076AA	130
SEQUOIA	C69AFA	59
SEQUOIA SRT	C69BFA	59
SET CATERPILLAR	P68	131
Sm'D	M39A	96
SPATHA	S92AN	138
SPIKY PLUS	79510 / 79520 / 79530	138
ST'ANNEAU	C07	123
STEF	S62	62
STRING	M90000 L / M90000 XL	98
SWIVEL	P58	123
SWIVEL OPEN	P58 SO	123

<b>T</b>		
TACTIKKA	E93ACA	175
TACTIKKA +	E89AAA	175
TACTIKKA +RGB	E89ABA	175
TACTIKKA CORE	E99ADA	175
TANDEM	P21	118
TANDEM SPEED	P21SPE	
TANGA	M92000	98
TIBLOC <small>NEW 2018</small>	B01BN	112
TOOLBAG	S47Y S / S47Y L	63
TOP <small>NEW 2018</small>	C081AA00	53
TOP CROLL S <small>NEW 2018</small>	C081BA00	57
TOP CROLL L <small>NEW 2018</small>	C081CA00	
TRANSPORT 45L	S42Y 045	136
TREESBEE	C04110	124
TREESBEE SCREWLINK	C04110 M	124
TWIN	P65A	117

<b>V</b>		
VECTOR 12,5 mm	R078AA	129
VERTEX BEST	A10B	73
VERTEX ST	A10S	73
VERTEX VENT	A10V	73
VERTIGO TWIST-LOCK	M40A RLA	84/97
VIZEN	A14	74
VIZIR	A15A	74
VIZIR SHADOW	A15AS	74
VOLT	C72AFA	51
VOLT LT		
VOLT WIND	C72WFA	51
VOLT WIND LT		
VULCAN <small>NEW 2018</small>	M73	96

<b>W</b>		
WILLIAM	M36A	95

<b>Z</b>		
ZIGZAG	D22A	106
ZILLON	L22A	83



## From the deep: the Petzl adventure

### A story about a company and its environment

Though rarely in the spotlight, climbing equipment represents more than a simple accessory for mountaineers. The evolution of such carefully designed gear bears witness to the intelligence climbers use to overcome increasingly challenging terrain, and embodies their ethical choices. The tools climbers use clearly reflect their approach to the mountains.

For forty years, Petzl and its founders have played a major role in the history of the mountains. With the golden age of caving as the starting point of its legacy - in which Fernand Petzl played a pioneering role - the manufacturer has explored the different realms of the vertical world: rock, ice, snow, nighttime... The company has also successfully applied its expertise to rescue and to work-at-height.

To read about the Petzl adventure is to follow women and men committed to the vertical world, and to exploration. In constant interaction with an ever-evolving world, they invent new modes of progression.

- Authors: Sophie Cuenot and Hervé Bodeau
- Preface by Lynn Hill
- 272 pages
- Available in several versions:
  - French (Z180 FR)
  - English (Z180 EN)
  - Spanish (Z180 ES)
  - gift box (Z18001 FR)
- Editions Guérin - Chamonix Mont-Blanc



© Petzl



© Petzl



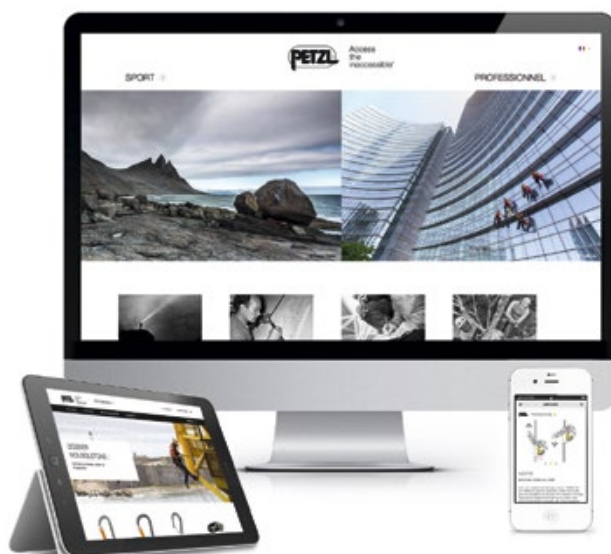
© Pascal Tournaire



© Petzl / Kalice



© Petzl



[www.petzl.com](http://www.petzl.com)

The site for professionals working at height and in dark environments.

- Discover Petzl's solutions for verticality and lighting
- Check out tips and technical information on best practices for using Petzl products
- Find all the Petzl news and reports on various trades: videos, news, portraits, events...

© Petzl 2017



**Petzl headquarters:** PETZL INTERNATIONAL. Z.I. Crolles, 38920 CROLLES, FRANCE

**Graphic design:** pierrebenadesign.com

**Product photos** (non-contract photos):

Kalice - [www.kalice.fr](http://www.kalice.fr)

Aurélie Jeannette Photographe - [www.aureliejeannette.com](http://www.aureliejeannette.com)

**Printing:** Comptoir des idées

Catalog printed on recycled paper, made up mostly of post-consumer waste. Using non-chlorine bleach, its production respects the environment by reducing energy consumption, as well as air and water pollution.



The activities depicted are inherently dangerous. All users must be trained and competent in the use of the equipment for these activities.



# Access the inaccessible®



To find a Petzl retailer near you  
or anywhere in the world go to:

[www.petzl.com/dealers](http://www.petzl.com/dealers)

---

↑ Maintenance Moray Met Mast, Wick, Scotland.  
© Petzl / vuedici.org / Asaken Rope Access

↓ Replacement and maintenance of the lighting system inside a cement mine, France.  
© Petzl / Lafouche / Vicat

## AUSTRALIA & NEW ZEALAND

Spelean Pty Ltd  
PO Box 645  
ARTARMON NSW 1570  
Ph: +61 02 9966 9800  
Em: [petzl@spelean.com.au](mailto:petzl@spelean.com.au)

Z013DA01  
ENGLISH

[PETZL.COM](http://PETZL.COM)